Federal Ministry
for Economic Affairs
and Energy

National Reform Programme 2021

bmwi.de

Imprint

Publisher
Federal Ministry for Economic Affairs and Energy (BMWi)
Public Relations
11019 Berlin
www.bmwi.de

Status
March 2021

This publication is available for download only.

Design
PRpetuum GmbH, 80801 Munich

Central ordering service for publications of the Federal Government:
Email: publikationen@bundesregierung.de
Tel.: +49 30 182722721
Fax: +49 30 18102722721

This publication is issued by the Federal Ministry of Economic Affairs and Energy as part of its public relations work. The publication is distributed free of charge and is not intended for sale. It may not be used by political parties or by election campaigners or election assistants during an election campaign for the purpose of election advertising. This applies to elections to the Bundestag, the Landtag and local elections as well as to elections to European Parliament.

Contents

Introduction 4

I. Macroeconomic context 5

II. Actions to tackle primary macroeconomic challenges 10

A. Fighting the COVID-19 pandemic, boosting the economy, ensuring debt sustainability, strengthening the health system 13
Tackling the COVID-19 pandemic 13
Supporting the economy during the crisis, promoting the recovery 15
Supporting the economic revival 22
Mitigating income losses, strengthening the labour market in the face of the pandemic 23
Ensuring debt sustainability and strengthening investment 26
Strengthening the health industry for the long term 29

B. Investment in climate action and the digital transformation 30
Contributing to macroeconomic stability through investment 31
Bringing forward, accelerating and stabilising investments 31
Supporting regions undergoing structural change, providing incentives for forward-looking investments 31
Increasing the supply of affordable housing, facilitating the purchase of property 34
Stabilising investment in sustainable transport, shaping mobility of the future 36
Driving investment in the digital infrastructure, tapping digitalisation potential in the business sector, administration and the energy transition 38
Shaping digitalisation strategically, supporting SMEs in the digital transformation 38
Rapid roll-out of fixed line broadband and mobile communications 40
Taking advantage of digitalisation for the energy transition 41
Investing in clean, efficient and integrated energy systems 42
Continuing to expand renewable energy 43
Accelerating the expansion of the grid 45
Leveraging the potential of energy efficiency and renewable heat 46
Developing hydrogen as an energy carrier 47
Seizing the opportunities offered by the energy transition for industrial policy 48
Boosting investment in education, research and innovation 50
Improving the infrastructure and quality of education in child day-care facilities and schools, enabling digital learning opportunities 51
Establishing a framework for more research, development and innovation 51

C. Improving conditions for competition, designing a fair tax environment conducive to growth, reducing bureaucracy 54
Improving conditions of competition 54
Ensuring fair competition in the digital world 54
Using venture capital to make Germany more attractive for start-ups 56
Modernising public procurement law and accelerating public procurement 56

Strengthening legal clarity and fighting corruption 57
Deepening the Single Market for economic recovery and competitiveness 58
Designing a fair tax environment conducive to growth 58
Reducing the administrative and bureaucratic burden on businesses 61

D. Increasing labour force participation, making the pension system and labour market fit for the future 62
Strengthening the framework for labour participation 63
Reducing taxes and charges for low-income earners and second earners 65
Ensuring the long-term sustainability of the pension system and an appropriate pension level 67
Maintaining the conditions for higher wage growth 67
Promoting vocational training and skills development 68
Improving results in education and skills levels among disadvantaged groups 72

III. Europe 2020 headline targets: final report on the progress made 74

IV. Drafting the NRP 2021: process and stakeholders 76

Table: Actions to tackle primary macroeconomic challenges 77

List of diagrams

Diagram 1: The German current account surplus 8
Diagram 2: Development of the labour market (seasonally adjusted) 23
Diagram 3: Use of short-time work 25
Diagram 4: Volume of spending on federal investments from 2019 to 2024 28
Diagram 5: Federal Funding System for Structural Development Regions 32
Diagram 6: Structural Reinforcement Act for Mining Regions 33
Diagram 7: Selection of housing policy measures 35
Diagram 8: Development of the charging infrastructure in Germany 37
Diagram 9: Status of the implementation strategy 38
Diagram 10: Expansion of renewable energy up until 2030 44
Diagram 11: Progress of grid expansion projects 45
Diagram 12: ARC (Act against Restraints of Competition) Digitalisation Act 55
Diagram 13: Functioning of the Competition Register 57
Diagram 14: Annual median social security contribution rates as a percentage of gross assessable earnings 66
Diagram 15: National Further Training Strategy - Partners and fields of action 72

List of boxes

Box 1: 2019/20 and 2020/21 country-specific recommendations of the Council of the European Union for Germany 11
Box 2: The German Recovery and Resilience Plan (DARP) 12
Box 3: Stimulus programme for the culture and media sector 20
Box 4: Employment and sustainability 24
Box 5: Public-sector finances and sustainability 27
Box 6: The electronic patient file and the Act on the Protection of Patients' Data in Telematic Infrastructure 30
Box 7: Renewable energy and sustainability 42
Box 8: Preventing carbon emissions in the steel sector 49
Box 9: Innovation and sustainability 52
Box 10: Regulatory sandboxes in Europe 53
Box 11: What is the bureaucracy brake? 62
Box 12: Gender equality and sustainability 64
Box 13: Germany's tax and welfare system reduces inequality 68
Box 14: Education and sustainability 69

List of overviews

Overview 1: Selected key figures for macroeconomic trends in the Federal Republic of Germany 7
Overview 2: Changes to Bridging Assistance 17
Overview 3: Measures decided on and contractually agreed with companies under the Stabilisation Fund Act (status: 4 March 2021) 19
Overview 4: Quantitative goals defined under the Europe 2020 strategy and current progress towards goals 75

Introduction

1. After a decade of continuous economic growth, the German economy was impacted severely last year by the COVID-19 pandemic. Unprecedented support schemes offered by the Federation and the *Länder* cushioned the effects of the slump; for this year, the Federal Government is anticipating annual economic growth of 3.0 percent in its annual projection. Average annual employment is likely to stay around last year's level; the number of registered unemployed is expected to fall slightly. However, the uncertainty about the future development of the pandemic places a question mark over any economic forecasts.

2. Overcoming the effects of the coronavirus crisis also requires a coordinated and solidarity-based approach at the European level. The intention is that a stronger Europe should emerge from the crisis. The shared aim is for the EU Member States to return to a permanent growth path that combines a high level of international competitiveness with sustainable economic activity. For this reason, the EU Member States have agreed to establish a temporary recovery instrument, "Next Generation EU", to tackle the effects of the crisis. With regard to the ecological transformation of society, the European Commission's proposals for a Green Deal play a prominent role. Strengthening economic growth will be an important building block for ensuring sustainable public finances in Germany and Europe. The aim is to show solidarity in times of crisis. It is also necessary to observe the principle of subsidiarity in the distribution of tasks between the EU and the Member States and to combine responsibility and liability for one's actions. The guiding principle – also at European level – is the Social Market Economy. Following the departure of the United Kingdom from the EU, the Federal Government continues to aspire to a close partnership between the EU and the United Kingdom on the basis of the Trade and Cooperation Agreement.

3. In this NRP the Federal Government reports comprehensively on the implementation of the country-specific recommendations of the Council of the European Union for Germany for the 2020/21 period issued on 20 July 2020, and for the 2019/20 period issued on 9 July 2019. It thus supplements the German Recovery and Resilience Plan, which – in view of its focus on climate action and digitalisation – will not report in detail on all the country-specific recommendations directed to Germany (cf. also introduction to Chapter 2 in this regard). There is also a discussion of the German current account surplus, which as in preceding years offers the basis for an in-depth analysis of Germany in the context of the Macroeconomic Imbalance Procedure. There is a final summary of the quantitatively measurable progress in the context of the Europe 2020 strategy. The reporting also refers to the United Nations' Sustainable Development Goals. The NRP 2021 is aligned with the priorities set out in the Annual Sustainable Growth Strategy 2021 and the European Commission's guidelines for the recovery and resilience plans. This report refers to the reporting period from April 2020 to March 2021.

I. Macroeconomic context

4. Due to the COVID-19 pandemic, the German economy experienced a turbulent year last year. Price-adjusted gross domestic product (GDP) shrank by 4.9 percent last year, following ten successive years of expansion. For 2021, the Federal Government anticipates that there will be an annual average GDP increase of 3.0 percent. It is expected that the pandemic will continue to significantly curb economic output in the first quarter. Going forward, following a stabilisation of the pandemic situation once large segments of society have been inoculated and the COVID-19-related restrictions on economic and social life lifted, the economy is expected to pick up speed again. At first, however, economic development will continue to be split into a services sector which is more dependent on personal contact and thus more affected by the pandemic, and an industrial sector that is seeing generally robust development. In the course of 2021, it is likely that the COVID-19 pandemic will be slowly overcome to make way for the services sector to recover.

5. The COVID-19 pandemic is also having a considerable impact on the job market. The number of gainfully employed persons fell for the first time in 2020 – after 14 years of growth. Gainful employment is expected to rise only by a moderate margin in the beginning of 2021. As the cyclical recovery continues, a slightly more pronounced increase can be expected from the second quarter. Overall for 2021, the Federal Government estimates that the number of gainfully active people will be flat. This is because the considerable decrease in 2020 causes such a strong statistical underhang that the increase expected over 2021 will not push the figure beyond the baseline. An increase in the number of jobs subject to social security contributions contrasts with a fall in the number of self-employed people. This trend started years ago. The number of registered unemployed is expected to go down slightly, by 76,000. Because of the lockdown, it is likely that the unemployment figure will not drop significantly at the beginning of the year, but will see a more tangible fall later in the course of overall economic recovery.

6. The recession that resulted from the pandemic also caused wages to fall last year. This year, net wages and salaries are likely to see a strong rise as a result of measures such as the end of the solidarity surcharge for most income levels and the adjustments made to income tax as per the Second Families Relief Act *(Zweites Familienentlastungsgesetz)*. The 2021 'social guarantee' means that total social security contributions will be largely stabilised at less than 40 percent of gross wages. Parallel to the recovery of wages and salaries, it is expected that pecuniary social benefits, which saw an extraordinary rise last year, will remain at a high level due to measures to support the job market and due to economic assistance. Overall, nominal disposable income of private households is likely to return to significant growth again this year (+2.7 percent).

7. The development in income is indicative of a continuing robust increase of 5.3 percent in consumer spending this year. Price-adjusted private consumption after the deduction of the inflation rate is expected to grow by 3.6 percent, following a strong drop of 6.0 percent last year.

8. In 2020, public-sector consumption grew by an extraordinary rate of 3.3 percent, acting as an important pillar of economic development. Among the most important drivers of public-sector consumption were the many measures taken to support business. Another, albeit more moderate rise in public-sector spending (+1.1 percent) is also expected this year. As a result of the higher expenditure and lower tax revenue due to the pandemic, Germany's public-sector posted its first deficit

since 2011 in 2020, at a ratio of 4.2 percent of nominal GDP. This year, the gap will increase further because of the measures taken to combat the pandemic.

9. The global economy is likely to continue its recovery this year, and will expand at a rate of 5.3 percent[1] year on year. Last year, global economic recovery suffered visibly from the COVID-19 pandemic. Whereas, in 2019, global GDP rose by 3.0 percent in price-adjusted terms, 2020 saw an unprecedented fall in GDP, of approximately 3.4 percent. Global trade also fell by a historic margin of an estimated 9.3 percent. However, a strong recovery set in in the second half of 2020, allowing for significant portions of the losses accumulated in the first two quarters to be cancelled out. Towards the end of 2020, rising numbers of infections gave rise to new restrictions and a disruption of the positive trend, particularly in many of the advanced economies. It is expected that this year, progress on the vaccination drive and a (gradual) easing of the rules in the second quarter will set another global recovery in motion.

10. The negative impetus given by the global economy during the pandemic also had a negative effect on German exports. As the coronavirus crisis is tackled and the global economy recovers, German exports are likely to see a marked increase during the projection period. This is also indicated by the ongoing cyclical dynamism observed in the German industrial sector at present – a sector which has been affected by the lockdown measures in a mostly indirect way. Overall, exports of goods and services are set to rise considerably this year, by around 6.4 percent. Once the restrictions on public life are lifted, domestic demand is expected to see solid growth, which will also result in a steep increase in imports by approximately 7.2 percent. As global demand returns to normal, commodity prices will likely rise. This will mean that import prices will probably grow slightly more strongly than export prices. Consequently, the terms of trade should see a slight negative development after the significant improvement seen last year as a result of the slump in commodity prices.

11. Projections for economic development are inevitably fraught with uncertainty. The main risks are assumed to lie in the future development of the pandemic, which might make further-reaching containment measures necessary. It is also possible that longer restrictions could have a negative effect on economic output in the manufacturing sector, which has so far proven relatively robust. Other potential risks result from high debt levels in the corporate sector across the world, high levels of sovereign debt, and potential bubbles forming on the financial and real-estate markets. In the event that the pandemic can be overcome more quickly than is expected and that postponed expenditure can be resumed on a larger scale, overall economic development could turn out more favourable than the projection.

The current annual projection for 2021 was presented in the Annual Economic Report on 27 January 2021. The next estimate will take place in the context of the spring projection, and will probably be published on 27 April 2021.

12. Despite a significant fall in exports in 2020, Germany's surplus dropped only slightly to 7.0 percent as a ratio of the GDP as imports of services fell by a large margin because of the drastic reduction in

1 GDP of the global economy calculated on the basis of purchasing power parities.

Overview 1: Selected key figures for macroeconomic trends in the Federal Republic of Germany[1]

	2019	2020	Annual Projection 2021
	Change as compared to preceding year in %, unless indicated otherwise.		
FORMATION of gross domestic product (GDP)			
GDP (adjusted for price)	**0.6**	**-5.0**	**3.0**
Gainfully active (domestically)	0.9	-1.1	0.0
Unemployment rate in % (as classified by Federal Employment Agency)[2]	*5.0*	*5.9*	*5.8*
USE of GDP in price-adjusted terms (real)			
Consumer spending and priv. non-profit organisations	1.6	-6.0	3.6
Machinery and equipment	0.5	-12.5	6.5
Buildings	3.8	1.5	1.9
Domestic demand	1.2	-4.1	3.1
Exports	1.0	-9.9	6.4
Imports	2.6	-8.6	7.2
External component (momentum)[3]	*-0.6*	*-1.1*	*0.1*
Gross wages and salaries per employee	2.9	-0.4	3.0

Sources: Federal Statistical Office; The Federal Government's 2021 Annual Projection

1 Until 2020, preliminary calculations by the Federal Statistical Office, as of January 2021.
2 Among all gainfully active persons.
3 Total changes in stocks kept/foreign contribution in % of GDP of the preceding year (= contribution to GDP growth).

cross-border travel undertaken by the domestic population. This year, the surplus is likely to amount to 6.3 percent. The robust industrial sector and its exports will only start to be offset as of the second half of the year, when cross-border travel resumes to a larger degree, resulting in imports of services. For 2022, the Federal Government is expecting the surplus to drop further to 6.1 percent of GDP (cf. Diagram 1). Since it peaked in 2015 at 8.6 percent of GDP, the German current account surplus has fallen substantially.

13. Despite the general downward trend, the German current account surplus remains high by both historical and international standards. There are numerous causes of this, both temporary and structural in nature.[2]

The German economy is highly competitive in international terms, both regarding price-related and non-price-related factors. Further to this, the demographic development is currently still making a major contribution towards the macroeconomic surplus of savings (cf. Bundesbank Monthly Report July 2020). Also, many German firms are investing abroad, and this is recorded in the statistics as "formation of savings" by the companies, and increases the current account surplus. However, most figures show that the finances of non-financial corporations were close to balance. Finally, the foreign

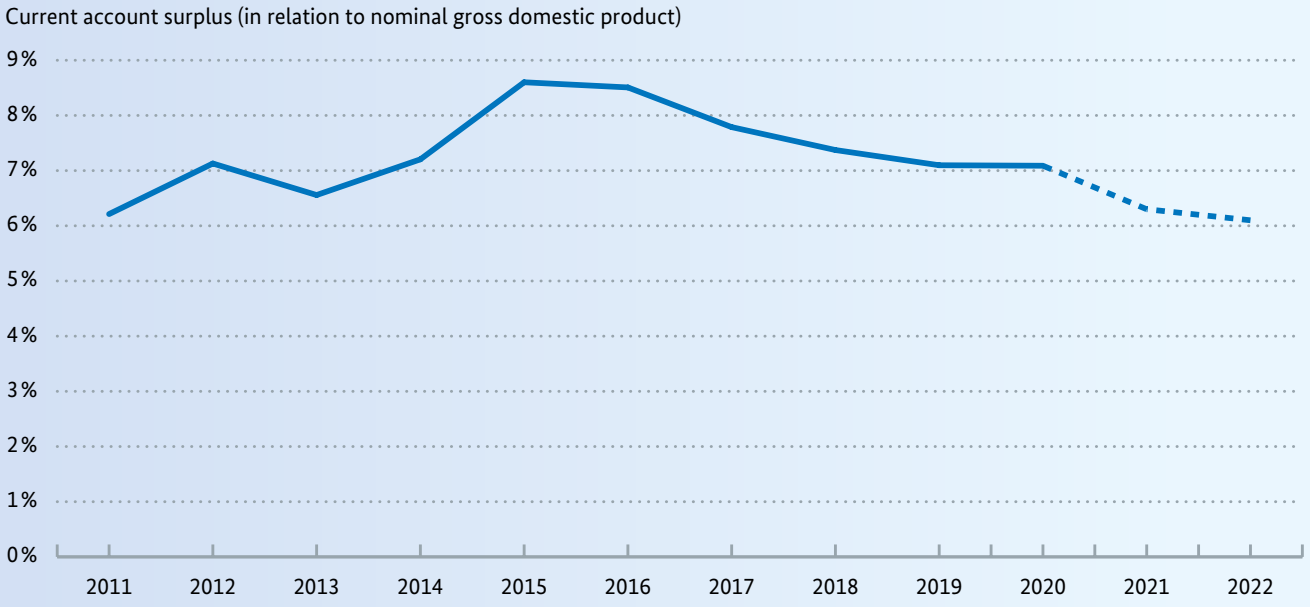
2 The reasons for Germany's current account surplus were discussed in detail in the 2018 and 2019 NRPs.

assets formed generate income from interest and assets and, as primary income, these increase the current account surplus.

14. In view of declining but nevertheless persistent current account surpluses, the procedure for avoiding and correcting macroeconomic imbalances is investigating a possible macroeconomic imbalance for Germany. The exceeding of the six percent threshold, however, does not automatically imply that a high current account surplus poses a problem. Current account surpluses are generally considered economically problematic if they are the result of the influence of economic policy, e.g. via currency manipulation or protectionism. This criticism does not apply to Germany.

Nor are the current account surpluses the result of a proactive state wage policy which distorts Germany's competitiveness. Wage agreements are the exclusive responsibility of the parties to collective bargaining. In recent years, the good economic development in Germany fed into a clear rise in real wages. The high current account surpluses are thus primarily the result of market processes, and are not due to manipulation by the state. Also, many people overestimate the role played by the state in the reduction of a current account surplus. Almost all the studies show that economic policy measures can only exert – if at all – a very limited impact on the balance of trade and the current account, and cannot make a long-term contribution to a significant reduction in the surpluses.[3]

Diagram 1: The German current account surplus



Source: Deutsche Bundesbank, Federal Statistical Office, in-house calculations

3 Simulations by the European Commission show that both structural reforms and wide-ranging state investment and education campaigns make virtually no contribution to a structural reduction in current account surpluses (country reports by the European Commission for 2017-2019). Estimates for Germany by the International Monetary Fund also suggest that economic policy has little impact on the current account surplus. Further comments on the effects of economic policy measures can also be found in the 2018 NRP.

15. The latest developments in the current account are also impacted by the COVID-19 pandemic, which is affecting international flows of trade and services. For example, the German current account surplus is somewhat larger than had been anticipated in the Federal Government's 2020 Annual Projection – i.e. prior to the crisis. However, the likely extent of any longer-term, structural impact on Germany's current account, e.g. via changes to supply chains, to investment and savings patterns, or to travel movements, cannot be predicted at present.

II. Actions to tackle primary macroeconomic challenges

16. The 2020 European Semester was dominated by the COVID-19 pandemic. For example, the country-specific recommendations of the Council of the European Union of 20 July 2020 are very much focused on the pandemic and call on all Member States to take the necessary measures in compliance with the general escape clause of the Stability and Growth Pact in order to tackle the pandemic and to support the economic recovery.

17. The current European Semester is also continuing to be dominated by the development of the pandemic and its economic and social repercussions. In order to address these together, the EU Member States have agreed on the establishment of a temporary recovery instrument, "Next Generation EU", centred around a "Recovery and Resilience Facility" (RRF). The Member States are now called on to draw up a recovery and resilience plan – in addition to the firmly established annual National Reform Programmes, in which not least the Member States respond comprehensively to the country-specific recommendations of the Council of the European Union. The latter is a precondition for Member States to receive funding from the RRF (cf. Box 2). The roll-out of this temporary instrument has necessitated temporary alterations to the semester process. For example, the European Commission did not publish any country reports in 2021. New country-specific recommendations will not be made this year, with the exception of fiscal policy recommendations.

18. The reforms and investments presented in the context of the German Recovery and Resilience Plan *(Deutscher Aufbau- und Resilienzplan, DARP)* take up the country-specific recommendations made to Germany for 2019/2020 and 2020/2021, and in this way complement the measures contained in the German NRP. A central element of the DARP is the interlinkage of viable projects and reforms to implement the country-specific recommendations.

19. In the 2021 National Reform Programme, the Federal Government provides an overarching and comprehensive report on the reforms and measures taken by the Federation and the *Länder* with regard to the fulfilment of the country-specific recommendations for 2019/2020 and 2020/2021 (cf. Box 1) and the tackling of the macroeconomic challenges of our time.

20. The structure of this report follows that of the country-specific recommendations for 2019/20 and 2020/21:

21. To begin with, Chapter II.A. depicts the measures taken by the Federation and the *Länder* to tackle the COVID-19 pandemic, to support the economy and to mitigate negative consequences of the pandemic, to ensure debt sustainability, and to strengthen the healthcare system, also in the long term (CSR 1 2020/2021).

22. Chapter II.B. highlights the public and private-sector investment undertaken in the fields of structural change, affordable housing, sustainable transport, digitalisation and broadband networks, clean, efficient and integrated energy systems, and education, research and innovation, and how these can be accelerated (CSR 1 2019/2020, CSR 2 2020/2021).

23. Chapter II.C. describes measures to improve the competitive environment, to shape a pro-growth and fair taxation environment, and progress on cutting red tape (CSR 1 2019/2020, CSR 2 2020/2021).

24. Finally, Chapter II.D. illustrates the measures taken by the Federal Government to promote

Box 1: 2019/20 and 2020/21 country-specific recommendations of the Council of the European Union for Germany

The Council of the European Union hereby recommends that Germany take action in 2019 and 2020 to:

1. While respecting the medium-term budgetary objective, use fiscal and structural policies to achieve a sustained upward trend in private and public investment, in particular at regional and municipal level. Focus investment-related economic policy on education; research and innovation; digitalisation and very-high capacity broadband; sustainable transport as well as energy networks and affordable housing, taking into account regional disparities. Shift taxes away from labour to sources less detrimental to inclusive and sustainable growth. Strengthen competition in business services and regulated professions;

2. Reduce disincentives to work more hours, including the high tax wedge, in particular for low-wage and second earners. Take measures to safeguard the long-term sustainability of the pension system, while preserving adequacy. Strengthen the conditions that support higher wage growth, while respecting the role of the social partners. Improve educational outcomes and skills levels of disadvantaged groups.

The Council of the European Union hereby recommends that Germany take action in 2020 and 2021 to:

1. In line with the general escape clause, take all necessary measures to effectively address the pandemic, sustain the economy and support the ensuing recovery. When economic conditions allow, pursue fiscal policies aimed at achieving prudent medium-term fiscal positions and ensuring debt sustainability, while enhancing investment. Mobilise adequate resources and strengthen the resilience of the health system, including by deploying eHealth services;

2. Front-load mature public investment projects and promote private investment to foster the economic recovery. Focus investment on the green and digital transition, in particular on sustainable transport, clean, efficient and integrated energy systems, digital infrastructure and skills, housing, education and research and innovation. Improve digital public services across all levels and foster the digitalisation in small and medium-sized enterprises. Reduce the regulatory and administrative burden for businesses.

Box 2: The German Recovery and Resilience Plan (DARP)

The DARP stipulates how Germany will use the funding from the EU's Recovery and Resilience Facility. The RRF serves to cushion the economic and social consequences of the crisis, to strengthen the resilience of the Member States and to support the green and digital transition. The measures in the DARP concentrate on the following six priorities:

At the same time, the DARP also takes up country-specific recommendations for 2019/2020 and 2020/2021 which relate to the DARP's investment projects.

The main focus of the DARP is on measures to tackle the two greatest challenges of our time: climate change and digitalisation. Here, the pro-climate measures cover a wide range: from decarbonisation to renewable hydrogen, climate-friendly mobility and climate-friendly building. The digital transformation is a common thread running through almost every feature of the plan. In addition to investments allowing a swift digitalisation of infrastructure and businesses, there is also a focus on data as a central raw material in future. Further to this, the Recovery Plan contains a national digital education campaign and measures to digitise the administration, to strengthen social participation and to use digital tools to build a pandemic-resilient healthcare system. In order to boost public and private-sector investment, Germany is continuing to work on accelerating and digitising processes and on removing existing bottlenecks.

In its deployment of the funding of the RRF, the Federal Government is sending out a signal for European cooperation. This is taking place via the use of the Important Projects of Common European Interest (IPCEI) instrument in the key fields of hydrogen, cloud computing and microelectronics/communication technologies. The projects were initiated and driven by Germany and France; at the same time, as IPCEIs, they are genuinely European projects open to stakeholders from all EU Member States.

labour participation, to secure the skills base, to strengthen vocational training and skills, and to boost the level of education and skills of disadvantaged groups (CSR 2 2019/2020).

A. Fighting the COVID-19 pandemic, boosting the economy, ensuring debt sustainability, strengthening the health system

25. The COVID-19 pandemic is creating not only health risks, but also societal, economic and social policy challenges. In this context, the Council of the European Union recommends that Germany take all necessary measures in compliance with the general escape clause of the Stability and Growth Pact to effectively combat the COVID-19 pandemic, to bolster the economy and to foster its recovery. The following chapter addresses the measures to constrain the pandemic and to alleviate the economic and social repercussions, as well as the fiscal policy effects. As the Council of the European Union also stresses, it is necessary to maintain debt sustainability whilst increasing investment despite the COVID-19-related spending. Finally, in line with the Council's recommendations, this report explains how the Federation and the *Länder* are boosting the resilience of the healthcare system, including on a long-term basis, and not least making use of digital applications (cf. Box 1 re the country-specific recommendations).

Tackling the COVID-19 pandemic

26. Tackling the COVID-19 pandemic and its repercussions is one of the Federal Government's key goals. A number of laws and ordinances serve to protect public health and aim to maintain the functioning of the healthcare system in the current situation. A vaccination strategy is intended to ensure that the available vaccine is deployed rapidly and effectively in order to prevent the spread of the pandemic and to protect people's lives.

27. The changes to the Infection Protection Act *(Infektionsschutzgesetz – IfSG)* made by the Act on the Protection of the Population in the Event of an Epidemic Situation of National Significance *(Gesetz zum Schutz der Bevölkerung bei einer epidemischen Lage von nationaler Tragweite)* of 27 March 2020 aim to safeguard the functioning of society in an infection-related emergency (cf. Table, No. 1). When the Bundestag has confirmed that there is an epidemic situation of national significance, measures can be taken swiftly on the basis of the powers added into Section 5 Infection Protection Act to ensure a basic supply of pharmaceuticals, remedies and aids, and to strengthen personnel resources in the health sector. Moreover, the Infection Protection Act has been expanded to include an additional compensation rule. The aim of this compensation rule is to mitigate losses of earnings suffered by workers who have to look after their children themselves due to the closure by the authorities of schools or child-care facilities on the grounds of a pandemic, and who therefore are unable to work. In the field of cross-*Länder* health and health services research, the Fifth Book of the Social Code (SGB V) has been amended so that federal law should apply, and an overall data protection supervision authority has been introduced, in line with the corresponding provisions of the EU General Data Protection Regulation.

28. The changes to the Infection Protection Act made by the Second Act on the Protection of the Population in the Event of an Epidemic Situation of National Significance *(Zweites Gesetz zum Schutz der Bevölkerung bei einer epidemischen Lage von nationaler Tragweite)* of 19 May 2020 expanded the existing rules to provide protection against infec-

tions (cf. Table, No. 2). Not least, the preconditions were put in place so that in the event of an epidemic situation of national significance an ordinance can be enacted to establish an entitlement to test for the existence of an infection with SARS-CoV-2.

29. Both the Second Act on the Protection of the Population in the Event of an Epidemic Situation of National Significance and the COVID-19 Hospital Relief Act *(COVID-19-Krankenhausentlastungsgesetz)* of 27 March 2020 (cf. Table, No. 3) introduced a large number of changes to the Hospitals Financing Act *(Krankenhausfinanzierungsgesetz - KHG)*, the Hospital Fees Act *(Krankenhausentgeltgesetz - KHEntgG)*, Social Code V and Social Code XI. The aim is to support hospitals, panel physicians, as well as care facilities, people in need of care and family caregivers in coping with the COVID-19 pandemic. Under the protective shield for the care sector, roughly €1.8 billion in funds from the long-term care insurance system was spent in 2020 to offset additional expenditure and revenue shortfalls incurred by care facilities as a result of the pandemic. After the corresponding deductions in the spending on services are made, the net figure stands at around €1.4 billion. Moreover, a one-off bonus ('coronavirus premium') was disbursed in 2020 to all employees working in elderly care, totalling around €0.9 billion. In addition, the Federation allocated some €11.5 billion last year to compensate hospitals for postponing non-essential surgery and treatment, of which approximately €9.4 billion was actually used. The aim was to keep capacities free for the treatment of patients infected with COVID-19. Further to this, funding from the liquidity reserve of the Health Fund provided €686 million to create additional intensive care treatment capacity in hospitals. Also, for a temporary period, preventive care and rehabilitation facilities received – pro-rata – financial compensation for unoccupied beds from the liquidity reserve of the Health Fund. In 2021, a further €3.5 billion (as things stand) in federal funds is being made available to continue these compensation payments. Hospitals that have had to provide healthcare services to a very large number of SARS-CoV-2 patients in the first months of the pandemic were provided with a total of €100 million from statutory and private health insurance schemes for premium payments to be disbursed to nurses and employees who have come under particular strain; this was based on an amendment to the Hospitals Financing Act undertaken in the Hospital Future Act of 23 October 2020 (cf. Table, no. 4). In addition, hospitals are granted compensation for revenue shortfalls (2020 compared to 2019) and for extra costs related to the pandemic via an amendment to the Hospital Fees Act.

30. The Third Act on the Protection of the Population in the Event of an Epidemic Situation of National Significance *(Drittes Gesetz zum Schutz der Bevölkerung bei einer epidemischen Lage von nationaler Tragweite)* of 18 November 2020 further develops the existing rules to tackle the pandemic (cf. Table, No. 5).

31. The Federation is reimbursing the liquidity reserve of the Health Fund for expenses related to protective masks for groups of vulnerable people (up to €2.5 billion) as well as revenue shortfalls experienced by prevention clinics and rehabilitation establishments (up to €150 million). Moreover, it is allocating some €8.89 billion for the centralised procurement of SARS-CoV-2 vaccines in 2021. In this way, it is helping to reduce the expenditure burden on statutory health insurance funds while fulfilling important tasks for the whole of society.

32. In view of the COVID-19 pandemic, a temporary urgent assistance scheme for family caregivers came into effect in 2020, making it possible for

employees to stay away from work for a total of up to 20 working days (rather than ten working days) because they are temporarily prevented from working in order to provide care. Likewise, it is possible to claim care support allowance for the same period of time. Moreover, the provisions not least of the Long-term Care Leave Act *(Pflegezeitgesetz)* and the Family Care Leave Act *(Familienpflegezeitgesetz)* have been made more flexible.

33. As a strong location for research and development, it is Germany's responsibility to support the development of promising vaccine candidates in the country's research establishments. In mid-June 2020, a special programme was therefore launched to accelerate research and development in search of urgently needed vaccines against SARS-CoV-2 (cf. Table, No. 6). The funding is geared towards clinical vaccine development with a view to speeding up the availability of an effective and safe vaccine against SARS-CoV-2. Moreover, the programme is to expand development and production capacities in Germany and thus to strengthen the healthcare industry specifically in the field of vaccine development. Back in December 2020, a candidate vaccine developed by an assisted company was licensed by the European Medicines Agency, and the official EU licensing process for a further candidate vaccine was launched in February 2021.

34. The *Länder* have also taken important action to combat the COVID-19 pandemic (cf. Table, No. 7). The Infection Protection Act gives the public health service – and particularly the health offices and the "lower medical authorities" in the rural districts and towns and cities – important tasks to fulfil in the fight against the pandemic. These include contact tracing, the imposition of quarantine measures and the curbing of outbreaks, for example in care homes.

Supporting the economy during the crisis, promoting the recovery

35. In view of the dramatic economic slump, the Federation and the *Länder*, in coordination with the European Commission, responded very quickly to the economic challenges. The Federal Government introduced comprehensive support measures to mitigate the shock as early as spring 2020. It bolstered the economic recovery with a comprehensive programme of stimulus measures from May 2020. As part of the stimulus programme, the Future Package has been and still is triggering investment in key forward-looking areas (cf. Chapter II.B). The Federal Government accompanied the renewed lockdown from November 2020 to once more restrict the course of pandemic with new support measures for the sectors affected by the closures.

36. In order to help small and micro-enterprises as well as own-account workers with little in the way of reserves, the Federal Government set up an Immediate Assistance Programme for a maximum of three successive months in the March-June 2020 period when the restrictions were put in place due to the pandemic. By the end of 2020, more than €13.4 billion of non-repayable Immediate Assistance was disbursed to companies with up to ten employees, in response to nearly 1.8 million applications (cf. Table, No. 8). In November and December, extraordinary economic assistance ("November Assistance Programme" and "December Assistance Programme") also supported companies affected by measures necessary to tackle the pandemic with a one-off flat-rate amount of up to 75 percent of the comparable turnover from 2019 (cf. Table, No. 9).

37. Since June 2020, small and medium-sized companies have also been able to obtain grants towards fixed operating costs via the Bridging Assistance

Programmes. The Bridging Assistance Programme is the central instrument used by the Federal Government to support companies. It has so far been extended twice, and the conditions have been continuously adapted and simplified to meet the needs of the companies for support. For example, entry thresholds for the companies have been lowered, and maximum amounts of support increased (up to €1.5 million or €3 million per month for affiliated companies in Bridging Assistance III, cf. Overview 2). With additional sector-specific cost items, the revised Bridging Assistance III rules from January 2021 take particular account of the sectors hardest hit by the pandemic. The principle is: "the higher the loss in turnover, the higher the grant" (within the constraints of European State aid rules). By the end of 2020, roughly 206,000 applications had been approved, and €2.56 billion paid out, in the first two funding phases (cf. Table, No. 10). Around 60 percent of all the funding applied for was for companies in the hotel and restaurants sector, the travel sector and the events industry.

38. Companies of all sizes and freelancers who have encountered difficulties can apply for low-interest loans from the KfW in order to safeguard their liquidity. The KfW Special Programme 2020 has significantly relaxed the previous eligibility criteria – for the KfW Entrepreneur Loan and the KfW Start-up Loan – and has extended the group of eligible parties. Here, the KfW grants the banks a liability release of up to 90 percent, backed by a federal guarantee. Furthermore, the KfW Instant Loan created a new programme variant in which, in order to facilitate and accelerate the provision of the loan, the banks handling the loan are fully released from liability. Beyond this, individually structured and tailored syndicated loans are possible, with the KfW covering up to 80 percent of the risk of the financing (cf. Table, No. 11). By 11 March 2021, nearly 120,000 loans totalling around €48.8 billion had been granted under the KfW Special Programme.

39. Changes to the Federation's guarantee programmes have also helped companies to take on loans. The companies have been able to benefit from guarantees for loans of up to €2.5 million (previously: €1.25 million); in the case of the guarantee programmes to strengthen the equity base of small and medium-sized enterprises, the possibility to cover holdings was raised to up to €2.5 million (previously: €1.25 million) (cf. Table, No. 12). Also, the 'large-scale guarantee programme' (in which both the Federal government and the *Länder* serve as guarantors), which had previously only been open for companies based in structurally-weak regions, is now opened up to companies based outside these regions from a guarantee amount of or exceeding €50 million (cf. Table, No. 13). In all the guarantee programmes, the maximum guarantee rate was raised from 80 percent to 90 percent (in exceptional cases 100 percent for small amounts). From the onset of the crisis until the end of 2020, the guarantee banks approved 5,189 guarantees covering loans totalling €1.57 billion. Also, nine large-scale guarantees were approved for loans totalling €2.7 billion by the end of 2020.

40. A protective scheme for supplier credit was set up to maintain and stabilise supply chains and to control the risk of defaults on claims. By the end of 2020, the Federation had assumed guarantees of up to €30 billion for compensation payments by credit insurers. The Federal Government and the credit insurers agreed to extend until 30 June 2021 the temporary coverage for supply chains, which had initially been set to expire on 31 December 2020. The extension of the protective scheme was approved under State aid rules by the European Commission on 17 December 2020.

Overview 2: Changes to Bridging Assistance

Bridging Assistance I	Bridging Assistance II	Bridging Assistance III
June – August 2020	September – December 2020	November 2020 – June 2021
Grants towards the fixed operating costs in order to safeguard the economic survival of SMEs with annual sales of up to €750 million in Germany suffering considerable losses of sales due directly and indirectly to the pandemic. (For companies which do not qualify for the Economic Stabilisation Fund (WSF). Ineligible if at least two of the following criteria are met in the two completed financial years before 1 January 2020: a) total balance sheet of more than €43 million, b) sales revenues of more than €50 million, or c) annual average of more than 249 staff.)		Grants towards the fixed operating costs in order to safeguard the economic survival of SMEs with annual sales of up to €750 million in Germany suffering considerable losses of sales due to the pandemic (loss in sales of at least 30 percent). Companies in retail, the events and cultural industries, hotels, hospitality, pyrotechnics, wholesale and travel affected by closure orders issued on the basis of a decision taken by the Federation and the *Länder* are also eligible to apply if their turnover exceeded €750 million in 2020.
Grants totalling up to €50,000 per month/€150,000 for three months Maximum level can only be exceeded in justified exceptions	Grants totalling up to €50,000 per month/€200,000 for four months	Grants totalling up to €1.5 million (€3 million for affiliated companies) per month, up to a maximum total of €12 million due to State aid ceilings
SME threshold: • for companies with up to five employees, a maximum of €9,000 for three months, • for companies with up to ten employees, a maximum of €15,000 for three months,	Deletion of SME threshold	
Sector-specific fixed cost arrangements for the travel sector	Sector-specific fixed cost arrangements for the travel sector	Special sector-specific rules for the travel industry, retail trade, the cultural and events sector, and the pyrotechnic industry Extension of the catalogue of fixed costs, e.g. with up to 50 percent depreciation of assets by value (max. €100,000), investment in digitalisation, rebuilding costs for hygiene-related measures Further to this: • One-off flat-rate amount for operating costs for own-account workers *(Neustarthilfe)* totalling 50 percent of the reference sales of up to €7,500 which is not deducted from welfare benefits (if no other claims for fixed costs are made in Bridging Assistance III). • Sector-specific cost rules for the events and cultural sector; in the context of the general grant rules, costs of cancellation and preparation for business activities (internal project-related and external costs) are eligible for funding in the March-December 2020 period.

Bridging Assistance I	Bridging Assistance II	Bridging Assistance III
June – August 2020	September – December 2020	November 2020 – June 2021
Eligibility criteria • Drop in sales of at least 60 percent in the months of April and May 2020 compared with April and May 2019 • Ongoing drop in sales of at least 40 percent	Eligibility criteria • Drop in sales of at least 50 percent in two consecutive months in the period April to August 2020 compared to the respective months in the previous year • or average fall in sales of at least 30 percent in the months April to August 2020 compared to the same period in the previous year	Eligibility criteria • Drop in sales of at least 30 percent in a month compared to the reference months in 2019
Monthly reimbursement of fixed costs to the amount of: • 80 percent of the fixed costs for those having lost more than 70 percent of their turnover; • 50 percent of the fixed costs for those having lost between 50 percent and 70 percent of their turnover; • 40 percent of the fixed costs for those having lost more than 40 percent of their turnover in each case in the month for which the application is made compared to the same month in the preceding year. • Eligible fixed costs in line with a positive list	Monthly reimbursement of fixed costs of • 90 percent of the fixed costs for those having lost more than 70 percent of their turnover; • 60 percent of the fixed costs for those having lost between 50 percent and 70 percent of their turnover; • 40 percent of the fixed costs for those having lost more than 30 percent of their turnover in each case in the month for which the application is made compared to the same month in the preceding year. • Eligible fixed costs in line with a positive list	Monthly reimbursement of fixed costs of • 90 percent of the eligible fixed costs for those having lost more than 70 percent of their turnover; • 60 percent of the eligible fixed costs for those having lost between 50 percent and 70 percent of their turnover; • 40 percent of the eligible fixed costs for those having lost more than 30 percent of their turnover in each case in the month for which the application is made compared to the corresponding month of comparison in 2019. • Eligible fixed costs in line with a positive list
Flat-rate assistance towards staff costs of ten percent of the eligible fixed costs	Flat-rate assistance towards staff costs of 20 percent of the eligible fixed costs	Flat-rate assistance towards staff costs of 20 percent of the eligible fixed costs (which are not covered by short-time work allowances)
Only orders for repayments are possible in the context of the final settlement.	Both additional payments and orders for repayments are possible in the context of the final settlement.	Both additional payments and orders for repayments are possible in the context of the final settlement.
Applications via third party scrutinising the application	Applications via third party scrutinising the application	Applications via third party scrutinising the application Own-account workers are entitled to apply directly for up to €5,000, subject to special identification requirement. In the case of New Start Assistance *(Neustarthilfe)*, up to €7,500 can be applied for directly, i.e. without third-party scrutiny.

The purpose of the Economic Stabilisation Fund (WSF) is to stabilise companies in the real economy whose failure would have a significant impact on the economy or the labour market. In specific cases, smaller companies may also get access to the Fund (cf. Table, No. 14). The fund has a total volume of €600 billion. Of this, €400 billion consists of federal guarantees which help companies to refinance themselves on the financial market, as well as €100 billion towards recapitalisation to directly strengthen the equity base of companies. A further €100 billion serves to refinance the KfW Special Programme. The fund has so far decided on and signed contracts with companies for 14 measures with a total volume of €8.384 billion (cf. Overview 3).

Overview 3: Measures decided on and contractually agreed with companies under the Stabilisation Fund Act (status: 4 March 2021)

Assisted company by type of measure	Level of the stabilisation measure	Contract signed
Guarantees (Section 21 Stabilisation Fund Act)		
-	-	-
Recapitalisation (Section 22 Stabilisation Fund Act)		
Deutsche Lufthansa AG	€5847.1 million	06/2020; 09/2020 (adapted)
FTI Touristik GmbH		
1st measure	€235.0 million	09/2020
2nd measure	€250.0 million	12/2020
TUI AG		
1st measure	€150.0 million	09/2020
2nd measure	€1091.0 million*	01/2021
MV Werften Holding Ltd.	€193.0 million	10/2020
German Naval Yards Kiel GmbH	€35.0 million	10/2020
Schlote Holding GmbH	€25.5 million	11/2020
NOVUM Hospitality GmbH	€45.0 million	12/2020
A-Kaiser GmbH	€12.5 million	01/2021
Blacklane GmbH	€10.0 million	01/2021
SANHA GmbH & Co. KG	€10.0 million	01/2021
GALERIA Karstadt Kaufhof GmbH	€460.0 million	02/2021
Berge & Meer Touristik GmbH	€20.0 million	03/2021
Total	**€8,384.1 million**	

* Consists of a Silent Participation I of €420 million and a Silent Participation II of up to €671 million. The Silent Participation II will be reduced by an amount (up to €200 million) if several *Länder* grant TUI AG a guarantee matching this amount.

KfW Special Programmes (Section 23 Stabilisation Fund Act)
The fund can grant the KfW loans to refinance the special programmes assigned to it by the Federal Government due to the pandemic. As of 3 March 2021, €38,032.0 million had been called on by the KfW.

An updated overview can be found here: https://www.deutsche-finanzagentur.de/de/wirtschafts-stabilisierung/

41. The COVID-19 crisis also has far-reaching consequences for the cultural and creative industries, particularly as a result of the hygiene and distancing rules and above all due to the closure of facilities during the temporary lockdown. Like other companies and self-employed persons, those working in the cultural and media industries can draw on the cross-sectoral federal coronavirus assistance. In order to safeguard the future of cultural institutions, the Federal Government has set up the (initially) €1 billion New Start Culture rescue and future programme; it is meeting with a high level of demand (cf. Table, No. 15). There are plans to top up the programme with another billion euros. It has also reoriented the work of the Federal Government's Centre of Excellence for the Cultural and Creative Industries. This ensures not least a rapid and direct sharing of practically relevant information during the crisis between all the central stakeholders in the creative industries (Federation, *Länder*, associations, initiatives). In addition to own-account workers and those without steady employment, short-term employees in the performing arts sector have been eligible since 16 February 2021 to apply for New Start Assistance of up to €7,500 for the six-month period from January to June 2021 in the context of Bridging Assistance III.

42. At the proposal of the Federal Government, the legislature has therefore introduced various provisions in civil, insolvency, company, association, foundation and property-ownership law to alleviate negative economic effects of the pandemic.

Not least, the termination of rental contracts and leases was temporarily suspended where this related to a failure to make rental or lease payments caused by the COVID-19 pandemic. Consumers were given a temporary right not to fulfil contracts (cf. Table, No. 16).

Also, the legislation on rental contracts and leases was adjusted in favour of those who have rented or leased real estate or commercial property for their business and can make only restricted use, if any, of the property due to state-imposed measures to tackle the COVID-19 pandemic. It was made clear that the rules on a frustration of the contractual basis pursuant to Section 313 of the Civil Code *(Bürgerliches Gesetzbuch – BGB)* are in principle

Box 3: Stimulus programme for the culture and media sector

The aim of the New Start Culture programme is to facilitate a fresh start for cultural life in Germany during and after the pandemic by enabling cultural institutions and stakeholders to reopen with new programmes and activities. The aim is not only to restore the urgently needed diversity of cultural services, but also to provide prospects of employment and earnings for many people working in the sector.

The funding of (initially) a billion euros for New Start Culture represents important investment in the maintenance of the unique cultural and creative infrastructure and of cultural life in Germany. Parts of it that are lost cannot quickly be rebuilt. The top priority in cultural policy is therefore to maintain cultural institutions and venues and to secure the economic survival of those who earn their living from art and culture.

applicable to the special situation in the COVID-19 pandemic. In addition to this, an arrangement was introduced under procedural law giving precedence to and expediting disputes about the existence of a frustration of the contractual basis in the case of commercial rental contracts (cf. Table, No. 17).

Also, companies which were economically weakened by the pandemic and which were insolvent or had excessive debts in terms of insolvency law as a consequence, were relieved of their obligation to apply for insolvency up to 30 September 2020. They were given more time to avert an insolvency, e.g. by drawing on government assistance, obtaining new finance, and if necessary, reorienting their activities. A restriction on risks of liability and challenges was also introduced to make it easier for companies to keep their businesses going during the crisis (cf. Table, No. 18). This arrangement was extended until the end of 2020 for companies which had excessive debts but were not insolvent (cf. Table, No. 19). In these cases, it was assumed that there are prospects of permanently averting the insolvency.

43. At the beginning of 2021, and limited until the end of the year, further amendments for companies affected by the pandemic entered into force in the context of the Act to Develop Recovery and Insolvency Law *(Gesetz zur Fortentwicklung des Sanierungs- und Insolvenzrechts)*. For example, the reference period for the over-indebtedness assessment was reduced under certain circumstances to four months. Also, the obligation to file for insolvency was suspended for January 2021 in certain circumstances (both for the reason for opening the insolvency proceedings and for over-indebtedness). This arrangement applies to those debtors whose crisis is related to the pandemic and who applied for financial aid under COVID-19 government assistance programmes between 1 November 2020 and 31 December 2020 or who can at least be considered eligible if they were unable to apply during this period on either legal or factual grounds. Another precondition is that the assistance is likely to be paid out so that the company has a chance of surviving (cf. Table, No. 20). This suspension of the obligation to file for insolvency was extended until 30 April 2021 for those debtors which applied for financial assistance by 28 February 2021 or were eligible to apply and which fulfilled the other preconditions for a suspension (cf. Table, No. 21).

44. Further temporary measures in the field of legislation on companies, cooperatives, associations, foundations, residential property and transformations make it easier to, for example, hold assemblies and adopt resolutions virtually by means of telecommunications technologies (cf. Table, No. 22).

45. From the outset of the COVID-19 pandemic, the Federal Government has attached great importance to investing in the maintenance of social infrastructure. Legal measures such as the Social Service Providers Deployment Act *(Sozialdienstleister-Einsatzgesetz (SodEG)*, cf. Table, No. 23), financial assistance such as the Children and Youth Education, Children and Youth Work Special Programme (cf. Table, No. 24), as well as loan programmes such as KfW's special programme 'Global Loans to *Länder* Promotional Institutes for the Support of Non-profit Organisations' are targeted measures to stabilise and strengthen the existing social infrastructure.

46. Looking beyond these grant and loan programmes, the Federal Government has taken a number of additional measures to support the liquidity of companies and thus to make them more resilient. For example, possibilities to defer tax payments were improved and the lowering of advance payments of profit tax was made easier (cf. Table, No. 25).

47. The Act implementing tax relief measures to tackle the COVID-19 pandemic *(Coronavirus Tax Relief Act – Corona-Steuerhilfegesetz)* is helping those stakeholders who are particularly affected by the crisis. If certain conditions are met, payments made by employers to supplement employees' short-time or seasonal short-time work allowances are exempt from tax. Furthermore, between 1 March 2020 and 30 June 2021, employers can grant their employees up to €1,500 aid and support to ease the additional financial burden they face during the COVID-19 pandemic. Provided that this aid and support is paid out in addition to owed wages or salaries, it is exempt from tax and social security contributions or can be paid out in kind. Another instrument that has been deployed is a temporary application of Germany's reduced VAT rate of seven percent to certain hospitality services (cf. Table, No. 26), and this has been extended until the end of 2022 by the Third Coronavirus Tax Relief Act *(Drittes Corona-Steuerhilfegesetz)* (cf. Table, No. 28).

Supporting the economic revival

48. With the end of the exceptional situation due to the health-related restrictions during the COVID-19 pandemic in spring 2020, the Federal Government took targeted action to support the ensuing economic recovery during the year. To this end, it adopted a stimulus programme in June 2020 totalling around €180 billion in the budget for 2020 and 2021, including around €40 billion in 2021 for COVID-19 business assistance. The priorities of the Stimulus Programme include both the safeguarding of jobs and the stabilisation of the economy, and also measures to revive the economy and boost forward-looking investment in order to resolutely tackle forthcoming challenges like climate change, digitalisation and demographic change.

49. The Federal Government has deployed various targeted instruments to stimulate consumer demand by boosting the disposable income of private households. These particularly included the reduction in VAT rates from 19 percent to 16 percent and from seven percent to five percent until the end of 2020. Further to this, the stimulus programme disbursed a one-off child bonus of €300 for each child entitled to child benefit in 2020, and the amount of tax relief for single-parents was raised to €4,008 p.a. These measures were implemented in the Second Act implementing tax relief measures to tackle the COVID-19 crisis (Second Coronavirus Tax Relief Act – *Zweites Corona-Steuerhilfegesetz*, cf. Table, No. 27). In 2021, once again, a one-off child bonus of €150 will be granted on the basis of the Third Coronavirus Tax Relief Act (cf. Table, No. 28).

50. A second tranche of stimulus measures is chiefly addressed to the business community. The Second Coronavirus Tax Relief Act (cf. Item 49) raised the maximum amount of losses that can be carried back for tax purposes for 2020 and 2021, and introduced a new mechanism for losses being carried back from 2020 to become disposable and financially effective as soon as the 2019 tax declaration is processed. The carry-back of losses for 2020 and 2021 was raised by the Third Coronavirus Tax Relief Act to a maximum of €10 million and €20 million (cf. Table, No. 28). The social insurance contributions are stabilised at a maximum of 40 percent of gross wages until 2021 by means of a "social guarantee", and the EEG surcharge (which funds renewable energy sources) is restricted by means of grants from the federal budget. In order to maintain incentives for companies to invest, despite the crisis situation, the Federal Government has introduced via the Second Coronavirus Tax Relief Act a temporary increase in tax incentives for research and a temporary possibility for degressive depreciation of movable assets which were purchased or produced in 2020 and 2021 (cf. Items 175 ff. on other tax-related reforms).

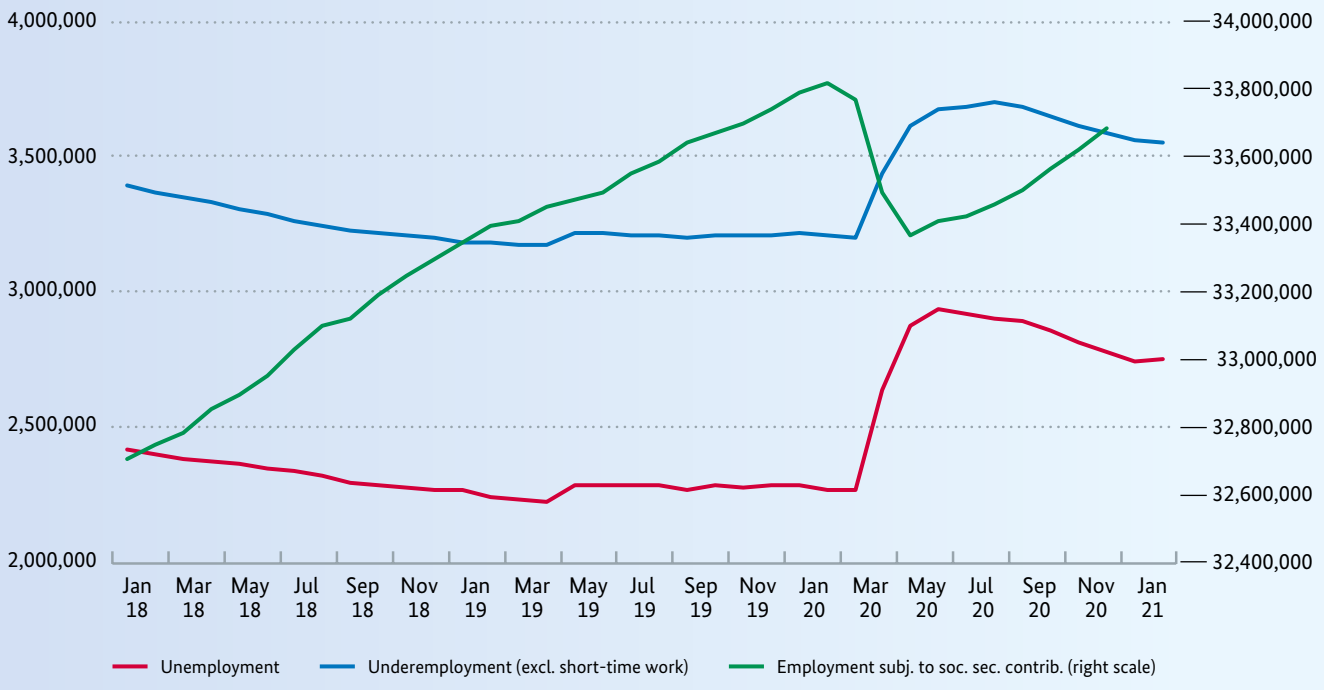
51. The *Länder* have also provided comprehensive assistance to the commercial sector in response to the economic slump caused by the COVID-19 pandemic (cf. Table No. 29).

Mitigating income losses, strengthening the labour market in the face of the pandemic

52. Until the outbreak of the COVID-19 pandemic, the labour market had been developing positively under the current government: while unemployment and underemployment had been falling, there had also been a marked increase in the number of jobs requiring social insurance contributions (cf. Diagram 2). In early 2020, however, labour market activity deteriorated abruptly. Between March and May 2020, the level of short-time work reached a record high while employment decreased sharply and unemployment was on the rise. From June 2020, the labour market started to stabilise again. In 2020, the number of gainfully active persons in Germany averaged 44.8 million, down from the previous year by about 477,000, i.e. 1.1 percent. The average unemployment rate in 2020 was 2.7 million people in total, i.e. 5.9 percent (+ 429,000 or 0.9 percentage points in the year-on-year comparison).

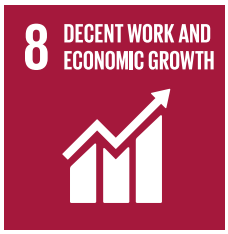
53. Due to the pandemic, the number of long-term unemployed rose to an annual average of 817,000 (2019: 727,000), not least because fewer people took up a job and more people therefore remained unemployed. Following the peak in April 2020, when nearly six million people were in short-time work, the number fell continuously to around 2.06 million in October 2020. It rose again from November in the course of the second lockdown. In December 2020,

Diagram 2: Development of the labour market (seasonally adjusted)



Source: Statistics from the Federal Employment Agency

Box 4: Employment and sustainability



Increasing the level of employment and promoting decent work for all are declared objectives of Germany's National Sustainable Development Strategy and of the United Nations 2030 Agenda for Sustainable Development (as part of SDG 8: decent work and economic growth). The total employment rate as determined by Eurostat (20 to 64 years) stood at 80.6 percent in 2019, surpassing the target of 78 percent for 2030.

according to an initial extrapolation, 2.39 million employees were in short-time work (cf. Diagram 3). In view of the current rate of infections and the restrictions imposed in response to the pandemic, the recovery of the labour market is unlikely to reach pre-crisis levels soon – although leading indicators are still largely positive. Furthermore, structural change and the external economic environment continue to pose major risks.

54. The economic situation and the sharp decline in economic activity in certain sectors has led to some massive falls in profits and income. The social protection packages adopted by the Federal Government (cf. Table, Nos. 30, 31 and 32) are designed to mitigate the social and economic repercussions of the COVID-19 pandemic for the citizens. Social Protection Package I and the subsequent packages (cf. Table, Nos. 33, 34 and 35) have therefore facilitated access to these basic security benefits for jobseekers under SGB II until 31 December 2021, ensuring that the benefits are made available quickly and in a non-bureaucratic manner. The self-employed can also benefit from this if they are otherwise unable to provide for themselves. In particular, insubstantial assets are not being considered while actual expenses for housing and heating are recognised. In this context, the simplified asset test for the child supplement was extended until 31 December 2021. In addition, any aid or support that employees may receive from their employers for their commitment during the COVID-19 pandemic is to be exempted up to a limit of €1,500 from income assessments required for recipients of basic security benefits for jobseekers (cf. Table, No. 36). Nor do these assessments take into account any payments received as part of the Federation's extraordinary economic assistance (November Assistance and December Assistance) or the New Start Assistance (cf. Table, No. 37). Social Protection Package III grants adult recipients of basic security benefits a one-off special payment of €150 in May 2021 towards additional expenses due to the COVID-19 pandemic.

55. In order to cushion the losses for employees liable to the payment of social insurance contributions and to prevent a massive rise in unemployment, the Federal Government has facilitated access to short-time work allowances, extended their duration, and opened up the instrument to temporary agency workers (cf. Table, No. 38). This has reduced losses of income in many cases. In total, disposable income in the fourth quarter of 2020 stood at €498.68 billion, and was actually 0.3 percent above the level in the fourth quarter of 2019. The special regulations also help to improve the liquidity of companies during work shortfalls by ensuring that the social insurance contributions are temporarily reimbursed.

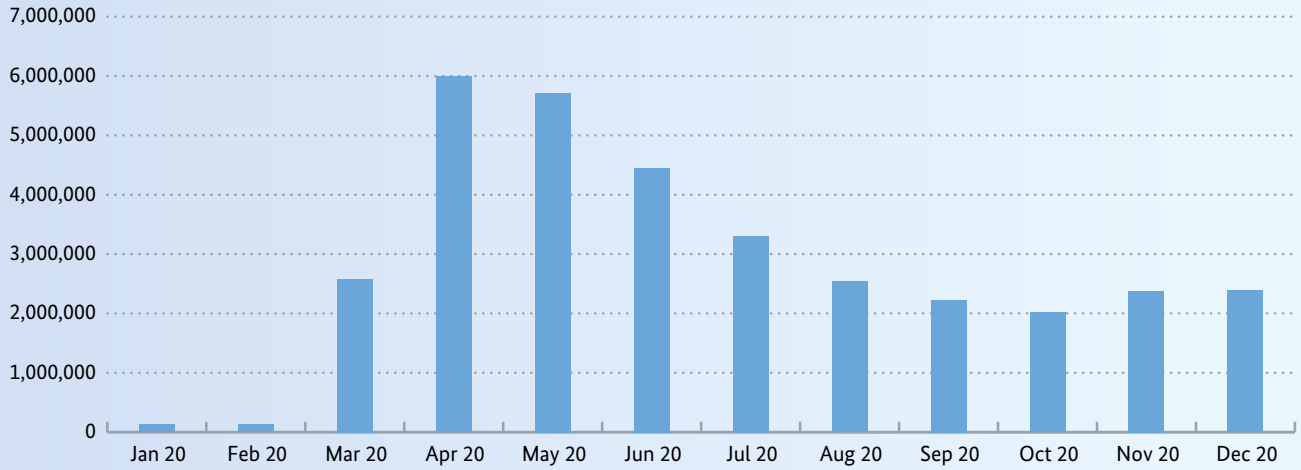
56. In order to provide greater financial security for employees affected by the lack of work as well as their families, the amount of the short-time working allowance was raised by Social Protection Package II (cf. Table, No. 31) to a maximum of 80 or 87 percent, graded according to the duration of entitlement and the extent of the work shortfall. Also, it was settled that earnings from sideline activities taken up during short-time work should not be credited up to a certain amount; earnings from a low-paid job (mini-job) are not to be credited at all.

57. The special regulations on the short-time working allowance, originally limited until the end of 2020, have been partially extended until the end of 2021 (cf. Table, Nos. 39 and 40). The Act to Secure Employment *(Beschäftigungssicherungsgesetz)* offers additional incentives for further training measures for short-time workers. From April to December 2021, the previous regulations which had applied before the COVID-19 pandemic are to be phased in again for companies taking up short-time work during this period.

58. Social Protection Package II (cf. Table, No. 31) temporarily expanded insurance cover within the framework of employment promotion pursuant to Social Code III (SGB III). For those whose entitlement to unemployment benefits was due to expire between 1 May and 31 December 2020, the entitlement period was extended once by three months.

59. To help parents, the Federal Government has adapted the parental allowance rules to the necessities of the crisis (cf. Table, No. 41), and has built exceptional rules into the child supplement via the Social Protection Package (cf. Table, No. 30). Further to this, the short-time work allowance for parents is increased by seven percentage points, meaning that – depending on how long the allowance is received – the amount can be up to 87 percent of the lost net income. A new clause in the Infection Protection Act provides for pro-rata compensation for loss of earnings (67 percent of net income) for parents who have to look after their child themselves because the kindergarten, school or facility for people with disabilities is temporarily closed

Diagram 3: Use of short-time work



Source: Statistics from the Federal Employment Agency

(cf. Item 27). The *Länder* are operating various measures to support families and care and educational facilities during the COVID-19 pandemic (cf. Table, No. 42).

60. For young people, it is important that, despite the crisis, adequate training and initial career opportunities continue to exist to facilitate the smoothest possible entrance into the world of work. Companies also benefit from this, as they rely on well-trained staff. The stimulus programme therefore supports small and medium enterprises which, despite the financial burden imposed by the crisis, continue to offer training places and to provide training (cf. Item 215).

Ensuring debt sustainability and strengthening investment

61. The external shock of the COVID-19 pandemic put an end to more than a decade of growth, during which Germany succeeded in cutting its debt from 82.3 percent to 59.6 percent of GDP and in complying with the Maastricht debt rule in 2019 for the first time since 2002. The Federation did not take on any new debt between 2014 and 2019.

62. The measures relating to the COVID-19 pandemic are having a major impact on the budgets of the Federation and the *Länder*. The Federation and the *Länder* recognise the necessity of the approach taken in European budget monitoring to activate the general escape clause of the Stability and Growth Pact for the special exceptional situation in 2020 and 2021.

63. The extensive support and measures provided by the Federal Government are going hand in hand with net federal new borrowing of approximately €130 billion in 2020 and a planned amount of close to €180 billion in 2021. At the same time, the federal budget is delivering a considerable macroeconomic stimulus. The use of the exemption clause for extraordinary emergency situations in the deficit rules provided under Article 115(2) of the Basic Law means that the normal limits on net borrowing imposed by the debt rule can be exceeded in the 2020 and 2021 financial years. This is necessary to cushion the economic effects of the COVID-19 crisis.

64. In 2020, the Federal Government adopted two supplementary budgets to create the budgetary basis for financing the immediate crisis-relief measures and the measures taken under the stimulus programme. The decision to use the exceptional provision of the deficit rules also entailed the adoption by the German Bundestag of a repayment schedule pursuant to Article 115(2) Sentence 7 German Basic Law. Under this schedule, the Federal Government is legally obligated to repay the loans assumed beyond the limits of the debt brake over a period of 20 years starting in 2023.

65. The demands of the COVID-19 pandemic are making it necessary once again to assume unusually high levels of net borrowing in the 2021 budget year (a planned €179.8 billion). For the federal budget for 2021, the German Bundestag has decided that there continues to be an extraordinary emergency that justifies renewed borrowing levels exceeding the limits set out in Article 115(2) sentence 2 and 3 German Basic Law. The repayment schedule adopted in this context obligates the Federal Government to repay the loans assumed beyond the limits of the debt brake over a period of 17 years starting in 2026. This repayment obligation applies in addition to the repayment obligation cited above. Due to the ongoing pandemic, the Federal Government intends also to introduce a supplementary budget for 2021 into the parliamentary procedures.

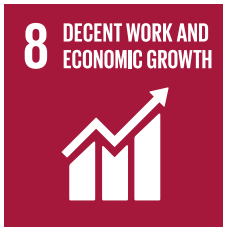
66. As a result of a highly expansive financial policy and of lower tax revenues due to the significant loss of GDP growth last year, the Federation (including its extra budgets) posted a financial gap that the Federal Statistical Office, in its initial calculations for the National Accounts, estimates at €86.6 billion, meaning that the Federation has had a significant share in the overall public-sector financial gap of €139.6 billion. The large financing gap in the national budget, changes in stocks resulting from the provision of guarantees, and the fall in GDP caused Germany's 'Maastricht' debt ratio (according to the current projection by the Stability Council in December 2020) to rise to an estimated 70 percent by the end of 2020, which is, once again, higher than the allowed 'Maastricht' limit of 60 percent of GDP.

67. The Federal Government expects the debt ratio to raise again in 2021, to 72.5 percent of GDP – according to the current projection by the Stability Council in December 2020. In part, the effect the high public-sector deficit is having on the debt ratio is expected to be cancelled out by the expected GDP growth. In the following years, the debt ratio is then expected to be brought down continuously. This expected development should be the result of economic recovery, the return to lower levels of new debt, and the persistence of low interest rate levels. The updated projection of government borrowing is being presented in the context of Germany's 2021 stability programme.

68. For a considerable time to come, the Federation's budgetary scope will be restricted by the repayment schedules for the shares of new debt incurred in the supplementary budget for 2020 and the federal budget for 2021 that exceed the normal limits imposed by the debt brake.

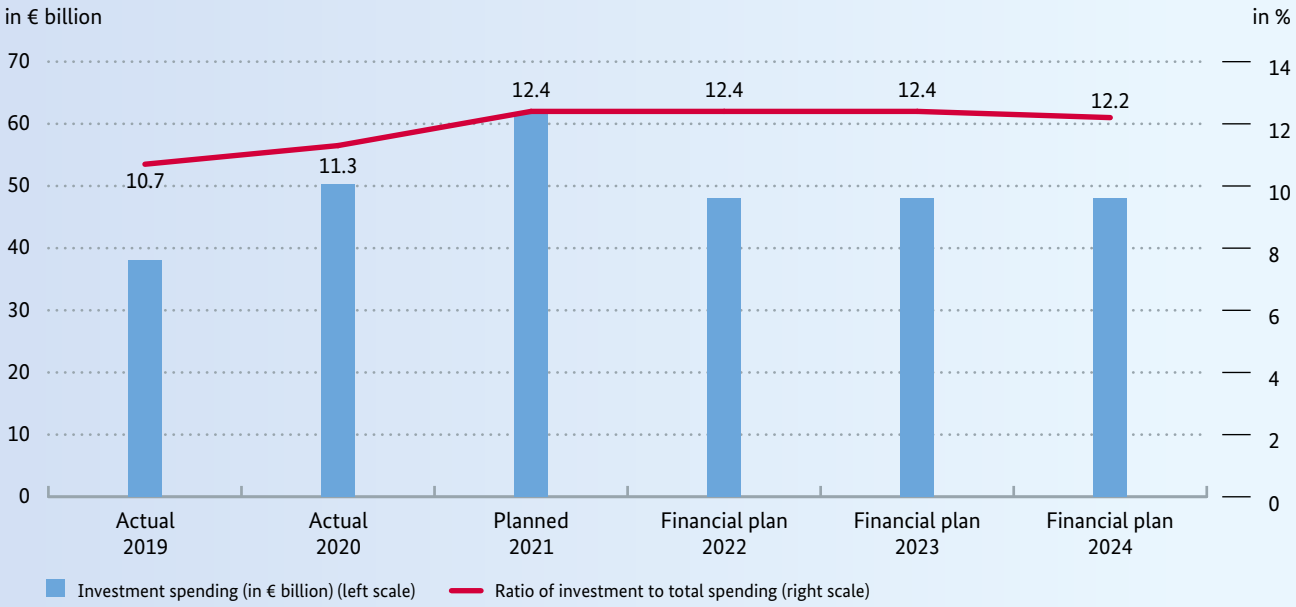
69. At the same time, the intention is to boost the forces for growth, particularly via an internationally competitive, forward-looking tax system, flexible labour-market rules, further reductions in superfluous bureaucracy and important investments in the future. Spending on investments as defined in the federal budget totals approx. €61.9 billion this budget year, and will be stabilised at approx. €48 billion per annum over the financial-planning period – a figure well above pre-crisis levels. Obstacles such as a lack of planning and administrative capacity and regulations standing in the way of a swift implementation of public-sector investments are being addressed both by the Stimulus and Crisis-relief Package and the Future Package (cf. Items 79 ff.).

Box 5: Public-sector finances and sustainability



Stable public finances and a positive investment environment are declared objectives of the German Sustainability Strategy (as part of SDG 8: decent work and economic growth). Germany complied with the European fiscal rules in terms of its deficit and debt ratios for 2019. In 2020, the COVID-19 pandemic caused the debt ratio to rise by a large margin.

Diagram 4: Volume of spending on federal investments from 2019 to 2024



Source: Calculations made by the Federal Ministry of Finance

70. In coordination and cooperation with the Federation, the *Länder* have acted resolutely to curb the pandemic and have also provided wide-ranging stimulus and crisis packages to additionally stabilise the economy. These measures are having a major impact on the budgets of the *Länder*. The deficits arising there derive from crisis-related shortfalls in tax revenues and the measures taken by the *Länder* which particularly benefit the healthcare system, the municipalities and the companies, self-employed persons and institutions affected by the crisis. With regard to the *Länder* budgets and their deficit rules, it can also be confirmed that, at least for 2020 and 2021, a natural disaster or extraordinary emergency within the meaning of the Basic Law exists.

The Federation is relieving the burden on the *Länder*, not least by assuming the costs relating to the supplementary pension systems of the GDR (cf. Table, No. 43) and, in the form of federal regionalisation funding, for compensating financial disadvantages in local public transport (cf. Table, No. 44).

71. The municipalities are also losing out on significant revenue due to the pandemic. In order to ensure that they remain viable in the face of the current challenges and can undertake important forward-looking investment, the relief provided in previous years is being continued and strengthened in a targeted manner. Under the stimulus programme, the Federation and the *Länder* have each offset half of the municipal revenue shortfall from 2020 (cf. Table, No. 45). In order to provide lasting relief for the municipal budgets in the field of welfare spending, the Federation will in future cover a further 25 percentage points of the costs of accommodation and heating provided by the basic security benefits for jobseekers (cf. Table, No. 46). This particularly benefits municipalities with high levels

of welfare spending. Further funding was provided for investment in the expansion of all-day education and child-care services (cf. Item 147).

Strengthening the health industry for the long term

72. In addition to measures to mitigate the economic impact of the COVID-19 pandemic, the epidemic also requires immediate action to strengthen the healthcare sector. Investments in modern emergency capacity in hospitals, their digital transformation and for IT security in hospitals are supported via a new "Future Hospitals Fund". Another €3 billion in federal funding has been approved for this purpose (cf. Table, No. 4).

73. By adopting the Public Health Pact, which is part of the economic stimulus package, the Federation, *Länder* and municipalities have taken far-reaching measures totalling €4 billion until 2026 to strengthen the public health service in a lasting way – both in terms of personnel resources and digital capacity (cf. Table, No. 47).

74. Stockpiling pharmaceuticals and personal protective equipment can help to increase resilience and prevent supply bottlenecks in healthcare crises. The Federal Government has therefore decided to set up a National Health Protection Reserve (cf. Table, No. 48). The National Health Protection Reserve is to cover the health sector's and the Federation's demand for personal protective equipment for a period of up to six months, with physical stockpiles to last for at least one month.

75. The Act on the Protection of Patients' Data *(Patientendaten-Schutz-Gesetz – PDSG)* establishes important principles for digitalisation in the health sector and thus an improvement in the quality of medical care. A key core element of the digital medical applications is the electronic patient file *(ePA)*, which is being introduced in the statutory health insurance system in several stages starting on 1 January 2021 (cf. Table, No. 49). At the same time, rules are stipulated in the Act on the Protection of Patients' Data which ensure a high level of data protection. An improved exchange of information in the health sector is intended to improve the quality, security and economic viability of medical care and to assist medical research (cf. Table, No. 50). At the end of 2019, the Digital Healthcare Act introduced the entitlement for insured persons to use digital health applications (cf. Annual Economic Report 2020 Item 70). The first health applications have successfully undergone the procedure of the Federal Institute for Drugs and Medical Devices to examine whether they were refundable, and can now be prescribed by doctors. The conditions are also being put in place for the use of digital health services in long-term care (cf. Table, Nos. 51 and 52). The *Länder* are also stepping up digitalisation in the healthcare sector (cf. Table, No. 53).

76. In November 2020, an initial report was presented on the state of implementation of the agreements on Concerted Action for Long-term Care (KAP). One of the major measures implemented under KAP is a training campaign that is geared towards the new training programmes in long-term care. Moreover, as a first step in the implementation of a procedure for assessing staff demand in elderly care, funds can be made available for the creation of up to 20,000 additional jobs for nursing assistants in full inpatient care facilities (cf. Table, No. 54). A road map has been developed to guide the further implementation of the new assessment procedure. Further to this, the Fourth Ordinance on Working Conditions in Long-term Care *(Vierte Pflegearbeitsbedingungenverordnung)*, which entered into force on 1 May 2020, introduces a set of nationwide minimum

Box 6: The electronic patient file and the Act on the Protection of Patients' Data in Telematic Infrastructure

The Act on the Protection of Patients' Data creates the basis for thorough use to be made of digitalisation in the health sector with a view to improving the quality of medical care. The electronic patient file is being introduced in several stages as a core element of medical applications. It will give insured persons the possibility to make comprehensive medical information to a wide range of institutions and sectors in order to improve their personal medical treatment. From 2022, it will be possible to administer the vaccination card, maternity record, record of child health tests and the dental bonus booklet online. Cooperation and networking in the healthcare sector is being substantially expanded and strengthened via further innovative digital medical applications such as the electronic prescription and the connection of further service providers to the telematic infrastructure.

wages for a range of qualifications in elderly care, with pay gaps between western and eastern Germany to be gradually aligned by 1 September 2021.

77. The changes to Social Code V (SGB V) contained in the Act to Further Develop the Healthcare System *(Gesundheitsversorgungsweiterentwicklungsgesetz – GVWG)* are intended to anchor cures and inpatient preventive care services as services which the statutory health funds are required to cover. It has also been found that prevention and precautionary measures are the best way to prevent chronic illnesses and to boost the body's defences.

B. Investment in climate action and the digital transformation

78. In 2019, the Council of the European Union recommended that Germany should take action to increase private and public investment, with a focus on education, research, innovation, digitalisation and broadband, sustainable transport, energy networks and affordable housing. In 2020, the Council reiterated this recommendation to focus investment on the green transition and the digital transformation (cf. the country-specific recommendations Box 1). In keeping with this recommendation, the Federal Government's investment policy is increasingly focussed on climate action and digitalisation. This is complemented by regulatory measures. The promotion of research and innovation is also increasingly concentrated on these topics of future relevance. Particularly with regard to digitalisation in education, the Federation and the *Länder* are making tremendous efforts to promote equality of opportunities across the entire population. In addition to expanding the infrastructure in schools, childcare centres and early learning establishments, the quality of education and learning is also being improved. In the opinion of the Federal Government, public and private investment make an important contribution overall to stabilising macroeconomic development and to promoting equal living conditions throughout Germany.

Contributing to macroeconomic stability through investment

79. In order to accelerate and stabilise investment, the Federal Government is dismantling additional bureaucratic barriers. It is improving the foundations for planning and coordination to drive investment in the economy overall in a way that facilitates regional structural change and promotes equivalent living conditions across the various regions. In this respect, and in keeping with the country-specific recommendations, the Federal Government is also placing an emphasis on improving tight housing markets in the regions and developing a sustainable transport infrastructure. The measures (including those implemented by the *Länder*) broadly complement the components presented in the German Recovery and Resilience Plan and reinforce their efficacy.

Bringing forward, accelerating and stabilising investments

80. The Federal Government has launched a series of measures to expedite planning and approval procedures, particularly in the field of transport and digital infrastructure. In spring 2020, statutory relaxations for new roads and railway lines replacing existing ones were launched, along with financial relief for municipalities with a view to a more rapid realisation of work to upgrade railway crossings (cf. Table, No. 55). Further to this, a procedural basis for the approval of transport infrastructure projects by the Bundestag was established in appropriate cases (cf. Table, No. 56). The Investment Acceleration Act *(Investitionsbeschleunigungsgesetz)*, which has been in force since 10 December 2020, is to leverage further potential. This affects the approval of railway projects, the expansion of onshore wind energy, and spatial planning and judicial procedures relating to projects to build up digital infrastructure (cf. Table, No. 57). Measures implemented by the *Länder* also help to accelerate investment. These include an administrative simplification in the implementation of the ERDF structural fund (cf. Table, No. 58).

81. The Federation and the *Länder* have introduced a variety of financial measures to ensure that municipal budgets remain viable during the crisis and municipalities can continue to make investments. These include compensation for lost trade tax revenue, an increased federal share in the cost of accommodation under the system of basic security benefits for job-seekers, and the stabilisation of payments by the *Länder* under the municipal fiscal equalisation system. In addition, the *Länder* have also made efforts to keep their own investments at a consistent level and allow the automatic stabilisers to take effect.

Supporting regions undergoing structural change, providing incentives for forward-looking investments

82. The Federal Government is committed to establishing equivalent living conditions across Germany. To better harness regional potential in structurally disadvantaged regions, the Federal Government created a pan-German Federal Funding System to strengthen all regions that are structurally lagging behind – be they in the Old or New *Länder*. The new scheme took effect on 1 January 2020. The so-called Federal Funding System for Structural Development Regions bundles together more than 20 programmes offered by six federal ministries, to support structurally disadvantaged regions. The regional distribution of the funding is guided by the map developed for the Joint Task for the Improvement of Regional Economic Structures (GRW). The Federal Government and the *Länder* are currently discussing which criteria should apply for the selection of areas to be assisted as of 2022. The demographic component of the criteria is to be significantly strengthened.

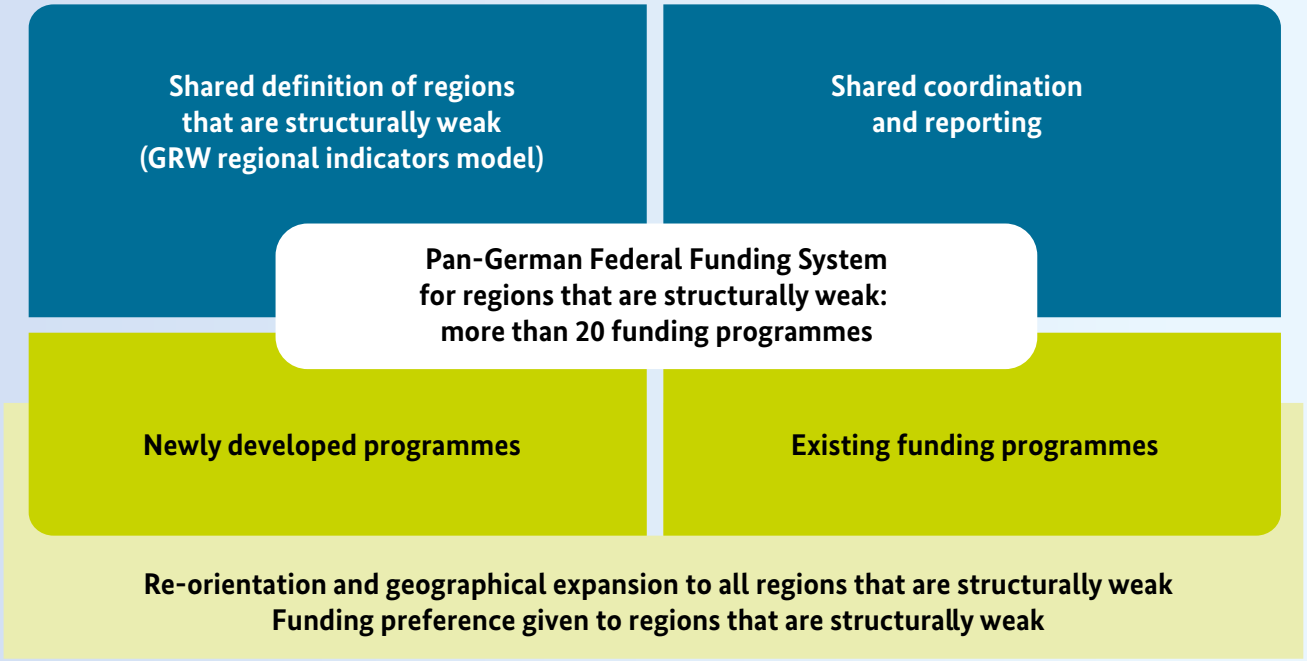
83. Under the stimulus package, the federal funding for the GRW in 2020 and 2021 was increased by €250 million for each of these years, and the innovation-funding aspect expanded. This tallies up to a total €919 million in federal funding for 2021, which is available for matching co-financing from the *Länder*. For a limited period of time, the criteria for funding for investments in commerce-related infrastructure have been eased to create incentives for companies and municipalities to invest during the COVID-19 pandemic.

This spring and as part of the Federal Funding System, the Federal Government will launch its new "Future Region" programme, a competition for ideas for regional alliances with the participation of municipalities in regions that are structurally lagging behind. There is also some limited scope for a 'preventative' regional policy, under which regions located outside the GRW areas can receive structural funding.

84. The Act Amending the GRW Act *(Gesetz zur Änderung des GRW-Gesetzes)* is designed to help integrate industrial and commercial areas receiving GRW funding in the transregional road network (cf. Table, No. 59).

85. In 2021, federal funding provided for programmes for the promotion of urban development will remain unchanged at the high level of €790 million in order to help the cities, towns and municipalities eliminate imbalances in urban planning. Structurally disadvantaged regions, in particular, are also to benefit from this. Furthermore, with the introduction of a new, pan-German distribution key, more funding is to be distributed to problem areas in the future. Complementing this,

Diagram 5: Federal Funding System for Structural Development Regions



Source: Federal Ministry for Economic Affairs and Energy

the Federation is making €110 million available in 2021 for the investment pact to support sports facilities ("Golden Plan").

86. The Structural Strengthening Act for Mining Regions *(Strukturstärkungsgesetz Kohleregionen)* implements the structural-policy recommendations made by the Commission for Growth, Structural Change and Employment and came into force on 14 August 2020. Under this legislation, lignite-mining regions will receive a total of up to €14 billion in financial aid for crucial investments made by the relevant *Länder* and municipalities up to 2038. In addition, up to €26 billion has been earmarked for further measures within the remit of the Federal Government until 2038. Additionally, selected hard-coal-mining regions and the former mining areas of Helmstedt will receive up to €1.09 billion. For the district of Altenburger Land, the Free State of Thuringia will receive up to €90 million from the funds for the Central German coal-mining region *(Mitteldeutsches Revier)*. A new coordination committee of the Federation and the *Länder* will ensure that the funding for the lignite coal-mining regions is actually disbursed (cf. Table, No. 60). The Federal Government will create at least 5,000 new, additional jobs in the coal-mining regions in government agencies at federal level and other federal institutions within a period of ten years through to 31 December 2028.

87. Accounting for around a third of the EU budget (€354.7 billion for the 2014–2020 programming period), European Cohesion and Structural Policy is the central instrument of European economic and employment policy. Cohesion policy also plays a major role in Germany's economic and social policies. Over the last programming period, Germany received more than €19 billion from the European Structural Funds.

88. Under the agreement on the EU Multiannual Financial Framework 2021-2027 (MFF), which was reached under the German Presidency of the Council of the EU, Germany is to receive €18.4 billion in structural funding over that period. Of this

Diagram 6: Structural Reinforcement Act for Mining Regions

Pillar 1: Financial assistance

Financial assistance (as per Art. 104b Basic Law) of up to **€14 billion** until 2038 at the latest, for especially important investments of the *Länder* and municipalities.

The *Länder* select the projects.

Example: Expansion of commercial areas or environmental restoration

Pillar 2: Federal measures

Federal measures consist of new programmes and projects and topping up existing programmes by up to **€26 billion** until 2038 at the latest.

The Federal Ministries select the projects.

Example: Federal institutions, federal programmes and infrastructure

+

Up to €1 billion for hard-coal mining regions particularly affected, up to €90 million for the former mining area of Helmstedt and €90 million for Altenburger Land*

Joint Federation-*Länder* **coordination body**

Measures to speed up **planning process**

Tied to exit from coal

* from funds for the Central German coal-mining region as per Section 3 (1) no. 3 of the Investment Act for Mining Regions

Source: Federal Ministry for Economic Affairs and Energy

funding, approx. €9.5 billion is intended for the country's 'transition regions' – mostly located in eastern Germany – and €8 billion for the 'more developed regions', predominantly in western Germany. The EU's cohesion policy will again focus on key policy objectives, such as innovative and smart economic change, climate action, environmental protection, and a Europe that is more socially just.

89. The European Regional Development Fund (ERDF) will continue to focus on the promotion of investment in the fields of research and innovation, small and medium-sized enterprises, sustainable urban development and climate action and environmental protection. Under the European Social Fund (ESF+), the focus is on the promotion of sustainable and quality employment and support for labour mobility, the promotion of social inclusion and the combating of poverty and any form of discrimination, and investment in general education and vocational training. Other priorities include support for the acquisition of key competences, including business and digital skills, and the promotion of lifelong learning.

90. In addition to funding from the traditional structural funds (ERDF, ESF+), Germany will also receive funding from Next Generation EU (NGEU), the temporary EU recovery instrument established in response to the COVID-19 pandemic. From the new React EU programme, Germany will receive some €2.4 billion, which will be disbursed through the structural fund programmes (ERDF and ESF) in the 2014-2020 programming period and the Fund for European Aid to the most Deprived, and will be used to mitigate the economic and social impact of the COVID-19 pandemic.

91. Germany will also receive roughly €2.5 billion (in current prices) from the newly created Just Transition Fund (JTF). This fund will complement existing structural funds in future and, as part of the Green Deal, is designed to help regions most affected by structural change – including the lignite mining regions in particular – to address the socio-economic impacts of the move towards a greenhouse-gas-neutral economy.

92. Another approx. €710 million in recovery funding for Germany will come from the NGEU and be disbursed through the European Agricultural Fund for Rural Development (EAFRD) in 2021 and 2022. These additional funds have been earmarked for action to mitigate the effects the COVID-19 pandemic is having on agriculture and rural areas, and for measures that contribute towards the objectives of the Green Deal.

Increasing the supply of affordable housing, facilitating the purchase of property

93. With a view to a joint housing campaign by the Federation, *Länder* and municipalities, a package of measures was adopted at the 2018 Housing Summit to increase the availability of affordable housing. All major decisions of this housing campaign have been put into effect or are in the process of implementation. The Federal Government has taken action to stimulate residential construction, particularly in the form of a special depreciation for privately financed new rental housing construction, which will be available for the last time for new apartments for which the application for a building permit is submitted or the start of construction notified by the end of 2021 (cf. Diagram 7). The Basic Law has been expanded by Article 104d in order to enable the Federation to provide financial assistance for social housing – a responsibility of the *Länder*. For the period from 2020 to 2024, Federal Government funding totalling €5 billion has been allocated to social housing. The Federal Government has also paved the way for amend-

Diagram 7: Selection of housing policy measures

Affordable housing

- Extension of the funding period for construction child benefit until 31 March 2021 (in response to the COVID-19 pandemic)
- Increase in housing benefit, with dynamic adjustments to take place every two years; introduction of a carbon component
- Extension of the reference period for the determination of the standard local comparative rent from four to six years

Provision of additional housing

- Recommendations based on the deliberations of the Building Land Commission; implementation includes amendments to the Federal Building Code aimed at giving municipalities greater scope for action in mobilising land for construction
- Special depreciation options for privately financed construction of new rental accommodation
- Increase in the house-building premium, with income thresholds raised

Climate-friendly living

- Greater incentives to switch over to climate-friendly heating systems
- Tax breaks for the retrofitting of buildings to improve energy efficiency introduced from the 2020 tax year
- Federal funding for energy efficiency in buildings

Source: Federal Ministry for Economic Affairs and Energy

ments to the Federal Building Code *(Baugesetzbuch)* in order to give municipalities greater scope for action in mobilising land for construction (cf. Table, No. 61).

94. Furthermore, the Federal Government supports families with children in buying their own home. Under the home buyers' child benefit programme, the Federal Government provides €12,000 per child to promote the purchase or construction of an owner-occupied dwelling. Programme funds amounting to €9.9 billion are set aside for this purpose. Also, the house-building premium has been made more attractive from the 2021 savings year on (by raising the income thresholds, the amount eligible for funding and the premium rate). Further measures such as the housing benefit reform, which entered into force on 1 January 2020, and dynamic adjustments to the level of housing benefit that are to take place every two years from 2022 help to ensure that housing continues to be affordable for low-income households as well (cf. Table, Nos. 62 and 63). Finally, a funding programme for the purchase of cooperative shares for owner-occupied housing is to be launched in 2021.

95. The Act to Extend the Reference Period for Standard Local Comparative Rents from Four to Six Years *(Gesetz zur Verlängerung des Betrachtungszeitraums für die ortsübliche Vergleichsmiete von vier auf sechs Jahre)* entered into force on 1 January 2020 (cf. Table, No. 64). It is to mitigate the increase in standard local comparative rents on housing markets experiencing a sharp rise in rent levels in new rental agreements. On 1 April 2020, the rent control mechanism was extended until the end of 2025 in order to counteract the sharp rise in rents on tight housing markets (cf. Table, No. 65). Furthermore, the Federal Government has decided to improve quality and legal certainty regarding rent level surveys, and to promote the production of such surveys (cf. Table, No. 66). Finally, the burden of brokerage fees is reduced for buyers of residential property (cf. Table, No. 67).

Stabilising investment in sustainable transport, shaping mobility of the future

96. The Federal Government aims to stabilise investment in the federal transport infrastructure at a high level. The federal budget provides for approximately €19.6 billion for this in 2021, roughly 14.3 percent up in year-on-year terms. In order to cushion the impact of the phase-out of coal-fired power generation, the Federal Government will in future also fund and realise infrastructure projects being pursued for structural policy reasons, using the additional funding made available for this in the context of the Structural Reinforcement Act for Mining Regions (cf. Item 86).

97. To make rail travel more attractive, the Federal Government reduced the applicable VAT rate on train tickets for long-distance journeys from 19 percent to seven percent with effect from 1 January 2020. Added to this are major investments in the rail network, which will make rail travel more appealing, thanks to new trains, routes and more connections. At the same time, air travel has become more expensive since 1 April 2020 as a result of the increase in air travel tax.

98. In order to ensure that the quality and quantity of local public transport services can be maintained in rural areas, the Federation increased the regionalisation funds in 2020 by a one-off amount of €2.5 billion to offset the financial impact of the pandemic. The *Länder* are responsible for handling the compensation payments (cf. Table, No. 68).

99. In order to strengthen the shipping and ports industry, the Federal Government has launched support programmes not least for the modernisation of inland waterway vessels and coastal shipping, the building of LNG fuelling vessels, and for innovative port technologies and digital testbeds in the ports (cf. Table, Nos. 69, 70, 71, and 72). Furthermore, as part of the stimulus package (No. 35 k), the Federal Government has scaled up the Maritime Research Strategy Programme, with funding of approx. €295 million available for this in the 2020-2024 period (cf. Table, No. 128).

100. The Federal Government's stimulus programme to tackle the coronavirus crisis includes additional investment in transport totalling €2.5 billion for research and development in the field of electric mobility and battery cell manufacturing (cf. Table, No. 73), and for the roll-out of a modern and secure charging station infrastructure. The originally planned funding of €50 million for private and commercial charging infrastructure was topped up by €500 million in the period up to 2023. Charging on non-public sites is of key importance for the overall charging infrastructure system and with a view to ensuring that it serves the grid to the greatest possible extent (cf. Table, No. 74). A new funding guideline for private charging infrastructure is to promote charging points in and on residential buildings (cf. Table, No. 75). This year, an additional programme, which needs to be notified to the European Commission, will cover commercial charging infrastructure. The Future Package is doubling the proportion of funding from the state for the innovation bonus for electric vehicles up to the end of 2021. The environmental bonus had already been increased before the pandemic and extended until the end of 2025 (cf. Table, No. 76). Also, the European Commission has been sent draft guidelines for technology-neutral funding for buses and trucks with alternative drives, including the fuelling and charging infrastructure (cf. Table, Nos. 77, 78 and 79). To further reduce emissions in the rail transport sector, the use of innovative drive systems with lower CO_2 emissions is to be more widespread on non-electrified lines. A funding guideline to this effect has been in force since 18 February 2021 (cf. Table, No. 80). Further to this, the Federal Government is giving impetus to the digitalisation

of the railways in order to increase the capacity and efficiency of the rail network. Under the stimulus programme to accelerate the roll-out of 'Digital Rail in Germany', additional funding of €500 million is available through to the end of 2021. This will be used, for example, to replace interlocking equipment and level crossing technology with the latest digital generation of safety installations. In addition, the planned aviation innovation bonus is designed to provide incentives for airlines to push ahead with the modernisation of their fleets in order to reduce greenhouse gas emissions by flying lower-emission aircraft. A total of €1 billion is to be made available from the Future Package for this purpose (cf. Table, No. 81).

101. By modernising the law on passenger transport *(Personenbeförderungsrecht)*, the Federal Government will respond to changing mobility requirements and advances in technology by adapting the rules for public transport and innovative services in the field of shared use, and in doing so create a legally secure foundation for new digital-based business models (cf. Table, No. 82).

102. The Federal Government intends to maintain and build on the leading role Germany is playing in the field of autonomous driving. To this end, it is necessary to drive forward research and development in order to make the mobility of the future more innovative, safer, more environmentally friendly and more user-oriented (cf. Table, No. 83). Germany's draft legislation on autonomous driving aims to make it the first country to permit nationwide regular operation of driverless vehicles (cf. Table, No. 84).

103. Under the stimulus programme, the Federal Government is making an additional €2 billion available in the years 2020 to 2024 to help fund forward-looking investments in the automotive industry. The aim of this funding is to support the

Diagram 8: Development of the charging infrastructure in Germany

Source: Federal Network Agency; data as at the end of each year

sustainable, rapid and technology-neutral transformation of the automotive sector (cf. Table, No. 115); it is to be part-financed via the German Recovery and Resilience Plan (cf. Box 2).

Driving investment in the digital infrastructure, tapping digitalisation potential in the business sector, administration and the energy transition

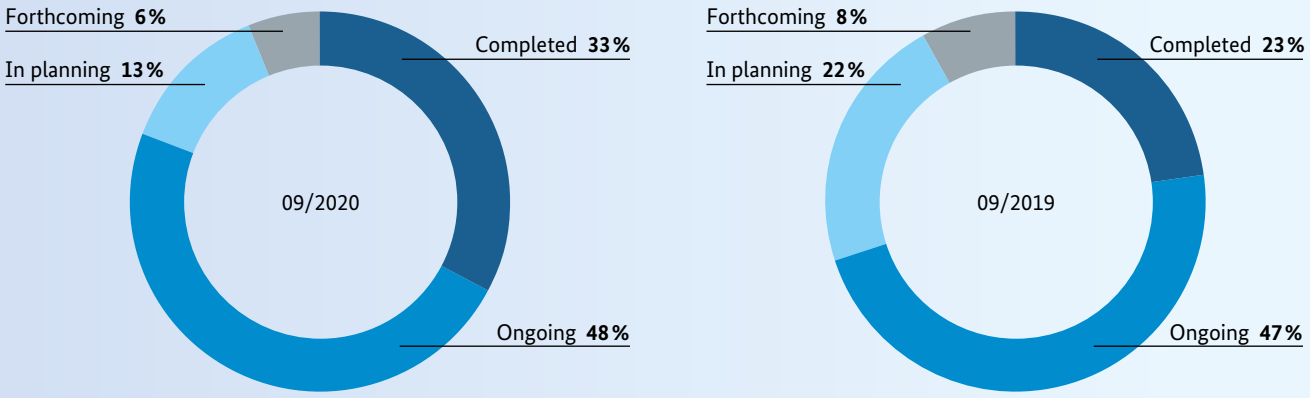
104. For the Federal Government, digitalisation is a comprehensive, strategic process where the priority is to seize opportunities while also strengthening the fundamental values, rights and freedoms of our society. It involves the expansion of infrastructures (for fixed broadband and mobile communications), the strengthening of technology fields and actions to support and accelerate the digitalisation of the business sector, educational facilities and administration, such as in the health sector. It is also becoming increasingly clear that the use of digital technologies offers potential for efficiency gains in the energy transition also.

Shaping digitalisation strategically, supporting SMEs in the digital transformation

105. The Federal Government's implementation strategy to shape the course of the digital transformation presents the progress made on digital policy projects in five fields of action (digital skills, infrastructure and equipment, innovation and digital transformation, society in digital change, and modern government). Since autumn 2020, the progress of individual projects has become even more visible thanks to the interactive digital policy dashboard (available at www.digital-made-in.de), (cf. Diagram 9 and Table, No. 85).

106. With its Data Strategy (adopted by the Federal Cabinet on 27 January 2021), the Federal Government comprehensively defines data policy and creates new scope for the innovative and responsible provision and use of data in Germany and the EU in a manner that is oriented to the common good. The Data Strategy will be a central driver of digital policy in Germany in the next few years. Comprising a total of 234 concrete individual measures, the

Diagram 9: Status of the implementation strategy



Source: "Shaping the Course of Digitalisation" implementation strategy; base: 486 implementation steps

Strategy aims to promote data-driven innovations, significantly increase the availability and responsible use of data, and contribute towards a mature and responsible data society in a sustainable, competitive data economy that enables just participation and upholds high data protection standards. The Data Strategy incorporates both internal administration measures, such as the appointment of chief data scientists in federal administration, and broad sub-strategies (e.g. Open Data Strategy) and projects (e.g. Gaia-X, Digital Education Initiative).

107. In the revision of the Artificial Intelligence Strategy (AI Strategy), the Federal Government is focusing its measures in the light of current developments in the field of AI since the Strategy was adopted in November 2018. The aim is to strengthen Germany's international competitiveness in the research, development and application of AI. For this, the priority is to continue to build and expand AI ecosystems in Germany and Europe in order to increase the application of AI on a broader scale while also promoting the visibility of outstanding initiatives and structures. The responsible development and application of AI systems which are oriented to the common good is to become a central component, and consequently the hallmark, of "AI Made in Europe" (cf. Table, No. 86). Under item 43 of the Stimulus and Future Packages, planned investment in AI through to 2025 will be increased from €3 billion to €5 billion. Item 44 of the COVID-19 Stimulus and Future Packages allocates an additional €2 billion for the research and development of quantum technologies. This horizontal technology has the ability to set in motion key innovations in important fields of industry and applications (e.g. digitalisation, AI, cryptography, aerospace, transport, pharmaceutics, medical technology, defence, agriculture), (cf. Table, No. 87).

In the GAIA-X project, the Federal Government is continuing to promote the establishment of a networked European data and infrastructure ecosystem with the highest aspirations in terms of data protection, transparency, interoperability and openness (cf. Table, No. 88). The goal is to establish an ecosystem that allows its users to provide, pool, share and use data and services in a trusted environment. In 2021, the Federal Government is launching a GAIA-X funding competition to implement examples of applications and to build data spaces.

108. The Federal Government plans to permit the purely online establishment of limited-liability companies in certain cases. By so doing, it is implementing the EU Digitalisation Directive. Also, in many other cases, a new online procedure for registrations in the Commercial Register is being set up, and the digital sharing of information between the commercial and company registers of the EU Member States is being improved (cf. Table, No. 89).

109. With regard to digitalisation in the public administration, the introduction of the electronic invoice (eInvoice) in the federal administration represents a key milestone. This lays the foundation for complete digitalisation of the process, from the invitation to bid or the order through to the invoice and the payment (cf. Table, No. 90). The pandemic has shown clearly how important it is for citizens and businesses to have easy and secure electronic access to public services. In the Federal Government's stimulus programme, €3.3 billion is being provided to speed up the digitalisation of public administration. Here, online services are to be developed once and then used by other government agencies as well ("one-for-all" principle), (cf. Table, No. 91). This ensures nationwide and efficient implementation.

110. The Federal Government gives particular support to SMEs to leverage the potential of digitalisation to an even greater extent (including in the Future Package); here, it is prioritising the transfer of innovations into practical applications, e.g. with

the recently launched "Digital Now" investment grant programme (cf. Table, No. 92), or the new programming period of the nationwide "SME Digital" network (cf. Table, No. 93).

Through the "Centres for the Future" ESF programme, the Federal Government has been lending support since 2019 to eastern Germany-based SMEs, their employees, own-account workers and self-employed persons with tailored consulting and innovative skills development approaches to develop innovative working and learning processes in the face of the digital transformation. The model is currently being rolled out to the other *Länder* with the "Centres for the Future (AI)" federal programme. Furthermore, the Centres for the Future are now also to support SMEs in the participatory introduction of people-centred AI systems. Both programmes are due to end in December 2022. A pan-German ESF programme of the same name is set to follow from 2023 onwards (cf. Table, No. 94). Since 2015, the ESF programme "Human resources: a valuable asset" *(unternehmensWert:Mensch)* has been funding SME consulting services nationwide to help SMEs secure the supply of skilled workers and develop a viable, employee-focussed business culture (cf. Table, No. 95).

Some *Länder* have also launched their own digitalisation strategies and provide numerous SME-specific incentives for investment through bonus and premium programmes and with hub and network initiatives (cf. Table, No. 96).

Rapid roll-out of fixed line broadband and mobile communications

111. The demands placed on the bandwidth and reliability of digital infrastructure continue to increase at a steady pace. The Federal Government is therefore aiming at nationwide availability of gigabit-capable landlines by 2025. The expansion of gigabit connections will primarily be driven by market-led processes in a competitive setting and is currently very dynamic, with investments recently reaching record highs. The Federal Government aims to provide targeted incentives for investment and innovation with the amended Telecommunications Act *(Telekommunikationsmodernisierungsgesetz)*, which was adopted by the Cabinet on 16 December 2020 (cf. Table, No. 97).

112. Public funding will only play a role where the market-driven roll-out does not take place. The Federation's broadband support programme, which was launched in 2015 and updated in 2018, is providing around €8 billion of approved funding to date in support of the roll-out of broadband in nearly 2,000 expansion projects across Germany.

113. Whilst the previous programme was restricted to areas with no coverage (transmission rate of less than 30 Mbit/s), in a next step a new funding programme will reach areas with coverage below 100 Mbit/s to the extent that it is apparent that no market-led expansion will take place. The Federation's Digital Infrastructure Fund is providing financial assistance. It remains the case that in both the initial and the extended eligible areas, funding is going exclusively to the expansion of gigabit networks (cf. Table, No. 98).

114. The Federal Government is also aiming at nationwide availability of mobile broadband voice and data services. The existing rules on coverage, contractual agreements and other measures of the Federal Government's Mobile Communications Strategy, which was adopted in November 2019, will result in coverage of approximately 99.95 percent of households and 97.5 percent of the territory.

The planned federal mobile communications funding programme will provide the necessary incentives for the construction of mobile communications sites in order to expedite the roll-out of at least

4G mobile communications networks and to close remaining gaps. The funding is to provide assistance where a lack of economic viability means that no market-driven roll-out will take place and where the coverage requirements have no effect. €1.1 billion will be available for the construction of up to 5,000 mobile communications sites. The nationwide 4G roll-out will create the platform for corresponding 5G coverage (cf. Table, No. 99).

115. In order to further speed up the expansion of mobile communications, the Federal Government has decided to set up a mobile infrastructure company (MIG) (cf. 2020 Annual Economic Report Item 35). It was established on 1 January 2021 and incorporated on 12 January 2021 with its entry in the Commercial Register (cf. Table, No. 100).

116. The Federal Government has launched the 5G Innovation Competition in order to show local residents, businesses and administrations the opportunities afforded by 5G technology and to provide specific possibilities to try out innovative 5G applications in various regions (cf. Table, No. 101). Also, spectrum was provided at the end of 2019 for "campus networks" to allow companies and research institutions, for example, to operate their own 5G networks on their property and to implement digital process innovations (cf. Table, No. 102). As of mid-January 2021, 102 such local campus networks were already in operation. Finally, the Federal Government is funding research into 5G, and also 6G on the long term (cf. Table, No. 103).

117. The Federation and the *Länder* are supporting the expansion of fixed line broadband and mobile communications networks through targeted investment promotion programmes. The primary focus here is the provision of coverage in previously underserved regions, actions to move forward with the expansion of fibre-optic networks, and the connection of educational facilities (cf. Table, No. 104). For example, the aim of funding provided through the Joint Federal/*Länder* Task for the Improvement of Agricultural Structures and Coastal Protection is to ensure underserved rural areas are better connected to broadband networks. With small-scale measures that close gaps in the existing broadband infrastructure, funding under the Joint Federal/*Länder* Task complements the federal programme for broadband roll-out and contributes to achieving the coverage targets. The aim is to enable agricultural businesses, in particular, to have adequate access to modern information and communication technologies.

Taking advantage of digitalisation for the energy transition

118. Smart networks and communication between all stakeholders of the energy system are a prerequisite for delivering on the energy transition and bringing electric mobility to scale without compromising on security of supply. The 450 MHz spectrum, which serves as the basis for wireless networks, allows for the rapid establishment of a network that is economically viable, blackout-resilient and secure in terms of supply. The 450 MHz spectrum is already being used in the energy sector to some extent. Devices which run on this spectrum (for example smart meter gateways) are available on the market. The decision made by the Federal Network Agency (Bundesnetzagentur) on 16 November 2020 to make the 450 MHz spectrum available primarily for critical infrastructure in the energy and water sector therefore serves as an important step to move forward on the energy transition, including in the transport sector.

119. The 2021 Renewable Energy Sources Act *(Erneuerbare-Energien-Gesetz, EEG)* provides for the deployment of smart meters in renewable energy and combined heat and power (CHP) installations in order to better integrate the rising number of

distributed and volatile generation facilities into the grid. The new EEG thus makes a big contribution to digitalising the energy transition, whilst at the same time protecting the legitimate expectations of the operators of existing installations. The overall goal of the Federal Government's digitalisation strategy remains to equip as many metering points as possible with smart meters and to maximise the use of secure gateways for running energy transition-related applications.

120. The importance of digital solutions can also be seen in network operation. If the exact state of the network is known, utilisation can be increased in particular situations. In order to ensure that the network remains secure and reliable at higher degrees of utilisation, its state needs to be monitored closely and in real time. By confirming the grid boosters in the 2019–2030 Network Development Plan, the Federal Network Agency has for the first time given approval for pilot projects that will look into innovative operational management approaches.

121. Focussing on different regional challenges, five large model regions – known as showcases – were set up under the "Smart Energy Showcases – Digital Agenda for the Energy Transition" (SINTEG) funding programme. Model solutions for the energy supply of the future were developed and demonstrated in these regions. The main emphasis of the programme is on digitalising the energy sector. The programme places a clear focus on building smart networks linking up the electricity supply and demand sides, and on the use of innovative grid technology and strategies (cf. Table, No. 105).

Investing in clean, efficient and integrated energy systems

122. The Federal Government supports the European Commission in its mission to make Europe the world's first climate-neutral continent whilst making it more competitive at the same time. This goal is underlined by the European Council's decision to reduce greenhouse gas emissions by at least 55 percent by 2030 compared with 1990 levels. According to the European Commission's impact assessment, the reinforced climate target for 2030 will require increasing the share of renewable energy and improving energy efficiency in the EU by 2030.

Box 7: Renewable energy and sustainability

A high share of renewable energy and reduced energy consumption are the goal of the German Sustainability Strategy and the 2030 Agenda for Sustainable Development of the United Nations (SDG 7: affordable and clean energy). The share of renewable energy in gross electricity consumption has increased considerably in this legislative term, rising from 36.0 percent in 2017 to 45.5 percent in 2020, by far exceeding the target of 35 percent set for that year.

Primary energy consumption in 2020 fell compared with the previous year. According to initial preliminary estimates, primary energy consumption dropped by 18.7 percent in the period from 2008 to 2020, and is therefore likely to just miss the target set for 2020 (20 percent reduction compared with 2008 levels). The development of primary energy consumption in 2020 is also greatly influenced by the COVID-19 pandemic.

123. The funding capacity of the Climate Action Programme 2030 amounts to around €54 billion up to 2023 alone. An additional two-digit billion sum has been added to this under the Stimulus and Future Packages, for example, to drive forward the market roll-out of hydrogen technology and the expansion of electric vehicle charging infrastructure. An essential element of the Climate Action Programme 2030 is the introduction of a new market-based carbon pricing scheme for the transport and heat sectors as of 2021. With effect from 1 January 2021, Germany has introduced a fuel emissions trading system for all fossil fuels that are not yet covered by the EU Emissions Trading System. This means that for all fossil-based carbon emissions there is now an effective price signal in place which is based on the CO_2 intensity of the fuel and provides a market-based incentive for the cost-effective changeover from emission-heavy technologies to more climate-friendly solutions, such as the use of heat pumps and electric mobility, as well as for increased energy efficiency and the use of renewable energy sources. All of the proceeds generated from carbon pricing will be invested in measures to combat climate change (e.g. purchase bonus for electric cars, funding of energy retrofitting of buildings), relief for the business sector and social redistribution. This particularly includes relieving the electricity price burden on private citizens and the business community by putting the majority of the revenue generated from fuel emissions trading towards reducing the EEG surcharge (cf. Table, No. 106).

Continuing to expand renewable energy

124. The Renewable Energy Sources Act is the main tool for promoting renewable energy generation. It guarantees that generation facilities receive a market premium for the renewable electricity they provide, that grid operators give priority to the purchasing of this electricity and that renewable energy installations are first in line to be connected to the grid. A fundamental revision of the Renewable Energy Sources Act (EEG 2021) entered into force on 1 January 2021. It stipulates that all of the electricity generated and consumed in Germany is to be greenhouse gas neutral before 2050. The Offshore Wind Energy Act *(Windenergie-auf-See-Gesetz)*, which was revised in 2020, governs the expansion of offshore wind energy. The revised version of the Offshore Wind Energy Act entered into force on 10 December 2020.

The EEG 2021 sets out in a clear and transparent manner the technology-specific expansion schedules and auction volumes and an annual schedule for electricity volumes across all technologies up until 2030 (cf. Diagram 10) to ensure that by 2030, 65 percent of the electricity consumed will come from renewable sources. The EEG 2021 specifies annual auction volumes of between 2.9 and 5.8 GW for onshore wind energy, of between 1.95 and 2.15 GW for photovoltaics, and of 750 MW for biomass. The auction volumes for offshore wind energy have been set at around one GW for the years from 2021 to 2023, at around three GW for 2024 and at around four GW for 2025. Stringent monitoring of the actual expansion of the renewables share in terms of gross electricity consumption will be an additional safeguard for meeting the 65 percent target.

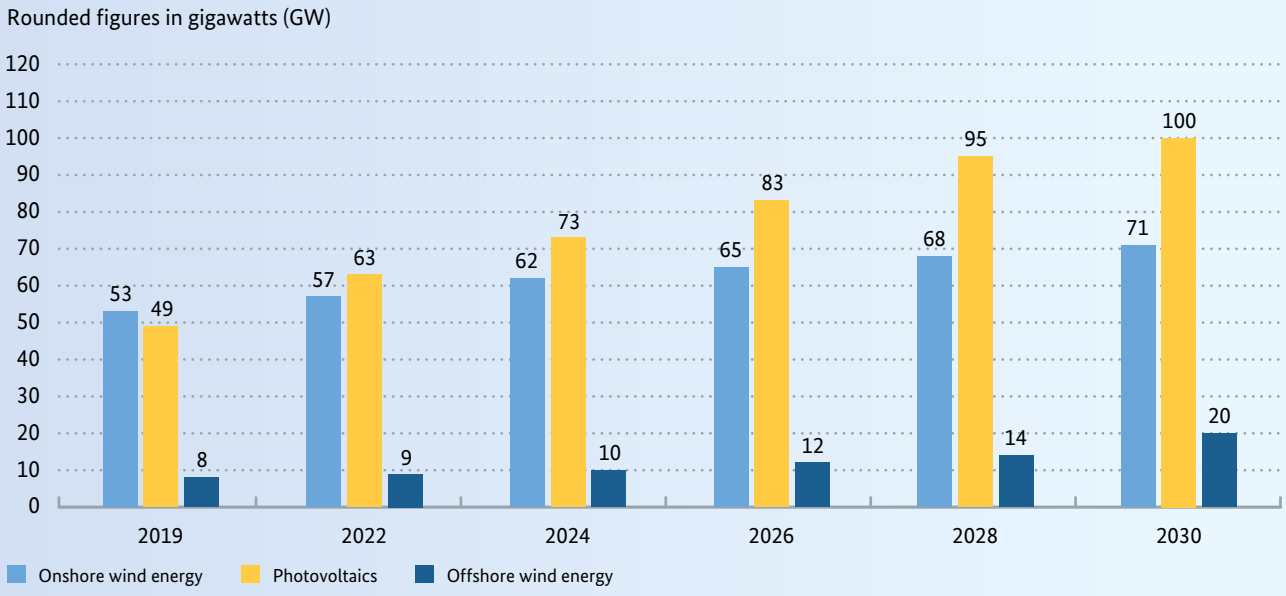
This is to bring the installed capacity of onshore wind energy to 54 GW by 2020 and 71 GW by 2030. The target for installed solar-PV capacity has also been increased, rising from 52 GW in 2020 to 100 GW in 2030. Innovation auctions have been extended and funding increased, thus providing strong impetus for innovation. Changes in auction design and technical modifications are currently being tested in order to improve the cost-effectiveness of the auctions and their ability to generate

successful innovations. The Federal Government and the *Länder* have set up a cooperation committee which looks at issues surrounding target achievement, the availability of land and the planning and approval procedures for wind turbines in the *Länder*. The EEG 2021 also includes measures for further slowing the increase in costs, spreading the expansion more evenly across regions, strengthening landlord-to-tenant electricity supply and self-generation, ensuring continued acceptance for the further expansion of renewable energy, and strengthening grid and market integration.

125. The cost of funding renewable energy under the EEG will be covered via the EEG surcharge. In 2020, the surcharge amounted to 6.756 cents. The Federal Government believes that there is a need to ensure that no additional burden is placed on the electricity price, particularly not from the EEG surcharge. Thanks to the proceeds from the national carbon pricing scheme and grants provided under the Stimulus and Future Packages, the EEG surcharge will fall to 6.5 ct/kWh in 2021 and to 6.0 ct/kWh in 2022. This is an important first step towards reforming taxes, levies and surcharges in the energy sector.

126. The Federal Government has revised the Offshore Wind Energy Act in order to further expand offshore wind energy. The current installed capacity stands at 7.7 GW. The central element of the revision is a significant increase of the 2030 expansion target from 15 to 20 GW of installed capacity. The revision also contains a long-term goal, which is to bring on line 40 GW of offshore wind energy by 2040. It shortens a number of deadlines for the construction of offshore wind energy installations and necessary connection lines and improves integration with grid expansion by introducing an additional inspection step. Furthermore, other

Diagram 10: Expansion of renewable energy up until 2030



Sources: Federal Ministry for Economic Affairs and Energy; Offshore Wind Energy Act (WindSeeG); Renewable Energy Sources Act (EEG 2021)

energy generation areas, such as areas focussed on innovative approaches for the production of 'green' hydrogen, will also be governed by the Offshore Wind Energy Act in the future. The revision also speeds up court procedures by extending the Federal Administrative Court's competence in first instance to actions against offshore connection lines (cf. Table, No. 107).

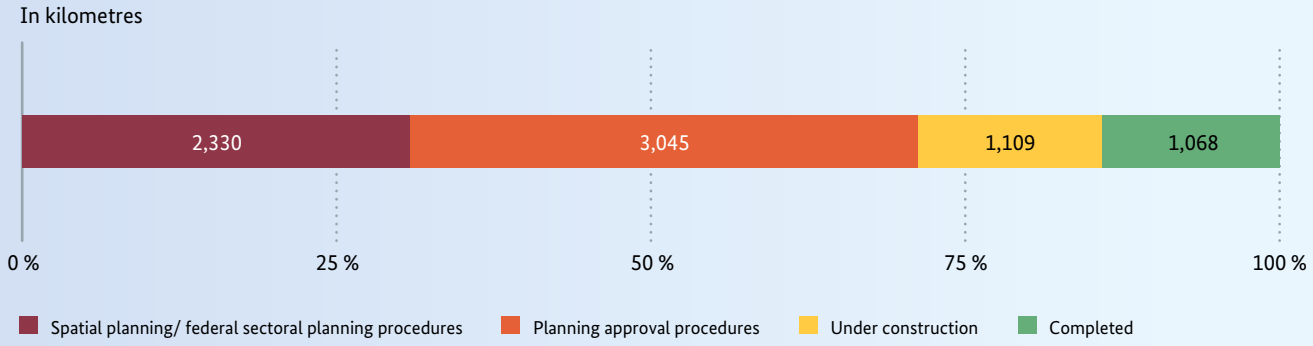
127. The 'PV cap' determined that newly installed small-scale solar PV installations of up to 750 kW were to no longer receive funding as soon as the installations' output reached 52 GW. This rule was eliminated by the Bundestag as part of its adoption of the Buildings Energy Act *(Gebäudeenergiegesetz)* on 18 June 2020. The EEG 2021 establishes separate auctions for large roof-mounted PV installations so as to ensure that the potential of roofs and buildings can be better used. In addition to this, the landlord-to-tenant electricity supply scheme has been made more attractive and extended to neighbourhoods, and self-generation has been strengthened.

128. The *Länder* are also simultaneously driving the expansion of renewable energy forward with funding for PV battery banks, combined biomass heat and power plants, and hydroelectric power plants, for example (cf. Table, No. 108).

Accelerating the expansion of the grid

129. Renewable electricity needs to be transported over great distances in Europe and Germany, for example to move electricity that is generated in the windy north to consumer centres in the west and south. To make this transport possible, the grid needs to be improved, strengthened and expanded. The Act Amending the Federal Requirements Plan Act *(Gesetz zur Änderung des Bundesbedarfsplangesetz)* entered into force on 4 March 2021. It updates the list of urgently needed grid expansion projects. The basis for this is the 2019-2030 Network Development Plan, which, for the first time, takes account of the Federal Government's reinforced target to achieve a 65 percent share of renewable energy in gross electricity consumption by 2030, which was introduced in this legislative term. Measures to address the grid problems in the tri-border area between Bavaria, Hesse and Thuringia are also implemented (cf. Table, No. 109).

Diagram 11: Progress of grid expansion projects



Source: Federal Ministry for Economic Affairs and Energy

130. Of the currently more than 7,500 grid kilometres to be expanded, around 2,200 are ready or under construction, whilst around 5,300 kilometres are still undergoing spatial planning, federal sectoral planning or planning approval procedures (cf. Diagram 11). The expansion is based on the Power Grid Expansion Act *(Energieleitungsausbaugesetz)* (covering around 1,800 kilometres). In addition to this, grid reinforcement measures and new routes are covered by the Federal Requirements Plan Act *(Bundesbedarfsplangesetz)* (approximately 5,700 kilometres up to now). An internal auditing mechanism has been put in place so that possible delays in the expansion process can be detected early on and measures initiated in order to prevent, make up for and reduce delays. The transmission system operators expect that the expansion of the grid could reduce by 50 percent the need for interventions into power plants' generation capacity as a means to protect certain line sections against congestion (cf. Table, No. 110).

Leveraging the potential of energy efficiency and renewable heat

131. The Federal Government seeks to make Germany the world's most energy efficient economy and to halve primary energy consumption by 2050 compared with 2008. This is because it will be impossible to implement the energy transition and climate action in an effective, sustainable and cost-efficient manner without substantial increases in energy efficiency.

132. The Federal Government's 2050 Energy Efficiency Strategy, which was adopted at the end of 2019, therefore sets out a target to cut primary energy consumption by 30 percent by 2030 compared with 2008 levels. The 2050 Energy Efficiency Strategy thus paves the way for strengthening energy efficiency policy, whilst at the same time contributing to meeting the EU's energy efficiency target (a reduction of at least 32.5 percent of primary and final energy consumption by 2030). The Strategy not only sets the new energy efficiency target for 2030, it also combines the measures the government needs to take to achieve it into a new National Action Plan on Energy Efficiency (NAPE 2.0), (cf. Table, No. 111).

133. Demand for funding under the programmes for energy efficiency and renewable energy in the buildings sector (CO_2 Rehabilitation Programme and Market Incentive Programme for heat from renewable sources) is very high. In order to cover the increased funding needs – also as a result of the higher funding rates under the Climate Action Programme 2030 – the Federal Government has significantly scaled up funding by another approx. €2 billion as part of the Stimulus and Future Packages. A part is to be financed through the German Recovery and Resilience Plan (cf. Box 2). By doing so, Germany is already making a contribution to the European Commission's renovation wave strategy that was announced on 14 October 2020. The high demand for funding is also reflected in 2020 in the revised Market Incentive Programme for heat from renewable sources. It includes a new bonus for replacing oil-fired boilers, which was introduced by the Climate Action Programme 2030. The Federal Government's Long-term Renovation Strategy is another important instrument for greater energy efficiency in the buildings sector. It includes a roadmap setting out indicative milestones for meeting the energy and climate targets in Germany's buildings sector by 2030. The Strategy details that Germany will specify the indicative milestones for 2040 and 2050 once the necessary decisions have been taken at the national and European level (cf. Table, No. 112).

134. The Buildings Energy Act, which was adopted by the Federal Government on 1 November 2020, unifies and streamlines energy conservation law.

The Act combines the Energy Conservation Ordinance *(Energieeinsparverordnung)*, the Energy Conservation Act *(Energieeinsparungsgesetz)* and the Renewable Energies Heat Act *(Erneuerbare-Energien-Wärmegesetz)*. The current energy-related requirements for new and renovated buildings are maintained and not tightened. At the same time, the Act provides an additional stimulus for using renewable energy (cf. Table, No. 113). In 2023, the requirements for new and existing buildings will be revised in accordance with the principles of economic efficiency and technological neutrality. The affordability of buildings construction and housing is a key pillar that needs to be taken into account.

135. Under the Federal Government's "Federal Funding for Efficient Buildings" scheme, which merges existing investment-related funding programmes in the buildings sector – namely Energy-efficient Building and Renovation, the Market Incentive Programme, the Incentive Programme for Energy Efficiency, and the Federal Funding Programme for Heating Optimisation – into a single, comprehensive and modernised funding offering, the Federal Government has reorganised the energy-related funding landscape for buildings and adjusted it to better suit beneficiaries' needs. Some of the measures of the scheme have applied since 1 January 2021, while others will come into effect on 1 July 2021. The scheme implements a number of decisions made as part of the Climate Action Programme 2030. It reduces the complexity of the funding landscape and provides even stronger incentives for investment into energy efficiency and the use of renewable energy in buildings. In 2020, the financing for energy audits for residential buildings was put on a more solid footing. As an additional tool, outreach activities will be used to disseminate even more specialised and targeted information about energy-efficient renovation measures so as to harness additional potential for energy efficiency and renewables use. This contributes towards the ambitious energy and climate targets in the buildings sector (cf. Table No. 114).

136. The *Länder* also continued their measures to increase energy efficiency, and are defining new priorities in their efficiency strategies, including in the areas of residential buildings, public institutions and energy storage technologies (cf. Table, No. 115).

Developing hydrogen as an energy carrier

137. Hydrogen plays a key role for the energy transition as it provides an alternative to fossil energy sources and raw materials. The Federal Government considers only hydrogen that has been produced using renewable energy (green hydrogen) to be sustainable in the long term. It therefore aims to use green hydrogen, promote its rapid market rollout and establish the necessary value chains. At the same time, however, the Federal Government expects a global and European hydrogen market to develop over the next ten years. Carbon-neutral hydrogen (e.g. "blue" or "turquoise" hydrogen) will also be traded on this market. Given Germany's close integration in the European energy supply infrastructure, carbon-neutral hydrogen will also be relevant for Germany and, if available, will be used on a transitional basis.

138. By adopting the National Hydrogen Strategy, the Federal Government has prepared the ground for the development of a market for hydrogen and hydrogen technologies. The Strategy provides a coherent framework for the generation, transport, use and processing of hydrogen, encouraging the relevant innovations and investment. It also sets out the steps that need to be taken in order to meet the climate targets, open up new value chains for German companies and advance international energy policy cooperation. Research and innovation are central for the expansion of the green

hydrogen economy. The priority is to advance technologies to an industrial level while also preparing future innovations which will make the production, transportation, storage and application of hydrogen more efficient and therefore more competitive (cf. also Item 145). In the implementation of the National Hydrogen Strategy, a particular focus is being placed on areas that are already close to commercial viability and where major path dependencies are to be avoided, or which cannot be decarbonised in other ways, as is the case with process-related emissions in the steel or chemicals industry, or in certain parts of the transport sector (cf. Table, No. 116). Some of the *Länder* have also adopted their own hydrogen strategies (cf. Table, No. 117).

139. In order for the National Hydrogen Strategy to be implemented, a total of €9 billion has been made available for the coming years. Under the Stimulus and Future Packages adopted in June 2020, €7 billion has been earmarked for funding hydrogen technology in Germany and another €2 billion for promoting international partnerships. A part is to be refinanced through the German Recovery and Resilience Plan (cf. Box 2).

140. Under the "Important Projects of Common European Interest on Hydrogen Technologies and Systems" (IPCEI on Hydrogen), the Federal Government is planning to provide funding for integrated projects along the entire hydrogen value chain, starting from the production of green hydrogen, to hydrogen infrastructure, and through to its use in industry and for mobility purposes. Funding is to go to projects that will make a significant contribution to the delivery of the National Hydrogen Strategy and to achieving the goals of the EU's environmental, energy and transport strategy. Financing will be provided through the funds of the National Hydrogen Strategy (cf. Table, No. 118). At the official EU launch of the IPCEI on Hydrogen on 17 December 2020, Germany and 22 other European countries signed a manifesto on hydrogen, declaring their willingness to support the development of hydrogen technologies.

Seizing the opportunities offered by the energy transition for industrial policy

141. The Federal Government would like the sector-specific initiatives stipulated for industry by the Green Deal to be expedited. Major challenges in the period up to 2030 are progress on swifter decarbonisation in energy-intensive sectors such as the primaries industry and the automotive, aviation and space industries. This requires the establishment of green lead markets and a European industrial framework for climate-friendly and biodiversity-friendly materials and products.

142. In the Steel Action Concept of July 2020, the Federal Government set out an overall political strategy as to how the country's steel industry can be strong, internationally competitive and climate-neutral (cf. Table, No. 119). The aim here is in particular to replace blast furnace technology and to switch to direct reduction (cf. Box 8) with an increasing use of hydrogen (cf. Item 137 ff.). The Federal Government will establish appropriate funding programmes and policies for energy-intensive industries and improve or introduce necessary instruments at national and European level. An international level playing field is required if the steel industry is to remain competitive. The Federal Government is therefore working within the EU and in relations with third countries to ensure fair world trade. Further to this, it aims to avoid carbon leakage (relocation of carbon-intensive manufacturing facilities due to climate-related costs). Effective protection against carbon leakage for energy-intensive industry should help industry shift to low-carbon and ultimately zero-carbon manufacturing.

Box 8: Preventing carbon emissions in the steel sector

The steel industry in Germany is working on the introduction of low-carbon, carbon-neutral and zero-carbon processes – for example, using hydrogen rather than carbon to reduce iron ore (carbon direct avoidance, CDA) – and, to some extent, on ways of making further use of carbon within the industrial value network (carbon capture and utilisation, CCU). CDA offers great potential for the steel sector in Europe and for climate change mitigation. In addition, carbon capture and storage (CCS) may be a possible option for industrial process emissions that cannot be avoided in other ways.

The use of hydrogen promises to offer particularly great potential for CO_2 reduction in the steel industry, not least because relatively large CO_2 reductions can be achieved here compared with other sectors per unit of green hydrogen deployed. In the steel sector, this in fact applies even to direct reduction on the basis of natural gas, as long as such measures are only temporary solutions in preparation for the later conversion to renewable hydrogen.

Also, the scrap-based production of steel via the electric arc furnace (EAF) route already offers a lower-GHG process for around 30 percent of the crude steel produced. This share can be increased, but only to a certain extent due to the limited availability of steel scrap. Moreover, due to varying alloy metal contents, the suitability of the process is limited for certain higher-grade steel products. Measures that support the recyclability of steel are required to increase the share of potentially climate-neutral EAF steel.

143. Germany is to remain open to new technology and a leading global base for the automotive industry of the future (cf. Table, No. 120). For this reason, in the Concerted Action for Mobility, the Federal Government regularly holds top-level meetings with the stakeholders in the automotive industry with a view to rapidly identifying the need for policy responses and implementing measures in a sustainable strategy. Not least, agreement has been reached on setting up an Automotive Industry Future Fund worth a billion euros to address the medium- and long-term challenges of the automotive industry. For this purpose, the Federal Government has set up a committee of experts to advise the Federal Government on the allocation of the funds allotted for this purpose. In addition, agreement has been reached on fleet renewal programmes for commercial vehicles and municipal emergency vehicles, funding for the expansion of the charging infrastructure, and the extension of the innovation premium until the end of 2025 in order to support the swift scale-up of electric mobility (cf. Table, Nos. 121 and 122). The package of measures takes up some recommendations for action identified in the Automotive Industry Transformation Dialogue.

144. The Federal Government supports the establishment of research-based and sustainability-oriented battery manufacturing in Europe. Working together, 14 European Member States are using two IPCEIs to strengthen an innovation-based battery

value chain in Europe. The Federal Government is providing up to €3 billion in funding under the two large-scale programmes for projects implemented in Germany and is coordinating the second battery IPCEI – the largest IPCEI so far, with nearly 50 companies on board (cf. Table, No. 123). With the development of the research centre for battery cell production in Münster, the Federal Government is supporting the activities in the IPCEI with up to €500 million within the framework of the "Battery Research Lab" umbrella strategy. As a novel innovation platform, the research centre for battery cell production will help businesses to translate scientific findings and developments to industrial, large-scale production.

145. As a globally active mobility sector, the aviation industry and the air traffic industry have been hit particularly hard by the COVID-19 pandemic. The Federal Government aims to help the sector cope with the crisis and take the necessary climate action measures. A technological priority in the current call for funding of the LuFo VI aviation research programme is placed on climate-friendly technologies (cf. Table, No. 124). The aim is to make zero-emissions flight possible in the long term. Key enabling technologies here are hybrid propulsion systems based on hydrogen in combination with fuel cells and battery systems. For this reason, the Federal Government will enhance the programme from 2021 not least with funding from the National Hydrogen Strategy (cf. Item 138) and provide structural reinforcement funds to support hydrogen technologies and encourage the production and use of electricity-based aviation fuels like Power-to-Liquid (PtL). In order to modernise the shipping industry, the Federal Government has provided an additional one billion euros from the Stimulus and Future Packages for the environmentally friendly use of shipping. Not least, research, development and innovation are to be strengthened, with funding going towards aspects like a reduction in atmospheric pollutants via the construction of LNG fuelling vessels (cf. Table, No. 125 and 126). Also, the Federal Government will support the construction of shoreside electricity installations to reduce greenhouse gas, atmospheric and noise emissions in ports (cf. Table, No. 127). Further to this, it is supporting research and development projects of the maritime sector (cf. Table. No. 128).

Boosting investment in education, research and innovation

146. Mastering the challenges presented by climate change requires an innovative and productive economy. First and foremost, this calls for a strong education system and an excellent research environment. The use of digital technologies will play an increasingly important role in this regard. It is therefore all the more important to improve and expand the education infrastructure and educational opportunities to enable equal participation for all in the digitalisation process. This starts with early childhood education and extends through to education at higher education institutions (HEIs) and universities. Targeted research funding can provide additional incentives for innovation and strengthen Germany's ability to compete internationally as a centre for research and cutting-edge technologies. In this context, the Federal Government is placing a particular focus on the transfer of research findings to economically viable applications through cooperative models with Germany's *Mittelstand*, the Agency for Breakthrough Innovations, and the establishment of regulatory sandboxes.

Improving the infrastructure and quality of education in child day-care facilities and schools, enabling digital learning opportunities

147. Under the Future Package, the Federal Government is making an additional €1 billion available for 2020 and 2021 for the expansion of childcare services (cf. Table, No. 129). Funding provided under the "5th Investment Programme to Fund Childcare Services in 2021-2022" enables 90,000 new childcare places in nurseries and day care. The funds can also be used for upgrading measures and for investment in new hygiene and room usage solutions that are required as a result of the COVID-19 pandemic. With the Quality Childcare Act *(Gesetz zur Weiterentwicklung der Qualität und zur Teilhabe in der Kindertagesbetreuung)*, the Federation is already supporting the *Länder* with a total of €5.5 billion through to 2022 for measures to enhance the quality of child day-care and relieve the fee burden on parents (cf. NRP 2019, Item 89 and NRP 2020, Items 15, 84). The Federation is making a total of up to €3.5 billion available for the expansion of all-day education and care services for primary school children. This includes up to €1.5 billion in funding from the Stimulus and Crisis-relief Package to speed up expansion efforts. Of this amount, €750 million will be available in 2021 particularly for preparatory measures under the Investment Programme. In addition, support for school modernisation is continued under the Municipal Investment Promotion Fund, with total funding of €3.5 billion. The "Chatter Matters" *(Sprach-Kitas)* and "Starting Nursery School" *(Kita-Einstieg)* federal programmes promote easy access to early childhood education and language acquisition and thereby provide professional support for early childhood educators in line with needs. The Federation is making additional funding of up to €420 million available in 2021 and 2022 to continue the two programmes. Complementing these support measures, the *Länder*, which are responsible for the field of education, are implementing their own investment programmes and initiatives to enhance the quality and supply of childcare and education services (cf. Table, No. 130).

148. With the Digital Pact for Schools, the Federation is providing €5 billion to help the *Länder* to build up and expand digital infrastructure at schools. With the autonomy of the federal states in cultural and educational affairs, the *Länder* and municipalities are responsible for digital literacy, they train teachers as required, and ensure that the equipment is maintained and functioning. As part of its measures to combat the pandemic, the Federation has topped up the Digital Pact for Schools by another €500 million for the purchase of mobile devices for school students who have no access to such equipment at home, and has also provided an additional €500 million for the funding of the administration of educational infrastructure at schools, and a further €500 million for devices provided on loan to teachers. All three additional agreements, and the Digital Pact for Schools, are supplemented by at least ten percent by additional funding from the *Länder's* own resources or those responsible for covering the costs of material inputs. The *Länder* use the funds to strengthen numerous measures, such as programmes for the supply of digital equipment, and the creation of portals, platforms and school clouds (cf. Table, No. 131).

Establishing a framework for more research, development and innovation

149. Research-driven innovation is a fundamental precondition for safeguarding the international competitiveness of German firms. The Federal Government focuses its research and innovation activities across all policy fields, sectors and disciplines in its High-tech Strategy, and brings together the most important players in science and business under a strategic umbrella.

150. Many *Länder* have set up their own innovation strategies to promote research, development and innovation and initiate research clusters and innovation networks, including those in the important fields of energy research, hydrogen and battery cell technology, artificial intelligence and pandemic research. Here, the focus is on the funding of projects and the promotion of the expertise and excellence of research centres and higher education institutions (cf. Table, No. 132).

151. The long-term success of German commerce is rooted not least in the breadth of the German innovation system. In addition to the companies doing a lot of research, this is largely driven by the research at higher education institutions and non-university research establishments. As part of the Excellence Strategy of the Federation and the *Länder*, funding has been granted to 57 excellence clusters since January 2019 and additionally to ten universities of excellence and one university consortium of excellence since November 2019. The Excellence Strategy seeks to continue and build on the efforts taken under the Excellence Initiative to strengthen universities by promoting scientific excellence, image building and partnerships in the science system. In the Pact for Research and Innovation IV adopted in June 2019, the Federation and the *Länder* are also providing a total of approximately €120 billion for non-university research establishments between 2021 and 2030.

152. In times of economic crisis in particular, investment in research and development is especially important so that the economy can quickly start growing again. The Federal Government has also placed a clear focus on research and forward-looking technologies in its Future Package. For example, with effect from 2020 Germany introduced its first ever tax credit for research and development in the form of an R&D allowance. This is to supplement existing project support. In addition, the Federal Government also doubled the funding scope of the R&D allowance (cf. NRP 2020, Item 28) for the period from 1 July 2020 to 30 June 2026 in the Second Coronavirus Tax Relief Act *(Zweites Corona-Steuerhilfegesetz)*, (cf. Item 49 and Table, No. 27). Further to this, the Federal Government has made an additional €50 million available for industry research with the stimulus package (Item 33). This has meant that projects conducted by non-university facilities in structurally disadvantaged regions, particularly under the INNO-KOM programme to strengthen innovation, could continue and did not have to be cancelled (cf. Table, No. 133).

153. In 2021, the Federal Government wishes to provide key impetus for more crisis-resilient value

Box 9: Innovation and sustainability

Appropriate levels of spending on research and development are goals of the German Sustainability Strategy and the 2030 Agenda for Sustainable Development of the United Nations (as part of Sustainability Development Goal 9: industry, innovation and infrastructure). Up to 2025, the spending by the Federation, *Länder* and commerce on research and development is to rise from around 3.17 percent (2019) to 3.5 percent of GDP.

chains with the "Future of Value Creation" research programme – which will also continue funding for labour research and work structures (cf. Table, No. 134). Also, its "Society of Ideas" competition for innovations calls on civil society to develop social innovations (cf. Table, No. 135). The *Civic Innovation Platform* project promotes the collaborative development and implementation of AI applications geared to the common good in line with the principle of social forms of technology (cf. Table, No. 136).

154. The Federal Government has continued, improved and expanded the technology-neutral funding for innovation, which particularly aims to promote cooperation between the research community and SMEs. The aim is that research findings should be applied and marketed more quickly (cf. Table, Nos. 137 and 138).

155. With the founding of SprinD GmbH, the Agency for Breakthrough Innovations has commenced its work. It is to help to progress radical technological and market-changing innovations. The first subsidiary was set up in December 2020. The supervisory board has approved the founding of three additional subsidiaries. (cf. Table, No. 139).

156. The Federal Government is strongly supporting the implementation of regulatory sandboxes. Firstly, these testbeds for innovation and regulation are intended to responsibly trial new technologies and business models. Secondly, they are to deliver important experience for future regulations (cf. Table, No. 140).

157. Under the Federal Government's 7th Energy Research Programme, energy research funding has been largely oriented towards the energy transition. In addition, the funds available for energy research have once again been considerably topped up as part of the adoption of the Stimulus and Future Packages in June 2020 (cf. Table, No. 141). Research is a strategic element underpinning energy and industrial policy. Practical research is strengthened with the introduction of the close-to-market format of the Regulatory Sandboxes for the Energy Transition (cf. Table, No. 142). The aim is to test technical and non-technical innovation under real-life conditions and at industrial scale. Around

Box 10: Regulatory sandboxes in Europe

In the context of the German Council Presidency, Council conclusions on regulatory sandboxes and experimentation clauses were adopted on 16 November 2020 with a view to boosting innovation capacities and resilience in the EU. In their decision, the 27 EU Member States agreed for the first time on a common understanding of regulatory sandboxes and experimentation clauses and their potential, e.g. to improve innovative capacities and regulatory learning. The Council will support the European Commission as it makes more use of regulatory sandboxes and experimentation clauses in future legislation. Also, the EU Member States have initiated a sharing of experience and best practices, which the European Commission is to report on in 2021 – combined with specific recommendations of how the use of regulatory sandboxes and experimentation clauses is to be developed further in the EU and at EU level.

€100 million will be made available for the Regulatory Sandboxes for the Energy Transition each year; this will be part-financed via the German Recovery and Resilience Plan (cf. Box 2). The funding is to be continued and topped up. By integrating forward-looking basic research with targeted application-based research, we can set the stage for key enabling technologies. The Federal Government is committed to providing research funding along the entire hydrogen value chain – from generation and storage, transport and distribution all the way to application. The first measures towards the implementation of the National Hydrogen Strategy in the field of research and development include the Regulatory Sandboxes for the Energy Transition, the "Hydrogen Technology Campaign" research initiative and the "Hydrogen Republic of Germany" ideas competition. In the coming years, a total of up to €1 billion is to be invested in energy research on hydrogen (cf. Table, Nos. 142, 143 and 144). The Copernicus Projects for the Energy Transition are examples of how basic research is geared towards the requirements of industry and the implementation of the energy transition in practice (cf. Table, No. 145).

C. Improving conditions for competition, designing a fair tax environment conducive to growth, reducing bureaucracy

158. In 2019, the Council of the European Union recommended that Germany should take action to shift taxes away from labour to sources less detrimental to inclusive and sustainable growth, and to strengthen competition in business services and regulated professions. In its country-specific recommendations for 2020, the Council also stated that Germany should reduce the regulatory and administrative burdens for businesses (cf. country-specific recommendations in Box 1). This section of the NRP explains the measures which Germany has taken in response to these recommendations.

Improving conditions of competition

159. Action to continuously improve the competitive conditions for businesses in Germany is one of the most important responsibilities of policymaking in order to safeguard prosperity in Germany on a sustained basis. Despite the COVID-19 pandemic, much has been achieved and put into practice in this respect in the last year both in Europe and at a national level: the EU single market is to be deepened further; central reforms of the rules on competition have been agreed for the digital economy, numerous support measures for start-ups have been adopted, and public procurement law has been modernised. A ruling of the European Court of Justice regarding the fee schedule for architects and engineers has also been implemented.

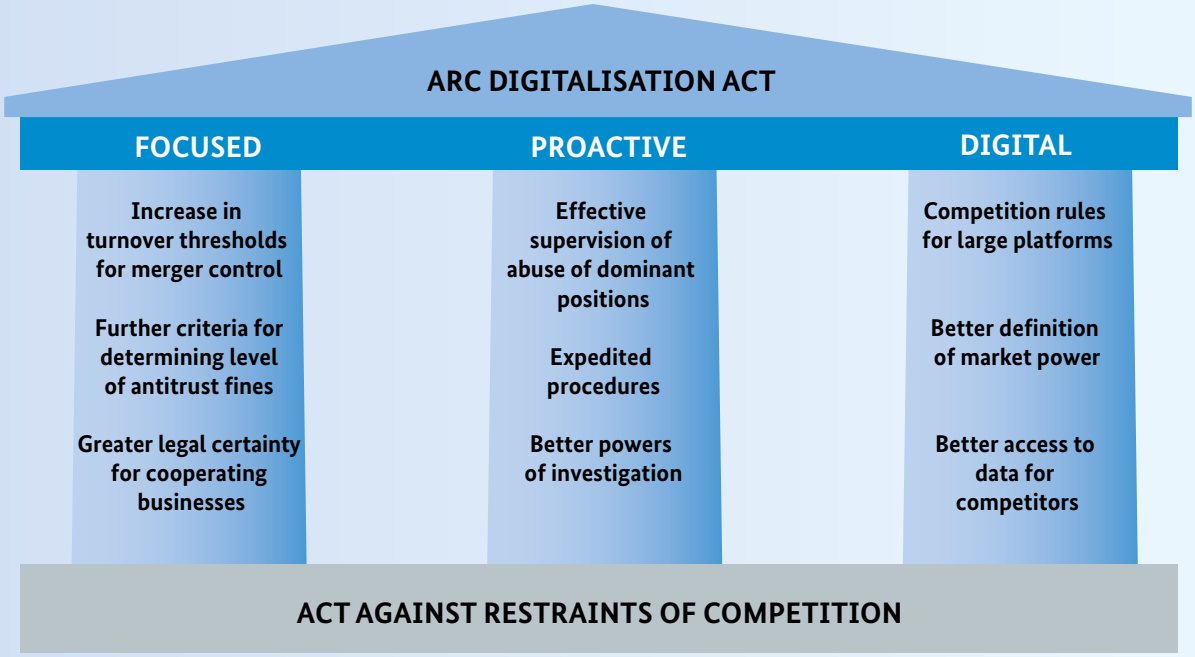
Ensuring fair competition in the digital world

160. Functioning competition and free access to digital markets are central objectives for the Federal Government. Against this background, the ARC (Act against Restraints of Competition) Digitalisation Act *(GWB-Digitalisierungsgesetz)* makes the competition law framework more digital, proactive and focused. The Federal Government has therefore adapted national competition law to the challenges of the digital economy. Amongst other things, stricter rules have been introduced for platforms of overriding cross-market significance and improved data access for competitors. Also, supervision of abuse of dominant positions has been strengthened so that restraints of competition can be tackled more effectively and more quickly. In this way, the *Bundeskartellamt* (Federal Cartel Office) will be able to take interim measures more easily in

future. Further to this, the Act transposes obligations contained in EU law (implementation of the ECN+ Directive), focuses merger control more on cases of relevance to competition, and delivers greater legal certainty for cooperating companies (cf. Table, No. 146).

161. The Federal Government is also working to update competition law at European level. It had presented proposals for this together with other EU Member States. In 2020, the European Commission launched several initiatives to evaluate and adapt the European competition framework which address the main German demands as well as multilateral aspects. Amongst other things, an instrument against distortions of competition by companies subsidised or controlled by third countries (a "level playing field instrument") is to prevent non-European companies from gaining market shares and undertaking acquisitions with the aid of massive state support whilst European firms are subject to strict State aid controls. Further to this, the European Commission has presented a proposal for a new Digital Markets Act (DMA) as part of the EU's Digital Strategy. The DMA proposal covers directly applicable rules of conduct for large platforms with a gatekeeper function and aims to provide harmonised rules to ensure contestable and fair markets for digital services in the Single Market (cf. Table, No. 147). The Federal Government will continue to work constructively on the current proposals at European level: a modern EU legal framework will strengthen the competitiveness of European firms in an age of digitalisation and globalisation.

Diagram 12: ARC (Act against Restraints of Competition) Digitalisation Act



Source: Federal Ministry for Economic Affairs and Energy

Using venture capital to make Germany more attractive for start-ups

162. Sufficient venture capital must be available if innovative start-ups are to emerge in Germany and grow into international competitors. The Federal Government is therefore building on the successful tool-box in the field of venture capital finance. The Fund Domicile Act *(Fondsstandortgesetz)* is to shape the tax conditions to improve the way in which staff of young companies can participate in the success of those companies. For young companies in particular, staff shareholdings are an important way to attract skilled workers and can also be a source of finance. Further to this, this Act also aims to ensure that venture capital funds can be exempted from value-added tax on administrative services, and doubles the tax-exempt amount for staff shareholdings from €360 to €720. This will remove a significant competitive disadvantage for venture capital in Germany as of 1 July 2021 (cf. Table, No. 148).

In view of the low level of venture capital availability in Germany compared with other countries, the Federal Government is supporting start-ups and SMEs with a package of measures worth €2 billion (cf. Table, No. 149). Further to this, the Federal Government is promoting investment in digital technologies and digital knowhow (cf. Table, No. 150), and is providing €10 billion for a venture capital fund for forward-looking technologies ("Future Fund") at the KfW. The Future Fund will help start-ups to grow throughout all the phases of their business development – but particularly in the growth phase – in Germany and beyond, and to attract new groups of investors to the German venture capital market (cf. Table, No. 151).

The *Länder* have also adopted and built on numerous measures to support start-up funding (cf. Table, No. 152).

Modernising public procurement law and accelerating public procurement

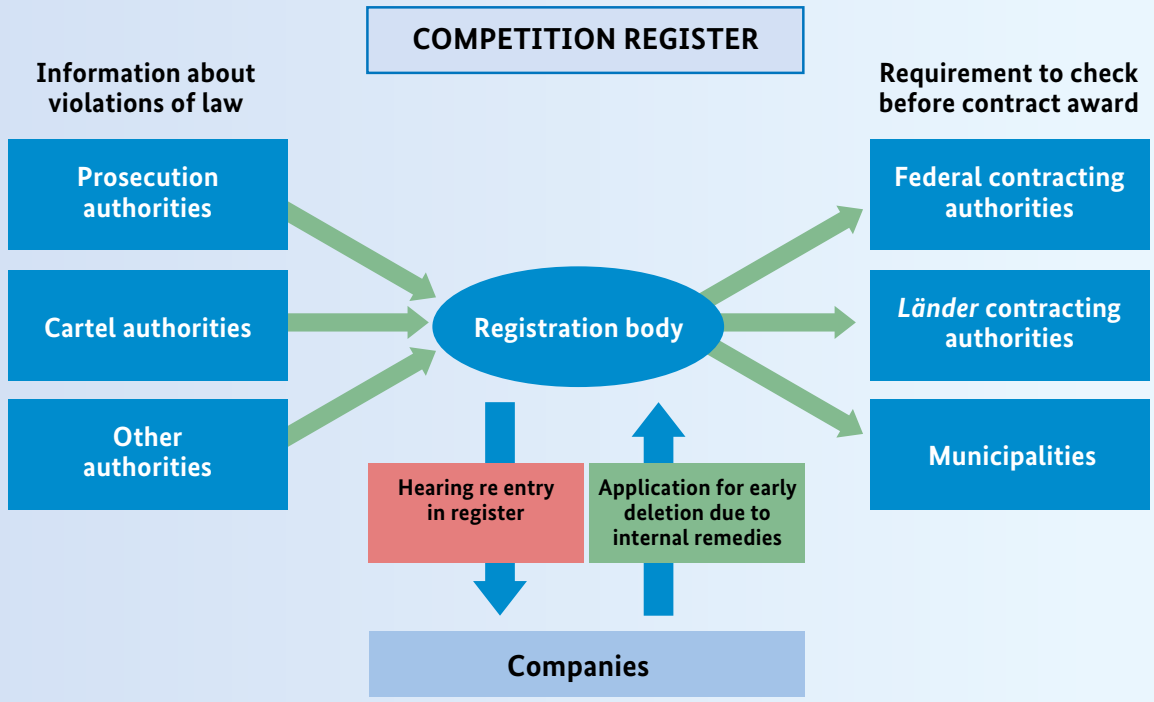
163. The COVID-19 pandemic has made the importance of public procurement abundantly clear: the temporary shortages of goods like face masks, medicines and medical equipment showed how important functioning procurement processes are for tackling the acute crisis. Also, swift and efficient public procurement is needed for a successful boost to investment to stabilise the European economy.

164. On 3 April 2020, the European Commission passed a resolution to exempt goods needed to combat the effects of the COVID-19 outbreak during 2020 from import duties and VAT ((EU) decision 2020/491, extended by decision 2020/1573). This was necessary and helpful to ensure the easier importation and procurement of protective equipment. The Federal Government believed that the resolution should be implemented efficiently and without red tape in line with the pertinent rules of EU customs legislation that directly apply; Member States should be given more options for the use of procured material to support the WHO and third countries in need.

165. In future, contracting authorities are to be able to find out quickly and easily from a Federal Competition Register whether there are reasons to exclude a bidder from the award of a public contract (cf. Diagram 13). The nationwide online Federal Competition Register is currently being built up by the *Bundeskartellamt* and is to gradually take effect in the course of 2021 (cf. Table, No. 153).

166. Further statutory measures refer to security and defence with a view to expediting procurement and creating greater legal certainty. In particular, the new rules provide more details of the exemption from procurement law where essential security interests are affected (cf. Table, No. 154).

Diagram 13: Functioning of the Competition Register



Source: Federal Ministry for Economic Affairs and Energy

167. The Federal Government also aims to boost sustainable procurement. Not least, the Federal Government plans to issue a general administrative provision on climate-friendly public procurement in order to implement the cabinet decisions on the Climate Action Programme (cf. Table, No. 155).

168. The Ordinance on Prices/Price Formation in Public Contracts *(Verordnung über Preise und Preisbildung bei öffentlichen Aufträgen)* which currently applies for contracting agencies and contractors has been revised by a working group and adapted to the economic situation, which has changed since the adoption of the ordinance in 1953. Following necessary coordination, the adapted ordinance will be adopted and published.

Strengthening legal clarity and fighting corruption

169. In its ruling of July 2019, the European Court decided that the binding minimum and maximum rates of fees in the statutory fee schedule for architects and engineers violate the EU Services Directive. The legislator has brought the corresponding German regulations into line with this ruling. This means that fees for services by engineers and architects are in principle freely negotiable. The rules have been in force since 1 January 2021 (cf. Table, No. 156).

170. The Federal Government is working on a draft law to implement Directive (EU) 2019/1937 of 23 October 2019 on the protection of persons who report breaches of Union law. The identification of any such breaches is in the interest of the business community because this helps uncover potential problems and inefficiencies. Many companies already operate internal reporting channels (cf. Table, No. 157).

171. The Act Modernising Insurance Tax Law and Amending Staff Regulations *(Gesetz zur Modernisierung des Versicherungsteuerrechts und zur Änderung dienstrechtlicher Vorschriften)* (in force since 10 December 2020) states the rules of insurance tax law more precisely and thereby improves legal clarity (cf. Table, No. 158).

Deepening the Single Market for economic recovery and competitiveness

172. The COVID-19 pandemic is also a challenge for the European Union's Single Market. Measures taken by Member States to combat the pandemic have led to disruptions such as border controls, waiting times and entry restrictions. Against this backdrop, the urgent goals are to restore the full functioning of the Single Market and to avoid new restrictions while strengthening the resilience of the Single Market. At the same time, it was necessary to implement time-limited measures to protect against infections. In principle, the Federal Government supports the European Commission's action plan of 10 March 2020 (Long term action plan for better implementation and enforcement of single market rules), which also includes a Single Market Enforcement Task Force (SMET) consisting of the EU Commission and Member States.

173. A deeper and forward-looking Single Market is essential for economic recovery and the long-term competitiveness of the EU. The conclusions adopted under the German Presidency of the Council of the EU, entitled "A deepened Single Market for a strong recovery and a competitive, sustainable Europe", therefore define the next steps in Single Market policy and central fields of action for ensuring that the Single Market is forward-looking. These include making sure that the Single Market is an economic area that supports European businesses by promoting innovation, and is open to new green and digital solutions and business models. Other important elements are an internal market for small and medium-sized enterprises, free and fair competition and a level playing field, including in relation to third countries, and structural reforms in the Member States to boost competitiveness. Additional steps towards a true internal market for financial services are also to be taken.

174. In order to cushion the effects of Brexit, the Federal Government has adopted legislative and sub-legislative measures (cf. 2020 Annual Economic Report, Item 194). The Federal Government will continue to aspire to a close partnership between the EU and the United Kingdom on the basis of the Trade and Cooperation Agreement.

Designing a fair tax environment conducive to growth

175. Comprehensive tax measures adopted in this legislative term are aimed at improving the financial situation of companies and especially families and low and middle-income citizens. The Second Act on Tax Relief for Families and Adjusting other Tax Rules *(Zweite Gesetz zur steuerlichen Entlastung von Familien sowie zur Anpassung weiterer steuerlicher Regelungen)* (Second Families Relief Act, cf. Table, No. 159) and the partial abolition of the solidarity surcharge (cf. 2020 Annual Economic Report, Item 106) on their own will ease the tax burden on

income tax payers by roughly €17 billion in 2021 and by a solid €22 billion in 2022. These are the largest permanent tax cuts seen in recent years.

176. Under the Second Families Relief Act, monthly rates of child benefit will increase by €15 per child as of 1 January 2021, and the tax-related child allowance will be adjusted accordingly. This means that the decision made in the Coalition Agreement to raise child benefit by a total of €25 per child and month has been fully implemented. In addition to this, the basic personal allowance for personal income tax will be raised as of 2021 and the other income threshold levels adjusted. This will ensure the constitutional right to a subsistence minimum and compensate for the effects of the fiscal drag in the tax schedule (cf. Table, No. 159).

177. Other priorities for Germany's tax policy continue to include tax simplification, the modernisation of the tax collection system, and fair taxation in the national and international context. Beyond this, it is necessary to keep adjusting the system of corporate tax to changes in the overall framework to ensure that the tax system allows German companies and especially SMEs to remain competitive. This notably includes improvements in the tax rules for non-incorporated firms; via a new option these companies are to pay corporation tax and be treated in the same way as corporations for tax purposes. Depreciation allowances for computer hardware and software for data entry and processing have also been improved (communication of the Federal Ministry of Finance, 26 February 2021).

178. The Act Increasing the Disability Flat-rate Amounts and Adjusting Other Tax Rules *(Gesetz zur Erhöhung der Behinderten-Pauschbeträge und zur Anpassung weiterer steuerlicher Regelungen)* has doubled the flat-rates for people with disabilities under tax law with effect from the 2021 tax year. At the same time, the existing care-related standard allowance was almost doubled and switched to a system that depends on the level of care required by the individual. This means that in the future a care-related standard allowance can be claimed for level two care or higher (cf. Table, No. 160).

179. As part of the Second Act Implementing Tax Relief Measures to Tackle the COVID-19 Pandemic (Second Coronavirus Tax Relief Act *(Zweites Corona-Steuerhilfegesetz)*, see Item 49 and Table, No. 27), the rules on tax reduction for income from commercial operations (Section 35 Income Tax Act *(Einkommensteuergesetz)*) have been improved on a permanent basis, the allowance of tax-free add-backs doubled for trade-taxation purposes, and the due date for import VAT postponed to a later date. The Third Coronavirus Tax Relief Act *(Drittes Corona-Steuerhilfegesetz)* also makes a significant contribution to relieving the burden on private citizens and businesses in 2021. In addition to the payment of a new child bonus, the Act also includes provisions for extending the reduced rate of VAT in the catering sector and an expansion of loss carry-back (cf. also Item 50 and Table, No. 28).

180. The 2020 Annual Tax Act *(Jahressteuergesetz)* includes tax provisions on short-time work and on living space provided at reduced rates. Provisions designed to promote the digital transformation have also been included. Under the improved and more targeted revised provision of Section 7g Income Tax Act, small and medium-sized enterprises now receive much greater tax deductions for investments. The various limits that used to apply to companies depending on their size and which determined what amounts of their investments they were able to deduct from their taxable income has been replaced by a common profit limit of €200,000 for all types of income. This means that a much larger number of small and medium-sized enterprises will benefit from this provision. Furthermore, the proportion of investment costs for

which deductions can be made has been increased from 40 percent to 50 percent and it is now possible to fully include all assets that have been rented out. Also, a temporary flat-rate allowance has been introduced for those working from home. For 2020 and 2021, tax payers can deduct €5 per day on which he or she was exclusively working from home, up to a maximum of €600 per year. The overall sum can be deducted as operating expenses/professional costs (cf. Table, No. 161).

181. The Seventh Act Amending the Motor Vehicle Tax Act *(Siebtes Gesetz zur Änderung des Kraftfahrzeugsteuergesetzes)* notably implements two measures of the Climate Action Programme 2030 which are also part of the Stimulus and Future Packages. Under the Act, the amount of CO_2 released by a vehicle is to be factored in more strongly as the tax rate for newly registered vehicles is determined. New cars with a combustion engine are to be subject to a progressive CO_2 tax rate from 1 January 2021. These progressive tax rates were designed taking into account the WLTP emissions test, which is closer to reality. Furthermore, the tax exemption for newly registered all-electric vehicles is to be extended from 2020 to the end of 2025 (cf. Table, No. 162).

182. On 31 July 2019, the Federal Government started the legislative project of an Act Amending the Real Property Transfer Tax Act *(Gesetz zur Änderung des Grunderwerbsteuergesetzes)*. The objective of this Act is to thwart abusive tax arrangements around real property transfer tax through a number of individual measures. The draft legislation for this Act is now being deliberated by parliament.

183. The Federal Government considers coordination on tax policy with international partners to be highly advantageous. Agreed standards developed by a large number of states will not only raise acceptance levels, they also offer greater transparency. Furthermore, they help avoid double taxation.

184. The recommendations made by the OECD and G20 'BEPS' initiative of 2015 to combat base erosion and profit shifting have been largely implemented. The fact that the number of member states and jurisdictions that have joined the Inclusive Framework on BEPS has risen to 139 shows the high level of interest on the part of both industrialised and developing countries in establishing shared standards and committing to them. An annual progress report on the implementation of the agreed standards confirms the success of the initiative. At present, one of the focal points of the work being conducted at international level is the development of a strategy on taxation of the digital economy. The Federal Government aims at a long-term and global solution. At OECD level, a two-pillar approach has been developed (cf. 2020 Annual Economic Report, Item 114). Pillar 1 is to be used to adjust the way in which taxation rights for corporate profits are allocated. Under Pillar 2, Germany and France propose a global, effective minimum tax. This minimum tax is to be collected not only from the digital economy, but across all economic sectors. It is an effective means of addressing BEPS risks that remain, and of continuing the global combat against undesired tax avoidance.

185. The first European exchange of information on cross-border tax arrangements took place in October 2020. The EU Member States that introduced the requirement to notify cross-border tax arrangements for the first time on 1 July 2020 automatically exchanged information about certain cross-border tax arrangements. This measure further increases transparency levels in taxation (cf. 2020 Annual Economic Report, Item 115). On 1 December 2020, ECOFIN confirmed the conclu-

sion of negotiations on revising the Council Directive on Administrative Cooperation in the field of taxation in the EU (DAC 7). The Directive sets out rules stipulating the introduction of a standardised notification requirement, including the international exchange of information on suppliers conducting business on online platforms. Additionally, the legal framework governing joint inspections of companies is to be approved along with the level of efficacy of administrative cooperation between Member States. The Federal Government continues to support the process of introducing a new financial transaction tax as part of greater cooperation at European level.

186. On 20 January 2021, the Federal Government introduced a draft Act on the Modernisation of Withholding Tax Relief and the Certification of Capital Gains Tax *(Gesetz zur Modernisierung der Entlastung von Abzugsteuern und der Bescheinigung von Kapitalertragsteuer)*. In particular, the bill includes measures to digitalise the taxation procedure and to prevent attempts to circumvent the taxation of dividends.

187. The Federal Government is fully prepared for the tax-related changes resulting from the exit of the United Kingdom from the European Union ("Brexit"). The Brexit Transition Act *(Brexit-Übergangsgesetz)*, which entered into force on 1 February 2020, and the Tax Act relating to Brexit *(Brexit-Steuerbegleitgesetz)*, which took effect on 29 March 2019 (cf. 2020 Annual Economic Report, Item 117), have averted impending tax disadvantages that would have automatically hit taxpayers connected to the United Kingdom as soon as Brexit or the transition period were completed.

Reducing the administrative and bureaucratic burden on businesses

188. Relieving companies of the burden of unnecessary bureaucracy is a central aim of the Federal Government. For this reason, it has cut compliance costs for business by around €1.3 billion a year in the 19th legislative term thanks to the use of the bureaucracy brake. Even if the implementation of EU rules is discounted, the effects of which do not have to be offset by simultaneous reductions in bureaucracy elsewhere, the savings for the German economy still amount to €1.1 billion a year. Since the introduction of the bureaucracy brake in 2015, compliance costs for business have been cut by more than €3.1 billion.

189. Surveys by the Federal Statistical Office on behalf of the Federal Government show that citizens and companies remain largely satisfied with their experience with public administration. Their level of satisfaction was recently higher than that found in previous surveys. The Federal Government will continue to use the detailed findings to identify deficiencies and make proposals for improvements. A high-level working group established to develop regulations that can be covered by a Bureaucracy Reduction Act IV *(Bürokratieentlastungsgesetz IV)* agreed on a bureaucracy reduction package on 2 March 2021. The legislative and sub-legislative measures this package contains are to be implemented by the competent ministries before the end of this legislative term.

190. The measures presented here will particularly help to make public administration more effective and remove barriers to public and private investment. They therefore complement the reforms presented in components 6.1., 6.2. and 2.2. of the German Recovery and Resilience Plan.

Box 11: What is the bureaucracy brake?

The bureaucracy brake for business entered into force on 1 January 2015. The aim is to permanently limit the increase in burdens on business. The "one in, one out" rule basically applies to all the Federal Government's regulatory projects which impact compliance costs for business.

Exceptions are only provided for projects that precisely implement EU rules, international treaties, judgments of the Federal Constitutional Court and the European Court, that serve to avert considerable dangers, or that apply for less than a year.

Under the system, each federal ministry should remove burdens to the same extent that it imposes burdens on business through new rules. In general, measures to alleviate burdens should be presented within a year.

If a ministry is not in a position to offset new burdens during the 19th legislative term, another ministry can reduce its compliance costs instead. If no compensation is possible in this way either, the ministry can have recourse to "credit" from the preceding legislative term, once it has presented and justified this in the "Better regulation and bureaucracy reduction" committee of state secretaries.

D. Increasing labour force participation, making the pension system and labour market fit for the future

191. An ageing population creates challenges both for the future supply of skilled labour and for the viability of the social insurance systems. The COVID-19 pandemic has led to a need for urgent action in the field of labour market and social policy. Moreover, it has added considerable weight to structural challenges on the labour market and has highlighted the need for action to improve the overall conditions for work, for instance as regards the compatibility of work and family life and enhanced health care. The Federal Government is therefore taking a variety of measures to improve these conditions both in the short and in the long term. In this way, it is also addressing the recommendation by the Council of the European Union to reduce false incentives which act against an increase in the volume of work. These include the high tax burden/high contributions, especially on low and second earners. The Federal Government believes it is crucial to safeguard the long-term sustainability of the pension system, while maintaining an appropriate pension level.

192. Finally, the following chapter covers the issues of vocational training and further training, which are central priorities for the Federation and the *Länder*, and are also of particular importance for the disadvantaged groups highlighted by the Council. Further to this, strengthening the level of education and skills is a key precondition for the goal cited by the Council of higher wage growth (cf. Box 1 regarding the country-specific recommendations).

Strengthening the framework for labour participation

193. The most targeted way to combat poverty is to increase labour force participation. At the same time, this can improve the supply of skilled workers. The Federal Government's policies therefore aim to improve the environment for labour force participation. A central element is the improved compatibility of working and private life, not least via an expansion of the quantity and improvement of the quality of child care services, and the improvement of participation in child day care services and improved possibilities to combine care for relatives with one's own working life. Vocational training and further training also play a central role. Further to this, the policy of the Federal Government is specifically aimed at improving the earnings opportunities of low-skilled individuals through activation, skills development and integration into employment and at enabling them to participate more in the labour market.

194. The expansion of day care helps to improve children's education and participation opportunities. The aim is for children to be given a fair chance to participate in society, receive an education and develop their skills and abilities irrespective of their parents' financial means. At the same time, the expansion of child day care provides a better foundation for the compatibility of work and family life, thus helping to increase labour market participation and provide skilled labour. The Federal Government is supporting the expansion and the quality of child day care services via the Good Kindergartens Act *(Gute-KiTa-Gesetz)* and the investment programmes to finance child care services (cf. Item 147). Also, it is planning to establish a statutory right to all-day care for children of primary school age.

195. When it comes to enabling employees to combine work and family life, the COVID-19 pandemic has highlighted the need for family-friendly working conditions in addition to adequate child care services. The Federal Government's 'Success Factor Family' corporate programme is therefore intended to support employers in implementing a family-friendly personnel policy.

196. The COVID-19 pandemic has further increased the importance of remote work models such as working from home. The Federal Government aims to create a legal framework that promotes and facilitates remote work while leaving scope for operational arrangements and regulations under collective agreements. The Ordinance on SARS-COV-2 Occupational Health and Safety *(SARS-COV-2-Arbeitsschutzverordnung)* obliges employers to allow its workers to do office or similar work from home during a pandemic in order to ensure adequate protection against infection. In many companies, employers and employees have concluded agreements on working from home. In view of the fragile situation in the COVID-19 pandemic, it should remain possible to design individual mobile solutions in line with the agreements in place and the local needs.

197. The Act on the Equal Participation of Women and Men in Executive Positions in the Private and Public Service *(Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst)*, which entered into force on 1 May 2015, is being developed further in line with a cabinet decision of 6 January 2021 in a Second Act on the Equal Participation of Women and Men in Executive Positions in the Private and Public Service *(Zweites Führungspositionen-Gesetz)* (cf. Table, No. 163). For example, in future boards with more than three members of companies which are listed on the stock exchange and subject to codetermination

must have at least one woman and one man. In future, companies will have to justify a target of zero for women on the supervisory board, executive board and the top two managerial levels below the board. Companies not providing a justification or a target can be sanctioned. The fixed gender ratio of 30 percent on supervisory boards is to be extended to cover companies in which the Federation has a majority stake. For these companies, a minimum membership of one woman and one man on the board is to apply when the board has three or more members. The public-law welfare insurance corporations, such as statutory health insurance funds, pension and accident insurance funds, and the Federal Employment Agency are also to have at least one woman and one man in managerial bodies containing more than one person.

198. The rules for the public service are also being developed further by the Act on the Equal Participation of Women and Men in Executive Positions in the Private and Public Service (cf. Table, No. 163). The Appointment to Federal Bodies Act *(Bundesgremienbesetzungsgesetz)* is being broadened so that it will also apply in future in bodies in which the Federation is able to choose two members. The Federation aims to attain equal participation for women in executive positions covered by the Federal Act on Gender Equality *(Bundesgleichstellungsgesetz)* by the end of 2025.

199. The *Länder* are running various programmes to support higher labour force participation for women and an increased proportion of women in executive positions (cf. Table, No. 164).

200. The COVID-19 pandemic had, and is still having, a very strong impact on the labour market. New recruitment has fallen in almost all sectors. At the same time, there has been a strong boost to digitalisation in companies, as well as in school teaching and vocational training. It remains difficult to fill vacancies in some IT and skilled craft occupations. As the pandemic situation improves and the economy recovers, there is likely to be a general rise in demand for skilled workers, meaning that structural and, in particular, demographically driven bottlenecks are likely to become more obvious again. The Federal Government is therefore sticking to its forward-looking and cross-sectoral Skilled Labour Strategy. In order to boost the

Box 12: Gender equality and sustainability

Gender equality is an objective of Germany's National Sustainable Development Strategy and the United Nations Agenda for Sustainable Development (SDG 5: Achieve gender equality and empower all women and girls). The proportion of women on the supervisory boards of companies that are listed on the stock exchange and subject to codetermination is to amount to at least 30 percent in 2030. In April 2020, the average proportion of women on the supervisory boards of these 108 companies stood at 35.2 percent ('Women-on-Board Index'). In the public service, equal participation of women and men in leading positions is to be achieved by 2025. The proportion of women stood at 37.6 percent in 2019.

supply of domestic skilled workers, the Federal Government is intensifying its focus on training and skills development programmes as well as measures to improve the compatibility of work and family life. It has already adopted a range of measures to develop the promotion of further training, particularly for employees facing structural change and for the low-skilled, e.g. via the Act on Opportunities to Gain Qualifications *(Qualifizierungschancengesetz)*, the National Strategy for Continuing Education, and the Act to Promote Advanced Vocational Training amid Structural Change and Enhance the Promotion of Training *(Arbeit-von-morgen-Gesetz)*, which consequently entered into force in 2020. In addition, measures aimed at attracting labour from third countries are to be stepped up. These include the changes to residency law which entered into force in 2020 through the Skilled Immigration Act *(Fachkräfteeinwanderungsgesetz)*, and also for example the 'Make it in Germany' web portal, the Central Service Centre for the Recognition of Professional Qualifications, as well as pilot projects aimed at proactively recruiting skilled workers from third countries. The *Länder* have their own strategies and programmes to secure the supply of skilled labour (cf. Item 165).

201. Good working conditions also help to increase the rate of labour market participation. At the heart of the Occupational Safety and Health Control Act *(Arbeitsschutzkontrollgesetz)* (cf. Table, no. 166), are amendments to the Act to Secure Employees' Rights in the Meat Industry *(Gesetz zur Sicherung von Arbeitnehmerrechten in der Fleischwirtschaft)*. In order to address grievances in the meat industry, the deployment of external staff is to be largely ruled out. The butcher's trade is exempted from these regulations. Nor are other sectors deploying external staff affected by the rule.

Reducing taxes and charges for low-income earners and second earners

202. A reduction in the burden of taxes and charges results in higher net incomes and thus improves the incentives to work. The measures from the first Families Relief Act *(Familienentlastungsgesetz)* from 2019 (cf. NRP 2019, Item 69) resulted in relief totalling around €9.8 billion on an annualised basis. Beyond the comprehensive increases in child benefit and child allowance, low-income families have also been able to benefit since 2019 from improved incentives to work via the reform of the child supplement in the Act on Targeted Measures to Strengthen Families and their Children through the Reform of the Child Supplement and an Improved Education and Participation Package *(Starke-Familien-Gesetz)*; from 2021, the child supplement will be index-linked and currently amounts to up to €205/month.

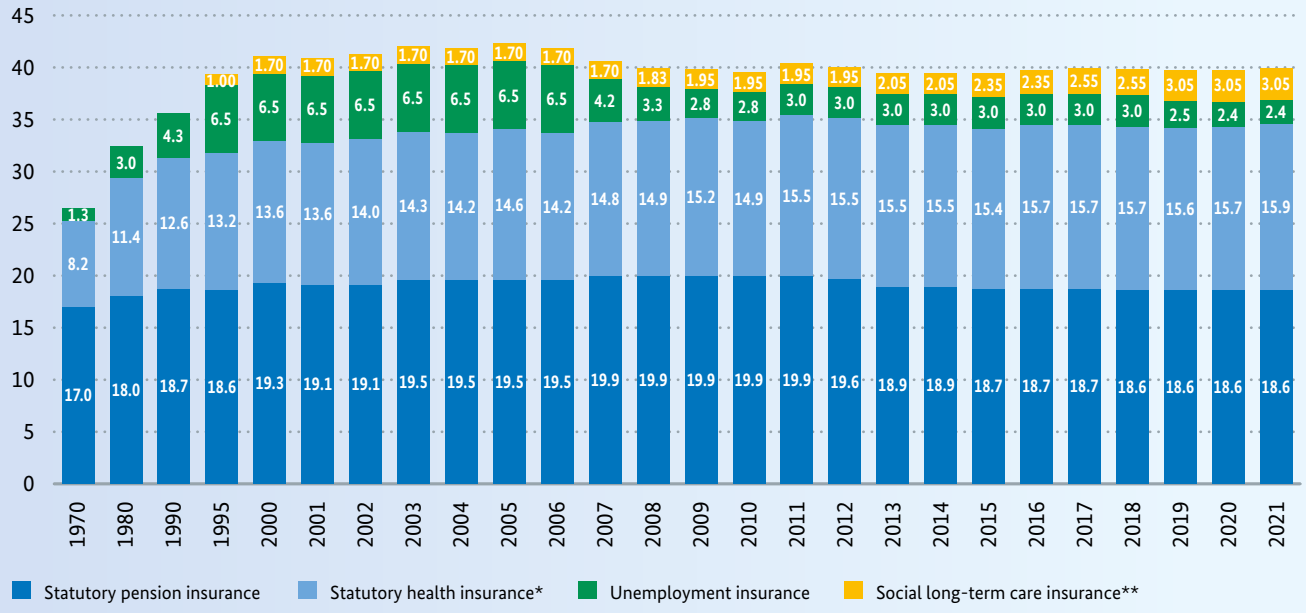
203. The Second Families Relief Act again raised the level of child benefit and the child tax credit from 2021 (cf. Item 176). The measures introduced by the Second Families Relief Act and the abolition of the solidarity surcharge in a first step for around 90 percent of the people previously required to pay the solidarity surcharge on wage and income tax reduces the burden on lower and middle income brackets by over €17 billion in 2021 and over €22 billion in 2022. Further positive effects on net incomes derive from the raising of the basic personal allowance and the shifting of the other tax thresholds in the income tax brackets from 2021 (cf. Item 176).

204. The increase in the amount of relief for single-parent families from €1,908 to €4,008 clearly improves the situation for single-parent families. The increase was initially introduced on a temporary basis by the Second Coronavirus Tax Relief Act

(cf. Item 49 and Table, No. 27) and was rendered permanent by the 2020 Annual Tax Act (cf. Item 180 and Table, No. 161).

205. The spending by the welfare insurance funds is rising, currently not least as a result of the COVID-19 pandemic. In order to slow the increase in non-wage labour costs and to limit the cost of labour, the Federal Government has stabilised social insurance contributions at a maximum of 40 percent of gross wages as part of its 'Social Guarantee 2021'. Any financing needs in excess of that mark are to be covered by the federal budget, at least until 2021 (cf. Diagram 14). In the interest of employees (particularly on low and medium pay) and employers – and with a view to ensuring both continue to have sufficient leeway – the Federal Government wants to keep social insurance contributions below the mark of 40 percent. As legislation currently stands, the contribution rate towards promotion of employment will be 2.4 percent until the end of 2022 and 2.6 percent from 2023. A federal grant of €3.35 billion is envisaged to balance the budget of the Federal Employment Agency in 2021. Also, the loan of roughly €6.9 billion granted by the Federation in 2020 is to be forgiven at the end of 2021. In 2021, the average contribution rate for statutory health insurance stands at 15.9 percent. This figure is composed of a general contribution rate of 14.6 percent and an additional contribution rate averaging 1.3 percent. The contribution rate for long-term care insurance stands at 3.05 percent (3.3 percent for persons without children). In order to offset revenue shortfalls and rising

Diagram 14: Annual median social security contribution rates as a percentage of gross assessable earnings



* including member-specific additional contribution (subject to parity funding since 2019)
** excluding the 0.25% contribution supplement for childless persons levied since 1 January 2005

Source: Federal Ministry for Economic Affairs and Energy

expenditure in connection with the COVID-19 pandemic, the second supplementary federal budget for 2020 earmarked some €3.5 billion for the Health Fund as well as €1.8 billion for the long-term care insurance compensation fund. Further to this, an additional federal grant totalling €5 billion is to be disbursed to the Health Fund in 2021 in order to stabilise the average additional contribution rate (cf. Table, No. 167). At the same time, the statutory health insurance funds will be obliged, depending on their financial capacities, to pay savings worth some €8 billion to the health fund. These resources will be used to enable higher allocations to all statutory health insurance funds. Also, with certain exceptions, statutory health insurance funds with savings in excess of 0.8 monthly outlays are not allowed to raise their additional contribution rate. They remain obliged to gradually reduce savings that exceed the established cap. Further to this, the Health Fund is receiving a further federal grant of €300 million in 2021 for extended child sickness allowance claims as a response to the COVID-19 pandemic.

Ensuring the long-term sustainability of the pension system and an appropriate pension level

206. In March 2020, the 'Reliable Intergenerational Contract' Commission set up by the Federal Government presented its recommendations on changes to be made to the old-age pension system from 2025. The Commission proposes maintaining the mechanism of legally binding stop lines for the pre-tax pension level and the contribution rate beyond 2025. The contribution rate for statutory pension insurance currently stands at 18.6 percent, which is 1.4 percentage points below the 20 percent stop line which applies until 2025. The Commission concludes that, at present, no decision should be taken about a further raising of the standard retirement age. The recommendations made by the Pension Commission will feed into the Federal Government's deliberations on the design of pension policy from 2025. The effects of the pandemic will also be a matter of discussion.

207. In January 2021, the Federal Government introduced a basic pension for long-time members of the statutory pension insurance scheme with a below-average income. It thus aims to give greater recognition to the life's work of pensioners who have worked for at least 33 years and paid compulsory contributions or who have raised children or cared for people close to them, and to increase the trust in the statutory pension insurance scheme among long-time compulsorily insured contributors with below-average earnings (cf. Table, No. 168). The basic pension is to be financed from tax revenue via an increase in the federal grant to the pension insurance scheme. At present levels, the amount of the basic pension for those entitled averages €75 and can be as high as €418. The basic pension is supplemented by further measures outside the statutory pension insurance system, including exempt amounts for other welfare benefits for people who have been compulsorily insured for many years, such as basic welfare benefits in old age, and for those with reduced earning capacity, as well as housing benefit.

Maintaining the conditions for higher wage growth

208. The recession that resulted from the pandemic also caused wages to fall last year. However, the decrease in wage levels was comparatively moderate given the pronounced slump in the overall economy. This was owed to factors including rises agreed in collective bargaining rounds in the previous years, but also a strong decline in marginal employment, which counteracted the average rate of wage decline. Despite the onset of the economic recovery and the comparatively resilient develop-

Box 13: Germany's tax and welfare system reduces inequality

A comparison of the Gini coefficients for equivalised income before social transfers excluding pensions (0.352, value for 2019) and disposable equivalised income (0.297, value for 2019) shows that social welfare benefits, social security and taxes make a significant contribution in Germany to reducing inequalities with regard to disposable income and to restricting the risks of poverty (part of SDG 10: Reduced inequalities). Funding from the European Social Fund Plus is also being used to reduce the risk of poverty (cf. Table, No. 169).

ment of the industrial sector expected for this year, any collective wage agreements concluded this year can be expected to be more moderate. However, actual wages are likely to rise somewhat more strongly given that the economic recovery is likely to go hand in hand with earnings not covered by collective wage agreements and that the number of people in short-time work will fall. Consequently, gross wages and salaries per employee (actual earnings) will rise by 3.0 percent in 2021 and therefore more strongly than earnings subject to collective wage agreements (+1.6 percent).

209. The decline in employment in 2020 also had an effect on the total payroll, which was 1.1 percent smaller than that of the preceding year. This fall was, however, smaller than the one observed in corporate and investment income (-4.2 percent). In the wake of the expansion of monetary welfare benefits as a response to the crisis and reductions in taxes and charges, net wages and salaries saw a considerably better development (-0.6 percent) than gross wages and salaries. Overall, it proved possible to stabilise personal disposable income levels in spite of the deep recession; in fact, this figure grew by 0.8 percent year on year.

210. This year, net wages and salaries are likely to see another strong rise as a result of measures such as the end of the solidarity surcharge for most income levels and the adjustments made to income tax as per the Second Families Relief Act *(Zweites Familienentlastungsgesetz)* and the stabilisation of social insurance contributions at 40 percent of gross wages. Parallel to the recovery of wages and salaries, it is expected that pecuniary social benefits, which saw an extraordinary rise last year, will remain at a high level due to measures to support the job market and due to economic assistance. Overall, nominal disposable income of private households is likely to see significant growth again this year (+2.7 percent).

211. In terms of future wage growth, a key role is played by the strengthening of education, training and skills development, and the related labour productivity.

Promoting vocational training and skills development

212. The improvement of training opportunities and job prospects for young people has top priority for the Federation and the *Länder*. To this end,

young people can avail of a nationwide range of services – particularly in the form of career guidance, career orientation, career preparation and placement in training – which also supports the vocational integration of disadvantaged and disabled young people with a range of training assistance measures (cf. Item 220). Vocational training plays an important role in the education and skills development of young people.

213. In the context of the tension that has existed since March 2020 due to the pandemic between the right to education and the need to protect the health of everyone involved in school life, the Conference of Ministers for Education confirms that the right of children and young people to receive education can best be realised in on-site education in schools, and that this must be a top priority in all the decisions on restrictive measures to be taken in response to rising infection rates. The *Länder* are making sure that pupils will be able to gain their qualifications in the 2020/21 school year, and agree that the changed conditions for teaching and learning processes as a result of the COVID-19 pandemic must be taken into account in the curricula for the school year, particularly with a view to examinations and qualifications in the 2020/21 school year.

214. In the resolution entitled "Vocational Schools 4.0 – Further development of innovative capacities and integration in the vocational schools in Germany in the coming decade" of 7 December 2017, the *Länder* define aspects like the principles governing their efforts to make use of the potential offered by digitalisation to improve the quality and efficiency of teaching at the vocational schools. The Special Programme to Promote Digitalisation in Inter-company Vocational Training Centres and Centres of Excellence supports the provision of digital equipment to inter-company vocational training centres and promotes projects to develop and test new training and skills development concepts. A total of €120 million is being provided for the current Funding Phase II (2020-2023).

Box 14: Education and sustainability

The Federal Government has launched a broad-based, participatory multistakeholder process to attain SDG 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all) and to implement the UNESCO Education for Sustainable Development (ESD) Programme. All the ministries, the *Länder* and municipalities are involved, as are stakeholders from academia, business and civil society. In total, more than 300 organisations and institutions are working to structurally anchor the UNESCO programme in all areas of the education system. This is taking place with the help of the National Education for Sustainable Development Action Plan, which was adopted in 2017 and forms a comprehensive ESD strategy. The basic idea is that all the relevant stakeholders need to subscribe to the concept of ESD if we are to succeed in anchoring sustainability in education and education in sustainability narratives and activities. The aim for the 2020–2030 decade is to implement a new UNESCO Global Action Programme for ESD.

215. The Alliance for Initial and Further Training remains the central political platform for supporting dual vocational training (cf. Table, No. 170). Its joint declaration of 26 May 2020 addresses the impact of the COVID-19 pandemic on the training market. It was an important basis for the federal programme 'Safeguard vocational training places" (cf. Table, No. 171). Funding worth €0.5 billion is available for this package of measures in 2021. The federal programme entitled "Safeguarding training places" is being continuously evaluated, and awareness of it amongst the companies providing training is to be increased. The idea is to support companies offering vocational training during the current period of economic difficulties and encourage them to maintain or increase the number of training places on offer and allow young people to continue and successfully complete their training. For example, the first funding guidelines to implement the federal programme have – as the skilled craft sector also sees it – already given an important boost to training activities in Germany. The *Länder* have created a wide range of services to help young people move on from school to vocational training and work (cf. Table, No.172).

216. Ensuring a high percentage of tertiary and equivalent education remains a matter of central importance for the Federation and the *Länder*. At 50.5 percent in 2019, Germany continued to exceed its national Europe 2020 goal of increasing the percentage of 30–34-year-olds with a tertiary or equivalent education to at least 42 percent (cf. Overview 4). In the field of vocational training, the Federation has further strengthened the vocational training offering higher qualifications: the three new stages of further vocational training introduced by the revision of the Vocational Training Act *(Berufsbildungsgesetz)* on 1 January 2020, with the internationally recognisable qualifications of Bachelor Professional and Master Professional, directly express the equivalence of vocational and academic education. In the revision of the Upgrading Training Assistance Act *(Aufstiegsfortbildungsförderungsgesetz – AFBG)* as of 1 August 2020, the Federation has also greatly expanded the financial support available in the form of assistance for upgrading training, and is now enabling funding to be provided at all three further vocational training levels, up to the Master level. With the financing of the Higher Education Pact 2020 and the Teaching Quality Pact, the Federation and the *Länder* made an important contribution to capacity building in the higher education system and to improving study conditions and the quality of teaching at German institutions of higher education. In the Future Treaty on Strengthening Study and Teaching, the Federation and the *Länder* are jointly improving the quality of study and teaching from 2021 onwards and are maintaining study capacities in Germany in line with demand (cf. NRP 2020, Item 127). The "Innovation in Higher Education Teaching" Foundation has been set up by the Federation and the *Länder* with the specific aim of strengthening the capacity of higher education teaching to modernise itself (cf. NRP 2020 Item 128). In addition to this, the Federation and the *Länder* have adopted the Pact for Research and Innovation IV with which they are making a substantial contribution to non-university research (cf. Chapter II.B). Also, the *Länder* have adopted further measures to increase the percentage of individuals with a tertiary education qualification (cf. Table, No. 173).

217. In order to help the higher education institutions and the students to cope with the effects of the COVID-19 pandemic, the Conference of Ministers for Education adopted measures at the beginning of April 2020 regarding the design of the 2020 summer semester. The aim was to give the higher education institutions as much flexibility as possible, but also to provide a reliable basis for planning whilst avoiding disadvantages for students. For the 2020/21 winter semester, the application and admis-

sion procedure were safeguarded via the Foundation for Higher Education Admissions thanks to joint efforts by the higher education institutions, the Foundation and the *Länder*, with later dates being set.

218. Germany's technological prowess and economic performance is determined by highly innovative and increasingly digitised sectors, which rely on skilled professionals in STEM disciplines. There are a wide range of initiatives in the *Länder* to increase attractiveness, promote and improve STEM education, both in the context of curriculum revisions and through services extending beyond classwork, some of them in cooperation with external partners. The initiatives range from kindergarten level throughout the school system (cf. Table, No. 174). Further to this, the Federal Government is supporting the expansion of STEM programmes for young people, the development of a nationwide STEM centre of expertise and networking, and STEM-related research.

219. Structural and technological change creates an acute need to provide further training for employees in order to respond to the necessity of adapting to changing skills profiles. The National Strategy for Continuing Education, which was presented on 12 June 2019, is to contribute to supporting vocational further training, skills development and lifelong learning more actively than in the past, and thus to improve the possibilities for people to take up skilled work. By developing a National Further Training Strategy, the Federal Government has taken action in coordination with all relevant stakeholders (Federation, *Länder*, business, trade unions and the Federal Employment Agency) to improve the framework for a proactive handling of the upcoming structural changes. The National Further Training Strategy puts forward possible responses to the changing world of work and helps to stimulate a new culture of further education in Germany that promotes the value of self-determined educational and professional biographies and stresses the increased responsibility of all stakeholders involved in further training. Close cooperation between the Federation and the *Länder* is intended to make further training opportunities and support options more transparent and easier to access. A report on the implementation status and further development of the National Strategy for Continuing Education will be presented in June 2021.

220. The Act on Opportunities to Gain Qualifications *(Qualifizierungschancengesetz)* improves the funding for further education and training for employees in work and strengthens the role of the Federal Employment Agency as a provider of advisory services on further training and skills development. It also expands publicly funded further training to include employees affected by structural change (cf. NRP 2020 Item 90). The Act to Promote Advanced Vocational Training amid Structural Change and Enhance the Promotion of Training *(Arbeit-von-morgen-Gesetz)* implements key aspects of the National Strategy for Continuing Education. For example, the funding available for employees and companies that are particularly affected by structural change was further improved from 1 October 2020 (cf. Table, No. 175). It is explicitly possible to conduct further training while receiving short-time working allowances, and the Act to Secure Employment *(Beschäftigungssicherungsgesetz)* makes additional funding available for this purpose. Further to this, low-skilled workers were given a basic legal entitlement to funding for vocational skills upgrading measures (cf. Item 224).

221. The federal programme 'Creating Further Training Alliances' helps the Federal Government to implement its National Further Training Strategy by supporting projects aimed at increasing further training activity particularly in SMEs and strengthening regional business and innovation networks.

Diagram 15: National Further Training Strategy - Partners and fields of action

Source: Federal Ministry for Economic Affairs and Energy

Improving results in education and skills levels among disadvantaged groups

222. The improvement of opportunities for participation and employment is a central concern of the Federation and the *Länder*, particularly with a view to disadvantaged groups. Educational opportunities and improved labour market integration are key fields of action in the fight against poverty and social exclusion. The *Länder* have taken various measures to open up opportunities for participation and education for children and young people from lower income groups (cf. Table, No. 176).

223. With a view to improving the level of basic education and reducing functional illiteracy, the Federation, the *Länder* and other partners have launched the National Decade for Literacy and Basic Education 2016–2026. The Federation is providing €180 million in funding for the "AlphaDecade". Funding is going for example towards projects which aim to develop and test innovative models at work for literacy and basic education for employees with low literacy.

224. It is a central goal of the Federation and the *Länder* to open up skills development opportunities to adults formally considered as having low qualifications that give them a realistic second chance at earning a vocational qualification or at least a skill that can lead to a qualification. A variety of programmes and measures are in place to achieve this goal (cf. NRP 2019, Item 75). Via the National Strategy for Continuing Education and the Act to Promote Advanced Vocational Training amid Structural Change and Enhance the Promotion of

Training (cf. Item 220 and Table, No. 175) the Federal Government has introduced a statutory entitlement to support for later efforts to obtain a vocational qualification in order to attract more employees without a vocational qualification to undertake continuing training which leads to a qualification. The rule builds on previous efforts to improve access to continuing vocational education and training (CVET) support by promoting basic skills development, and to boost an individual's staying power and motivation to complete further training which will lead to a qualification by providing a continuing education bonus.

225. Since 2011, Germany has significantly exceeded the national target set down in the Europe 2020 strategy of reducing the number of long-term unemployed by 20 percent compared with the average for 2008 (NRP 2020 Item 135). The Federal Government's Inclusion Act *(Teilhabechancengesetz)*, which entered into force in 2019, had introduced a social labour market to give people at the margins of the labour market longer-term prospects through publicly sponsored employment and better opportunities for participation in society (cf. NRP 2019, Item 166). The *Länder* have also rolled out a range of measures designed to facilitate the integration of unemployed individuals into the primary labour market and to provide support for their families (cf. Table, No. 177).

226. While the level of unemployment among refugees remains high, it was declining as they spent longer in Germany – until the outbreak of the pandemic. Overall, considerable progress has already been made with regard to the labour market integration of persons granted asylum status and those granted refugee status. Despite the pandemic, further increases in labour market participation can be reported. The rate of employment among citizens from the eight main non-European countries of origin of asylum seekers reached 37.9 percent in October 2020 (German nationals 69.6 percent, foreign nationals 52.7 percent). The Federation is supporting the integration of refugees into the labour market (cf. NRP 2020 Item 92); also, they are benefiting from the other measures to stabilise the labour market (cf. Items 51-59). The *Länder* are also active in this area, having rolled out a broad range of measures (cf. Table, No. 178).

227. The right to education, health, work and employment for people with disabilities anchored in the UN Convention on the Rights of Persons with Disabilities is being implemented by the Federal Government and the *Länder* via a host of measures in the context of a National Action Plan. One of the priorities for the *Länder* is to implement Article 24 "Education" of the UN Convention. For this reason, a wide range of activities to develop an inclusive school system are constantly being planned, implemented and further developed in the *Länder*. The cooperation between the Federation and the *Länder* on inclusion in education is coordinated in the various areas of responsibility. The *Länder* have also launched numerous measures to support the inclusion of people with disabilities (cf. Table, No. 179).

III. Europe 2020 headline targets: final report on the progress made

228. Germany is committed to the five headline targets of the Europe 2020 strategy for smart, sustainable and inclusive growth in Europe and believes it to be both prudent and necessary to maintain a clear focus on sustainable growth and employment also beyond the horizon of the Europe 2020 strategy. Overview 4 provides a complete summary of progress made towards achieving the ambitious quantitative goals which the Federation and the *Länder* have set in the context of the Europe 2020 strategy.

229. Germany has continued to make progress in almost all areas compared with the previous year, and has reached several goals. The employment rates both of 20–64-year-olds and of women and older workers have increased further, and continue to exceed the agreed targets. Germany has also consistently beaten the target of reducing the number of long-term unemployed by 20 percent by 2020 compared with 2008 levels. For example, the number of long-term unemployed dropped by 68 percent between 2008 and 2019 (comparison of annual averages). Furthermore, according to preliminary calculations by the Federal Statistical Office, spending on research and development rose to 3.17 percent of GDP in 2019. Despite this positive overall result, particularly with regard to gainful employment and long-term unemployment, additional efforts are both advisable and necessary. Germany has also made progress in reducing greenhouse gas emissions. The Federal Government will continue to address the issues of the Europe 2020 Strategy in the context of the 2030 Agenda for Sustainable Development (regarding the Federal Government's measure to promote renewable energy, cf. also Chapter II.B). Individual quantitative indicators can, of course, only give a partial picture of the progress made in a policy field. For a full analysis, a wide number of quantitative and, in particular, qualitative factors would need to be considered.

230. The Federal Government supports the desire to further develop and strengthen the social dimension of the European Union by implementing all 20 principles of the European Pillar of Social Rights (ESSR). The aim is to reduce unjustified inequality within the EU, mitigate disturbances in the labour markets owing to external shocks and improve social protection.

The Federal Government welcomes the fact that the European Commission has presented an action plan for implementing the ESSR in 2021. It has taken part in a consultation process on this plan. In the implementation of the ESSR, the system of competence must be maintained; the principles of subsidiarity and proportionality must be observed. The measures at the various levels should complement one another, dovetail as well as possible and be mutually supportive – with a view to improving the quality of life of EU citizens throughout the EU and reducing social inequalities. The action plan can make a contribution to further countering poverty and social exclusion as a result of the COVID-19 pandemic. The funding from the European Social Fund Plus also helps here. The Federal Government shares the assessment indicated by the Social Scoreboard that, by comparison, Germany's performance on social issues is better than average. With a view to the meeting of the EU 2020 targets on employment and poverty reduction, the scoreboard categories "Gender employment gap", "At-risk-of-poverty or social exclusion rate", "Employment rate" and "Long-term unemployment rate" are of relevance. Germany's performance is above average in all four categories; in terms of the employment rate, Germany is designated "best performer". The Federal Government continues to aim to progress the implementation of the principles of the European Pillar of Social Rights and to aspire to an upward social development in the Member States on the basis of common principles.

Overview 4: Quantitative goals defined under the Europe 2020 strategy and current progress towards goals

Europe 2020 headline targets	EU-wide indicators (if different)	National indicators	Status of quantitative indicators
1. Foster employment	• Employment rate of 75 percent for people aged 20-64 • Greater participation of young people, older workers, low-skilled workers and migrants	• Employment rate for people aged 20–64: 77 percent • Employment rate for older people aged between 55 and 64: 60 percent • Employment rate for women: 73 percent	• Employment rate for people aged 20–64: 80.6 percent (2019) • Employment rate for older people aged between 55 and 64: 72.7 percent (2019) • Employment rate for women: 76.6 percent (2019)
2. Improve the conditions for innovation, research and development (R&D)	• R&D expenditure of three percent of GDP up to 2020 • Improve the conditions for R&D	• R&D expenditure: 3.5 percent of GDP by 2025, two thirds from the private sector and one third from the public sector	• R&D expenditure: 3.17 percent of GDP for 2019 (preliminary data), approx. two thirds of which from the private sector and approx. one third from the public sector
3. Reduce greenhouse gas emissions and increase energy efficiency and energy from renewables	By 2020: • Reduce greenhouse gas emissions by at least 20 percent (or 30 percent[4] if applicable) compared with 1990 levels • Increase the share of renewables in gross final energy consumption to 20 percent • Increase energy efficiency by 20 percent in relation to forecast development	• Reduce greenhouse gas emissions by at least 40 percent by 2020 compared with 1990 levels, long-term goal of greenhouse gas neutrality by 2050 • Increase the share of renewables in total gross final energy consumption to 18 percent by 2020, to 60 percent by 2050[5] • National energy efficiency goals under the Federal Government's Energy Concept of 28 September 2010: primary energy consumption to be down 20 percent by 2020, 30 percent by 2030, and 50 percent by 2050 from 2008 level[6]	• Greenhouse gas emissions: reduced by 40.8 percent (2020) compared with 1990 • Share of renewables: 19.6 percent of total gross energy consumption (2020) 45.5 percent of gross electricity consumption (2020); the figures indicated in other publications may differ slightly due to the different methodologies applied • Primary energy consumption: down by 18.7 percent in 2020 from 2008
4. Improve education levels	• Improve education levels, in particular reduce the proportion of early school leavers and people dropping out of vocational training to below ten percent • Increase the percentage of 30–34-year-olds with a tertiary or equivalent education to at least 40 percent	• Increase the percentage of 30–34-year-olds with a tertiary or equivalent education to 42 percent	• Proportion of early school leavers and people dropping out of vocational training[7] in 2019: 10.3 percent • Percentage of 30–34-year-olds with a tertiary or equivalent education: 50.5 percent (2019)[8]
5. Promote social inclusion, in particular by reducing poverty	• Lift at least 20 million people out of the risk of poverty or exclusion	• Reduce the number of long-term unemployed by 20 percent by 2020 compared with 2008 levels	• Reduction of 68 percent in the number of long-term unemployed between 2008 and 2019 (from 1.63 million to 0.52 million; comparison of annual averages)

4 Conditional offer by the EU to achieve a 30% reduction by 2020 compared with 1990 levels if other industrialised countries commit to similar emissions reductions and developing countries make a contribution reflecting their responsibilities and individual abilities.

5 These are the current targets based on the Federal Government's Energy Concept. The 2021 Renewable Energy Sources Act provides that all of the electricity generated or consumed in Germany is to be greenhouse gas neutral before 2050.

6 With regard to the indicative national energy efficiency goal under Article 3 of European Directive 2012/27/EU, reference is made to the communication to the European Commission of 11 June 2013 and the NECP. The targets cited are the current targets based on the Federal Government's Energy Concept and the 2050 Efficiency Strategy.

7 Early school-leavers are 18-24 year-olds who, at the very maximum, have successfully completed lower secondary education *(Hauptschule or Realschule)*, but who have not gone on to earn a further qualification or who are currently not in education.

8 Individuals with qualifications equivalent to ISCED level 4 to 8 according to ISCED 2011 are considered when evaluating the status of this indicator. According to the Council Presidency conclusions on education targets in the Europe 2020 strategy at the 3013th EDUCATION, YOUTH AND CULTURE Council meeting of 11 May 2010, Member States may, in justified cases, include ISCED level 4 into their definition of their national target.

IV. Drafting the NRP 2021: process and stakeholders

231. The NRP 2021 was prepared by the Federal Government under the leadership of the Federal Ministry for Economic Affairs and Energy and with the involvement of the *Länder*. Coordinated by Berlin as the state currently chairing the Conference of Minister-Presidents, the Conferences of Specialised Ministers and the Joint Science Conference (GWK) supplied articles, delivered comments on a draft version of the NRP and submitted opinions. The contributions of the *Länder* have been incorporated into the document.

232. Many industry and social associations, trade unions, employer representatives and other civil society groups have also contributed to the creation of this document. These include the Confederation of Employers' Associations, the German Trade Union Confederation, the Federation of German Industries, the Association of German Chambers of Industry and Commerce, the German Confederation of Skilled Crafts, the Association of German Cities, the Association of German Counties, the German Association of Towns and Municipalities, and the Federal Association of Non-Statutory Welfare. Their opinions are published on the website of the Federal Ministry for Economic Affairs and Energy along with the NRP 2021. In addition, the German Trade Union Confederation, and the Joint Committee for German Industry and Commerce and dbb Beamtenbund and Tarifunion received the opportunity to discuss the NRP with the Federal Government.

233. The NRP 2021 was adopted by the Federal Cabinet on 24 March 2021. The citing of measures in the report does not prejudice either current or future budget negotiations. In this respect, measures not financed in the budgetary framework are all subject to the availability of funding. Directly after the Cabinet decision, the NRP 2021 was formally submitted to the German Bundestag and the Bundesrat. The Bundesrat considered the NRP at its session on 26 March 2021. The Federal Government will submit the NRP 2021 to the European Commission by the end of April 2021.

Table: Actions to tackle primary macroeconomic challenges

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
A. Fighting the COVID-19 pandemic, boosting the economy, ensuring debt sustainability, strengthening the health system			
1.	Act on the Protection of the Population in the Event of an Epidemic Situation of National Significance *(Gesetz zum Schutz der Bevölkerung bei einer epidemischen Lage von nationaler Tragweite)*	The changes proposed under the Infection Protection Act *(Infektionsschutzgesetz – IfSG)* are intended to ensure the functioning of society in an infection-related emergency. The revision of Section 5 IfSG authorises the Federal Ministry of Health to issue general administrative acts or ordinances in order to make provisions for the safety of citizens and to ensure the provision of healthcare, e.g. in the form of: • rules on cross-border travel, • rules that are usually made by self-governing bodies, • measures to ensure a basic supply of pharmaceuticals, protective equipment and equipment for laboratory diagnostics, • leeway for more flexible rules in healthcare and long-term care facilities. The Act also contains amendments to the Federal Building Code that make it possible to build medical facilities at short notice. Furthermore, Section 56 IfSG now contains a compensation rule for parents whose children are affected by public closures of child-care facilities. Compensation covers 67 percent of lost earnings (up to €2,016 per month) and is limited to a period of six weeks.	Largely in effect since 28 March 2020
2.	Second Act on the Protection of the Population in the Event of an Epidemic Situation of National Significance *(Zweites Gesetz zum Schutz der Bevölkerung bei einer epidemischen Lage von nationaler Tragweite)*	The changes proposed to the Infection Protection Act further expanded the scope of the infection protection rules imposed under the Act on the Protection of the Population in the Event of an Epidemic Situation of National Significance. Further to this, the introduction of Section 5 (2) sentence 1 no. 9 IfSG has created the legal basis for federal financial assistance for the technical modernisation of health authorities and for connecting the health authorities to the electronic reporting and information system pursuant to Section 14 IfSG. The Federation made available some €50 million for this financial assistance in 2020; the amount has been allocated in full to the *Länder*.	Largely in effect since 20 May 2020
3.	COVID-19 Hospital Relief Act *(COVID-19-Krankenhaus-entlastungsgesetz)*	The Act entailed changes to the Hospitals Financing Act *(Krankenhausfinanzierungsgesetz – KHG)*, Hospital Fees Act *(Krankenhausentgeltgesetz - KHEntgG)*, Social Code V and Social Code XI. The aim is to give financial support particularly to hospitals, rehabilitation establishments, panel physicians and care facilities in order to tackle the impact of the COVID-19 pandemic.	Largely in effect since 28 March 2020
4.	Hospital Future Act *(Krankenhauszukunftsgesetz)*	The Hospital Future Act, which amends the Hospitals Financing Act and the Hospital Structure Fund Ordinance *(Krankenhausstrukturfonds-Verordnung – KHSFV)*, provides for the establishment of a Hospital Future Fund. By making available €3 billion, the Federation is to cover 70 percent of the funding. The remaining 30 percent is to come from co-financing, which can be covered by the *Länder* alone, with the financial participation of hospital operators, or solely by hospital operators. Thus, a total of up to €4.3 billion will be available as funding. The aim is to finance investments by hospitals in modern emergency capacities, digitalisation and IT security. A set of provisions for the support of service providers initially limited until 30 September 2020 were extended until 31 December 2020. Moreover, a total of €100 million is being made available for premium payments to be disbursed to nurses and other hospital staff.	Largely in effect since 29 October 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
5.	Third Act on the Protection of the Population in the Event of an Epidemic Situation of National Significance *(Drittes Gesetz zum Schutz der Bevölkerung bei einer epidemischen Lage von nationaler Tragweite)*	The changes made to the Infection Protection Act further develop the existing rules to tackle the COVID-19 pandemic (in particular with regard to the compensation rule, tests and vaccines). The changes made to the Hospitals Financing Act and to Social Code V provide a basis for federal financial support for hospitals and inpatient rehabilitation and preventive care facilities (including facilities affiliated with the Maternal Health Care Foundation) during the period from 18 November 2020 to 31 January 2021, the aim being to continue to be able to tackle the effects of the coronavirus pandemic. By virtue of ordinances enacted by the Federal Ministry of Health, this period has subsequently been extended to 11 April 2021 (as at 4 March 2021).	Largely in effect since 19 November 2020
6.	Special programme to accelerate research and development in search of urgently needed vaccines against SARS-CoV-2	The special programme is geared towards the three phases of clinical vaccine development with a view to speeding up the availability of an effective and safe vaccine against SARS-CoV-2. Moreover, the programme is to expand development and production capacities in Germany and thus to strengthen the healthcare industry specifically in the field of vaccine development.	Cabinet decision: 11 May 2020. Funding guideline of 18 June 2020; funding launched in September 2020
7.	Measures adopted by the *Länder* in response to the COVID-19 pandemic	**Bavaria** ***First wave of pandemic in 2020*** Coronavirus Pandemic Emergency Plan *(Notfallplan Corona-Pandemie)*: General administrative act to address exceptionally high hospital occupancy rates *(Allgemeinverfügung zur Bewältigung erheblicher Patientenzahlen in Krankenhäusern)* In late March 2020, the Free State of Bavaria issued a general administrative act, which was subsequently adjusted to evolving healthcare system requirements, to instruct all hospitals to postpone non-essential treatment and surgery if medically acceptable. Further to this, the Coronavirus Emergency Plan provided for comprehensive measures regarding inpatient services, particularly with a view to managing patient flows by means of newly appointed Medical Directors at the level of special-purpose associations for ambulance and fire services, creating and expanding (intensive) care capacities and facilitating cooperation among the relevant institutions. Since the compensation payments adopted by the Federation in March 2020 were not sufficient to offset the revenue shortfalls experienced by inpatient facilities, the state government adopted additional liquidity assistance measures for rehabilitation establishments and private clinics as well as an exceptional payment for facilities that had begun to treat COVID-19 patients (total volume: €138 million). ***Second wave of pandemic in late 2020/early 2021*** In late November 2020, a general administrative act – which was then repeatedly adjusted to the increasing hospital overload – re-established the tried-and-tested organisational structures for managing patient flows. Again, Medical Directors were deployed at the level of the special-purpose associations for ambulance and fire services and endowed with far-reaching powers to issue instructions to inpatient facilities. Following the declaration of the state of emergency in December 2020, these powers were expanded by the possibility to ban elective treatment and to make greater use of the capacities of preventive care and rehabilitation facilities.	In effect since 19 March 2020, with subsequent adjustments to evolving requirements

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
7.	*Measures adopted by the Länder in response to the COVID-19 pandemic*	In order to relieve hospitals of patients who no longer required acute inpatient treatment subsequent to their hospital stay, but were not allowed to return to their nursing home or domestic environment because of the risk of still being infectious, the local administrative authorities were entrusted with the task of instructing suitable establishments (including, in particular, preventive care or rehabilitation facilities) to accommodate and provide for such patients. To this end, the Free State of Bavaria made available a total of €30 million for the period until March 2021. A further €30 million was earmarked for flat-rate payments that preventive care and rehabilitation facilities can receive as compensation for their support in alleviating the healthcare crisis.	
		Hesse Investments in research infrastructure and diagnostics at universities and university hospitals A total of €3 million was made available via the European Regional Development Fund (CRII+ Initiative by European Commission; ERDF funding rate: 100 percent) for urgently needed infrastructure for research on COVID-19 and for improvements in patient-specific diagnosis and therapy. The EU funds were used to purchase research equipment and laboratory safety equipment and to create additional capacities for storing and analysing patient data.	Approved by promotional bank in August 2020; procurement completed and balance sheet finalised as of 31 January 2021
		Pandemic-related shortfalls on the part of the research museums of the Senckenberg – Leibniz Institution for Biodiversity and Earth System Research in Frankfurt (€702,000) and the Freies Deutsches Hochstift (€143,110), and on the part of the visitor information centre at the Messel Pit Fossil Site (UNESCO World Heritage Site - €181,440).	Approved in 2020, completed
		The 'LOEWE' funding programme, which is open to all fields of research, supports two cross-disciplinary research associations in the life sciences which are, among other things, conducting activities with a focus on the coronavirus pandemic. These include a LOEWE centre entitled 'DRUID – Novel Drug Targets against Poverty-Related and Neglected Tropical Infectious Diseases' (approx. €18.8 million) and the Frankfurt-based 'CMMS Center for Multiscale Modelling in Life Sciences', a LOEWE cluster (approx. €4.5 million).	Previous approvals refer to the period from 2018 to 2023
		Pandemic-related healthcare-relevant research within the framework of the Hesse Pandemic Network The *Land* of Hesse is making available a total of approx. €4.35 million (€2 million each for 2020 and 2021; €350,000 for 2022) from the special fund pursuant to the Securing a Good Future Act *(Gute-Zukunft-Sicherungsgesetz)* in order to promote pandemic-related healthcare-relevant research projects at the top three Hessian medical schools in Frankfurt, Giessen and Marburg. The funding is geared towards research activities which aim, among other things, to develop vaccines and antiviral drugs against COVID-19, understand the biology of the virus and examine potential routes of transmission. The funds were used to establish the Hesse Pandemic Network with a view to coordinating the universities' research activities related to SARS-CoV-2 pathogenesis, diagnosis, therapy and prophylaxis. The steering group in charge of this coordination includes leading representatives from the virology institutes of the universities of Marburg, Frankfurt and Giessen.	Act on Special Fund for 'Securing a Good Future for Hesse' *(Gute-Zukunft-Sicherungsgesetz – GZSG)*, of 4 July 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
7.	*Measures adopted by the Länder in response to the COVID-19 pandemic*	**Lower Saxony** Research projects aimed at fighting the COVID-19 pandemic A total of €27.5 million is being made available to support • sixteen research projects aimed at understanding the virus and developing vaccines or pharmaceuticals, • two studies that are trying to analyse infection patterns by conducting COVID-19 tests in different institutions (companies, universities, schools), and • the Lower Saxony COVID-19 Research Network (COFONI), which aims to pool expertise across Lower Saxony, accelerate the implementation of research findings and develop a strategy for tackling future pandemics.	In effect from 19 March 2020, with subsequent adjustments to evolving requirements until 16 June 2020.
8.	COVID-19 Immediate Assistance	The immediate assistance grant is designed to ensure the economic survival of own-account workers and micro-enterprises and to mitigate acute cash-flow problems caused by the coronavirus crisis.	Granted for three consecutive months between March and June 2020
9.	Extraordinary economic assistance (November Assistance and December Assistance)	Extraordinary economic assistance is disbursed as a one-off payment. The aim is to help the companies affected in a straightforward and non-bureaucratic manner. Particular focus is being placed on fixed costs that are still incurred despite the temporary closures. In order to keep the procedure as simple as possible, these costs are approximated via turnover, with average weekly turnover in November/December 2019 serving as a point of reference. The reimbursement covers up to 75 percent of the reference turnover. Since EU State aid legislation imposes certain limits on the scope of government support, the percentages applying to larger companies are determined on the basis of the relevant caps under State aid rules. Once granted, extraordinary economic assistance is offset against government payments concerning the time period in question that have already been received, e.g. short-time allowance or bridging assistance, or against any payments from bridging assistance still to be disbursed. Extraordinary economic assistance was extended for December (November and December Assistance Programmes).	Granted for November and December 2020 due to public closure orders
10.	Bridging Assistance for Small and Medium-sized Companies, New Start Assistance	The objective of Bridging Assistance I and II is to help ensure the survival of small and medium-sized companies experiencing losses in turnover as a result of the coronavirus crisis by granting them additional liquidity assistance for the period from June to December 2020 in the form of non-repayable grants on the basis of operational fixed costs. The third phase of Bridging Assistance covers the period from November 2020 to June 2021. The funding conditions were further improved and expanded in relation to the previous programmes. Within the framework of the New Start Assistance scheme, own-account workers (without fixed costs) can benefit from accelerated disbursements in the form of a one-off grant of up to €7,500.	Funding periods from June to August 2020 (Bridging Assistance I); from September to December 2020 (Bridging Assistance II); from November 2020 to June 2021 (Bridging Assistance III)
11.	KfW Special Programme 2020	The voluminous KfW Special Programme has been available since 23 March 2020 to commercial companies and members of the liberal professions – irrespective of their size – with a view to mitigating the economic impact of the COVID-19 pandemic. The KfW Special Programme is being implemented via the KfW Entrepreneur Loan and ERP Start-up Loan-Universal programmes, the funding terms of which have been modified and improved. The financing partners passing on the loans (banks and savings banks) are granted an 80 percent liability release (90 percent for SMEs) that is guaranteed by the Federation. Another variant of the programme, 'direct financing for syndicated loans', allows for large-scale syndicated loan financing, with KfW assuming up to 80 percent of the risk. On 15 April 2020, KfW's Instant Loan, a further programme variant, was launched to speed up lending with a 100 percent liability release and to offer support without much red tape. The Instant Loan programme offers up to €800,000 per loan without requiring any collateral. Initially, eligibility had been restricted to companies with more than ten employees, but since 9 November 2020 it has also extended to smaller companies with up to ten employees as well as own-account workers.	KfW Special Programme since 23 March 2020 KfW Instant Loan since 15 April 2020 KfW Instant Loan extended to companies with up to ten employees on 9 November 2020 Original time frame (31 December 2020) Extended until 30 June 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
12.	Guarantee programmes of guarantee banks	This measure is intended to support small and medium-sized companies in tackling liquidity shortages, particularly as a result of the coronavirus pandemic. Under such programmes, default guarantees are covered for high street banks with a maximum guarantee rate of 90 percent (instead of the usual 80 percent). Default guarantees can be assumed up to a guarantee amount of €2.5 million (usually €1.25 million). The back-to-back guarantee rates of the Federal Government and the *Länder* have been raised. For loans of up to €250,000, loan guarantees may cover 100 percent or 90 percent of the amount, depending on whether the Federal/*Länder* back-to-back guarantee is set at 90 percent or 100 percent respectively. As for the guarantee programmes to strengthen the equity base of SMEs, the possibility to cover holdings was raised to up to €2.5 million (previously: €1.25 million), the back-to-back guarantee rates of the Federation and the *Länder* were raised to up to 85 percent and additional procedural simplifications were agreed. The measure is designed to help small and micro-enterprises in particular to obtain the necessary liquidity quickly.	First extensions in force since 18 March 2020. Extensions will apply until 30 June 2021.
13.	Large-scale guarantee programme of the Federal Government (parallel Federal/*Länder* guarantees)	This measure provides guarantees to support large companies in tackling liquidity shortages caused by the coronavirus pandemic. The Federation's large-scale guarantee programme (parallel Federal/*Länder* guarantees) has also been extended to areas outside of regions that are structurally lagging behind. The Federal Government assumes 50 percent of the guarantee risk in the case of guarantee amounts of €50 million or more (€20 million or more in regions that are structurally lagging behind). The maximum guarantee rate is 90 percent (instead of the usual 80 percent).	First extensions in force since 18 March 2020. Extensions will apply until 30 June 2021.
14.	Economic Stabilisation Fund Act *(Wirtschaftsstabilisierungsfondsgesetz – WStFG)*	Launch of an Economic Stabilisation Fund (WSF) with a total volume of up to €600 billion, including • up to €400 billion for guarantees, • up to €100 billion for recapitalisation measures, • up to €100 billion for the refinancing of the KfW Special Programme, in order to stabilise the real economy during the COVID-19 pandemic. The fund helps companies cope with liquidity squeezes and strengthens their equity base. The WSF is targeted at companies from across the real economy that have met at least two of the following criteria in the balance sheets for the two financial years completed prior to 1 January 2020: • a balance sheet total exceeding €43 million, • sales revenues higher than €50 million, and • a workforce of more than 249 employees (on an annual average). In individual cases, smaller firms can get access to the WSF if they operate in one of the sectors mentioned in Section 55 of the Foreign Trade and Payments Ordinance (Außenwirtschaftsverordnung) or if they are of similar importance to public security or the economy. Likewise, support from the WSF in the form of recapitalisation measures is also available in specific instances to start-ups whose company value was estimated by private investors to be a minimum of €50 million during at least one financing round concluded on or after 1 January 2017 (including the capital received in the course of that round).	In effect since 28 March 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
15.	New Start Culture (NEUSTART KULTUR) rescue and future programme	In the light of the crisis caused by the coronavirus pandemic, the Federal Government is doing everything possible to support workers in the cultural and media industries and to safeguard the future of cultural institutions in Germany. Therefore, in addition to the Federation's assistance schemes, which are available to all companies and own-account workers including those in the cultural, creative and media industries, the Federal Government has set up the €1 billion New Start Culture rescue and future programme within the framework of its stimulus package. An additional €1 billion is to be allocated to the programme in order to help mitigate the sustained impact of the pandemic on the cultural and creative sectors. The aim of the programme is to facilitate a fresh start for cultural life in Germany during and after the pandemic and to preserve the country's unique cultural infrastructure. It provides targeted support to institutions and stakeholders from the cultural and creative industries as they reopen with new programmes and activities in a way that conforms to pandemic-related requirements. The aim is not only to restore the urgently needed diversity of cultural services, but also to provide concrete prospects of employment and earnings for people working in the sector.	Coalition Committee: 4 June 2020 Cabinet decision: 17 June 2020 Bundestag and Bundesrat: 3 July 2020 Launch of the programme: 14 July 2020 Programme duration: 2020 and 2021
16.	Act on Mitigating the Impact of the COVID-19 Pandemic in Civil, Insolvency and Criminal Procedure Law *(Gesetz zur Abmilderung der Folgen der COVID-19-Pandemie im Zivil-, Insolvenz- und Strafverfahrensrecht)*	Until 30 June 2022, it will be impossible to terminate rental contracts and leases on grounds of payment arrears accumulated between 1 April and 30 June 2020 that are due to the COVID-19 crisis. For the same period, consumers were given a temporary right to withhold payments in the case of continuing obligations that are required in order to obtain basic public services. The right to withhold performance was also granted to micro-enterprises that had been able to withhold payments related to continuing obligations that are necessary in order to obtain services allowing an adequate functioning of the enterprise. For consumer loan contracts concluded before 15 March 2020, creditors' entitlements to repayments, interest or amortisation payments due between 1 April 2020 and 30 June 2020 were deferred. Thanks to these measures, it has been possible to counter the loss of residential and commercial space and to bridge coronavirus-related payment difficulties. In addition, temporary measures were introduced in the field of legislation on companies, cooperatives, associations, foundations, residential property and transformations. They respond to the challenges involved in holding assemblies and adopting resolutions under the circumstances of the pandemic, which is of economic importance particularly as regards general meeting resolutions on the appropriation of net profit. Initially limited until 31 December 2020, the measures have been slightly adjusted and will now apply until 31 December 2021 (cf. No. 17). In insolvency law, the obligation to file for insolvency was suspended in certain circumstances, and the risks of liability and challenges borne by corporate bodies, contracting partners and creditors were restricted (cf. No. 18).	Act of 27 March 2020. The Act contained in Art. 2, detailing the measures adopted in the field of legislation on companies, cooperatives, associations and foundations to mitigate the impact of the COVID-19 pandemic, was last amended on 22 December 2020 by the Act to Further Shorten the Procedure for the Discharge of Remaining Debts and to Adapt Pandemic-related Provisions in the Field of Legislation on Companies, Cooperatives, Associations and Foundations, and in the Field of Legislation on Rental Contracts and Leases. Art. 2 will expire on 31 December 2021. Art. 240 of the Introductory Act to the German Civil Code will expire on 30 September 2022.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
17.	Act to Further Shorten the Procedure for the Discharge of Remaining Debts and to Adapt Pandemic-related Provisions in the Field of Legislation on Companies, Cooperatives, Associations and Foundations, and in the Field of Legislation on Rental Contracts and Leases *(Gesetz zur weiteren Verkürzung des Restschuldbefreiungsverfahrens und zur Anpassung pandemiebedingter Vorschriften im Gesellschafts-, Genossenschafts-, Vereins- und Stiftungsrecht sowie im Miet- und Pachtrecht)*	The Act to Further Shorten the Procedure for the Discharge of Remaining Debts, which also serves to implement the EU Directive on restructuring and insolvency (EU 2019/1023), shortens the period up to the discharge of remaining debts from previously six to three years. It goes beyond the provisions of the Directive in that the shortened periods apply not only to entrepreneurs, but also to consumers. They also apply retroactively to insolvency proceedings that were requested on or after 1 October 2020. In the case of insolvency proceedings requested between 17 December 2019 and 30 September 2020, the six-year period is to be shortened in stages. The discharge from remaining debts after three years no longer requires that obligations of a certain amount have been repaid or that procedural costs are covered. However, debtors continue to be bound by certain duties and obligations and bear an increased obligation to release acquired assets during a probationary period. Article 10 of the Act to Further Shorten the Procedure for the Discharge of Remaining Debts and to Adapt Pandemic-related Provisions in the Field of Legislation on Companies, Cooperatives, Associations and Foundations, and in the Field of Legislation on Rental Contracts and Leases entailed amendments to Article 240 of the Introductory Act to the German Civil Code (*Einführungsgesetz zum Bürgerlichen Gesetzbuche – EGBGB)*. These contain the clarification that the rules on a frustration of the contractual basis pursuant to Section 313 of the Civil Code *(Bürgerliches Gesetzbuch – BGB)* are in principle applicable to commercial rental contracts that are affected by the special circumstances of the COVID-19 pandemic. Article 1 introduced an arrangement under procedural law giving precedence to and expediting disputes about the adjustment of the rent or lease for non-residential property due to government measures adopted in response to the COVID-19 pandemic.	Act to Further Shorten the Procedure for the Discharge of Remaining Debts and to Adapt Pandemic-related Provisions in the Field of Legislation on Companies, Cooperatives, Associations and Foundations, and in the Field of Legislation on Rental Contracts and Leases, of 22 December 2020. Most of the Act's provisions apply retroactively as of 1 October 2020.
18.	Act on the Temporary Suspension of the Obligation to File for Insolvency and on the Restriction of the Liability of Corporate Bodies in the Event of an Insolvency Caused by the COVID-19 Pandemic *(COVID-19-Insolvenzaussetzungsgesetz – COVInsAG)*	The COVID-19 Insolvency Suspension Act was designed to enable and facilitate the survival of companies that had run into economic difficulties in the wake of the coronavirus pandemic and would therefore have been forced to file for insolvency due to over-indebtedness or inability to pay. To this end, the obligation to file for insolvency on the part of managing directors and the payment prohibitions under company law for management measures taken in the proper course of business was suspended – initially until 30 September 2020 – unless the insolvency is not related to the impact of the COVID-19 pandemic or there is no prospect of resolving the existing insolvency. The suspension comprises over-indebtedness and inability to pay as grounds for insolvency. The suspension was accompanied by regulations restricting the possibilities of challenges in subsequent insolvency proceedings and creating incentives for the continuation of business relationships with and the granting of loans to the companies concerned. In addition, the creditor's right to request the initiation of insolvency proceedings was restricted for the period from 29 March 2020 to 28 June 2020. It was expected that these measures would provide the companies affected by the pandemic and their managing directors with the time needed to make the necessary arrangements in order to restore their liquidity or reverse their over-indebtedness, particularly by claiming government support or by entering into financing or restructuring arrangements with investors. The restriction on risks of liability and challenges is intended to inspire greater trust in investors and creditors. This trust is essential in order for companies to be granted restructuring loans and for creditors to continue business relations with their debtors.	Act of 27 March 2020, in effect since 1 March 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
19.	Act Amending the COVID-19 Insolvency Suspension Act *(Gesetz zur Änderung des COVID-19-Insolvenzaussetzungsgesetzes)*	The Act Amending the COVID-19 Insolvency Suspension Act extended the suspension of the obligation to file for insolvency until 31 December 2020 for those companies which had excessive debts as a result of the COVID-19 pandemic but were not insolvent. For insolvent companies, however, the suspension of the filing obligation expired on 30 September 2020. The extension was to allow over-indebted companies to make sustainable arrangements for averting insolvency. The overall aim was to prevent insolvencies of all companies capable of being restored to viability. By restricting the extension to over-indebted companies, it was possible to maintain the necessary trust in economic transactions given that over-indebted companies – unlike insolvent companies – are still able to meet outstanding obligations.	Act of 25 September 2020, in effect since 1 October 2020
20.	Act to Develop Recovery and Insolvency Law *(Sanierungs- und Insolvenzrechtsfortentwicklungsgesetz – SanInsFoG)*	The Act to Develop Recovery and Insolvency Law created a legal framework for restructuring operations aimed at averting insolvency. This may be of particular interest to those businesses which have run into financial difficulties in the wake of the COVID-19 pandemic. In addition, companies affected by the pandemic now benefit from further relaxations: for example, the reference period for the over-indebtedness assessment for 2021 was reduced under certain circumstances to four months in order to take account of the current forecasting uncertainties. For companies that are still waiting for payments as provided for by the government assistance programmes in place since 1 November 2020, the obligation to file for insolvency was suspended under certain circumstances until 31 January 2021. This prevented companies from having to file for insolvency solely on the grounds that they were waiting for the disbursement of government aid. The suspension of the obligation to file for insolvency extended both to the reason for opening the insolvency proceedings and to over-indebtedness. But it only applied to those companies that were facing a pandemic-related crisis and that were able to expect financial aid from the government assistance schemes launched in response to the COVID-19 pandemic. Applications for government aid must have been filed between 1 November 2020 and 31 December 2020. If a company was unable to apply during this period on either legal or factual grounds, it must at least be considered eligible. The suspension of the obligation to file for insolvency did not apply to cases where there was evidently no prospect of the aid being granted or where the aid would be insufficient to correct the insolvency. In addition, the existing restructuring options in insolvency proceedings are being fine-tuned. It was made clear that the possibility to forgo the appointment of an insolvency administrator in 'self-administered proceedings' is in principle to be reserved for well-prepared projects. At the same time, companies are being shown a legally secure path to restructuring options on the basis of self-administration. However, since the new requirements cannot always be reliably met in the current crisis circumstances, they do not apply to companies whose insolvency is due to the COVID-19 pandemic.	Act of 22 December 2020, in effect since 1 January 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
21.	Act to Extend the Suspension of the Obligation to File for Insolvency, the Safeguard against Challenges for Pandemic-related Deferrals, Tax Return Deadlines for Tax Consultants and the Interest-free Grace Period for the 2019 Tax Year *(Gesetz zur Verlängerung der Aussetzung der Insolvenzantragspflicht und des Anfechtungsschutzes für pandemie-bedingte Stundungen sowie zur Verlängerung der Steuererklärungsfrist in beratenen Fällen und der zinsfreien Karenzzeit für den Veranlagungszeitraum 2019)*	The Act stipulates the continued suspension of the obligation to file for insolvency for the period from 1 February 2021 to 30 April 2021. The arrangement is based on the suspension of the obligation to file for insolvency for January 2021. It applies under the established conditions (cf. No. 20), whereas the eligibility/application period extends to 28 February 2021. The extension of the suspension of the filing obligation is to prevent companies from having to file for insolvency because disbursement of government aid is still pending. In addition, the Act extends the safeguard against challenges for pandemic-related deferrals which applies to all creditors who had granted their debtors deferrals by 28 February 2021. Further to this, the Act stipulates an extension by six months of the tax return deadline for cases involving tax consultants for the 2019 tax year (five months for tax returns submitted by tax consultants for farmers and foresters to whom a different financial year applies), the aim being to make it easier for tax consultants to meet the statutory tax return deadline in view of the additional workload created by the COVID-19 pandemic. With a view to avoiding interest rate risks, the Act also extends, by six/five months, the interest-free grace period for interest charges on back taxes and tax refunds for the 2019 tax year.	Act of 15 February 2021, provision on the continued suspension of the obligation to file for insolvency in effect since 1 February 2021
22.	Ordinance on the Extension of Measures in the Field of Legislation on Companies, Cooperatives, Associations and Foundations to Mitigate the Impact of the COVID-19 Pandemic *(Verordnung zur Verlängerung von Maßnahmen im Gesellschafts-, Genossenschafts-, Vereins- und Stiftungsrecht zur Bekämpfung der Auswirkungen der COVID-19-Pandemie)*	The ordinance enacted to extend the measures in the field of legislation on companies, cooperatives, associations and foundations enables companies of the legal forms concerned as well as associations and foundations to adopt resolutions in 2021 as coronavirus-related restrictions continue. The Act to Further Shorten the Procedure for the Discharge of Remaining Debts and to Adapt Pandemic-related Provisions in the Field of Legislation on Companies, Cooperatives, Associations and Foundations integrated this extension in a slightly modified form into the Act on Measures in the Field of Legislation on Companies, Cooperatives, Associations and Foundations to Mitigate the Impact of the COVID-19 Pandemic (cf. No. 17).	In force since 29 October 2020, last amended on 22 December 2020 by the Act to Further Shorten the Procedure for the Discharge of Remaining Debts and to Adapt Pandemic-related Provisions in the Field of Legislation on Companies, Cooperatives, Associations and Foundations.
23.	Social Service Providers Deployment Act *(Sozialdienstleister-Einsatzgesetz – SodEG)*	This Act is designed to secure the maintenance of social service providers during the coronavirus crisis. Eligibility applies to social service providers that deliver services pursuant to the Social Codes (other than Social Codes V and XI) and the Residence Act *(Aufenthaltsgesetz)*. The Social Service Providers Deployment Act commits social service providers to offering all forms of support to the degree that these are reasonable and legally permissible. In return, in order to be able to maintain themselves, they receive monthly grants (up to 75 percent of the average pre-year contract volume) from the funding agencies. In this way, it is possible to maintain critical social infrastructure, for example in the fields of labour market policy, rehabilitation services or services for people with disabilities. The corresponding mandate applied until 31 March 2021.	In effect since 27 March 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
24.	Children and Youth Education, Children and Youth Work Special Programme *(Sonderprogramm Kinder- und Jugendbildung, Kinder- und Jugendarbeit)*	Following the decision of the German Bundestag of 2 July 2020, the second supplementary budget earmarked some €100 million for the support of non-profit organisations in the fields of children and youth education as well as children and youth work. In the event of liquidity squeezes, these organisations can receive support from the special programme in the form of a non-repayable equitable payment worth up to 90 percent of the liquidity shortage set forth. Part A outlines the grants for establishments in the field of children and youth education and children and youth work that offer overnight accommodation, whereas the focus of Part B is on supporting long-term international youth exchanges. For 2021, the Bundestag decided to spend another €100 million.	Part A: Term from 1 April 2020 to 31 December 2020, extended until 31 December 2021 Part B: Term from 1 April 2020 to 31 August 2021
25.	Tax measures in response to the impact of the COVID-19 pandemic	In order to mitigate the impact of the COVID-19 pandemic, a wide range of immediate measures were taken particularly with a view to improving the liquidity situation, safeguarding jobs and supporting companies. On 19 March 2020, a letter was published by the Federal Ministry of Finance on tax measures in response to the impact of coronavirus (COVID-19/SARS-CoV-2), accompanied by identically worded instructions by the highest *Länder* tax authorities on trade tax-related measures in response to the impact of coronavirus (COVID-19/SARS-CoV-2). For example, the possibilities of deferring tax payments and reducing advance payments were improved for the cases concerned. These measures were extended in December 2020, and again in March 2021. As a result, it will be possible until 31 December 2021 to lower advance payments of profit tax in a simplified procedure. Moreover, taxes can be deferred upon request until 30 September 2021 at the latest. Likewise, until 30 September 2021, assets (e.g. bank accounts) will not be seized or tax penalties charged if the tax debtor is affected directly and not insubstantially by the effects of the coronavirus pandemic. Under the simplified procedure, deferring foreclosures or tax payments beyond 30 September 2021 is only possible until 31 December 2021 on the basis of an appropriate instalment agreement. Various other measures were subsequently adopted in coordination with the highest *Länder* tax authorities. On 13 March 2020, 22 December 2020 and most recently on 18 March 2021, the customs administration was instructed to apply the measures set out by fiscal law to those taxes governed by federal legislation which it is in charge of administering (including import VAT, alcohol tax, energy tax, motor vehicle tax and aviation tax). On the same day, the Federal Central Tax Office was instructed to do the same for insurance tax and VAT, to the extent that these are administered by the Federal Central Tax Office. Moreover, at the request of companies benefitting from a permanent extension of the VAT payment deadline that are able to prove that they are directly and not insubstantially affected by the current coronavirus crisis, Tax Offices are allowed to reduce the VAT special advance payment amounts payable in 2020 in part or in full, and thus effectively refund payments that have already been made. The permanent extension of the VAT payment deadline will remain unaffected by this. Entrepreneurs who are directly and not insubstantially affected by the coronavirus pandemic and have not yet applied for a permanent extension of the VAT payment deadline are free to apply for this extension.	Published on 13 March 2020 and 19 March 2020. Extended on 22 December 2020 and 18 March 2021.
26.	Act Implementing Tax Relief Measures to Tackle the Coronavirus Crisis *(Gesetz zur Umsetzung steuerlicher Hilfsmaßnahmen zur Bewältigung der Corona-Krise)*	The Act Implementing Tax Relief Measures to Tackle the Coronavirus Crisis (Coronavirus Tax Relief Act) of 19 June 2020 (Federal Gazette I, p. 1385) sets out the following measures to stabilise long-term economic development and to secure employment by providing swift support to those that have been hit particularly hard: • Reduction of the VAT rate from 19 percent to seven percent for restaurant and catering services (excluding drinks) between 1 July 2020 and 30 June 2021 (until 31 December 2020: five percent). • Tax exemption for payments made by employers to supplement employees' (seasonal) short-time work allowances (up to 80 percent of the difference between the intended and the actual level of pay pursuant to Section 106 of Social Code III) for wage payment periods beginning after 29 February 2020 and ending before 1 January 2021. • Tax exemption for aid and support worth up to €1,500 that employers may grant their employees in cash or in kind in addition to owed wages or salaries in 2020.	Largely in force since 30 June 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
27.	Second Act Implementing Tax Relief Measures to Tackle the Coronavirus Crisis *(Zweites Gesetz zur Umsetzung steuerlicher Hilfsmaßnahmen zur Bewältigung der Corona-Krise)*	The Second Act Implementing Tax Relief Measures to Tackle the Coronavirus Crisis (Second Coronavirus Tax Relief Act) of 29 June 2020 (Federal Gazette I, p. 1512) introduces a range of mostly fast-acting stimulus measures, including, in particular, the following: • temporary reduction of VAT rates from 19 percent to 16 percent and from seven percent to five percent during the period from 1 July 2020 to 31 December 2020, • one-off child bonus of €300 for each child entitled to child benefit in 2020, • temporary increase in the amount of relief for single-parent families, • temporary increase in the carry-back of losses for tax purposes, • temporary introduction of degressive write-offs for moveable assets, • temporary increase from €2 million to €4 million in the maximum assessment basis for the tax-based research allowance for expenses incurred after 30 June 2020 and before 1 July 2026, • permanent increase from 3.8 to 4.0 of the rebate factor as per Section 35 of the Income Tax Act *(Einkommensteuergesetz – EStG)*, • doubling of the allowance of tax-free add-backs for trade-taxation purposes, • delay in due date for Import VAT, which is now payable on the 26th day of the second month after the import took place.	Largely in force since 1 July 2020
28.	Third Act Implementing Tax Relief Measures to Tackle the Coronavirus Crisis *(Drittes Gesetz zur Umsetzung steuerlicher Hilfsmaßnahmen zur Bewältigung der Corona-Krise)*	The following tax measures are being implemented in an effort to continue the fight against the effects of the coronavirus crisis and to strengthen domestic demand: • The reduced VAT rate of seven percent for restaurant and catering services (excluding drinks) will be temporarily extended beyond 30 June 2021 – it will apply until 31 December 2022. • A one-off child bonus of €150 will be granted for each child entitled to child benefit in 2021. • Tax losses for 2020 and 2021 can now be carried back up to an amount of €10 million (or €20 million in the case of joint taxation). This also applies to the upper limits of the preliminary carryover of losses.	Conclusion of legislative process on 5 March 2021
29.	Measures by the *Länder* to support the economy in the crisis	**Baden-Württemberg** <u>Investment Fund Act</u> The investment fund is targeted at companies from Baden-Württemberg with between 50 and 250 employees which are of special importance for the economy of Baden-Württemberg. It is to strengthen their capital case, thus improving their creditworthiness and ensuring they will get through the crisis. The *Land* either provides companies with equity capital for a limited period of time or uses quasi equity financial instruments. Companies with an annual turnover of no more than €50 million or a balance sheet total of no more than €43 million in the last completed business year can apply for funding from the investment fund. <u>COVID-19 Immediate Assistance</u> Implementation of the Federal Government's Immediate Assistance Programme at the beginning of the pandemic, with the *Land* using its own funds to supplement the programme. The *Land's* own COVID-19 Immediate Assistance Programme was closely linked with the Federal Government funding programme for own-account workers and companies with up to ten employees and supplemented it by providing assistance also to small companies with between ten and 50 employees (over a period of three months and in the form of a one-off non-repayable grant of up to €30,000 for companies with up to 50 employees).	Applications can be submitted since 21 December 2020 Application period: 25 March 2020 – 31 May 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
29.	*Measures by the Länder to support the economy in the crisis*	COVID-19 Bridging Assistance Additional funding provided by the *Land* in particular to own-account workers and freelances in the form of a 'salary' for entrepreneurs. Applicants can receive a 'salary' of up to €1,180 depending on the level of turnover they lost.	Months in which funding is provided: June up until the end of December
		Stabilisation Assistance for the hospitality sector Hospitality businesses experiencing a liquidity shortage as a result of the COVID-19 pandemic could receive funding for up to three months in the period between 1 May and 31 December 2020, depending on the size of their business and the size of the liquidity shortage. Under Stabilisation Assistance II, businesses can apply for up to three months of funding in the period between 1 January and 31 March 2021 – as an alternative to applying for Bridging Assistance III. The programme has a total volume of €330 million.	Funding period: between 1 May 2020 and 31 December 2020
		COVID-19 repayment grant for fairground operators, the events industry and taxi operators Funding provided for sectors that have been particularly hard hit by the crisis. Companies applying under this scheme can receive a one-time payment covering 80 percent of half of their total loan payments for 2020 (no more than €150,000 per company).	Applications can be submitted since 24 September 2020
		Invest BW The 'InvestBW' innovation and investment funding programme for individual companies is to massively boost demand across the entire economy of Baden-Württemberg and help companies develop innovations and invest in forward-looking technologies. 'Invest BW' is fast to implement, boosts the economy, and through its focus on individual companies, has an immediate effect. Two lines of funding exist – one for innovation funding and another for investment funding – each coming with specific funding terms.	Applications can be submitted since 15 January 2021
		Bavaria LfA Instant Loan The LfA Instant Loan from LfA Förderbank Bayern (Bavaria's promotional bank) is issued to freelancers and microenterprises with up to 10 employees which are experiencing temporary difficulties as a result of the COVID-19 crisis. Companies can receive funding to cover their total liquidity needs up to an amount of €50,000/100,000, with a possibility to include regular capital repayments due until the end of 2021 but excluding extraordinary repayments. The LfA Instant Loan by default includes a 100 percent liability release.	LfA Förderbank Bayern's COVID-19 related support schemes were extended in November 2020 up until the end of June 2021.
		COVID-19 Protective Shield Loan LfA Förderbank Bayern's COVID-19 Protective Shield Loan aims to help Bavarian companies overcome the economic impact of the COVID-19 pandemic. The loan provides liquidity aid to small and larger medium-sized companies (generating up to €500 million in turnover) and freelancers which are experiencing temporary financial difficulties as a result of the COVID-19 crisis. The COVID-19 Protective Shield Loan helps companies finance investments and equipment of up to €30 million and by default includes a 90 percent liability release.	
		BayernFonds (Fund for Bavaria) The purpose of the BayernFonds (Fund for Bavaria) is to mitigate the pandemic's impact on companies in the real economy whose failure would have a significant impact on the economy, technological and economic sovereignty, security of supply, critical infrastructure or the labour market in Bavaria. The fund helps companies strengthen their capital base and overcome liquidity shortages by providing them with guarantees and acting as a silent partner. At a volume of €46 billion, the BayernFonds is the largest of all *Länder* instruments that has been adopted to supplement the Federal Government's Economic Stabilisation Fund.	The BayernFonds was extended up until 31 December 2021, subject to publication of the BayernFonds implementation guideline.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
29.	*Measures by the Länder to support the economy in the crisis*	COVID-19 Immediate Assistance Bavaria-wide immediate assistance programme for companies with up to 250 employees which, for companies with up to ten employees, was dovetailed with the Federal Government's Immediate Assistance Programme that was launched on 31 March 2020. Under the Bavarian programme, companies with more than ten and up to 50 employees can receive up to €30,000 and companies with more than 50 and up to 250 employees up to €50,000 in the form of a one-off non-repayable grant over a period of three months.	Application period: 17 March – 31 May 2020
		Bavarian Lockdown Aid Bavaria launched a special aid programme for companies and own-account workers which were affected by a local lockdown (Berchtesgadener Land, Rottal-Inn, Augsburg and Rosenheim) that was imposed before the start of the German-wide lockdown starting on 2 November 2020, which complements the Federal Government's November Assistance Programme. The Bavarian Lockdown Aid programme is provided to the affected districts for the time the local lockdown lasted.	The guideline on granting Bavarian Lockdown Aid entered into force on 2 February 2021.
		Hamburg Hamburg Liquidity Loan (HKL) Target group: Small companies with up to ten employees, own-account workers, members of the liberal professions, persons starting a new business and non-profit organisations. Form: Liquidity loan of up to €250,000 and up to €800,000 for NPOs, issued by the applicant's bank. The interest rate on the loan is one percent over ten years. Hamburg has earmarked €300 million in guarantees for this in its budget.	A pplications can be submitted since 31 May 2020
		COVID-19 Immediate Assistance (HCS) Target group: Own-account workers and companies with up to 250 employees Form: Top-up of the Federal Government's COVID-19 Immediate Assistance Programme Funds provided by the *Land* of Hamburg: €275 million	Closed
		COVID-19 Immediate Assistance 'InnoStartup' element Target group: Innovative, growth-oriented start-ups with a maximum of 50 FTEs, which were set up no more than eight years ago Form: lump-sum conditionally repayable grant of between €12,500 and €100,000	Closed
		COVID-19 Recovery Fund (CRF) Target group: Exit-oriented start-ups and growth-oriented small and medium-sized enterprises, Form: Silent partnership of up to €800,000	Applications can be submitted since 1 July 2020
		New Start Bonus Target group: Artists and creative professionals (who are members of the Artists' Social Fund or fulfil the Fund's criteria) Form: Grants of €2,000 provided for the months of July and August	Applications could be submitted up until 31 December 2020
		Hamburg Stabilisation Fund (HSF) Target group: Open to all sectors, companies with less than 250 employees Form: Investments to strengthen companies' equity base and guarantees (of at least €800,000, of which at least €500,000 is provided under a silent partnership) Under the HSF, silent partnerships with a total volume of up to €800 million can be concluded and guarantees of a total of up to €200 million issued.	Available since 1 December 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
29.	*Measures by the Länder to support the economy in the crisis*	Hamburg COVID-19 loan for sports The aim is to help sports clubs and other sports providers offset the financial losses incurred as a result of the COVID-19 pandemic to an extent where they can maintain their activities by providing them with loans of up to €150,000. Hamburg has earmarked €50 million in guarantees for this in its budget.	Contracts could be concluded up until the end of 2020
		Hamburg COVID-19 loan for culture Target group: Sponsors or owners of cultural institutions; loans of up to €150,000 are provided so these institutions can offset the financial losses incurred as a result of the COVID-19 pandemic to an extent where they can maintain their activities. Hamburg has earmarked €50 million in guarantees for this in its budget.	Contracts could be concluded up until the end of 2020
		Hamburg Digital Target group: Independent small and medium-sized enterprises (<250 FTEs) in trade, industry, the crafts sector and the liberal professions which have a permanent establishment in Hamburg Form: Grant for advisory services under module 1 (funding rate of 50 percent, maximum amount of €5,000), grant for investment projects under module 2 (funding rate of 30 percent, maximum amount of €17,000). Funding is available for investments in the area of information security and the digital transformation. Funds provided by the *Land* of Hamburg: €30 million	Applications can be submitted since 15 March 2021
		Hesse The *Land* of Hesse adopted two supplementary budgets and established a new special fund (Act Ensuring a Good Future – *Gute-Zukunft-Sicherungsgesetz*) including an authorisation to borrow up to €12 billion between 2020 and 2023 to combat the impact of the COVID-19 pandemic, with a focus on • Benefits under the Infection Protection Act • Measures to strengthen municipalities • Boosting the economy and investing in climate action and the digital transformation • Health and safety and social infrastructure • Maintenance of state infrastructure • Offsetting tax shortfalls	The financing of COVID-19 related expenditure and payments from the special fund expires on 31 December 2023.
		Hesse COVID-19 Immediate Assistance Programme for 2020 One-off non-repayable grant provided as immediate assistance to commercial enterprises, agricultural and forestry businesses, self-employed persons, own-account workers and members of the liberal professions with up to 50 employees which were facing a risk of collapse as a result of the COVID-19 pandemic. It was granted as an equitable payment under Section 53 of the Hesse Budget Code. The immediate assistance is provided as a lump sum payment, with the amount depending on the number of employees: • Up to 5 employees: One-off payment of €10,000 for three months • Up to 10 employees: One-off payment of €20,000 for three months • Up to 50 employees: One-off payment of €30,000 for three months	In force since 28 March 2020 Duration: 30 March 2020 to 31 May 2020
		Hesse Micro Liquidity Programme: Under this programme, loans of between €3,000 and €35,000 are provided to natural persons who engage in business activities (sole proprietors) and members of the liberal professions organised in small companies (with up to 50 employees). The term of the loan is seven years, with no repayments due for two of these years.	Duration: 3 April 2020 to 30 June 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
29.	*Measures by the Länder to support the economy in the crisis*	Liquidity Aid for SMEs based in Hesse Grants of between €5,000 and €500,000 for companies including social enterprises and freelancers with less than 250 employees and less than €50 million in annual turnover The term of the loan is either two years, with the loan having to be repaid at the end of the term, or five years, with no repayments due for two of these years	Duration: 26 March 2020 to 30 June 2021
		Hesse Capital I and II programmes Liquidity aid provided under Hesse Capital I and II Liquidity aid programme for SMEs of up to €800,000.	Duration: 1 June 2020 to 30 June 2021
		Hesse Fund Recapitalisation of medium-sized and large companies (with at least 50 employees and turnover of more than €10 million but no more than €50 million) facing difficulties due to the pandemic	Duration depends on whether the programme is approved under State-aid rules
		Hesse Emergency Fund Equitable payments in accordance with Section 53 of the Hesse Budget Code of up to €100,000 for cases of particular hardship i.e. companies, institutions and citizens which have suffered economic damage as a result of the COVID-19 pandemic which have not received benefits from other programmes or which cannot reasonably use their own resources or cannot claim any other financing options.	Duration: November/ December 2020 to 30 June 2021
		COVID-19 aid for associations (continuation of associations' and cultural institutions' work) Equitable payments in accordance with Section 53 of the Hesse Budget Code of up to €10,000 per year for helping non-profit associations that are facing pandemic-related liquidity shortfalls in the non-material sphere and/or asset management.	Duration: November/ December 2020 to 30 June 2021
		COVID-19 special funding programme: loan programme for professional clubs • Total volume: €10 million • Interest-free subordinated loans with a term of ten years (with no repayments due for professional clubs in the first three years) issued via WIBank Hessen • The funding covers up to 20 percent of the annual turnover of 2019 (the minimum amount is €10,000, the maximum amount €500,000). • The programme aims to mitigate the economic impact of the COVID-19 pandemic.	Duration: May to 31 December 2020
		COVID-19 special funding programme for professional clubs in 2021 • Financial means from the 2020 loan programme which were not used up are being used to finance a grant programme (non-repayable grants). • The Hesse grant programme supplements a Federal Government programme for professional clubs. • The funding is being used to cover losses from ticket sales and other losses.	Duration: January to 31 December 2021
		COVID-19 special funding programme for high-performance sports clubs • Total volume: €2 million • One-off non-repayable grant for high-performance sports clubs • Funding amount of no more than €80,000 per applicant • The programme aims to ensure that clubs can continue their high-performance sports activities	Duration: April 2020 to 31 December 2023
		COVID-19 special funding programme for associations • Total volume: €5 million • One-off non-repayable grant for associations • The programme aims to ensure that associations can continue their activities	Duration: April 2020 to 31 December 2023

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
29.	*Measures by the Länder to support the economy in the crisis*	Equitable payments to emergency aid organisations based in Hesse for 2020/2021 Equitable payments in accordance with Section 53 of the Hesse Budget Code up to a total volume of €4 million for mitigating the negative impact of the pandemic on private emergency aid organisations based in Hesse. The payments are to help emergency aid organisations maintain their capabilities and continue their non-profit activities during and beyond the pandemic.	Duration: March 2020 to 31 December 2021 Equity guideline in force since 3 December 2020
		Municipal Investment Funding Act *(KInvG)* and Municipal Investment Programme Act *(KIPG)* Under the Federal Government's and the Hesse municipal investment programmes, all loans under the Hesse programme and all co-financing loans under the Federal Government programme worth around €303.5 million in total which had been granted but not yet activated were disbursed on 17 August 2020. In addition, the duration of the KInvG and the KIPG have each been extended by one year.	Implementation successful, Duration of municipal investment programme for municipalities and hospitals: until 31 December 2021 Duration of municipal investment programme for schools: until 31 December 2023
		Disbursement ahead of schedule of quota allocation of funds On the May 2020 payment date, the Hesse municipalities received not only the quota allocations for May, but also for June and July 2020, which means that they were allocated 3/12 instead of 1/12 of the annual payment amount to help them overcome potential liquidity shortages.	Successfully implemented in May 2020
		Mecklenburg-Western Pomerania (MV) MV Protective Fund Private institutions offering further training and political education in accordance with Section 9(3) of the Act to Foster Further Training of Mecklenburg-Western Pomerania (WBFöG) and institutions offering accommodation in accordance with Section 9(1) of this Act can receive funds under pillar 5 (culture) of the MV Protective Fund for the COVID-19 related lockdown periods from 15 March 2020 to 31 May 2020 and from 3 November 2020 to 30 November 2020. The provision of equitable payments is to help the aforementioned institutions avoid a risk of collapse and make sure they • maintain their structures and most importantly their services and actions, • retain their employees even as their financial abilities are temporarily reduced, and • will not face liquidity shortfalls.	Invoices can be submitted up until 30 June 2021
		Lower Saxony COVID-19 special programme for non-profit cultural institutions and cultural associations Under this programme, funds were provided in the form of equitable payments to non-profit cultural institutions and cultural associations which were facing a risk of collapse and/or a liquidity shortage as a result of the COVID-19 pandemic. The aim of the programme was to ensure the survival of cultural institutions and prevent cases of insolvency. By providing the equitable payments, the *Land* sought to mitigate the economic cost of the COVID-19 pandemic (such as cancellation costs, losses of income) and reduce the subsequent inevitable payment obligations (such as rental costs, operating costs).	Supplementary budget adopted on 24 March 2020 The programme is closed (duration: 19 May 2020 to 31 December 2020).
		COVID-19 special programme for own-account workers and cultural institutions Lower Saxony is continuing to provide up to €10 million to own-account artists and cultural institutions under a COVID-19 special programme. Cultural institutions that hire own-account workers for artistic events or for cultural education activities can apply for the funding. In addition, funding is also provided for innovative artistic projects that shed light on current societal developments and for own-account workers who are working in the non-public sector.	Ongoing

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
29.	*Measures by the Länder to support the economy in the crisis*	**North Rhine-Westphalia (NRW)** NRW Rescue Package Establishment of a special fund for North Rhine-Westphalia worth up to €25 billion for dealing with the direct and indirect consequences of the coronavirus crisis. Supplementary budget for 2020 North Rhine-Westphalia expanded its guarantee scheme for supporting businesses from €900 million to €5 billion – an increase of €4.1 billion. It further expanded the guarantee and back-to-back guarantee volume from €100 million to €1 billion – an increase of €900 million. The finance ministry has been authorised to assume liability for up to €5 billion of liability releases granted by NRW.BANK under the NRW.BANK Universal Loan Programme on a global and one-off basis. North-Rhine-Westphalia Immediate Assistance Programme for 2020 – programme by the *Land* of North Rhine-Westphalia supplementing the Federal Government Coronavirus Immediate Assistance Programme for Micro-Enterprises and Own-Account Workers Aid of up to €25,000 to supplement the Federal Government's Immediate Assistance Programme for companies with more than ten but no more than 50 employees. Pre-financing of the Federal Government's Coronavirus Immediate Assistance Programme (see above) Immediate assistance of up to €9,000 for companies with up to five employees and of up to €15,000 for companies with up to ten employees. Liability releases for municipalities, institutions and public infrastructure companies Releases from liability of an additional €10 billion granted to NRW.BANK for the establishment and execution of funding programmes North Rhine-Westphalia Programme I to combat the impact of the COVID-19 pandemic and strengthen the *Land*'s viability North Rhine-Westphalia Programme I has a total volume of €8.9 billion. The funds provided under the programme are used towards combating the impact of the COVID-19 pandemic and strengthening the *Land*'s viability. North Rhine-Westphalia directly receives €3.2 billion from the Federal Government's economic stimulus package. North Rhine-Westphalia is providing an additional €3.6 billion from its own budget to supplement the Federal funds, which allows it to set its own priorities. In addition, the government of North Rhine-Westphalia is providing €1.7 billion from its budget to co-finance measures adopted by the Federal Government. Another €300 million is being provided for health and safety at work and hygiene measures in public-sector institutions. North Rhine-Westphalia Programme focuses on relieving municipalities from their burden and strengthening their investment capabilities, on digitalisation in education, investments in hospitals, support for own-account workers and cultural institutions, and on climate action. Draft budget for 2021 and medium-term financial planning During the current crisis, the government of North Rhine-Westphalia has been separating the Rescue Package from the general budget in a transparent manner. According to the September estimate of tax receipts, tax revenues will fall short of the tax receipts expected under the medium-term financial planning for the years of 2021 and 2022. These shortfalls will be offset by higher revenues in the years 2021 and 2022 through withdrawals from reserves and from the NRW rescue package.	Supplementary budget adopted on 24 March 2020 Second supplementary budget adopted on 25 June 2020 Implementation ongoing up until 31 August 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
29.	*Measures by the Länder to support the economy in the crisis*	As the rescue package will expire in 2022, the financial planning provides for a budget with zero new borrowing for 2023. For 2024, the government of North Rhine-Westphalia intends to adopt a budget with a surplus of €200 million, which is to be fully used towards repaying the loans taken out to finance the NRW Rescue Package in an economically compatible manner. Call for proposals on 'green infrastructure' as part of North Rhine-Westphalia's Economic Stimulus Package I By preserving, developing and upgrading green and open spaces, people's health and well-being are to be strengthened, not least during the COVID-19 crisis. In addition, businesses working in the field of laying out, planting and maintaining gardens, parks and green areas and municipalities are to be supported and their financial burden relieved. A total of €5 million has been made available for this; the funding rate is up to 100 percent.	
		Rhineland-Palatinate COVID-19 RLP immediate assistance loan for non-profit organisations Loan programme for financing equipment, investments, salaries and fees (of up to €800,000) for non-profit organisations and companies.	Applications can be submitted up until 30 May 2021
		Grant programme for commercial tourist businesses The existing funding programme on improving the quality of the service offer of the Rhineland-Palatinate hotel industry is to be expanded as part of a special programme. This special programme is to cover tourist businesses' investments in new fixed assets for commercial use in their own business (construction costs, machinery/facilities). In addition, the special programme can also take into account costs that cannot be capitalised (such as developing the homepage, creating an online booking service or renovations).	Applications can be submitted since 1 January 2021
		Investment fund for start-ups and medium-sized companies – COVID-19 Venture Capital Special Programme The COVID-19 Venture Capital Special Programme is to help mitigate the impact of the COVID-19 crisis by providing small and medium-sized enterprises with up to €500,000 in equity capital per company in the form of investments. The funds are mainly used to help companies overcome liquidity shortages and, through their quasi-equity nature, improve companies' creditworthiness.	Applications can be submitted up until 30 April 2021
		Project scholarships – Improving the visibility of artistic creation Scholarship programme ensuring the delivery and continuation of artistic work and helping own-account workers prepare planned projects. The project scholarship comes with a grant of €2,000 which is disbursed at the start of the scholarship.	Applications can be submitted up until 30 April 2021
		Measures undertaken to stabilise the Rhineland-Palatinate economy The *Land* is providing funds of €250 million as part of a special fund to tackle the COVID-19 pandemic in a sustainable manner. These funds are to be used to counter the massive impact of the pandemic on economic development by providing new impetus for investment and economic growth.	The measures need to be approved or justified in a legally binding manner by the 31 December 2022 deadline. Payments from the special fund can be made up until 31 December 2023.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
29.	*Measures by the Länder to support the economy in the crisis*	**Saxony** Saxony Stabilisation Fund The Saxony Stabilisation Fund for SMEs working in the manufacturing sector or offering production-related and technology-oriented services will be established at the Sächsische Beteiligungsgesellschaft (SBG) (Saxony Investment Company). However, in the beginning, it will only be able provide silent partnership investments of up to €800,000 under the Federal Framework 'Small amounts of compatible aid'. The State-aid requirements for larger investments of up to €2.4 million are currently being discussed between the Federal Government and the European Commission. One requirement for granting the aid is that the company was not in difficulties in 2019, that it had a positive operating and annual result, cash flow and equity base in the years 2018 and 2019, and that there is no dependency on the customer and supplier side that could cause the company to collapse.	Ongoing
		COVID-19 Start-up Assistance Fund The COVID-19 Start-up Assistance Fund (CSH) was launched in August and has a total volume of €30 million, with part of the funds coming from the Federal Government (pillar 2 of the COVID-19 Start-up Assistance Programme) and from the *Land*'s own funds. The Fund can make investments of up to €800,000 in start-ups based on the Federal Framework 'Small amounts of compatible aid'. The fund is managed by Mittelständischen Beteiligungsgesellschaft mbH (MBG) (SME Investment Company).	Applications can be submitted since August 2020 and probably up until 30 June 2021.
		COVID-19 immediate assistance for social organisations Liquidity aid for non-profit organisations falling in the responsibility of the Saxony Ministry for Social Affairs and Social Cohesion and for recreational facilities for young people (KIEZ), 'Schullandheime' (state-run boarding schools in the country used for school trips), youth hostels, family holiday and education centres, and leisure and seminar facilities. The aid is provided to offset lost grants, with the amount depending on the number of employees or the number of beds. Funds provided from the COVID-19 Stabilisation Fund: €11.9 million.	Ongoing
		Schleswig-Holstein Immediate Assistance Programme for the Cultural Sector I Equitable payments for non-state-owned cultural institutions and businesses that are receiving institutional grants or regular funding. Under the Immediate Assistance Programme for the Cultural Sector I, cultural and further education institutions and institutions run by minorities which were facing a liquidity shortage between the months of March and the end of July bringing them to the brink of collapse could submit an application for financial assistance to the Schleswig-Holstein Ministry for Education, Science and Culture. Just under €5 million was disbursed to a total of 47 institutions.	Application period closed
		Immediate Assistance Programme for the Cultural Sector II Equitable payments for non-state-owned cultural institutions and businesses that are receiving institutional grants or regular funding. Non-profit cultural and further education institutions and institutions run by minorities which were expecting a liquidity shortage up until the end of 2020 were eligible for funding. Cultural associations working in the region could also submit applications under the programme (and receive up to €1,500). It is estimated that around €1.4 million will be disbursed to just under 20 institutions.	Applications under the Immediate Assistance Programme for the Cultural Sector II could be submitted up until 30 November 2020.
		Digitalisation projects in the cultural sector and cultural education €5 million will be provided to speed up the digitalisation of cultural and cultural education institutions. A total of 37 projects will receive funding.	Application period ended in July 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
29.	*Measures by the Länder to support the economy in the crisis*	Schleswig-Holstein Cinema Assistance Programme Equitable payments of a total of €2 million to improve the economic situation of Schleswig-Holstein's cinemas, which were on the brink of collapse. Under the Schleswig-Holstein Cinema Assistance Programme, the amount of assistance to be granted is calculated based on the gap in the number of cinemagoers between August to October 2019 and the same months of 2020. €1.4 million has been disbursed so far. The remaining funds are being used to co-finance the Federal Government's Cinema Assistance Programme.	Application period ended on 22 December 2020
		#KulturhilfeSH (Schleswig-Holstein cultural assistance programme) Immediate assistance programme for own-account workers managed by the *Landeskulturverband* (Schleswig-Holstein Cultural Association). Under KulturhilfeSH, a total of just under €3 million was provided to artists between March and August 2020. Just under 2,000 applications for specific projects were approved by the *Landeskulturverband*. There were several rounds of applications, with applicants able to receive a total of up to €3,500 per person.	Application period ended on 31 August 2020 The programme was relaunched in 2021.
		Immediate Assistance Programme for Fairground Operators Equitable payments – immediate assistance for fairground operators with a volume of €3 million. €1.2 million of the available funding was used by around 120 fairground operator businesses.	Application period ended in the middle of August 2020. The remaining funds will be disbursed in a second round of applications to be held in the first half of 2021.
		Schleswig-Holstein Culture Festival With a view to creating an additional source of funding for artists and service providers, Schleswig-Holstein launched the Schleswig-Holstein Culture Festival in 2020. Around 700 artists from all artistic fields performed in a wide range of different formats and around 200 firms from the events industry were involved in the implementation of the festival up until the end of November 2020. A total of 4.4 million is available for organising the festival.	The Cultural Festival will be continued in 2021 using streaming formats as soon as pandemic-related restrictions permit.
		Federal Government and *Länder* Default Funds I and II for the Film and TV Industry Schleswig-Holstein is providing €2.5 million to the Default Funds I and II for the Film and TV Industry (national programme by the FFA (German Federal Film Board)).	2021
		Support for filmmakers €850,000 in additional support was provided to Filmförderung Hamburg Schleswig-Holstein (film board of Hamburg and Schleswig-Holstein) to help filmmakers weather the pandemic.	July 2020
		Thuringia Bridging Assistance I Implementation of the Federal Government Programme, supplemented and extended by the *Land* Pro-rata assumption of fixed costs for companies that have been especially hard hit by the pandemic and coverage of own-account workers' cost of living. 3,388 applications in total, of which 2,612 have been approved thus far, corresponding to a total funding volume of €22.4 million	June – September 2020
		Bridging Assistance II Implementation of the Federal Government Programme, supplemented and extended by the *Land* Pro-rata assumption of fixed costs for companies that have been especially hard hit by the pandemic and coverage of own-account workers' cost of living.	October – December 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
29.	*Measures by the Länder to support the economy in the crisis*	Exceptional Business Assistance Companies that were affected by the 'social lockdown' were reimbursed for turnover losses on a pro-rata basis.	November 2020
		COVID-19 800 Loan Companies that are facing difficulties as a result of the COVID-19 pandemic can use the 'COVID-19 800 Loan for SMEs' funding programme. The programme has two different variants: • COVID-19 Special variant with a maximum loan amount of €50,000 (at an annual interest rate of currently zero percent) • COVID-19 Standard variant with a loan amount of at least €50,001 and no more than €800,000 (at an annual interest rate of currently three percent)	July – December 2020
30.	Social Protection Package	The Act facilitating Access to Social Security Benefits and on the Deployment and Security of Social Service Providers in the Context of SARS-CoV-2 (Social Protection Package) *(Gesetz für den erleichterten Zugang zu sozialer Sicherung und zum Einsatz und zur Absicherung sozialer Dienstleister aufgrund des Coronavirus SARS-CoV-2)* has temporarily made it easier to access basic social security benefits for jobseekers and other basic social benefits, as well as a child supplement. The Social Protection Package has helped mitigate the social and economic repercussions of the COVID-19 pandemic for citizens. Under the Act, any income from employment taken up in essential industries and occupations by those put in short-time work is not to be discounted from the amount in short-time work allowance, up to the point where the combined income reaches the amount of the person's regular monthly income. This provision was in effect from 1 April to 31 October 2020, before being opened to all occupations under the Social Protection Package II. In this new form, it was extended until 31 December 2020. Easier access to the child supplement came hand in hand with simplified means testing. Simplified means testing was originally to expire on 30 June 2020.	In effect since 28 March 2020
31.	Social Protection Package II	Following the measures of the Social Protection Package, which notably provided for easier access to social security benefits and expedited procedure, the Act on Social Measures to Combat the COVID-19 Pandemic (Social Protection Package II) *(Gesetz zu sozialen Maßnahmen zur Bekämpfung der Corona-Pandemie)* afforded broader bail-out and protection schemes and raised the level of support given to companies, employees and jobseekers. This included measures ensuring that, under the education package, school students and children in day care could still be given lunch even at times of school and day care centre/kindergarten closures. Other elements of the Act include the following: Short-time work allowance raised: The short-time work allowance for employees whose payment for work has been reduced by at least half the original amount has been increased until 31 December 2020, to 70 percent (or 77 percent for employees with children) as of the fourth month in short-time work and to 80 percent (87 percent for employees with children) as of the seventh month in short-time work. The earliest start of the reference period for this purpose is 1 March 2020. Benefits and income from additional employment: Employees in short-time work have been given the possibility to top up their short-time work allowance by performing additional work in any profession, up to the amount of their previous monthly income and until 31 December 2020. Until 31 December 2020, marginal employment taken up while the employee is in short-time work will not result in a reduction in the short-time work allowance, not even if the amount of the employee's previous monthly income is surpassed.	In effect since 29 May 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
31.	*Social Protection Package II*	Insurance cover within the framework of employment promotion pursuant to Social Code III *(SGB III)* has been expanded for a limited time period: For those whose entitlement to unemployment benefits was due to expire between 1 May and 31 December 2020, the entitlement period was extended once by three months. The aim of this provision is to improve insurance cover for those who would otherwise have lost their unemployment protection during the labour market crisis caused by the economic impact of the COVID-19 pandemic.	
32.	Social Protection Package III	Social Protection Package III is designed mostly with a view to compensating adult recipients of basic security benefits for the additional costs they are having to shoulder as a result of the COVID-19 pandemic. This is why Social Protection Package III includes a one-off payment of €150 to adult recipients of any of the basic security benefits (under Social Code II, Social Code XII, Federal War Victims' Compensation Act, or under the Act on Benefits for Asylum Applicants) In addition to this, the package provides for the following measures: Simplified access to basic social security schemes and to the child supplement has been extended until 31 December 2021 (this means living costs are fully counted and the simplified means test continues to be used). Extension of the subsidiary mandate to ensure communal lunches in school and workshops for people with disabilities under the Social Service Providers Deployment Act *(SodEG)* and the provisions of the Social Code, volumes II and XII, and the Federal War Victims' Compensation Act. This extension is tied to the fact that the German Bundestag has declared an epidemic situation of national relevance. The minimum annual income threshold of €3,900 for those insured under the German Artists' Social Security Fund *(Künstlersozialversicherung)* has been suspended for 2021 as well.	Entry into effect on 1 April 2021
33.	Simplified Access Extension Ordinance *(Vereinfachter-Zugang-Verlängerungs-verordnung)*	The Ordinance extending the Period of Simplified Access to Basic Social Protection and to Communal Lunch Due to the COVID-19 pandemic extended access to basic social protection and to communal lunch due to the COVID-19 pandemic pursuant to the special provisions made by the legislators in the Social Protection Package and the Social Protection Package II, the Social Code XII, and the Federal War Victims' Compensation Act until 30 September 2020.	In effect since 30 June 2020
34.	First Ordinance amending the Simplified Access Extension Ordinance *(Erste Verordnung zur Änderung der Vereinfachter-Zugang-Verlängerungs-verordnung)*	The First Ordinance amending the simplified Access Extension Ordinance extended the special provisions in the Social Protection Package and the Social Protection Package II, in the Social Code, volumes II and XII, and the Federal War Victims' Compensation Act beyond 30 September, until 31 December 2020.	In effect since 29 September 2020
35.	Act on the Establishment of Regular Needs and amending the Twelfth Volume of the Social Code and other Acts *(Gesetz zur Ermittlung der Regelbedarfe und zur Änderung des Zwölften Buches Sozialgesetzbuch sowie weiterer Gesetze)*	The Act notably extended the period during which the simplified procedure for accessing basic social protection and communal lunches applies until 31 March 2021. It also extends the simplified means test used to determine who is entitled to the child supplement, also until 31 March 2021 (date of the application).	In effect since 1 January 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
36.	Eighth Ordinance amending the Unemployment Benefit II/ Social Benefit Ordinance *(Arbeitslosengeld II/Sozialgeld-Verordnung)*	Any aid or support granted by employers to their employees for their special commitment during the COVID-19 pandemic, up to a maximum amount of €1,500, is exempted from income assessments required for social benefits. This also applies to bonuses for nurses and any similar payments made from the Federal or *Länder* budgets.	In effect since 1 March 2020
37.	Ninth Ordinance amending the Unemployment Benefit II/ Social Benefit Ordinance *(Arbeitslosengeld II/Sozialgeld-Verordnung)*	Federal extraordinary economic assistance (November and December assistance) and the flat-rate grants towards operating costs disbursed from December 2020 to June 2021 under the Federal Bridging Assistance Programme III (New Start Assistance) are not considered income for the purposes of calculating basic social protection for jobseekers.	Entered into effect retroactively from 1 November 2020
38.	Ordinance on Easier Access to Short-time Work *(Verordnung über Erleichterungen der Kurzarbeit)*	The Ordinance on Easier Access to Short-time Work put in place a number of measures designed to ensure that as many employees as possible can benefit from short-time work allowance. The objective is to safeguard jobs. Components: Minimum requirements lowered: the share of a company's workforce that must be affected by a lack of work so that employees become entitled to short-time work allowance has been lowered from a third to ten percent. This rule has been extended until 31 December 2021 for companies that introduced short-time work by 31 March 2021 at the latest. Social insurance contributions reimbursed: employers are reimbursed on a flat-rate basis by the Federal Employment Agency for the social insurance contributions which they must cover themselves and in full whilst their employees are in short-time work. Tiered extension (reimbursement of social insurance contributions in full until 30 June 2021; reimbursement of 50 percent of social insurance contributions for the period between 1 July 2021 and 31 December 2021 for companies that introduce short-time work by 30 June 2021). No negative numbers of working hours required: there is no need to accumulate a number of negative working hours before short-time work allowance can be paid out. Under previous legislation, it had been necessary for companies that have rules on fluctuating numbers of working hours in place to make use of these to avoid the introduction of short-time work. Contract workers employed by an agency: short-time work allowance is now also available to contract workers employed by an agency. This rule has been extended until 31 December 2021 for companies that introduced short-time work by 31 March 2021 at the latest.	Entered into effect retroactively on 1 March 2020, applies until 31 December 2020; largely extended until 31 December 2021.
39.	Ordinance on the Period of Entitlement to Short-Time Work Allowance *(Verordnung über die Bezugsdauer für das Kurzarbeitergeld)*	The maximum period of entitlement to short-time work allowance for those whose entitlement began on 31 December 2019 at the latest has been extended to 21 months and ends on 31 December 2020 at the latest. For companies that introduced short-time work by 31 December 2020, the maximum period of entitlement to short-time work allowance has been extended to 24 months and ends on 31 December 2021 at the latest.	Entered into effect retroactively on 31 January 2020, applies until 31 December 2020; extended until 31 December 2021 at the latest.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
40.	Act to Secure Employment *(Beschäftigungssicherungsgesetz)*	Possibilities to receive funding for continuing education whilst in short-time work have been temporarily improved. The rules on this have been simplified and employers are reimbursed for half of the social insurance contributions (which they would otherwise have to pay in full) if their employees engage in continuing education whilst on short-time work. For all employees whose entitlement to short-time work allowance was accrued on 31 March 2021 or earlier, the short-time work allowance has been increased in two stages: to 70/77 percent from the 4th month of payment and to 80/87 percent from the 7th month of payment, up until 31 December 2021. Until 31 December 2021, additional income from marginal employment is not discounted from the short-time work allowance. With regard to unemployment benefits, a temporary special rule is in place until the end of 2022 to avoid a situation whereby (former) employees would see their unemployment benefits diminished due to the fact that their recent income from work was lower as a result of a measure designed to safeguard jobs.	In effect since 1 January 2021
41.	Adaptations to parental allowance in response to the COVID-19 pandemic	The rules governing parental allowance were temporarily adjusted due to the COVID-19 pandemic. Parents working in essential occupations had the opportunity to delay the period where they will receive parental allowance. Parents using the option of a partnership bonus did not lose their entitlement to this bonus if the pandemic caused them to work more or less than originally planned. The amount of parental allowance was not reduced even if parents received income replacement benefits, e.g. short-time work allowance or short-term unemployment benefits *(Arbeitslosengeld I)*, in compensation for income shortfalls caused by the COVID-19 pandemic. This applied to parents who were working part time and receiving parental allowance. Upon request, parents also had the opportunity to exclude low-income months from the calculation of their parental allowance. This primarily applied to expectant parents who had suffered income losses due to the pandemic, either because they were placed in short-time work or had been dismissed.	In effect since 1 March 2020
		The entry into force of the Act on 1 January 2021 extends the following provisions until 31 December 2021. Expectant parents will still be able to exclude months in which their income was diminished due to the pandemic from the period used to calculate their parental allowance. Parents who work part time after the birth of their child and who lose the income from this work due to the pandemic will not see their parental allowance diminished as a result of this. Under the Second Act amending the Federal Parental Allowance and Parental Leave Act *(Bundeselterngeld- und Elternzeitgesetzes)* (Federal Law Gazette I, p. 239), the COVID-19-related provision regarding the partnership bonus was also extended until 31 December 2021.	Provisions extended until 31 December 2021
42.	Measures taken by the *Länder* to support families during the pandemic and to tackle the impact of the pandemic on the education system	**Mecklenburg-Western Pomerania (MV)** Measures taken to tackle the COVID-19 pandemic The school closures ordered as part of the efforts to stop the pandemic in March and April 2020 meant that the exams for the intermediate school leaving certificate *(Mittlere Reife)* and the university-entrance qualifications *(Abitur)* could not take place during that time. All of the centralised exams for the university-entrance qualifications, which had been due to take place in March and April 2020, were postponed to mid-May, the period that had originally been reserved for re-examination dates. The exams for intermediate school leaving certificates began in early May. Re-examination dates were set for individual subjects as of mid-May.	March to June 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
42.	*Measures taken by the Länder to support families during the pandemic and to tackle the impact of the pandemic on the education system*	**North Rhine-Westphalia (NRW)** Programme for assistants working in child day-care facilities North Rhine-Westphalia is providing funding for assistants tasked with easing the work load of early childhood educators during the COVID-19 pandemic. These assistants are to support early childhood educators by taking over simple, everyday tasks other than education work. Overall, NRW is providing €252 million for this purpose. The dominant share of this sum is used to finance the additional assistants, a smaller portion is used to help service providers shoulder the unexpected costs for health-and-safety and hygiene-related equipment.	August 2020 to July 2021
		Measures to acquire new staff for child day-care facilities Adding on from the programme for assistants working in child day-care facilities, a sustainable strategy to acquire and train new staff is to be developed. The strategy is to take into account assistants' heterogeneous backgrounds in terms of their qualifications and age. The strategy will be three-pronged and open up the possibility for all interested and suitable candidates among the assistants to build on their existing qualifications and acquire new qualifications, so as to keep them in the child day-care system.	Starting in the new child day-care year of 2021/2022
		Parental contributions suspended Together with the municipalities, the state of NRW has suspended the collection of parental contributions for child day-care.	April 2020, May 2020, half of June/July 2020; January 2021
		Complete financing of child day-care services Since the beginning of the pandemic, NRW has been continuing to finance child day-care, regardless of how much of the capacity was being used.	Since May 2020 – planned to continue until May 2021
		Free tests for employees working in child day-care facilities A hotline providing information and advice on health and safety in child day-care facilities was set up for the benefit of service providers, managers of child day-care facilities, and professional childminders: Parallel to the return to restricted pandemic operations in child day-care facilities, NRW established a hotline for managers of child day-care facilities, service providers, and professional childminders to make it easier for them to cope with the special challenges in terms of occupational health and safety and especially with the measures to prevent infection that must be complied with by everyone involved in child day-care. The hotline can be contacted free of charge. Since 26 May 2020, everyone working in child day-care facilities has had access to occupational health-and-safety experts every day of the working week. On 15 February 2021, the service was expanded to include the possibility of having an occupational health and safety expert take a virtual tour of workplaces by means of a video conference system or, if necessary, come to the child day-care facility in person. This service gives those working in child day-care a possibility to receive advice on all matters to do with early-childhood education work and occupational health and safety – particularly in the context of the COVID-19 pandemic – and to find a responsible balance between the needs of early-childhood education work and the specific needs arising in the context of the pandemic.	
		Commissioning of a virologic analysis and study monitoring the return to restricted regular operations in child day-care facilities in NRW As child day-care facilities returned to restricted regular operations in NRW, the state commissioned a scientific surveillance study on the spread of SARS-CoV-2 in child day-care facilities in Düsseldorf. The objective of this study was to introduce close surveillance of SARS-CoV-2 infections in these facilities so as to obtain a stable data basis for risk assessments to be conducted. The study involved bi-weekly SARS-CoV-2 tests of approx. 5,000 employees and children in child day-care facilities in Düsseldorf between 10 June and 7 July.	

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
42.	*Measures taken by the Länder to support families during the pandemic and to tackle the impact of the pandemic on the education system*	Commissioning of a scientific process-evaluation study of the preventative health-and-safety measures taken and their impact on the work, wellbeing, and health of employees in child day-care institutions during the SARS-CoV-2 pandemic, viewed from the angle of experts on occupational health Given that employees working with young children can usually neither keep at the prescribed distance during the pandemic nor wear facemasks, it is not possible to rule out a latent risk of infection for employees during the COVID-19 pandemic. NRW wants to be able to address the specific challenges of this occupational setting as well as possible and thus commissioned a scientific study on occupational health during the pandemic, which began at the time when child day-care institutions in NRW returned to restricted regular operations. The goal of this study is to evaluate the measures taken to prevent infection in terms of degree of implementation in practice, stringency and any positive or negative factors that might have an impact on occupational health, and to assess these and any other additional precautionary measures in terms of their impact on employees' working conditions (deterioration), wellbeing, and health (strain and resulting impact).	Since May 2020 – planned to continue until June 2021
		Compensation for a lack of childcare during the pandemic NRW has closed a gap in the Federal provision on child sick pay by launching its own assistance programme. The NRW scheme providing compensation for a lack of childcare during the pandemic supports parents living in NRW who are looking after their child at home due to the pandemic and who are not entitled to child sick pay pursuant to Section 45 Social Code V or similar benefits, and who are also not entitled to special leave under the rules governing leave of absence for civil servants. This includes persons with private insurance, persons with optional statutory insurance who are not entitled to sick pay, and farmers who are not entitled to sick pay. The benefit is also available to parents with statutory insurance and whose children have private insurance. The provisions also apply at times when child day-care facilities are open, but parents are asked not to bring in their children. NRW is making available €9 million for these payments.	From 5 January 2021 to the end of 2021
		Rhineland-Palatinate Compensating the pandemic-related absence of teachers from regular school work €15 million from the First Supplementary Budget for 2020 was made available to fill vacancies arising due to the pandemic, and to do so before the beginning of the 2020/2021 school year. Another €25 million has been earmarked in the Special Fund "sustainable tackling of the COVID-19 pandemic", so that such vacancies can be filled throughout the school year. This makes it possible to finance between 600 and 700 full-time staff.	Ongoing
		Saxony Administrative rule on lost parental contributions in 2020 The Free State of Saxony has reimbursed its municipalities for the parental contributions lost during the period between 18 March 2020 and 17 May 2020, when child day-care facilities were closed due to the COVID-19 pandemic. From 18 March to 17 April, all parents were exempt from having to pay parental contributions, including parents who had access to and used 'emergency childcare'. From 18 April to 17 May, parents without access to 'emergency childcare' were exempt from payments. The Free State compensated the municipalities for these losses in full. This made it possible for staff in child day-care facilities to continue to be paid in full.	March to May 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
42.	*Measures taken by the Länder to support families during the pandemic and to tackle the impact of the pandemic on the education system*	**Thuringia** Essential measures taken to tackle the COVID-19 pandemic in the field of education On 17 May 2020, Thuringia's Ordinance Mitigating the Impact of the COVID-19 pandemic in Schools entered into force. Most importantly, the Ordinance put in place adjusted conditions for the various lower-secondary-level exams *(Qualifizierender Hauptschulabschluss, Realschulabschluss and Besondere Leistungsfeststellung)* for the school year of 2019/2020, made it possible for students to repeat the school year of 2019/2020 without this being counted towards the maximum schooling period, and allowed for students in years 4, 5, 6, and 10, in particular, to change to a grammar school *(Gymnasium)* without an entrance exam in the form of attending lessons on a trial basis beforehand. In addition to this, the state parliament (Landtag) amended the Schools Act in June 2020, making it possible for students who were unable to sit their final exams or parts thereof due to measures imposed under the Infection Protection Act to be assessed by means other than these exams. Furthermore, Thuringia's Ordinance to contain the spread of coronavirus in child day-care facilities, schools, and during sport defined rules on how to deal with the pandemic (e.g. in schools). These include the principle of set cohorts at primary-school level, the 'alternating model' (students alternate between lessons in schools and learning from home) for secondary schools, and measures to protect those especially at risk. When the Ordinance expired, it was replaced with the Ordinance to contain the spread of coronavirus in child day-care facilities, child and youth support services, schools, and in sport, which entered into force on 31 August 2020. Below the statutory level, Thuringia also took measures such as providing teachers with guidance on learning from home.	
43.	The federal contribution to the costs of the supplementary pension schemes of the former GDR (as per the relevant Act, the AAÜG)	• The share which the new *Länder* have to shoulder when it comes to reimbursing the pension insurance for spending resulting from the supplementary pension schemes of the former GDR has been lowered from 60 percent to 50 percent and the Federal contribution increased accordingly. • This eases the burden on the new *Länder* by approx. €343 million in 2021, an annual sum that will increase to €366 million by 2024. In the medium term, demographic change will bring down the cost to be borne by the Federation. • Easing the financial burden of the new *Länder* gives them financial scope which they can use to step up investments at municipal level.	Art. 4 Act Easing the Burden on Municipalities and the New *Länder (Gesetz zur finanziellen Entlastung der Kommunen und der neuen Länder)*, entered into effect on 1 January 2021
44.	Increase in regionalisation funding in the context of the Stimulus and Crisisrelief Package	Additional increase in regionalisation funding by €2.5 billion in 2020; this is to give the *Länder* a chance to mitigate the negative financial impact the COVID-19 pandemic is having on public-transport providers.	In effect since 17 July 2020
45.	Flat-rate offsetting of the expected reduction in trade tax revenue for municipalities in 2020	• The Federation and the *Länder* are equally sharing the cost of offsetting the expected loss of approx. €11.8 billion in trade tax revenue accruing to the municipalities in 2020 (net sums, i.e. after trade tax apportionment has been deducted). • The additional spending of the Federation amounts to approx. €6.1 billion, a sum that includes half of the lost revenue from supplementary federal allocations (of trade tax revenue) to the *Länder* that are financially weak. • The basis for this in constitutional law was created by means of a new Art. 143h Basic Law. It allows for the possibility of offsetting the expected losses in trade tax revenue, provided that the *Länder* provide the other half of the compensation. This special clause can only be used once and expires on 31 December 2020. • The flat-rate-based compensation is to prevent municipalities that are expecting significant losses in tax revenue due to the pandemic from falling into a state of budgetary emergency which could cause them to cut voluntary services or municipal investments.	Art. 1 Act Easing the Burden on Municipalities and the New *Länder (Gesetz zur finanziellen Entlastung der Kommunen und der neuen Länder)*, entered into effect on 15 October 2020 Art. 1 Act Amending the Basic Law (Art. 104a and Art. 143h) *(Gesetz zur Änderung des Grundgesetzes (Art. 104a and Art. 143h)* – entered into effect on 8 October 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
46.	Increase in the Federal contribution to housing and heating costs as per Social Code II	• The Federation has permanently increased its share in housing and heating costs as per Social Code II by 25 percentage points. • This increase took effect in 2020. • The new exemption in Art. 104a (3) Sentence 3 Basic Law raises the threshold after which housing and heating costs for jobseekers receiving basic social protection must be provided by the *Länder* within the system whereby the *Länder* execute federal laws on federal commission *(Bundesauftragsverwaltung)*. This makes it possible to ease the burden resulting from these housing and heating costs on the municipalities, without moving the Act into the system whereby the *Länder* execute federal laws on federal commission. • The higher share borne by the Federation considerably and permanently eases the burden on municipalities that are structurally weak and thus need to spend large sums on welfare. The new system gives them additional financial scope, e.g. for investments or for servicing debts.	Art. 2 Act Easing the Burden on Municipalities and the New *Länder (Gesetz zur finanziellen Entlastung der Kommunen und der neuen Länder)*, entered into effect on 15 October 2020 Art. 1 Act Amending the Basic Law (*Art. 104a and Art. 143h) (Gesetz zur Änderung des Grundgesetzes (Art. 104a and Art. 143h)* – entered into effect on 8 October 2020
47.	Public Health Pact	The Public Health Pact is designed to strengthen the Public Health Service in terms of staff numbers and technical and digital equipment. Overall until 2026, the Federation is providing a total of €4 billion for the Pact's implementation.	Decision by the Coalition Committee: 3 June 2020; Decision by the Conference of Ministers of Health 5 September 2020
48.	National Health Protection Reserve *(NRGS)*	Stockpiling and maintaining production capacities within the National Health Protection Reserve is to cover the health sector's and the Federation's demand for personal protective equipment (PPE) for a period of up to six months, with physical stockpiles to last for at least one month. In its initial phase, the Reserve is to be established using PPE that has already been acquired and that is not needed for immediate supplies. In the medium term, the Reserve is to be further built up using domestically produced PPE and other key supplies. €750 million to be used to establish the Reserve has been earmarked in the Federal Budget for 2021. In addition to this, maintaining production capacity for protective masks and lab facilities will result in ongoing costs. The Federation is providing €250 million for this purpose.	Cabinet decision: 3 June 2020 / Decision by the 'Coronavirus Cabinet': 30 November 2020
49.	Patient-Data Protection Act *(Patientendaten-Schutz-Gesetz)*	The Patient-Data Protection Act notably aims to • introduce the electronic patient file provided by statutory health insurance companies as a core element of digital medical applications; this is to be made available to everyone with health-insurance cover as part of a tiered approach to begin on 1 January 2021; • expand and strengthen cooperation and networking in the healthcare sector via further innovative digital medical applications such as the electronic prescription (ePrescription) and a connection of further service providers to the telematic infrastructure – particularly providers of nursing care, rehabilitation measures, and the Public Health Service; • implement the requirements of the Coalition Agreement regarding digital administration of vaccination cards, maternity records, paediatric health tests, and dental bonus booklets; • ensure patients' control over their data, e.g. by means of consent requirements, configurable access rights, and an access management system that is to be developed in separate technical phases; • protect sensitive health data to the highest possible degree by defining clear rules on data protection, data security, and responsibilities for data protection within the telematic infrastructure; • further improve the usability of health data for research purposes by making use of the data processing options within the electronic patient file (e.g. possibility for patients to agree to pass on treatment data to research data centres or to consent to making them accessible to researchers).	In force since 20 October 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
50.	Digital Healthcare Act and Data Transparency Ordinance *(Digitale-Versorgung-Gesetz (DVG) and Datentransparenz-Verordnung (DaTraV))*	Under the Digital Healthcare Act (DVG), the obligation or option to connect to telematics infrastructure has been expanded to new groups of service providers such as hospitals and pharmacies (for which it is mandatory) and for midwives and physiotherapists (for whom it is optional). In addition, the data processing body at the German Institute of Medical Documentation and Information (DIMDI) has been developed into a research data centre. With the publication of the Data Transparency Directive (DaTraV) in June 2020, this centre was subordinated to the Federal Institute for Drugs and Medical Devices (BfArM). The centre provides invoicing data relating to persons insured under the statutory health insurance scheme for data analyses which are in the public interest, particularly for research purposes, by adhering to strict data privacy rules and only upon request. The Patient Data Protection Act *(Patientendaten-Schutz-Gesetz, PDSG)* has made it possible to directly share treatment data from electronic patient files with medical researchers via the research data centre or based on broad consent.	The Digital Healthcare Act (DVG) has been in force since 19 December 2019. The Data Transparency Directive has been in force since 19 June 2020.
51.	Act to Improve Healthcare Provision and Care Services *(Gesetz zur Verbesserung der Gesundheitsversorgung und Pflege)*	The areas covered by the act include: • Financial stabilisation of the statutory health insurance funds via a supplementary tax-funded federal grant of €5 billion; transmission of €8 billion from the financial reserves of the statutory health funds to the revenues of the Health Fund. • Implementation of the 20,000 auxiliary care workers programme. • Extension up until 31 March 2021 of important rules which were set to expire by 31 December 2020 on the provision of financial relief and support for long-term care institutions, persons in need of care, and family carers. • Establishment of a programme to promote posts for midwives totalling €65 million a year (running from 2021–2023). • Even greater use is to be made of digital possibilities for the supply of nursing aids in future, e.g. when updating the list of nursing aids.	In effect since 1 January 2021
52.	Act for the Modernisation of Digital Healthcare and Long-term Care *(Digitale-Versorgung-und-Pflege-Modernisierungsgesetz)*	The act is to move forward digitalisation in the healthcare and long-term care sectors. The act's priorities include: • Expanding the supply of digital healthcare applications and introducing digital long-term care applications, • Continuing to expand the possibilities and benefits of the electronic patient file and integrating additional applications in it, • Developing the form and scope of electronic prescribing and making it mandatory for additional groups of service providers to connect to the telematics infrastructure, • Expanding the possibilities of digital communication and improving its use, • Pooling reliable health-related information and allowing for interoperable access to it, • Developing the interoperability register into a knowledge platform and establishing a coordination body for interoperability in the healthcare system, • Expanding already existing structures and services, preparing and enhancing sub-applications of the telematics infrastructure for cross-border use, and connecting additional groups of service providers to the telematics infrastructure, • Relieving pressure on service providers by making use of the possibility provided for in the General Data Protection Regulation to carry out the data protection impact assessment as part of the adoption of a legal basis.	Cabinet decision of 20 January 2021, parliamentary procedures ongoing, first passage in the Bundesrat probably on 5 March 2021. The act is to enter into effect in June 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
53.	Measures adopted by the *Länder* in the field of strengthening the healthcare industry	**Baden-Württemberg** "Zukunftsland BW" (Baden-Württemberg – Land of the Future) programme – Emerging from the crisis stronger than before Under this programme, €16 million is being provided for digitalisation in the medical and long-term care sectors. The measures have been initiated in response to the COVID-19 pandemic. The programme is to provide funding to projects that focus on: • Long-term care, • Addiction prevention and assistance, • Artificial intelligence, • Cross-sector healthcare services, • Organ transplantation, • Innovative digitalisation strategies, and telemedicine.	In force since 23 October 2020 Implementation has started and will be continued in the coming months
		Hesse Disbursement ahead of schedule of the lump-sum payments for investments in hospitals In order to preserve the liquidity of hospitals, hospital operators received lump-sum payments of €120 million in accordance with Article 22 of the Hesse Hospital Act (HKHG). Instead of disbursing the lump-sum payments as planned on the set dates of 15 June and 18 July 2021, they were already disbursed on 15 April 2021.	Implementation has been scheduled for April 2021.
		Financing of ventilators for hospitals €20 million was provided for financing ventilators, which had become necessary due to the COVID-19 pandemic.	€10 million has already been disbursed.
54.	Bill on enhancing healthcare services *(Gesundheitsversorgungsweiterentwicklungsgesetz – GVWG)*	Its objectives include in particular: more quality and transparency, better healthcare services and stronger networking in the healthcare sector. The measures include: preventive examinations for in-patients and out-patients are to be included in the list of mandatory statutory health insurance services. It has also been found that prevention and precautionary measures are the best way to prevent chronic illnesses and to boost the body's defences.	Cabinet decision: 16 December 2020 First reading in the Bundestag: 26 February 2021
B: Investment in climate action and the digital transformation			
55.	Act to Further Accelerate Planning and Approval Procedures in the Transport Sector *(Gesetz zur weiteren Beschleunigung von Planungs- und Genehmigungsverfahren im Verkehrsbereich)*	The Act contains provisions for relaxations for new roads and railway lines replacing existing ones, along with financial relief for municipalities in the upgrading of railway crossings.	In force since 13 March 2020
56.	Act to Prepare for the Establishment of Building Rights by means of a Law on Measures in the Transport Sector *(Gesetz zur Vorbereitung der Schaffung von Baurecht durch Maßnahmengesetz im Verkehrsbereich (Maßnahmengesetzvorbereitungsgesetz))*	By means of a law on measures, the *Maßnahmengesetzvorbereitungsgesetz* prepares the legal framework for future legislation governing specific construction projects, and names road, rail and waterway infrastructure projects in this context. Furthermore, the procedure to prepare laws on measures is described and the public authority with responsibility for conducting the procedure is specified. The Act aims to increase public acceptance of the projects cited in the draft and speed up their implementation.	In force since 1 April 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
57.	Investment Acceleration Act *(Gesetz zur Beschleunigung von Investitionen)*	Acceleration of planning and approval procedures, particularly in the areas of transport, the digital infrastructure and onshore wind energy installations, and corresponding amendments to procedural law. Reduced compliance costs incurred by businesses and administration authorities in connection with planning and approval procedures in the areas of transport and digital infrastructure. For onshore wind energy installations, this shortens the path through the administrative court system and reduces the overall length of administrative court procedures. Furthermore, the suspensive effect of challenges and actions for annulment is removed in legal actions brought against the approval of wind energy installations.	In force since 10 December 2020.
58.	Measures adopted by the *Länder* to simplify administrative procedures in the allocation of ERDF funds	**Brandenburg** For funding guidelines supported by ERDF funds, Brandenburg has introduced simplifications regarding the examination of expenses incurred and increased the range of potential beneficiaries: • Inspection of receipts and documents changed from 100 percent check to sample check • In some guidelines, funding extended to businesses in difficulty due to the COVID-19 pandemic The change to a sampling procedure for the inspection of documents and receipts reduces the administrative burden on the investment bank of *Land* Brandenburg and the final beneficiaries. The approval of businesses suffering as a result of the COVID-19 pandemic in some guidelines recognises the fact that businesses that are actually healthy meet the criteria of "firm in difficulty" in the current economic crisis. In so far as these "firms in difficulty due to COVID-19" can temporarily be treated as "normal" businesses under State aid law and ERDF rules, this is also implemented in Brandenburg in some guidelines.	Being implemented
59.	Act Amending the GRW Act *(Gesetz zur Änderung des GRW-Gesetzes)*	The Act Amending the GRW Act, adopted by the Federal Government on 28 October 2020, is designed to help integrate industrial and commercial areas receiving funding under the Joint Task for the Improvement of Regional Economic Structures (GRW) into the transregional road network. While the GRW solely provided funding for the construction of municipal roads up to now, *Land*-related measures in the integration of commercial areas (e.g. the construction of junctions, widening of sections of road) are, in future, also to be supported to a limited extent through GRW funds.	Cabinet decision: 28 October 2020
60.	Structural Reinforcement Act for Mining Regions *(Strukturstärkungsgesetz Kohleregionen)*	At the inaugural meeting of the Federal/*Länder* coordination committee on 27 August 2020, funding for a total of 65 federal projects from funds under the Investment Act for Coal-mining Regions *(Investitionsgesetz Kohleregionen)* was agreed for the 2020 and 2021 budget years. These projects include new institutes of the German Aerospace Centre (DLR), Regulatory Sandboxes for the Energy Transition, infrastructure projects, the establishment of an institutionally funded major research centre under Helmholtz Association conditions or similar in both the Lusatia (*Lausitz*) region in Saxony and the Central German coal-mining region, as well as actions promoting culture. Furthermore, the Federation has launched the "STARK" federal programme (*"Strengthen transformation and new beginnings in mining states and coal power station sites"*), which is primarily non-investment related (e.g. operation of networks or centres of excellence) and supports the economic, ecological and socially sustainable transformation of the coal-mining regions.	In force since 14 August 2020. Decision of the Federal/*Länder* coordination committee: 27 August 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
61.	Act to Mobilise Land for Construction *(Baulandmobilisierungsgesetz)*	Building on the recommendations for action of the Expert Committee, the draft act includes provisions to give municipalities greater scope for action in mobilising land for construction and safeguarding affordable housing. It includes a number of facilitations with regard to the development of housing. For example, the framework for exemptions from stipulations in local development plans is to be extended and it is to be possible, for a limited period, to include outer zones for housing construction to a limited extent. Amendments to the Federal Land Utilisation Ordinance *(Baunutzungsverordnung)* aim to support attic conversions and annexes. The introduction of "village residential area" as a new building zone category is designed to facilitate the permissibility of housing in rural areas. Rights of first refusal and building by-laws that are more municipality-friendly are to make it easier for municipalities to mobilise areas for the construction of housing. The construction of more affordable dwellings is to be expedited with the introduction of a new type of land-use plan for the provision of housing. The bill also contains a time-limited rule to reduce ways for converting rental accommodation into condominiums.	Cabinet decision: 4 November 2020 1st reading in the Bundestag: 28 January 2021 Public consultation in Building Committee: 22 February 2021
62.	Act to Strengthen the Housing Allowance *(Wohngeldstärkungsgesetz)*	The Act implemented the following measures to adapt the housing allowance to the general development of rents and consumer prices with effect from 1 January 2020: • Higher benefit amount • Improved scope of the housing allowance and incentives to work (in future, additional income will reduce the housing allowance to a lesser degree) • Regionally differentiated increase in the maximum amounts up to which the rent or burden (in the case of property owners) is taken into consideration • Review (update) of rent levels for municipalities and districts and introduction of a new rent level (level VII) to take account of higher rents in tight housing markets • Regular biennial housing allowance adjustment (index-linking) from 2022 onwards.	In force since 1 January 2020
63.	Act to Relieve the Burden of Heating Costs in the Housing Allowance in the Context of Carbon Pricing *(Gesetz zur Entlastung bei den Heizkosten im Wohngeld im Kontext der CO_2-Bepreisung)*	The Act makes provisions for an increase in the housing allowance to specifically relieve the burden of heating costs on housing allowance recipients and therefore take due account of the carbon pricing mechanism adopted in the Climate Action Programme 2030. The relief is provided in the form of a flat-rate carbon component, graded according to the size of the household, which is factored into the calculated housing allowance, and therefore results in a higher housing allowance.	In force since 1 January 2020
64.	Act to Extend the Reference Period for Determining the Standard Local Comparative Rent *(Gesetz zur Verlängerung des Betrachtungszeitraums für die ortsübliche Vergleichsmiete)*	The reference period for the determination of the standard local comparative rent is extended from four years to six. The standard local comparative rent serves as a benchmark for rent increases in existing rental agreements and for the permitted rent charged in new rental agreements in areas where there is a cap on rent increases. By extending the reference period to six years, more rental agreements are included in the standard local comparative rent. Short-term changes to the level of rent have a lower impact on the comparative rent. This is expected to slow the increase in rent in rental markets where the asking rent is steadily increasing.	In force since 1 January 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
65.	Act to Extend and Improve the Regulations on the Permitted Rental Price at the Start of a Rental Agreement *(Gesetz zur Verlängerung und Verbesserung der Regelungen über die zulässige Miethöhe bei Mietbeginn)*	The Act establishes the framework to ensure that the rules of the rent cap mechanism can continue to apply after a five-year period. For this, the *Länder* are allowed to again identify areas with a tight housing market by statutory order. As before, this statutory order applies for a maximum period of five years. All statutory orders will cease to be in force after 31 December 2025. Furthermore, the conditions entitling tenants to a rent refund if a landlord does not comply with the rent control mechanism are improved. In future, tenants will be able to claim back all the excess rent they have paid from the start of the rental agreement if they make a complaint about a breach of rent cap rules within the first 30 months of the start of the rental agreement. If a complaint is made after this 30-month period, the previous conditions apply, i.e. the tenant is only entitled to reclaim the excess rent paid after the receipt of the complaint. This also applies if the rental agreement had already been terminated when the complaint was received.	In force since 1 April 2020
66.	Act to Reform Rent Level Surveys *(Mietspiegelreformgesetz)* and Rent Level Survey Ordinance *(Mietspiegelverordnung)*	The drafts aim to promote the production of rent level surveys and improve the survey quality. Minimum requirements are introduced for a qualified rent level survey to ensure the reliable and legally certain depiction of standard local comparative rents. At the same time, the legislation also stipulates the standards that are deemed sufficient for a qualified rent level survey. To improve the conditions for the production of qualified rent level surveys, the competent authorities are granted the power to process data, and a duty of disclosure of information is introduced for landlords and tenants. Further to this, the period of application of rent level surveys (binding period) is extended from two to three years. Only low-threshold requirements are defined for simple rent level surveys so that they can continue to be used as a low-cost alternative.	Cabinet decision: 16 December 2020
67.	Act on the Division of Estate Agent Fees for the Brokering of Contracts for the Sale of Apartments and Single-family Homes *(Gesetz über die Verteilung der Maklerkosten bei der Vermittlung von Kaufverträgen über Wohnungen und Einfamilienhäuser)*	The new rules are designed to ensure that consumers purchasing apartments and single-family homes never have to pay more than half of the estate agent's commission, unless they have commissioned the estate agent on their own account.	In force since 23 December 2020
68.	Increased regionalisation funds under the Stimulus and Crisis-relief Package	Additional, one-off €2.5 billion increase in regionalisation funds in 2020 to enable the *Länder* to absorb the financial damage suffered by transport companies as a result of the COVID-19 pandemic.	In force since 17 July 2020
69.	Support programme for the sustainable modernisation of inland waterway vessels	With the further development of the support programme for the sustainable modernisation of inland waterway vessels, the Federal Government's goal is to increase the competitiveness, efficiency and safety of inland waterway vessels on a permanent basis even during periods of low water levels, and simultaneously reduce the negative impact of inland waterway vessels on the environment. The increased support for inland waterway transport is an element of the Stimulus and Crisis-relief Package. The support programme is to respond even more precisely to the needs of inland waterway transport from 2021 onwards with a modernised support structure and increased funding.	Notification to the European Commission is still pending. The funding guideline that has applied up to now is extended up until 31 June 2021.
70.	Support programme for the sustainable modernisation of coastal vessels	The support programme for the sustainable modernisation of coastal vessels is designed to provide impetus for innovation and financial incentives for the modernisation of coastal vessels. Measures to reduce emissions and improve the energy efficiency of coastal vessels are to make a key contribution to reaching the Federal Government's climate, clean air, and sustainability targets.	In force since 1 January 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
71.	"Innovative Port Technologies II" funding programme (IHATEC II)	To ensure that German ports can continue to be hubs for national and international trade, as well as growth engines of the economy, the Federal Government wants to support ports further in the research and development of innovative port technologies. This is to advance measures to consistently exploit the opportunities afforded by digital interconnectivity, particularly also with regard to climate action and environmental protection.	In force since 1 January 2021
72.	"Digital Test Beds in Ports" (DigiTest) funding programme	To advance the implementation of digital technologies in ports, support is granted to the establishment and operation of digital test beds in German sea and inland ports. The DigiTest funding programme seeks to support the development of a technical infrastructure that allows logistic 4.0 innovations to be tested under real-life conditions. It is to help develop our ports into central data hubs.	In force since 1 January 2021
73.	Battery research	The "Battery Research Lab" umbrella strategy describes a strategic framework for battery research in Germany. It pursues an integrated approach to promoting research into new battery technologies – from the material and battery cell through to production. The battery competence clusters are being expanded to strengthen the innovative base in the field of battery production and battery technologies. This also involves the expansion of the national research infrastructure by improving the technical equipment. Close and intensive exchange with German industry ensures industrial integration, thereby guaranteeing easy access for businesses to research expertise. Further to this, the "Battery 2020" initiative is geared even more towards the transfer of knowledge to practical applications. To this end, research production lines are established for material development and electrode production, and the qualification of sustainable and agile production resources for the large-scale production of battery cells is being advanced in collaborative projects between industry and the scientific community. In this way, the Federal Government is specifically supporting the development of a complete German/European battery value chain.	Four new battery competence clusters launched in September 2020 Publication of funding guidelines for "Battery 2020 Transfer" on 2 September 2020 and "ForBatt" on 8 February 2021 (funding from the Future Package)
74.	Charging Infrastructure Master Plan	To deliver on the goal of having one million publicly accessibly recharging points for up to ten million electric vehicles by 2030, the Charging Infrastructure Master Plan addresses the legal, financial, strategic and coordinating measures for the Federal, *Länder* and municipal level and for investors, the energy sector and the automotive industry. The National Charging Infrastructure Coordination Office was set up to coordinate the measures.	Cabinet decision: 18 November 2019
75.	Funding guideline for charging infrastructure in residential buildings	The funding guideline for private charging infrastructure makes provisions for the funding of smart charge points (wall boxes) in residential buildings and their connection to the grid.	In force since 6 October 2020
76.	Amendment to the "Environmental Bonus" guideline	The purchase bonus under the "Guideline on the promotion of sales of electrically powered vehicles (environmental bonus)" has been extended until the end of 2025 and significantly increased. This aims to guarantee continuity and provide greater support incentives. Introduction of the innovation bonus under the "Guideline on the promotion of sales of electrically powered vehicles (environmental bonus)" for a limited period up until the end of 2021. Increased support to address the economic crisis resulting from the COVID-19 pandemic.	In force since 19 February 2020 In force since 8 July 2020
77.	Guideline on the promotion of electric buses in the local public transport system (purchase of vehicles, charging infrastructure and other costs associated with fleet conversion, e.g. training courses)	Funding is provided for extra investment costs necessary to purchase vehicles, the charging infrastructure needed to run electric buses in the local public transport system (electric battery-powered buses and plug-in hybrids) and other expenditure associated with the operation of the vehicles (workshop facilities, training courses). This aims to support the market scale-up of the technology in order to help reduce greenhouse gas emissions and achieve other beneficial environmental effects (pollutants, noise).	Funding guideline in effect since 6 March 2018

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
78.	Guideline on the promotion of alternative drive systems in buses used in passenger transport (electric buses, fuel cell buses and gas-powered buses, charging and refuelling infrastructure)	Funding is provided for the purchase of electric battery-powered buses (including battery-powered trolley buses), fuel cell buses and buses which, on balance, run 100 percent on methane produced from biomass (gas-powered buses), as well as for the charging and refuelling infrastructure required for the operation of the buses. Grants are also provided for studies on the use of zero-emission buses. The funding is designed to contribute to the increased use and faster adoption of environmentally friendly, low-emission buses, and therefore towards Germany reaching its climate targets.	The process of notification to the European Commission is underway, the funding guideline is expected to be published in Q2 2021.
79.	Guideline on the promotion of light- and heavy-duty commercial vehicles with alternative, climate-friendly drive systems and related refuelling and charging infrastructure for electrically powered commercial vehicles (battery-only electric vehicles, externally chargeable (OVC) hybrid electric vehicles and fuel cell vehicles)	Funding is provided for the purchase of new and upgraded commercial vehicles with an N1, N2 and N3 (EC) vehicle category rating that have electric battery, hybrid-electric (particularly trolley hybrid) or hydrogen fuel cell drive systems. Funding is also provided for the related refuelling and charging infrastructure (excluding overhead cable infrastructure) as well as feasibility studies. The funding serves to support the market ramp-up of commercial vehicles with alternative, climate-friendly drive systems, and is therefore to contribute to reaching the climate targets in the transport sector. In this regard, the Climate Action Programme 2030 specifies that one third of vehicle mileage in heavy freight transport is to be covered by electric vehicles or vehicles using electricity-based fuels by 2030.	The process of notification to the European Commission is underway, the funding guideline is expected to be published in Q2 2021.
80.	Guideline for funding alternative drive trains in rail transport	The aim of the funding guideline is to increase the share of low-emission drive systems in the rail sector. This is to help reduce greenhouse gas emissions in the transport sector and therefore contribute to achieving the climate targets set down in the Federal Climate Action Act *(Bundes-Klimaschutzgesetz)*. Funding is provided to businesses and regional transport authorities for the purchase of rail vehicles with innovative, low-emission drive systems for passenger and freight services and for the development of a refuelling/recharging infrastructure for these rail vehicles.	In force since 18 February 2020
81.	"Aviation innovation bonus" funding guideline	The planned aviation innovation bonus is designed to provide incentives for airlines to push ahead with the modernisation of their fleets in order to reduce greenhouse gas emissions by flying lower-emission aircraft. Modern, more efficient aircraft use less jet fuel than previous aircraft generations and therefore play a significant role in the attainment of the Federal Government's and the EU's climate targets. The support measure also provides an opportunity to stabilise the industrial value-add of the German, European and international aviation industry by enabling the airlines to maintain their aircraft orders and continue with the planned modernisation of their fleets.	The process of notification to the European Commission is underway, the funding guideline is expected to be published in Q2 2021.
82.	Draft of an act to reform the law on the carriage of persons	The reform of the law on the carriage of persons is to establish a separate legal basis for new digital-based business models. An amendment to the Act on the Carriage of Persons *(Personenbeförderungsgesetz)* introduces both a new form of regular service within the local public transport system (non-scheduled line service *(Linienbedarfsverkehr)*), which allows demand-driven public transport pooling services, and a new form of occasional services outside the scope of the local public transport system (bundled on-demand transport *(gebündelter Bedarfsverkehr)*), and amends regulations governing transportation by taxi and rental car.	Cabinet decision: 16 December 2020, the legislative procedure is in progress
83.	Funding guideline for "A forward-looking, sustainable mobility system with automated and connected driving"	The funding guideline seeks to further advance automated driving through to autonomous driving, promote connectivity with other modes of transport in complex applications – also using artificial intelligence – and increase public acceptance.	The second call for projects ended on 30 April 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
84.	Draft of a law on autonomous driving	The Act on Autonomous Driving *(Gesetz zum autonomen Fahren)* is to create the legal framework to enable the regular operation of autonomous (driverless) vehicles in defined operational areas on public roads: • The operation of driverless vehicles is to be made possible for a maximum number of deployment scenarios. • Among other things, the Act establishes the technical condition and equipment requirements, regulates the examination and procedure for the issuance of an operating permit for vehicles with an autonomous driving function, and governs the approval of the defined operational areas.	Cabinet decision: 10 February 2021; The proposed legislation is to be finalised in this legislative term
85.	"Shaping the Course of Digitalisation" implementation strategy	The implementation strategy brings together over 120 priority projects of the Federal Government in five action areas (digital skills, infrastructure and equipment, innovation and digital transformation, society in digital change, and modern government) and makes progress on the implementation of the various measures visible for the first time. The Digitalisation Cabinet Committee (Digital Cabinet) tracks the state of implementation of all the priority projects listed in the implementation strategy and discusses potential problems and possible solutions. As part of a "strategic monitoring system", indicators were developed for the action areas in order to make success monitoring more effective and to alert monitors to necessary adjustments. Progress on the implementation of the digital policy is also visualised in a "digital policy dashboard".	Cabinet decision: 15 November 2018 Current state of play: meeting of the Digital Cabinet on 7 October 2020
86.	Updated Artificial Intelligence Strategy	The updated Artificial Intelligence Strategy (AI Strategy) aligns the Strategy with current developments and needs. The Strategy Update Report also identifies specific measures to be implemented in the years ahead.	AI Strategy was adopted in November 2018, updated AI Strategy was approved by the Cabinet on 2 December 2020.
87.	Quantum technologies	With the "Quantum Technologies – from the Basics to the Market" framework programme, the Federal Government is supporting research in this future-oriented field and the transfer of research findings to the market. Under the Stimulus and Future Packages, the Federal Government is making an additional €2 billion available for this purpose. A variety of initiatives have been and will be launched to implement this programme: For 2020/21, these specifically include: • Announcement of the Strategic Initiative on Quantum Computing in January 2020. Implementation commenced in 2020 with calls for projects on "Quantum information science – algorithms, software and applications" and on "Quantum processors and technologies for quantum computers". Further implementation planned for 2021 with technology platforms for hardware, software and applications. • Launch of a participatory process with research and industry in June 2020 with the goal of developing a research agenda for quantum systems. • Funding initiatives focussing on enabling technologies and junior research groups for quantum technologies. • Funding initiatives for initial and further training. • Commencement of the QuNet project in October 2019. The goal of the project is to develop technologies for a secure pilot network for quantum communication in Germany. The project is to play a fundamental role in the creation of a pan-European architecture for quantum communication. Complementing this, measures are planned that focus on the development of quantum repeaters that enable end-to-end encrypted quantum communication over large distances and, in the long term, pave the way for a quantum Internet of connected quantum computers, as well as measures to develop an innovation ecosystem for quantum communication. • Other initiatives to strengthen quantum technologies (quantum computing, quantum sensors, quantum communication) are in the preparatory stage.	Cabinet decision: September 2018 Strategic Initiative on Quantum Computing commenced on 31 January 2020. First calls for projects in 2020, projects commence from Q1 2021 Quantum systems agenda process: Started in June 2020, workshops in Q3/Q4 2020, handover of National Research Agenda for Quantum Systems in March 2021 QuNet: Announcement: 17 May 2019. Start: 1 October 2019. Demonstration: Expected in Q2 2021. Calls for projects for enabling technologies, initial and further training strategies, and junior research groups in Q1/Q2 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
88.	"Project GAIA-X"	"Project GAIA-X" connects central and decentralised infrastructures (particularly cloud and edge services) to form a homogeneous, user-friendly system. The resulting distributed ecosystem strengthens both the digital sovereignty of users of cloud services and the scalability and competitive position of European cloud service providers. Small and medium-sized enterprises particularly benefit from market transparency, broad access to alternative offerings and the resulting options for action. It also takes account of different preferences with regard to security aspects, latencies and application range, provides tailored solutions and enables the use of different cloud providers.	15 September 2020: Signing of the Articles of Incorporation of GAIA-X AISBL (currently being set up) Q1 2021: Launch of GAIA-X funding competition
89.	Introduction of the online establishment of limited liability companies *(GmbH)*; online procedure for registrations in the Commercial Register	The Federal Government's planned implementation of the EU Digitalisation Directive will, for the first time, allow the purely online establishment of limited-liability companies in certain cases. Also, in many other cases, a new online procedure for registrations in the Commercial Register is being set up, and the digital sharing of information between the commercial and company registers of the EU Member States is being improved. This enables the faster and more efficient establishment of companies and development of commercial activity, also across borders within the European Union. A corresponding Implementation Act *(Umsetzungsgesetz)* is to be adopted by the end of this year.	Participation of the *Länder* and associations in the draft legislation commenced on 17 December 2020; Adoption of the Implementation Act is sought before the end of this legislative term
90.	Introduction of electronic invoicing in public administration	With the implementation of EU Directive 2014/55/EU, this measure replaces paper-based invoice processing within the federal administration with an electronic invoice submission system and a digital processing system that provides a maximum degree of standardisation. With the deadline of 27 November 2019 set by law (Section 3 (3) in connection with Section 11 (2) of the Federal Electronic Invoicing Ordinance *(E-Rechnungsverordnung)*), the federal administration as a whole was required to accept electronic invoices. Practically the entire direct federal administration system was in a position to receive and process electronic invoices in the "XRechnung" standard via the Federal Government's compulsory Central Invoice Submission Platform by the specified date. So far, over 100 authorities within the indirect federal administration system, and the beneficiaries concerned, as well as five *Bundesländer* have voluntarily opted to join the OZG-RE platform – the Federal Government's invoice submission portal that complies with the Online Access Act. The first step towards electronic invoicing was taken in 2018 with the successful introduction of electronic invoicing at supreme federal authorities and constitutional bodies. Since 27 November 2020, all parties invoicing the Federal Government within the context of public contracts, jobs and concessions are required to submit their invoices online (Section 3 (1) in connection with Section 11 (3) of the Federal Electronic Invoicing Ordinance).	Ongoing
91.	Financial resources for digital administration under the economic stimulus programme	With additional funding of €3 billion, the Federal Government's economic stimulus programme is providing new scope for action to quickly establish a nationwide digital administrative service in Germany – and thereby specifically relieve the burden on the *Länder* and municipalities. An additional €300 million will be invested in modernising the registers so that significant progress can be quickly achieved.	Ongoing
92.	"Digital Now – Promoting Investment by SMEs"	The "Digital Now" investment grant programme launched in September 2020 supports small and medium-sized enterprises in investing in digital technologies and digital expertise. Grants of up to 70 percent are designed to encourage SMEs to specifically invest in digitalisation projects and in the upskilling of their staff, either individually or as a value-adding network of companies. This investment stimulus adds an important component to the existing support structure offered under the "SME Digital" funding programme for the digital transformation in small and medium-sized enterprises.	Funding programme commenced in September 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
93.	New funding period of the nationwide "SME Digital" network	The funding for the existing SME 4.0 Centres of Excellence came to an end in December 2020. These centres offer businesses tailored, comprehensive support in the digital transformation. The new funding announcement builds on the established approach and identifies new priority areas, which have a more in-depth focus. The priority topics in the new funding period include the data-driven economy, sustainability, energy and resource efficiency, the circular economy and new technological opportunities, such as artificial intelligence, the Internet of Things and Services, 5G, cloud computing, blockchain or big data.	The following deadlines have been set for the submission of outline proposals: First deadline: 31 October 2020, second deadline: 31 July 2021, third deadline: 31 January 2022. The maximum funding period is three years from approval with the option of extending by a maximum period of two years.
94.	Centres for the Future	Through the "Centres for the Future" ESF programme, the Federal Government has been lending support since 2019 to eastern Germany-based SMEs, their employees, own-account workers and self-employed persons with tailored consulting and innovative skills development approaches to develop innovative working and learning processes in the face of the digital transformation. The model is currently being rolled out to the other *Länder* with the "Centres for the Future (AI)" federal programme. Furthermore, the Centres for the Future are now also to support SMEs in the participatory introduction of people-centred AI systems. Both programmes are due to end in December 2022. A pan-German ESF programme of the same name is set to follow from 2023 onwards.	The ESF-funded Centres for the Future have been running since the end of 2019. The selection procedure for the new Centres of the Future under the "Centres of the Future - AI" federal programme is still underway. These will be launched starting from March 2021. Both programmes are set to end in December 2022. Pan-German "Centres of the Future" ESF programme is planned from January 2023 onwards.
95.	Human resources: a valuable asset plus *(unternehmensWert:Mensch plus)*	The ESF programme "Human resources: a valuable asset" *(unternehmensWert:Mensch)* funds consulting services for small and medium-sized enterprises (SMEs) to support them in securing the supply of skilled workers and developing a viable, employee-focussed business culture. The programme has been available throughout Germany since 2015, and has reached some 9,000 businesses in the country since then. Since 2017, the programme arm "Human resources: a valuable asset plus" *(unternehmensWert:Mensch plus)* has been helping SMEs to set up a learning and experimentation space in their business and develop innovative solutions to address the challenges of the digital transformation.	The programme is scheduled to end in June 2022. It is to be continued in a somewhat different format in the future ESF programming period.
96.	Measures adopted by the *Länder* in the field of digitalisation (digitalisation strategies and SMEs)	**Comprehensive measures are in place in the *Länder* to promote the digital transformation. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.** **Bavaria** Bavaria Digital Bonus The funding programme supports the digitalisation of products, processes and services and increased IT security. The guideline will be continued through to 2023 with €60 million per year. The aim is to provide targeted stimulus for growth by supporting small commercial enterprises.	Since November 2016 until the end of 2020 Continuation in 2021 until 2023, amended guideline

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
96.	*Measures adopted by the Länder in the field of digitalisation (digitalisatioan strategies and SMEs)*	Digital Business Start-ups Bavaria is supporting highly innovative digital start-ups across the state with • infrastructure and networks (19 digital start-up centres at 28 locations, funding of €120 million), • comprehensive coaching services, and • capital (including grant programmes and public equity capital). The financing framework for innovative start-ups will be scaled up by €40 million in 2021 as part of the Hightech Agenda Plus (conditional upon the Landtag passing the Budget Act *(Haushaltsgesetz)*).	Since November 2016
		BAVARIA DIGITAL, Hightech Agenda and Hightech Agenda plus Under the large package of measures in BAVARIA DIGITAL, €6 billion will be invested between 2015 and 2022 in the digitalisation of Bavaria. The Hightech Agenda and Hightech Agenda plus will advance the digital transformation and cutting-edge technologies in Bavaria with a further €3.5 billion through to 2024, with a priority focus on artificial intelligence, quantum computing and 5G/6G research.	BAVARIA DIGITAL 2015–2022 HTA and HTA plus: 2019–2024
		"Digitalisation" line of funding under the "Bavarian Joint Research Programme (BayVFP)" guideline The funding programme is geared towards industry-led, pre-competitive collaborative projects focussing on innovative developments from the fields of "information and communication technology" in the area of software, and "electronic systems" in the area of hardware. The funding is to support businesses in research and development projects, and improve and expedite implementation into new products, processes and business practices. Demand for the funding is very high among businesses across the entire state of Bavaria, and has remained at a consistently high level even during the COVID-19 crisis. Additional calls for the submission of project proposals will be published in 2021	Established in 2018 Line of funding since 15 May 2019
		Baden-Württemberg "Digital Future" special programme (Digitalisation Bonus Plus): Baden-Württemberg's "Digitalisation Bonus Plus" supports specific projects geared towards the introduction of new digital solutions and the improvement of IT security in small and mediums-sized enterprises (SMEs). The Digitalisation Bonus Plus is to continue and reinforce the push towards digitalisation that has resulted from the COVID-19 pandemic. In particular, funding is granted for the introduction of new digital information and communication technology (ICT) systems for products, services, processes, enhanced ICT security and artificial intelligence applications. Total volume: €66 million.	Application possible since 15 October 2020
		Berlin Digital Bonus Berlin: Support for the digital transformation process of own-account workers and small and medium-sized enterprises (SMEs) whose place of business is in Berlin, with a total funding volume of €80 million. Digital Bonus Basic: Up to €7,000 for Berlin-based own-account workers and SMEs with up to ten employees or Digital Bonus Plus: Up to €17,000 for Berlin-based SMEs with more than 10.5 and up to 249 employees.	Since November 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
96.	*Measures adopted by the Länder in the field of digitalisation (digitalisatioan strategies and SMEs)*	**Hesse** Establishment of the Hessian Centre for Artificial Intelligence (hessian.AI) The Centre already brings together the expertise and skills of 22 founding professors from 13 universities in the state. *Land* Hesse is making €38 million in funding available for the five-year development phase. Twenty new AI professorships are to be added in the coming years. In addition to excellent fundamental research, the Centre is tasked with conducting application-oriented research, supporting junior scientific talent in the field of AI, and significantly advancing the transfer of results to business and society.	Founded in August 2020
		Digital skills The state of Hesse is encouraging its citizens to improve their own digital skills with an online and offline campaign. Individuals can self-assess their digital skills using the "DigiCheck Skills" tool, which is based on DigComp, the European Digital Competence Framework. Furthermore, all the offerings to enhance one's digital skills that are available in the state, or provided by the *Land* of Hesse, are listed on the website www.wie-digital-bin-ich.de. With transparency and information measures, Hesse is therefore making a key contribution to improving the digital skills of its citizens. Other targeted measures to secure the supply of skilled labour are being developed and implemented for specific target groups in the New Skilled Labour Alliance and many other bodies in collaboration with social and economic players.	Ongoing until April 2021
		Distr@l Programme Hesse / support from the COVID-19 Special Fund Grant-based funding (pro rata basis) of applied R&D projects in the context of the digital transformation. Individual and collaborative projects are eligible (except in funding line (FL) 4). FL 1 Feasibility studies with funding of up to €100,000 (50 percent, SMEs, universities, research centres) FL 2 Digital product and process innovations with funding of up to €500,000 (up to 50 percent for SMEs, up to 90 percent for universities) FL 3 Knowledge and technology transfer projects with funding of up to €1,000,000 (up to 90 percent for universities) FL 4A Spin-off funding in universities (up to €1,000,000, 90 percent) FL 4B Funding to facilitate the growth of start-ups in the digital domain with up to €160,000 (100 percent, *de minimis*) Higher level of digitalisation in business. Increased resilience of SMEs with the digital transformation. Open to all technologies and applications; innovation-related funding only in the digital domain.	Ongoing
		Hesse Smart Region Office Since June 2020, the virtual Smart Region Office has been helping municipalities and regions in *Land* Hesse on their path towards increased digitalisation. With a variety of information and transfer services, such as online forums, conventions and advisory services, the Office sets smart solutions in motion throughout the entire state. The new structure links activities of the Hesse Ministry for Digital Strategies and Development with those of ekom21, Hessen Trade & Invest, and the House of IT – House of Digital Transformation, a registered association. The aim is not only to bring together the existing offerings of these institutions but also for these institutions to join forces and together develop new activities as required. Collaboration with players in the Hesse region and close contact with initiatives at the federal and European level provide the basis for the Office's work. Regional forums, a digitalisation consulting service for municipalities, and an information portal (currently being developed) are just some of the service offerings that have been developed so far.	Since June 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
96.	*Measures adopted by the Länder in the field of digitalisation (digitalisatioan strategies and SMEs)*	House of Digital Transformation As part of the "Houses of" innovation strategy of the state of Hesse and central players of the innovation ecosystem, the House of Digital Transformation (HoDT) interconnects actors from the business sector, the scientific community and the political arena. With expertise, experience, good practices and solutions for the digital transformation, the House of Digital Transformation makes a key contribution to Hesse's continuously evolving digitalisation process. It was originally founded as the "House of IT e.V.", a registered association; it later became the HoDT, with a focus on shaping the digital transformation overall.	HoDT established in January 2021
		Lower Saxony Lower Saxony Digital Bonus The aim is to force the pace on the digital transformation of the economy in Lower Saxony. Funding is granted to investments in hardware, software and software licences, with funding capped at €10,000. Eligible recipients include SMEs in the commercial sector, life sciences, the e-Health sector, the crafts and trades sector, and small freelance planning offices active in the field of digital construction.	The guideline was published in the Official Journal on 3 September 2019 and will run until 31 December 2021.
		Lower Saxony DigitalHub The aim is to strengthen the transfer of knowledge between the consortium partners in the DigitalHubs and the specific target group addressed – e.g. business operations, public authorities, business promotion agencies and innovation consultants in Lower Saxony – in order to encourage and promote capacity building and to make the benefits of digital technologies in practical applications accessible and transparent. Against this backdrop, the DigitalHubs are to boost digital innovations in Lower Saxony, enhance the performance of the economy, and help address region-specific challenges. Support is granted to investments. The maximum funding amount is €500,000. Eligible recipients include legal entities, particularly SMEs	The guideline was published in the Official Journal on 18 March and will run until 31 December 2022.
		Digital consulting Since January 2020, the Demographic Agency for the Economy in Lower Saxony has been certifying businesses in the state, awarding them the "fit for the future" seal with an emphasis on digitalisation. The focus here is on social change and the inclusion of employees in digital transformation processes. This is of vital importance, particularly for the introduction of new AI systems in businesses, as workers can have reservations regarding the systems' frequently non-transparent decisions and recommendations for action.	The project commenced on 1 January 2020 and will end on 31 December 2021.
		"digiKom" project for digital planning application processes The Leibniz University of Hanover is working with nine pilot municipalities in Lower Saxony on the introduction of digital planning application processes. The aims are: • Introduce and apply digital methods in municipal and higher-level *Land* administration using the example of digital planning application procedures • Increase the visibility and acceptance of digital services in (approval) procedures under public law • Development of a pilot, including basic processes than can continue to be used for digital local authorities • Digitalisation knowledge and technology transfer for personnel in public administration • Early automated preliminary approval-related examination of digital building models using specific examination algorithms	The project commenced on 1 December 2019 and will run until 30 November 2021.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
96.	*Measures adopted by the Länder in the field of digitalisation (digitalisatioan strategies and SMEs)*	**Rhineland-Palatinate** Under the "Special Fund for the Sustainable Management of the COVID-19 Pandemic", roughly €122 million have been set aside for measures to remove bottlenecks in broadband capacity and for the continued expansion of digital infrastructures. The amount is designed to expand and develop broadband networks in line with changing requirements and substantially increased demands. The pandemic has resulted in urgent broadband needs for schools and hospitals, as well as among tourism-related businesses and other enterprises, and private households. Further to this, €50 million are available in the Special Fund for measures to boost the digital transformation at institutions for higher education in order to further advance the digital transformation process at third-level institutions – accelerated as a result of the COVID-19 pandemic – and to support the development of digital learning formats and infrastructures to guarantee teaching services. This is also necessary to ensure that students can commence, continue and complete their study programmes.	
		Saxony "Digital Saxony" digitalisation strategy: The Saxony state government has been pursuing the "Digital Saxony" strategy since 2016, making the Free State of Saxony one of the first *Länder* to implement a state digitalisation strategy. As a dynamic strategy, "Digital Saxony" has been updated and revised several times since. The current version of the strategy was published on 27 June 2019 and contained 138 concrete implementation measures. In the period from 1 January 2017 to 31 December 2018, expenditure on measures within the context of "Digital Saxony" amounted to over €209 million (excluding broadband funding). An updated catalogue of measures under the digitalisation strategy is planned for 2020. Support for SMEs for the digital transformation of business processes and the protection of information.	Ongoing
		Digitalisation in the energy sector Saxony's targets with regard to the integration of increasing levels of renewable energy into the energy system and action to increase energy efficiency can only be achieved if the entire energy system is developed further. To this end, the Saxon energy cluster "Energy Saxony" has launched the "*Land* Initiative for Digitalisation in the Energy Sector". Activities previously in place have been incorporated and bundled together in this initiative. The initiative serves as the basis to fully support and oversee the digital transformation in the energy industry. In this context, business models are to be developed for future markets, scientific monitoring is to be conducted and pilot projects are to be implemented.	Limited until 31 December 2022
		Saxony-Anhalt Regional Future Centre for Digital Work in Saxony-Anhalt The "Future Centre for Digital Work in Saxony-Anhalt" supports small and medium-sized enterprises (SMEs) and workers in shaping the digital transformation of their work/work processes. The services offered serve to strengthen the capacity of the actors in the workplace to shape and organise their working environment and to boost their skills for independent learning. The specific advisory services are supported by innovative learning and teaching approaches to support skills acquisition and capacity building among management, workers and interest groups.	Ongoing project, November 2019 to June 2022
		Digital official land use planning system The official land use planning information system (ARIS) digitally records measures and developments that are important for land use planning. This serves digital planning in the field of regional development and land use planning, for example.	Ongoing project, new components continuously added

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
97.	Act to Transpose Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 on the European Electronic Communications Code and to Modernise Telecommunications Legislation *(Gesetz zur Umsetzung der Richtlinie (EU) 2018/1972 des Europäischen Parlamentes und des Rates vom 11. Dezember 2018 über den europäischen Kodex für elektronische Kommunikation und zur Modernisierung des Telekommunikationsrechts)*	The Federal Government seeks to revise the Telecommunications Act to provide incentives for investment and innovation. Provisions are made for significant elements of flexibility and facilitations in the regulation. In addition, approval and development procedures are to be simplified by speeding up the procedures, strengthening alternative installation methods (e.g. above ground installation or (micro-)trenching) and increasing transparency regarding existing infrastructures that can also be used for the expansion of the gigabit network (consolidation of existing planning and information tools).	Cabinet decision: 16 December 2020
98.	Federal funding programme for broadband roll-out	Continued development of connections below 30 Mbps (white areas) via the Federation's broadband programme, and nationwide development of infrastructure for schools, hospitals and business parks via special programmes; development of a gigabit funding programme for grey areas (under 100 Mbps). The aim is to have a nationwide gigabit-capable infrastructure in Germany by the end of 2025.	Broadband funding programme and special programmes are running; funding programme for grey areas to start in the first half of 2021.
99.	Promotion of mobile communications	With support for mobile communications, the Federation is providing the necessary incentives for the construction of additional mobile communications sites in order to expedite the roll-out of mobile communications networks and to close remaining gaps in 4G network coverage.	Cabinet decision on the Mobile Communications Strategy: November 2019. Currently in the process of notification to the European Commission.
100.	Mobile infrastructure company	The mobile infrastructure company of the Federal Government is to make further progress in the planning and construction of new 4G mobile communication sites, particularly in rural areas.	Established on 1 January 2021, incorporated on 12 January 2021 with entry in the Commercial Register
101.	5G Innovation Competition	The 5G Innovation Competition is designed to enable 5G applications to be tested under real conditions. Within this framework, 67 regional authorities have received around €6.2 million to develop individual strategies for 5G pioneer regions and interconnect providers and potential local customers. Ten particularly impressive and innovative strategies received funding for implementation in December 2020. The expansion of the competition is currently being examined. This approach is designed to bring together potential users and providers of innovative 5G mobile communications solutions and clearly demonstrate the potential of 5G mobile communication in the local area. In addition, six research projects already received roughly €55 million in funding in December 2019 for research into innovative 5G applications.	Implementation funding until the end of 2023 and research funding until the end of 2022
102.	5G campus networks	5G campus networks are generating a lot of interest. 74 spectrum assignments took place in the ten months following the start of the application procedure. The Federal Network Agency is making the 3,700 – 3,800 MHz spectrum available for local networks. The frequencies allow industry and SMEs to implement innovations using their own networks. In addition, the Federal Network Agency is preparing the application procedure for local broadband, which is expected to commence before the end of this year. This will allow the future applicants to use the 26 GHz band with 5G technology to connect small areas.	Since 1 January 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
103.	Communication technologies	With the Future Package, the Federal Government formulates its aspiration for Germany to play a leading role internationally as a technology provider in the development of the communication technologies of the future, 5G and also 6G on the longer term. The measures planned by the Federal Government are particularly designed to establish a broad research base for this purpose and to move forward with the transfer of findings into practical applications. Furthermore, measures that focus on resource-efficient and trustworthy electronics also play a central role. This includes smart hardware components that reduce the energy consumption of information and communication technologies and pave the way for a more sustainable digital transformation, as well as network and application technologies that respect European values. The highly successful research initiative "Industrial Communication of the Future" (funding of approx. €63 million since 2015) has provided an important basis for this development. The topic is being developed further under the funding priority "Artificial Intelligence for Communication Networks".	Funding priority "Artificial Intelligence for Communication Networks": First projects beginning since early 2020 Publication of the "Communication Systems" programme: Spring 2021 Start of projects on trustworthy electronics: Q1 2021
104.	Measures adopted by the *Länder* in the roll-out of fixed broadband and mobile communication networks	**Comprehensive measures are in place in the *Länder* to promote the expansion of broadband and mobile communication networks. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.**	
		Bavaria Bavarian Gigabit Guideline The aim of this measure is to promote the development of gigabit-ready broadband networks in white and grey NGA areas in the Free State of Bavaria with symmetrical speeds of at least 1 Gbps for commercial connections and of at least 200 Mbps for private connections. The funding conditions are based on the specific planning area category the municipality is assigned to in the Bavarian regional development plan at the time the application is made.	Ongoing until the end of 2025
		Co-funding Guideline Within a co-funding context, the Free State of Bavaria supports its municipalities also with regard to access to the federal funding programme. The federal funding rates are increased to the level of Bavarian broadband funding (Bavarian Gigabit Guideline).	Ongoing until the end of 2025
		Fibre Optic/WLAN Guideline: The Free State of Bavaria has been supporting the development of a fibre optic infrastructure for public schools and hospitals that are included in the state's hospital planning since June 2018, and infrastructure for town councils since 2019, by providing up to €50,000 (€60,000 in event of hardship) per facility or municipality with funding rates of up to 90 percent.	Ongoing until the end of 2021
		Broadband infrastructure loan: To finance the municipal share, municipalities in Bavaria can avail of the broadband infrastructure loan provided by *LfA Förderbank Bayern* – the promotional bank of the Free State of Bavaria – at very attractive conditions.	Ongoing
		The "Mobile Network" funding programme introduced by the Bavarian State Ministry of Economic Affairs supports municipalities in the building of mobile communication sites in areas that do not yet have mobile phone coverage ("white areas"). A Mobile Network Centre provides advice to the municipalities in the funding programme and acts as a liaison with network operators. Coverage expansion is with LTE and 5G. The goal is to improve mobile communications coverage in all parts of the state. Over 70 municipalities have already started development efforts.	In force since 1 December 2018

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
104.	*Measures adopted by the Länder in the roll-out of fixed broadband and mobile communication networks*	**Hesse** Mobile Communications funding programme Since the end of 2020, "white areas" that do not have mobile phone coverage can get coverage with funding under the "Mobile Communications" funding programme. Thanks to the intensive support and advice provided to the municipalities by the Mobile Communications Competency Centre of the Hesse State Broadband Office, it has been possible to get initial funding procedures started with precursory market exploration processes. The aim is to support up to 300 masts with a funding volume of €50 million and provide LTE and potentially 5G coverage in the areas.	In force since November 2020
		Implementation of the Broadband Funding Guideline The State Government of *Land* Hesse is making around €270 million available for broadband expansion in the municipalities in the current legislative term (2020–2024) to ensure the state-wide provision of high-speed Internet.	In force since 1 January 2016, extended on 30 November 2020
		Implementation of measures to reach the fixed-line network development goals set out under the Gigabit Strategy for Hesse State-wide expansion of the fixed-line network infrastructure • By 2025: Provision of gigabit-ready infrastructures, with particular attention to the prioritised connection of socio-economic facilities including commercial centres. • By 2030: State-wide roll-out of fibre-optic connections including fibre-to-the-home (FTTH) networks.	Presented in June 2018, ongoing implementation
		"Broadband Rollout" digitalisation laboratory under the Online Access Act (in partnership with the state of Rhineland-Palatinate and the Federal Ministry of Transport and Digital Infrastructure) The "digital application for the approval of cable installation in public thoroughfares" is part of the joint project of the Federation, *Länder* and municipalities to enable all key dealings with public authorities online by the end of 2022 – as set down in the Online Access Act *(Onlinezugangsgesetz)*, (cf. Section 68 (3) of the Telecommunications Act *(Telekommunikationsgesetz)* "use of public thoroughfares"). The development of a "click prototype" was completed in 2019. Since September 2020, selected pilot municipalities from Hesse and Rhineland-Palatinate have been able to test the online application portal under real-life conditions. The state-wide roll-out in both *Länder* will follow this test phase. The aim of the online portal is to speed up approval processes in the context of gigabit infrastructure development and optimise them further where possible in order to safeguard the goals of Hesse's Gigabit Strategy. Additional functions and approval processes for gigabit development will be incorporated into the application portal in 2021; a nationwide roll-out according to the "one-for-all" principle is currently being examined.	Implementation commenced in 2019, ongoing implementation
		GigaMaP With "GigaMaP", Hesse launched a forward-looking digital online portal at the start of December 2020 that provides "at-a-glance" information about broadband and mobile communications expansion in the state. GigaMaP gives municipalities in Hesse a tool to help them better address the challenges of infrastructure development and expansion. In the public domain, the platform also makes important broadband coverage data available to citizens, companies and persons engaged in a trade or business. Furthermore, registered users will also be able to evaluate infrastructure data in the future.	Implementation commenced in 2019, ongoing implementation

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
104.	*Measures adopted by the Länder in the roll-out of fixed broadband and mobile communication networks*	**Saxony-Anhalt** Looking to the future, the state of Saxony-Anhalt is seeking state-wide coverage with fibre optic networks. This goal has been defined in concrete terms under a "Gigabit Strategy": The aim is for it to be possible to exchange data at gigabit speed via fibre optic networks across the state from 2025 onwards. Businesses, schools and higher education institutions are given particular priority in connecting up to the fast Internet infrastructure. Saxony-Anhalt is placing a further priority on the expansion of the mobile communications and WLAN infrastructure and is initiating the first 5G projects in this connection.	Gigabit Strategy of the *Land* government of 14 May 2019
105.	Funding programme "Smart Energy Showcases - Digital Agenda for the Energy Transition" (SINTEG)	In the funding programme "Smart Energy Showcases – Digital Agenda for the Energy Transition", or SINTEG, five large model regions known as showcases have been developed and trialled for the energy supply of the future. The main emphasis of the programme is on digitalising the energy sector. It placed a major focus on building smart networks linking up the electricity supply and demand sides, and on the use of innovative grid technology and operating strategies. Furthermore, all showcases used local, innovative formats for energy transition information and civic participation. Each showcase is set in a different environment and has a different focus. The five SINTEG showcases are: • **C/sells:** The 'C/sells' showcase in Baden-Württemberg, Bavaria and Hesse focussed on the regional optimisation of energy production and consumption in autonomous "cells". • **DESIGNETZ:** This showcase spanning the states of North Rhine-Westphalia, Rhineland-Palatinate and Saarland developed solutions for a smart energy infrastructure – from a stand-alone solution to an efficient system. Due to the heterogeneity of the model region, it was possible to simulate almost all the supply tasks for all of Germany in 2035. • **enera:** The 'enera' showcase located in Lower Saxony dealt with regional ancillary services to stabilise the electricity grid at regional level in the event of volatile electricity production. • **NEW 4.0:** Schleswig-Holstein and Hamburg both participated in NEW 4.0, which stands for the North-German Energy Transition 4.0 project. In the large-scale, multi-*Länder* project, NEW 4.0 sought to demonstrate how the entire region with a population of 4.5 million could get its entire electricity from renewable sources as early as 2035 in a manner that is secure, reliable and accepted by society. • **WindNODE:** The "WindNODE" showcase spans the five *Länder* in eastern Germany plus Berlin. The goal is the efficient integration of renewable energy generation and an energy system that is optimised for all energy sources and combines the electricity, heat and mobility sector.	Project came to an end in March 2021 after running for four years. The results were presented at the SINTEG annual conference in Hamburg on 28/29 October 2020. The pilot solutions will be evaluated and consolidated in a summary of the findings of all the showcases by mid-2022 and made available to the public
106.	First Act to Amend the Fuel Emissions Trading Act *(Erstes Gesetz zur Änderung des Brennstoffemissionshandelsgesetzes)*	The Fuel Emissions Trading Act has introduced a price on climate-damaging carbon emissions in the building and transport sectors with effect from 1 January 2021. In 2021, the price is €25 per tonne of CO_2, and will steadily increase in the next few years, culminating in a price of €55 per tonne of CO_2 in 2025. From 2026 onwards, the price will be formed on the market but a price range of between €55 and €65 per tonne of CO_2 will initially apply in 2026. The revenues generated from trade with carbon allowances will be invested in climate mitigation measures and go towards relieving the burden on citizens and businesses. The Federal Government is committed to ensuring effective protection against carbon leakage.	Fuel Emissions Trading Act in force since 12 December 2019 First Act to Amend the Fuel Emissions Trading Act in force since 9 November 2020
107.	Amendment to the Offshore Wind Energy Act *(Windenergie-auf-See-Gesetz)*	The Act increases the 2030 expansion target for offshore wind energy installations from 15 to 20 GW. The higher target of 20 GW was already part of the Federal Government's Climate Action Programme 2030. Furthermore, the Act also defines a long-term target of 40 GW by 2040.	In force since 10 December 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
108.	Measures adopted by the *Länder* to expand renewable energy	**Comprehensive measures are in place in the *Länder* to promote the expansion of renewable energy. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.**	
		Baden-Württemberg The Baden-Württemberg Climate Action Act (Klimaschutzgesetz Baden-Württemberg) stipulates that photovoltaic systems must be installed for electricity generation when building new non-residential buildings and large parking lots with over 75 spaces. The rule governing mandatory photovoltaic installations applies to building projects whose planning permission applications are submitted to the competent authorities on or after 1 January 2022.	Amended Climate Action Act in force since 24 October 2020
		Bavaria Bavarian PV Storage programme Support for the installation of a battery storage unit (investment grant) with a capacity of between three kWh and 30 kWh when simultaneously installing a new PV system, as mandated, with a minimum proportional size for private owners of owner-occupied single-family and two-family houses. The funding programme has an annual scope of approximately €25 million.	In force since 1 August 2019
		"BioKlima" funding programme Funding of new, climate-friendly biomass heating plants with a nominal heat output of 60 kW and higher, and support for new investments to implement energy efficiency measures (investment grants). The aim is to achieve annual reductions of 5,000 tonnes of CO_2. The funding programme has an annual scope of €2.5 million in both 2020 and 2021.	In force since 1 January 2019
		Funding programme for hydroelectric power plants Support for the environmentally friendly expansion of electricity production using hydropower with investment grants for: • Retrofitting measures on existing hydroelectric power plants in Bavaria if such measures increase the capacity of the plant by at least ten percent • Recommissioning (subject to approval) of hydroelectric power plants and new replacement plants Approximately 30 projects are to receive funding each year. Annual funding of €1–2 million is planned.	In the planning stage, to start in 2021
		Berlin Resolution on the "Solar City Master Plan" and the "Coordination Centre for the Berlin Solar City Master Plan" Berlin wants solar power to account for 25 percent of total electricity generation by 2050. In collaboration with the Fraunhofer Institute for Solar-Energy Systems (ISE), experts in Berlin have developed a catalogue of 27 measures to come closer to the "Solar City" goal. At the request of Senator Pop, the Berlin Senate resolved to implement the catalogue of measures on 10 March 2020. According to calculations by the Fraunhofer Institute for Solar-Energy Systems, the Solar City Master Plan can deliver cumulative carbon savings of up to 79,000 tonnes in the period between 2020 bis 2023 (this is contingent upon adherence to the expansion path set down in the Master Plan study.) Berlin set up the "Coordination Centre for the Berlin Solar City Master Plan" in the summer of 2020. The Coordination Centre is the central point of contact for the implementation of the Solar City Master Plan. It supports the Senate administration and central actors and partners in the development and implementation of projects from the Solar City Master Plan. Its other primary activities include project management, continuous monitoring, transparent performance assessment of the individual measures, and the development of information and dialogue structures.	Measure in the implementation stage, initially planned until 2023

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
108.	*Measures adopted by the Länder to expand renewable energy*	**Lower Saxony** Under the Energy and Climate Action Programme of Measures, new priority support areas have been identified, also with funding from the COVID-19 Special Fund: • Hydrogen pilot and demonstration projects: 100 million • PV battery storage systems: 75 million • Business resources and energy efficiency: 47.5 million • Energy efficiency in non-profit organisations: 50 million • Energy retrofitting in social housing: 50 million	Started at end of October 2020, to run until the end of 2022
		Rhineland-Palatinate Rhineland-Palatinate adopted a second supplementary budget for the 2020 budget year and agreed on a Special Fund to Sustainably Address the COVID-19 Pandemic. Climate action plays a central role in the economic stimulus measures. A total of €200 million has been allocated for action to address climate change. In doing so, the *Land* government of Rhineland-Palatinate is pursuing the objective of a "Dual Future Strategy" that combines the necessary economic stimulus with green technologies of the future. An additional €50 million is provided in this context for renewable energy, a modern energy infrastructure and climate change adaptation. Under the Solar Initiative for Rhineland-Palatinate, financial support for investment in PV battery storage units is granted in combination with the installation of a new PV system. Initially aimed at private households and municipalities, the programme has been open to private businesses, associations and charitable institutions since August 2020.	Being implemented
		Saxony Study conducted with partners with the aim of delivering a relevant reduction in emissions at airports in Saxony, with Leipzig/Halle Airport taken as an example. The study is to involve a variety of partners with the aim of bringing about a relevant reduction in emissions at airports in Saxony, using the example of Leipzig/Halle Airport. Ultimately, Saxony seeks to implement investment measures on the basis of the EU call ("Green airports and ports as hubs for sustainable and smart mobility"). The results of the study are expected to deliver sustainable positive effects for Leipzig/Halle Airport.	Started at end of October 2020, to run until April 2021
		Schleswig-Holstein <u>Funding in the area of the energy transition and climate action within the framework of the Schleswig-Holstein economic stimulus programme</u> Funding is available from 2020/2021 until 2024 and is earmarked for the following: 1. Guideline for the provision of grants for the promotion of battery storage systems within the context of the "Climate Action for Citizens" programme; the aim is the expansion of distributed energy generation in connection with the use of stationary battery storage units 2. Funding guideline for energy retrofitting in urban areas, KfW programme 432, co-funding of small municipalities 2021–2023; aim: support with the development of concepts for neighbourhoods and redevelopment management 3. Promotion of municipal heat planning; aim: support for municipalities in the creation of municipal heating plans, also within the context of the planned obligation on larger municipalities to create such plans as set down in the Schleswig-Holstein Energy Transition and Climate Action Act *(Energiewende- und Klimaschutzgesetz)*	 €2 million €8 million €8 million

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
108.	*Measures adopted by the Länder to expand renewable energy*	4. Support for the energy transition in the heating sector and municipal climate action from the extension of the Schleswig-Holstein Energy and Climate Action Initiative (EKI) in order to strengthen the energy transition in the heating sector at the municipal level and municipal climate action by providing advisory services and information 5. Promotion of the development and expansion of charging stations for electric mobility 6. Funding measures within the context of the Hydrogen Strategy of the *Land* government of Schleswig-Holstein 7. Energy transition research; provisions are made for grants and project funding, particularly for R&D focussing on technologies in the field of renewable energy, energy and resource efficiency, sector coupling, e-mobility, energy-related ICT, system integration and infrastructures, and for projects of a "regulatory sandbox" nature Objectives and anticipated impact of all aforementioned funding measures: will contribute to climate change mitigation, the energy transition, to strengthening Schleswig-Holstein's position as a centre of science and business, and to supporting the economy in the context of the COVID-19 crisis.	€8 million €3 million €30 million €8 million
109.	Revision of the Federal Requirements Plan Act *(Bundesbedarfsplangesetz)*	The Act Amending the Federal Requirements Plan Act and other Provisions *(Gesetz zur Änderung des Bundesbedarfsplangesetzes und anderer Vorschriften)* creates the framework in the power transmission grid to integrate 65 percent of renewable energy into the electricity grid by 2030. The basis for this is the 2019–2030 Network Development Plan, which has been confirmed by the Federal Network Agency. It also implements the proposal to address the grid problems in the tri-border area between Bavaria, Hesse and Thuringia.	In force since 4 March 2021
110.	Forward-looking internal auditing of the grid expansion	Forward-looking internal auditing of grid expansion measures identifies potential delays in grid expansion at an early stage and provides the framework to take steps to avoid such delays. In this way, the central stakeholders (Federation, *Länder*, Federal Network Agency and transmission system operators) work together to address delays in the expansion of the grid.	Ongoing
111.	Energy Efficiency Strategy	The Energy Efficiency Strategy sets an energy efficiency target for 2030, constituting a 30 percent reduction in primary energy consumption compared with 2008 levels. The NAPE 2.0 action plan, which is part of the Energy Efficiency Strategy, brings together 34 energy efficiency measures of the Climate Action Programme, flanked by 20 complementary measures that all address sectors of energy demand. The ambitious package of measures under NAPE 2.0 is geared towards the delivery of the 2030 target. Germany has been implementing these measures as quickly as possible since 2020. The Strategy has also given the starting signal for a process of dialogue with the stakeholders in the Energy Efficiency Platform. In working groups dedicated to individual topics (industry, digitalisation, skilled labour etc.), experts explore ways to unlock dormant energy efficiency potential. Proposals for new measures from this two-year project are to feed into the regular update of the NAPE 2.0. Furthermore, a roadmap is to be developed that plots the course for the future development of energy efficiency policy beyond 2030.	Cabinet decision: 18 December 2019
112.	Long Term Renovation Strategy	Under the Long Term Renovation Strategy (LTRS), each EU Member State must develop a roadmap with measures and measurable progress indicators to achieve the long-term climate targets and identify policies and actions to stimulate the energy retrofitting of the national building stock. The LTRS of the Federal Government defines the "total energy efficiency" according to national energy conservation legislation as an indicator. The corresponding indicative milestone for 2030 is 2,000 PJ. This translates to a reduction in the consumption of non-renewable energy by around 55 percent compared with 2008 levels. The Strategy also describes the national buildings sector and national measures according to related EU requirements.	Cabinet decision: 17 June 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
113.	Buildings Energy Act *(Gebäudeenergiegesetz)*	The Buildings Energy Act combines the Energy Conservation Ordinance *(Energieeinsparverordnung)*, the Energy Conservation Act *(Energieeinsparungsgesetz)* and the Renewable Energies Heat Act *(Erneuerbare-Energien-Wärmegesetz)*. It therefore creates a new, uniform and harmonised rulebook for energy efficiency in buildings and for the use of heat from renewables. The current energy-related requirements for new and renovated buildings are maintained and not tightened. The Federal Ministry for Economic Affairs and Energy and the Federal Ministry of the Interior, Building and Community will revise the requirements for future building constructions and the requirements for existing buildings in accordance with the principles of economic efficiency and technological neutrality in 2023. On the basis of the findings, they will present a legislative proposal for the further development of requirements for existing and future buildings within six months of the completed revision. The affordability of buildings construction and housing is a key pillar that needs to be taken into account.	In force since 1 November 2020
114.	Federal Funding for Efficient Buildings	The Federal Government's "Federal Funding for Efficient Buildings" scheme merges existing federal funding programmes in the building sector into a single, coherent funding programme, and adjusts the funding landscape to better suit beneficiaries' needs. It also places an emphasis on the topics of renewable energy, digitalisation and sustainability. The "Federal Funding for Efficient Buildings" scheme comprises three funding guidelines which address the construction and full renovation of residential and non-residential buildings and individual energy-related measures. With this scheme, the Federal Government seeks to give incentive for 201,500 measures each year with an investment volume of €43.5 billion. The carbon savings sought under this programme amount to 1,055,000 tonnes of CO_2 annually.	Started on 1 January 2021
115.	Measures adopted by the *Länder* in the area of energy efficiency/ renewable heat	**Comprehensive measures are in place in the *Länder* to improve energy efficiency and the use of heat from renewable sources. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.** **Baden-Württemberg** A municipal heating plan is the basis for achieving a climate-neutral buildings sector. The Baden-Württemberg Climate Action Act sets forth the particular elements the municipal heating plan should contain for all municipalities. Urban districts and larger towns are required to prepare a heating plan for their territory by 31 December 2023. Municipal heat planning comprises an analysis of the current demand for heating and the supply structure, as well as an analysis of existing potential to supply heat using renewable energy sources. On this basis, the municipalities develop a scenario for a climate-neutral heating supply system in 2050. Baden-Württemberg will also develop a strategy, outlining how this transformation can succeed and what priorities must be set. This roadmap is to help municipalities to make the right decisions in order to enable the climate-friendly supply of heating to all buildings. It is also to assist all other local stakeholders in individual investment decisions.	Amended Climate Action Act in force since 24 October 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
115.	*Measures adopted by the Länder in the area of energy efficiency/ renewable heat*	**Brandenburg** The Energy Strategy 2030 (ES 2030) is the fundamental programme framework of the *Land* government for the development of the energy sector in *Land* Brandenburg through to 2030. The ES 2030 is evaluated regularly and adapted to the requirements of the energy transition. The *Land* government has decided to update the ES 2030, taking into consideration the modified European and federal framework conditions, and develop it further through to 2040, with a breakdown into energy sources, sectors and fields of application. The update will continue to be based on the current goals of the ES 2030 (particularly the expansion of the supply of renewable energy, increased energy efficiency, the promotion of new storage technologies, grid expansion and system integration, hydrogen economy ramp-up) and the updated catalogue of strategic measures, which was adopted by the Cabinet in July 2018 and underpins the energy and climate policy targets of the *Land* government with measures that are to be implemented. Various funding programmes with a total financial volume of around €115 million support the implementation of the ES 2030 and the energy transition in Brandenburg (including RENplus 2014–2020; Guideline for the promotion of measures to store energy within the context of implementing the Energy Strategy of *Land* Brandenburg, valid from 3 October 2019 to 31 December 2022).	ES 2030: Ongoing through to 2030, funding guidelines initially up until 2020 and 2022 (continuation and further development of the funding guidelines is planned)
		Establishing energy efficiency networks Businesses can increase their energy efficiency more easily by collaborating with other market players. Energy efficiency networks are therefore an important element of the National Action Plan. The East Brandenburg Chamber of Industry and Commerce is responsible for project management within the Brandenburg Energy Technology Initiative (ETI). The ETI is to continue to make an effective contribution to energy policy implementation and communication in 2021 also. This concerns all areas of the catalogue of measures in the 2030 Energy Strategy, and also involves the continuation and initiation of business networks for more energy efficiency. On average, an energy efficiency network saves around 31,000 megawatt hours of final energy each year. This is equivalent to the annual final energy consumption of around 1,900 German households. This is corroborated by the current monitoring results of the Initiative for Energy Efficiency Networks. In *Land* Brandenburg we want to build on this and launch additional flagship projects that can serve as a model for other medium-sized enterprises.	Ongoing
		Hesse Hesse Special Programme to support the highly efficient modernisation of private residential buildings (single-family and two-family buildings) or condominiums in homeowner associations Provision of incentives for energy-related modernisation measures for owners of single-family and two-family buildings and condominiums in homeowner associations. Indirectly, this should stabilise or improve the order books of small and medium-sized enterprises in the local crafts and trade sector, but also of planners (e.g. engineers and architects) and energy consultants, and thereby help them cope with the impact of the COVID-19 crisis. In addition, practical experience with the use of highly efficient building technologies in modernisation efforts will enhance knowledge and expertise, and prepare skilled jobs for the demands of the future.	Guideline of 26 January 2021, in force since 9 February 2021
		The funding is a complement to the Hesse funding projects in KfW programme 430 “Energy Efficient Modernisation – Investment Grant” or KfW programme 151 “Energy Efficient Modernisation – Loan” on the basis of the Hesse funding guideline of 26 January 2021. In principle, implementation of the Special Programme is time-limited to 31 December 2022. The programme will be evaluated in 2021 and on the basis of the results, a decision will be made on whether to continue the programme in the future.	Limited-term programme

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
115.	*Measures adopted by the Länder in the area of energy efficiency/ renewable heat*	Hesse Heating Guide Municipal heating plans offer a way to make the local heating supply fit for the future in collaboration with businesses and the local crafts/trades sector – in a manner that is sustainable, secure and low-cost thanks to a smart combination of energy upgrading and infrastructure solutions. This guide helps municipalities achieve this goal by explaining the necessary measures and steps involved in creating municipal heating plans, with due regard to the guiding principle of "efficiency first".	Published
		At-home energy consulting The concept of direct "at-home" energy consulting in Hesse seeks to raise awareness and motivation for the topic of modernisation in existing residential buildings in order to increase the rate of building refurbishment in Hesse. The measure is geared towards private owners of single-family and two-family dwellings that require energy retrofitting. This on-site consulting service is backed up by communication support measures in the municipalities. The conceptual design of the "at-home" energy consulting measure is finalised.	Ongoing
		Energy performance contracting as an economic stimulus measure offering financial and ecological sustainability In the COVID-19 pandemic, municipalities are to be encouraged to invest in energy efficiency or energy-saving measures in the existing building stock of municipalities, municipal businesses and non-profit organisations. Due to the pandemic, these measures are currently being postponed – also owing to a lack of personnel – even though they help stimulate the economy, reduce final energy and CO_2 emissions, and ultimately lower the energy costs of the contracting authorities. The *Land* Energy Agency, which will be responsible for running the programme, will therefore support around 15 contracting measures in the project planning and implementation stage. The 15 project developers will be a mix of municipalities, municipal businesses and non-profit organisations. The aim is to trigger investments in energy efficiency measures, which are expected to be in the region of €8-12 million, in 2021 and 2022.	In preparation, limited-term
		Initiation of investments in energy efficiency to stimulate the economy One particular focal point of the additional measures is in the area of investments in energy efficiency, such as the modernisation of residential and non-residential buildings, which can stimulate economic activity and contribute to achieving energy and climate policy targets. By initiating more energy efficiency measures in the residential sector, non-residential buildings, and in business, investments can be brought forward that help revive construction activity, relieve the burden on municipal budgets, ensure faster progress towards *Land* Hesse's energy targets, and reduce energy consumption.	In preparation, limited-term
		Lower Saxony COVID-19 Special Fund Mit fast 550 Millionen aus dem Corona-Sondervermögen wurde ein Schwerpunkt A priority was placed on the topic of climate action and a climate-friendly economic recovery with roughly €550 million from the COVID-19 Special Fund. The funding priorities resulting from this include pilot and demonstration projects in the field of hydrogen, PV battery storage, energy efficiency in businesses, energy retrofitting in social housing units and actions to increase energy conservation and energy efficiency in non-profit organisations.	Special Fund set up on 12 May 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
115.	*Measures adopted by the Länder in the area of energy efficiency/ renewable heat*	**North Rhine-Westphalia (NRW)** progres.nrw – market launch: introduction and uptake of technologies for climate action With the "progres.nrw – market launch" programme, the *Land* government of North Rhine-Westphalia (NRW) is promoting the market launch and uptake of technologies for climate action that use energy efficiently and sparingly and produce electricity and heat from renewable energy sources. Funding is granted to market-ready systems that require initial assistance for a limited period for the intended economic application. This includes the increased use of the potential of heat sources, such as waste heat and geothermal heat, the development and expansion of electricity and heat storage systems, and the use of integrated systems for the implementation of "climate-smart neighbourhoods" and urban energy solutions. The programme makes a central contribution towards delivering on the energy and climate targets of North Rhine-Westphalia: increase the share of renewables in the energy supply; accelerate heating and electricity sector coupling that is required for the future energy system; and reduce CO_2 emissions. The programme is providing a strong impetus, particularly for SMEs and property owners, to invest in innovative and efficient technologies and, against the backdrop of the current COVID-19 crisis, also makes a key contribution to supporting regional value-add and safeguarding jobs in the crafts/trade sector and the construction industry in North Rhine-Westphalia. In the 2020 funding year, approx. 16,500 applications had been made to the approval authority by the end of September. Of these, roughly 13,300 notifications of funding approval were issued, with a total funding volume of €24.9 million. www.progres.nrw progres.nrw – "Innovations" programme part Findings from university-based fundamental research must first be developed further in an applied research setting before they can be transferred to practical industrial applications. With the progres.nrw – "Innovations" part of the programme, the state of North Rhine-Westphalia is supporting projects in the field of industrial research or experimental development, particularly in the areas of energy efficiency and the use of renewable energy. Energy efficiency and renewable heat in the buildings sector: Built-in climate protection in NRW With a variety of awards programmes such as "Building Energy-efficient Residential Areas" ("100 climate-smart housing estates in NRW") and "Energy-efficient Non-residential Buildings in NRW", the state of North Rhine-Westphalia is supporting the implementation of energy-efficient buildings, estates and neighbourhoods – with a focus on both new builds and energy-retrofitted existing buildings – which will serve as particular role models. The funding programme is backed up by PR campaigns and events to showcase the flagship projects – and illustrate the good example they set – to any regions wishing to emulate them. Urban energy solutions: Sector coupling and local use of renewable energy in energy-efficient districts In addition to building renovation, the construction of efficient buildings and an economic energy supply, holistic concepts for urban districts also include the use of local energy sources and renewables, additional energy efficiency potential and flexibilisation options. The coupling of the electricity, heating, cooling and mobility sectors in urban districts with the help of digitalisation paves the way for low-emission, liveable cities of the future. The *Land* government of North Rhine-Westphalia supports research, demonstration and implementation projects on the basis of the "progres.nrw" programme family. In doing so, the *Land* government is building on the successful project "100 climate-smart housing estates in NRW" and is playing a role in reducing greenhouse gas emissions in North Rhine-Westphalia.	Ongoing; major increase in funding in 2020/2021 as part of measures to address the COVID-19 pandemic. 99 "climate-smart estates NRW" have been granted the climate-smart status, 53 have been completed (data as at 10/2020); the awards ceremony for "energy-efficient non-residential buildings" is being held for the second time in 2020. Funding granted to the first "Urban energy solutions" projects. On account of the COVID-19 pandemic, the majority of the events were held in digital formats. The "VISIONARIES Heat" campaign had reached approx. 50,000 users by October 2020.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
115.	*Measures adopted by the Länder in the area of energy efficiency/ renewable heat*	Networks and campaigns: Expedite investments in climate action and energy efficiency in the buildings sector To improve energy efficiency and promote greater use of renewable energy in the buildings sector, the *Land* government of North Rhine-Westphalia supports networks and campaigns, such as the "Heat Pump Market Place NRW", the "Network for Energy-efficient and Solar Construction", the "Wooden Pellets Action Network" and the "Geothermal Network". Events, publications and knowledge transfer geared to specific target groups mobilise stakeholder groups for project implementation. As part of the Wooden Pellets Action Network, the "VISIONARIES Heat" *(VORDENKER heizen)* campaign to promote the use of wooden pellets was successfully held this year. The aim is to make energy-efficient and climate-friendly technologies more popular in the market and ramp up investment in climate change mitigation and energy efficiency.	
		Rhineland-Palatinate Sustainable Energy Infrastructure Systems (ZEIS) In 2019, the Sustainable Energy Infrastructure Systems funding programme – or ZEIS for short – was reorganised to offer new funding objectives and better conditions. A new element of the programme is support for high-efficiency LED technology for street lighting that meets strict requirements to reduce the impact of light pollution and attract fewer insects. The funding rate for investment projects was increased from twelve percent to 20 percent. The improved conditions for the promotion of heat generating systems based on renewable sources and local heating networks have resulted in the activation of geothermal and solar energy, industrial waste heat and heat from wastewater – in addition to the use of biomass for heating – as regionally available sources of energy for the heating supply. Funding is also granted to pre-investment studies on the funding eligibility criteria defined in the administrative provision. Cross-border network for the promotion of innovative projects in the area of sustainable development and energy efficiency in the wider region (GReENEFF) In this collaborative project spanning the wider region of Rhineland-Palatinate, Saarland, Luxembourg, Wallonia and Lorraine, the partners are continuing the cross-border network for the promotion of innovative projects in the area of sustainable development and energy efficiency in the wider region. The focal topics are innovative technologies and energy efficiency in social housing and in public buildings. Together, partners in the wider region organise further training and skills development measures and implement pilot projects as model schemes. One funding possibility is geared to public and private project developers. An overview of the supported projects is provided on the following website: https://www.greeneff-interreg.eu/de/eco-map. Pilot project for the regional supply of electricity from renewables to the wider area ("Energy Cells GR") In the pilot project for the regional supply of electricity from renewables to the wider area (Energy Cells GR), a concept is developed for the future supply of energy on the basis of the intermittent feed-in of renewable energy. The project identifies ways to balance local surpluses of intermittent renewable energy in the distribution network at the local and decentralised level using "energy cells", with the perspective of cross-border solutions between the cells in the future. In this way, electricity production and consumption can be organised regionally and balanced "between neighbours" in the future: https://energiewaben-gr.eu/Projekt.	Ongoing

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
115.	*Measures adopted by the Länder in the area of energy efficiency/ renewable heat*	**Saxony** Storage Guideline The goal of the "Storage Guideline" is the introduction of innovative energy technologies in the private, public and commercial sector. As the energy sector transforms, more and more importance is placed on distributed energy generation and storage units in particular. Increasing private consumption of solar power can make an important contribution to the system integration of electricity from distributed, small-scale photovoltaic installations, but also for solutions in neighbourhoods/estates for instance. This requires innovative, decentralised electricity storage solutions that balance the different patterns of energy supply (generation) and energy demand (consumption). At the same time, the projects help to implement Saxony's Energy and Climate Programme. In future the scope is to be extended to also include heat storage units for sector coupling.	In force since 14 December 2017, continuation planned with updated guideline
		Guideline Energy/2014 The goal of the "Guideline Energy/2014" is to cut carbon dioxide emissions from industry by directly or indirectly reducing the consumption of fossil fuels. At the same time, the projects help to implement Saxony's Energy and Climate Programme. The guideline is currently being revised and is to be developed further with a focus on industrial businesses in the future. The programme is being implemented within the framework of the European Regional Development Fund (ERDF).	In force since 7 May 2015; continuation and further development planned
		Saxony-Anhalt The *Land* government of Saxony-Anhalt adopted a Climate and Energy Strategy in February 2019. Overall, the Climate and Energy Strategy contains 72 measures to cut greenhouse gas emissions. The basis for evaluating the measures and instruments of the Climate and Energy Strategy was developed in a monitoring plan in 2019. The main emphasis of the monitoring system is placed on extending existing and developing new assessment systems to measure the effectiveness of measures/instruments to reduce greenhouse gas emissions. The monitoring system will be built up on a continuous basis in the coming years (2020–2024). The state of Saxony-Anhalt is currently in the implementation phase. The measures to cut greenhouse gas emissions must be implemented quickly and activities stepped up. The "Saxony-Anhalt ENERGY" funding programme under the ERDF has been in place since 2016. This programme supports measures to raise energy efficiency and increase the use of renewables in the business sector. With the "Storage System" funding programme, Saxony-Anhalt is supporting the procurement and installation of an electricity storage system for new on-roof photovoltaic installations in the period from 2019 to 2021. This is to encourage the introduction of innovative storage systems in the private sector, among small- and medium-sized enterprises (SMEs), or in landlord-to-tenant electricity projects. The topics of energy storage and sector coupling set down in the Climate and Energy Strategy are relevant for the future supply of energy and can also be addressed with the system integration of renewable energy in the form of "green hydrogen". Saxony-Anhalt launched a participatory process for the development of a Hydrogen Strategy for Saxony-Anhalt in early 2020. The outcome is to be a medium- and long-term strategy for the development of a viable and sustainable hydrogen economy in Saxony-Anhalt.	Resolution in February 2019; monitoring and funding programmes ongoing

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
115.	*Measures adopted by the Länder in the area of energy efficiency/ renewable heat*	Within the context of structural change, the "Centre of Excellence for the Heat Transition" is being developed, with planned headquarters in Halle. It is to be responsible for assisting municipalities across Germany in decarbonisation efforts, including support in the creation of heating plans, regional strategies, or in the area of sector coupling. Regional responsibilities will be broadened and jobs developed as a result. The project is funded as a Federal Government measure through the "2nd funding arm" of the "Coal-mining Regions Investment Act" *(Investitionsgesetz Kohleregionen)* within the framework of the Structural Reinforcement Act *(Strukturstärkungsgesetz)*.	
		Thuringia Environmental compatibility and sustainability are topics that are of central importance in the development of sports facilities in Thuringia, and the construction of new buildings and replacement buildings in compliance with energy requirements is customary practice. For example, in building projects the Free State of Thuringia deems additional costs that are incurred for energy-saving measures (e.g. heat pumps and heat recovery systems) and for installations for the use of alternative energy (e.g. sun collectors for solar energy use) as eligible for funding. In addition, Thuringia demands compliance with the Energy Conservation Ordinance *(Energieeinsparverordnung)* in the course of building permit procedures.	Established practice
		Climate Invest Guideline The Climate Invest Guideline supports climate change mitigation and climate adaptation measures in the municipalities. A broad range of investment-related and non-investment measures are eligible for funding. An amendment to the guideline increases the range of potential recipients of funding to also include social agencies and church-run organisations. Furthermore, the rates of funding were increased in light of the pressure of the COVID-19 pandemic and the staff and budgetary situation in the municipalities. Furthermore, the guideline was adapted to the amended Local Authorities Guideline *(Kommunalrichtlinie)* of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.	Amended guideline in force since the start of 2021
116.	National Hydrogen Strategy	Under the National Hydrogen Strategy, the Federal Government is establishing a coherent framework for action for the future production, transportation, exploitation and use of hydrogen, encouraging the relevant innovations and investment. The Federal Government considers only hydrogen that has been produced using renewable energy (green hydrogen) to be sustainable in the long term. The Strategy sets out the steps that are needed to meet the German climate targets, create new value chains for the German economy and foster energy policy cooperation at international level.	Cabinet decision: 10 June 2020
117.	Hydrogen Strategies of the *Länder*	**Bavaria** Bavaria adopted its Hydrogen Strategy on 26 May 2020. It creates the framework to position hydrogen as the fuel of the future and interconnect high-tech solutions, innovation and climate action. By adopting this Strategy, Bavaria is primarily aiming at the development and export of technologies for the generation, storage, transportation and use of hydrogen. A concrete roadmap for the period through to 2025 is currently being developed on the basis of the Strategy. A range of measures have already been launched or implemented: establishment of the Bavarian Centre for Hydrogen (H2.B) in September 2019 and simultaneous development of a Bavarian Hydrogen Alliance, currently comprising over 150 businesses, research institutions and municipalities; hydrogen research initiative in the Bavarian Energy Research Programme, adoption of a funding guideline on the expedited development of a hydrogen refuelling infrastructure for fuel cell buses and utility vehicles in October 2020.	Cabinet decision on 26 May 2020, ongoing implementation, Funding guideline for the development of a refuelling infrastructure entered into force on 1 October 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
117.	*Hydrogen Strategies of the Länder*	**Hydrogen Strategy for North Germany** The states of Schleswig-Holstein, Mecklenburg-Western Pomerania, Hamburg, Lower Saxony and Bremen adopted a joint "Hydrogen Strategy for North Germany" at the end of 2019. It envisages the installation of at least 500 megawatts of electrolysis capacity by 2025, and at least five gigawatts by 2030, for the generation of green hydrogen in northern Germany. The Strategy outlines initial implementation steps and rough timelines for the years ahead in the four action areas, namely "hydrogen infrastructure", "hydrogen value add", "hydrogen in guidelines, regulations and programmes", and "hydrogen acceptance and education".	Ongoing
		Saxony-Anhalt The Hydrogen Strategy forms the strategic framework for the development of a green hydrogen economy in Saxony-Anhalt. Saxony-Anhalt seeks to establish itself as an important centre for the production and use of green hydrogen in eastern Germany by 2030 and consolidate its position as an energy and industry hub. To this end, it will expedite projects particularly in the industrial sector and initial transport projects, as well as the expansion of the research infrastructure. By developing an infrastructure that interconnects other hydrogen centres, the aim is to create a networked hydrogen economy in eastern Germany, starting with the Central German coal-mining region.	Adoption in Q2 2021, subsequent implementation
		Thuringia The *Land* government of Thuringia is developing a Hydrogen Strategy. This Strategy will identify potential applications for hydrogen technologies in Thuringia, develop key projects and set out actions to be taken in the *Land* to strengthen hydrogen technologies. Thuringia's Strategy is to complement activities at national and European level.	Development and adoption in Q4 2020/ Q2 2021, subsequent implementation
118.	IPCEIs on hydrogen	The IPCEIs on hydrogen are a central industrial policy instrument to implement the National Hydrogen Strategy. The aim is to develop integrated processes along the entire value chain. The funding is aligned with the goals of the National Hydrogen Strategy and encompasses both the production and transportation of hydrogen, as well as hydrogen use, particularly in industrial manufacturing (e.g. direct reduction facilities in the steel industry) and for mobility. The IPCEIs on hydrogen therefore have the potential to play a key role in addressing existing market failures and avoiding carbon emissions in the industry sector.	A kick-off event with 22 EU Member States and Norway was held on 17 December 2020. An expression of interest procedure commenced in Germany on 14 January 2021.
119.	Steel Action Concept – For a Strong Steel Industry in Germany and Europe	In the Steel Action Concept, the Federal Government sets out an overall political strategy as to how the country's steel industry can be strong, internationally competitive and climate-neutral on a long-term basis. The Steel Action Concept addresses various challenges in the steel industry and pursues the following goals: 1. Create a level playing field on the global steel market; 2. Avoid carbon leakage (relocation of the steel industry and other energy-intensive industries to countries with less ambitious climate rules); 3. Facilitate the transition to low-carbon steel production and harness the opportunity to be a pioneer of innovative climate technology.	Cabinet decision: 15 July 2020
120.	Implementation of Item 35c of the Stimulus Package "Future Investments for Vehicle Manufacturers and the Supplier Industry"	The focus of "Future Investments for Vehicle Manufacturers and the Supplier Industry" funding programme is on the following three areas: • Promotion of investment in new technologies, processes and facilities (Industry 4.0, digitalised and flexible value added networks, GAIA-X, 5G in manufacturing) • Support for R&D projects (product innovations, autonomous driving etc.) • Promotion of regional innovation clusters (exchange of knowledge and experience, joint use of regulatory sandboxes, skills development) The funding is to specifically lend support to SMEs amid the process of transformation in the vehicle and supplier industry, in changing their production processes and in conducting R&D into technologies of the future. Furthermore, the development of regional transformation strategies and employment measures are supported by the "development of further training alliances" and "skills development clusters".	Cabinet adoption of the Stimulus Package on 29 June 2020. Implementation of Item 35c of the Stimulus Package in specific funding guidelines, which are to be published at the start of 2021.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
121.	Guideline for funding commercial vehicle fleet renewal	The funding guideline is designed to provide financial support towards the replacement of heavy-duty commercial vehicles with EEV emission standard Euro 0–V with new vehicles with emission standard Euro VI or with an electric or hydrogen-based drive system. In addition, grants are also provided towards the purchase of smart trailer technology, which offers considerable efficiency savings in operation and therefore reduces energy consumption.	In force since 9 January 2021
122.	Guideline for funding municipal emergency vehicle fleet renewal for the fire department, civil protection and emergency assistance	The funding guideline is to provide incentive in the form of financial assistance for the replacement of the existing emergency vehicle fleet in municipalities with modern vehicles. This is to make an appreciable and lasting contribution to reducing the CO_2 and pollutant emission level of the fleet in a short time frame.	Planned to enter into force at the start of 2021
123.	Important Project of Common European Interest (IPCEI): "Battery Innovation"	In the two IPCEIs on "Battery Innovation", 12 interested European Member States work together to create the conditions for battery innovations and value added networks based on such innovations. In future, batteries will be used in a host of products, such as electric vehicles, consumer goods, medical applications or industrial goods. Within the framework of the IPCEIs for "Battery Innovation", research-intensive activities are conducted in Germany and in other European Member States through to industry pilot-testing of new and innovative processes and products from the battery value-added chain – from raw materials and resources to recycling.	Approval for the first of two battery IPCEIs was granted by the European Commission on 9 December 2019. The German projects concerned will be approved by the end of 2020 for the most part. Notification of the second IPCEI expected in January 2021.
124.	Aviation Research Programme (LuFo VI-2)	The coronavirus pandemic has had a very serious impact on the aviation industry. Private and business travel has virtually ground to a halt. This has led to the cancellation of orders for new aircraft. A recovery in the near future is not expected. Investments in R&D are being analysed critically. The industry wants to use the acute crisis to prepare for the future challenges with regard to digitalisation and climate change. It needs technologies that both significantly reduce the sector's ecological footprint and are also suitable to remain competitive in a fiercely contested market. The aim is to make zero-emissions flight possible in the next ten years. To this end, the funding lines for hybrid-electric flight, Industrie4.0, digitalisation and AI are being expanded further systematically in the Aviation Research Programme (LuFo VI-2). In the "Ecological Efficiency" programme line, fundamental research is being driven forward in order to prepare new, innovative approaches for industrial application. In the field of hybrid-electric flight, close collaboration is sought within the Federal Government's National Hydrogen Strategy, as suitable energy sources need to be developed in addition to a broad range of aircraft technologies in the areas of drive systems, cells and materials. Specific developments and demonstrations are being planned for this purpose. The actions planned within the Aviation Research Programme and the supporting measures under the Hydrogen Strategy (Item 36 of the Stimulus Package) as well as the measures set out within the context of the Structural Reinforcement Act will help make zero-emissions flight a reality within the next ten years. This will allow the industry to preserve and create much-needed jobs and ensure environmentally compatible aviation.	Public notification of the Aviation Research Programme at the end of September 2020 Funding from the start of 2021
125.	Innovative shipbuilding safeguards competitive jobs	In this market-based support programme, the Federation and the *Länder* are supporting domestic shipyards in the first-time industrial application of innovative ship-building products and processes. The aim is to set incentives for increased investment in innovative products and processes. The programme reduces the technical and economic risks involved in building prototypes which, in the shipbuilding industry, also have to be put to commercial use as well. Support comprises a grant of up to 25 percent for innovation expenses. Projects of small and medium-sized enterprises can receive funding of up to 50 percent.	Funding guideline revision in 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
126.	Promotion of LNG fuelling vessels	Implementation of a measure in the Stimulus Programme to promote infrastructure for alternative marine fuels which are less harmful to the environment compared with marine diesel fuel.	Current status: Funding guideline being developed
127.	Shoreside electricity installations for the shipping industry	The Federation is providing financial assistance to the *Länder* for the promotion of shoreside electricity installations for sea-going and inland waterway vessels. Goal: reduce greenhouse gas, air pollutant and noise emissions during berthing time in ports.	The administrative agreement between the Federation and the *Länder* entered into force in November 2020. Financial assistance disbursed according to the defined *Länder* programmes.
128.	The Maritime Research Strategy with two funding measures: the "Maritime Research Programme" and the "Real-time Technology for Maritime Safety and Security" line of funding	The maritime sector is characterised by longer economic cycles, which makes it likely that the coronavirus crisis will have a longer impact here than on other sectors. The amounts of CO_2 and other harmful substances emitted by the current generations of vessels are one of the major challenges facing us as we seek to reach the climate targets and implement the energy transition, including in transport. The Maritime Research Strategy currently contains two funding measures: firstly the "Maritime Research Programme" and, secondly, the "Real-time Technology for Maritime Safety and Security" line of funding. The maritime research and development activities of the German maritime industry have been boosted with a significant increase in funding from the economic stimulus programme. The Research Strategy provides a framework for strengthening the maritime industry and for developing projects across different sectors and along the entire value chain. The Maritime Research Programme aims to strengthen innovative maritime technology solutions and applications in the face of international competition. It further seeks to safeguard and increase forward-looking jobs in Germany while fostering climate change mitigation and environmental protection. Technology development addresses the following segments of industry: marine technology, production of maritime systems, shipping and marine engineering. In addition to boosting innovation and strengthening competitiveness, R&D is to make progress in the following four areas: environmentally friendly technologies (MARITIME.green), digitalisation and smart technologies (MARITIME.smart), safety (MARITIME.safe) and resources (MARITIME.value). Increased funding is to go to projects that make a significant contribution to the energy transition in the maritime industry. Current challenges include the mobility transition, the avoidance and reduction of emissions, new environmentally friendly fuels, smart systems, process digitalisation, new requirements for maritime safety architectures and the environmentally friendly and sustainable use of marine resources. The long-term vision is zero-emission vessels.	Ongoing
129.	Measures to expand child day-care facilities	With the promulgation of the "Act on Accompanying Measures to Implement the Stimulus and Crisis-relief Package *(Gesetz über begleitende Maßnahmen zur Umsetzung des Konjunktur- und Krisenbewältigungspakets)* on 14 July 2020, the Federal Government launched the "2020–2021 Childcare Financing Investment Programme" and scaled up the "Special Fund for the Expansion of Childcare Services" by a total of €1.0 billion to create an additional 90,000 childcare places. As in the previous programme, the creation of childcare places for children until they start school is possible. The Federation has been contributing €845 million annually towards operating costs on a permanent basis since 2015.	Support is granted to investments in the new construction, expansion, upgrading, modernisation and renovation of facilities, as well as equipment and infrastructure, that commenced in the period from 1 January 2020 to 31 December 2021.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	Measures adopted by the *Länder* to improve the quality of education in childcare facilities and schools	**Comprehensive measures are in place in the *Länder* to improve the quality of education in childcare facilities and schools. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.** **Baden-Württemberg** Strengthening basic skills: teaching and learning spelling in primary schools To strengthen basic skills in German as a subject, the multi-state continuing training initiative entitled "Teaching and Learning Spelling in Primary Schools" was launched in the 2019/2020 school year. After this pilot round, the measure is being implemented as a specific further training project for up to 5000 teachers in Baden-Württemberg. Key aspects of the continuing training initiative include a five-part thematic series of online seminars and an in-depth look at the subject area and teaching theory. The participating teachers receive subject-related materials in a Moodle classroom and support from the regional advanced training of specially qualified trainers. The online seminar series is proving very popular among teaching staff.	2020/2021 school year (08/20 – 07/21)
		The "textperts" – improving reading and writing skills at lower secondary schools *(Hauptschule/Werkrealschule)* Strong language skills are key to successful learning outcomes. However, almost one third of all pupils at lower secondary schools *(Hauptschule/Werkrealschule)* do not attain the minimum standard of literacy for a lower secondary school leaving qualification *(Hauptschulabschluss)*. To improve the language skills of pupils at lower secondary schools, this pilot project will initially provide support to fifty grade-5 pupils at lower secondary schools *(Hauptschule and Werkrealschule)* in the areas of literacy, writing skills and text comprehension. The Baden-Württemberg Centre for School Quality and Continuous Teacher Training will oversee the project and support the schools in the implementation of the project and through continuing training courses for teachers taking part.	2020/2021 school year (until October 2021)
		Ensuring basic German and maths skills in grades 1–8 Planned 64-module further training approach: The modules to be developed are based on milestones reached as learning progresses, deal with pupils' core German and mathematics skills in a spiral curriculum approach and builds on them further. They have a standardised structure and offer teachers units that reinforce foundations in disciplinary knowledge and the teaching approach; explanations of the diagnostic techniques and tools, and tips and advice regarding differentiated instruction and coaching. Teachers should be able to have quick access to the offerings at all times (available on a platform). The modules provide ideas on how to structure a lesson, are independent of course books, easily accessible and self-explanatory. They offer online seminars, explanatory videos (examples for in-lesson implementation), materials for download, and apps/links. The content is complemented by the school-related or regional offerings of the specialist consultants on education, as well as in-school on-demand events.	Starting from February 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	*Measures adopted by the Länder to improve the quality of education in childcare facilities and schools*	**Bavaria** Measures to expand and improve the quality of child day-care facilities To boost the quality of child day-care facilities, the Free State of Bavaria has adopted an additional bundle of measures alongside the measures already in place: • A management and administration bonus was introduced for child day-care facilities with effect from 1 March 2020 to relieve the burden on those running the facilities. This particularly aims to allow management to concentrate on the core educational tasks and enable further steps towards quality improvement. Under the guideline, the facilities receive a flat-rate support amount subject to the booked time factors (number of weekly hours of care agreed between parents and childcare facility) of the children cared for in the facility. • Furthermore, to strengthen the area of child day-care, the Free State of Bavaria has been providing funding for the permanent employment of day-care staff and assistants in child day-care facilities since 1 February 2020. This creates new ways to reach out to new interested parties and enable newcomers from other professional fields to enter the field of childcare. In addition, as the assistants are not included in the staff-to-child ratio, they offer additional relief and support for teaching staff. • The timeframe for the parental contribution subsidy has been expanded since April 2019. As a result, financial relief is provided to parents throughout their children's entire time at kindergarten, barriers to access are removed and participation is supported. • Since 1 January 2020, the Bavarian crèche allowance has been providing financial relief for parents paying parental contributions to nursery care. Relief is in the form of up to €100 per child per month from the child's first birthday and is granted to parents who do not earn above a certain amount and actually pay the parental contribution in childcare facilities. The crèche allowance and the parental contribution subsidy follow on from one another chronologically.	Ongoing measures (Continuation planned for 2021)
		Courses for intermediate school-leaving certificate *(Mittlere Reife)* in grades 5 and 6 Courses for the intermediate school-leaving certificate *(Mittlere Reife)* prepare suitable pupils early on for admission to streams studying for the intermediate school-leaving certificate at general secondary schools *(Mittelschule),* and thereby increase the pupils' chances of obtaining an intermediate school-leaving certificate. The M5/M6 courses prepare pupils for German, mathematics and English. The option of providing M5/M6 courses gives *Mittelschule* general secondary schools an additional tool to specifically train pupils with potential to work independently at a higher level. They do this by gradually increasing the pace of learning and the complexity of the assignments, and thereby facilitate the pupils' transition to grade 7 streams studying for the intermediate school-leaving certificate at *Mittelschule* general secondary schools. Completion of M5/M6 courses is not, however, a prerequisite for subsequent admission to streams studying for the *Mittlere Reife* intermediate school-leaving certificate.	Started in the 2020/2021 school year
		Berlin Since 2016, operators of child day-care facilities have received support (compensation) on request for two hours of mentoring per week for employees receiving in-service training to become an early childhood educator (ECE). The graduated 3-2-1 model has applied since February 2018, with three hours of mentoring per week in the first year of training, two hours in the second year and one hour in the third (*Land* funding of approx. €11 million in 2020). Using funds provided under the Quality Childcare Act *(Gute-Kita-Gesetz)*, this model has also been rolled out to employees in the dual/cooperative childhood education study programme since February 2020. In addition, operators receive compensation for preparatory and follow-up mentoring work for employees who are studying or in training: compensation is for one hour per week from the 2020/21 day-care year, and two hours per week from 02/22. Furthermore, from 02/20 operators receive one hour per week for the mentoring of people who have changed career and are in their first year of work in the field (related groups of professions, other suitable individuals and people for the realisation of a special (e.g. bilingual) model). This will be increased to two hours from February 2021.	Introduced in 2016, rules expanded since 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	*Measures adopted by the Länder to improve the quality of education in childcare facilities and schools*	Career changers are another important component of the strategy to secure the supply of staff. The employment opportunities for people changing career to work in child day-care facilities were expanded in August 2018 (e.g. other suitable persons, staff for the realisation of a special (e.g. bilingual) model). Clear and practical information on the rules that apply for specialist staff and ideas for organising mentoring are provided in a handy "postcard" format for day-care facility operators, available online at https://www.berlin.de/sen/jugend/fachkraefte/kitakarten-fachkraefte.pdf. A further training plan (foundation and specialisation course) that applies throughout Berlin and is implemented at technical colleges for youth work and education was introduced in Berlin in autumn 2018. This plan regulates vocational further training to become a youth work and educational professional in child day-care facilities and training to provide supplementary support and care in the context of all-day services for career changers with the option of becoming a skilled worker.	
		Brandenburg Measures to expand and improve childcare facilities In addition to the steps to improve staffing in child day-care facilities which have been taken since 2010, other measures are planned in the legislative term that has commenced (2019–2024). Since 1 August 2020, improvement in the staffing ratio for kindergarten-age children from 0.8:11 or 1:11 to 0.8:10 or 1:10; additional improvements for crèche-age children planned through to 2024; 2020: €16 million (5 months), 2021 €40 million.	1 August 2020; additional steps planned through to 2024
		Guideline for Child Day-care (since 1 August 2019) The purpose of the funding is to cover additional staffing costs that are incurred by providers of child day-care facilities as a result of measures to increase the number of staff in order to guarantee longer periods of childcare. A flat rate of €600 per budget year is provided for each child for whom an average period of care of more than eight hours per day (in excess of 40 hours per week) has been contractually agreed. In 2019, facility operators received €8.5 million for the provision of care services for children with longer periods of care, and €21.3 million in 2020.	Guideline extended from 1 January 2021 to 31 December 2022 €42 million in total (€21 million/year)
		2019–2022 Investment Programme *Land* investment programme to create new childcare places in child day-care facilities from 2019 to 2022: with the estimated budget in 2020 (€5 million) and the commitment appropriation for 2021 and 2022 (€5 million per year), additional places in child day-care facilities can be funded (new construction, extension, upgrading) to increase the number of places available for children in *Land* Brandenburg.	Start 1 December 2019–31 December 2021 €15 million in total (€5 million/year)
		2021–2024 Municipal Investment Programme Investment programme within the context of small-scale modernisation, renovation and energy retrofitting measures that serve the provision of childcare services in nurseries and child day-care centres for children from birth until they start school.	Planned start 1 January 2021-31 December 2024 €20 million in total

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	*Measures adopted by the Länder to improve the quality of education in childcare facilities and schools*	Kindergarten Check Preparation to implement a scientifically based quality assessment method ("kindergarten check"), and conduct a Europe-wide bid invitation for this method, with the aim of establishing a quality monitoring system at *Land* level and the evidence-based development of teaching quality at the level of the child day-care facilities. The draft budget plan of the Ministry of Education, Youth and Sport of the Federal State of Brandenburg contains a budget item 0505060 of title group 61 "Kindergarten Check Quality Monitoring" with a defined budget of €1,480,000. With this item, Brandenburg has therefore made provisions in the budget to ensure that the newly developed "Kindergarten Check" evaluation instrument can be put out to public tender, and the contract awarded, in 2021 and that up to 250 child day-care facilities can take part on a voluntary basis each year. Action to attract skilled workers and develop skills Improvement of the quality of mentoring and guidance in practical "hands-on" learning environments with an additional mentoring time of three hours per week.	Planned announcement of bid invitation: March 2021
		Mobilising sufficient funds to maintain the child day-care structure Continued payment of all subsidies, continued financing of all current programmes in the field of child day-care services and reimbursement of parental contributions incurred for emergency care in order to safeguard the structure of child day-care services.	Continuation planned
		Hesse Measures to strengthen all pupils' fluency and articulation in German The basis for the measure is the recommendation issued by the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* on 5 December 2019 for all *Länder* to strengthen and promote articulation and fluency in the German language on a lasting basis. This is already being implemented in Hesse by the following actions, for example: the establishment of the Orthography Centre in collaboration with the Goethe University of Frankfurt, the Hesse Teacher Academy and the Polytechnic Foundation; engagement of special advisers for German as a language of culture and education at the state education authorities; the introduction of an additional German period in primary schools and changes in legislation for mandatory participation in a preparatory course in the year before the child starts school if a recommendation is issued to this effect.	The actions mentioned have already been implemented in Hesse since 2020; other measures focussing on the 2021–2023 period are currently in the finalisation process
		Digital Pact for Schools To expand the digital infrastructure, the Federation has agreed three additional programmes with the *Länder* to supplement the Digital Pact for Schools 2019–2024 administrative agreement. As a result, Hesse will receive around €37.2 million for each programme. Hesse will increase this amount by €12.8 million in both the First and the Second Annex to the Digital Pact for Schools using funds from the "Special Fund to Safeguard a Good Future in Hesse". This will benefit operators of public schools, alternative schools and nursing schools.	Implementation until the end of 2023
		Mecklenburg-Western Pomerania (MV) Measures to improve all-day care for children of primary school age in schools; guideline on the provision of grants to develop the infrastructure for all-day care for primary school children in schools Pursuant to the administrative agreement with the Federation, the state of Mecklenburg-Western Pomerania is providing grants for investment measures to improve the quality of all-day education and care services for primary school children in schools, and associated measures that are geared towards improving the quality of these services.	Expected to enter into force at the end of March 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	*Measures adopted by the Länder to improve the quality of education in childcare facilities and schools*	Cooperative Initiative for All-day Learning *Land* Mecklenburg-Western Pomerania has joined forces with a broad spectrum of social stakeholders for the common goal of bringing schools and extracurricular partners together, create local networks and together make resources available for the organisation of all-day services for pupils.	Continuation of the interest group which was started in 2018/2019; 16 partners are currently involved
		ESF measure: Complementary Hours/Intensive Learning Hours and Coaching With the ESF-funded measure which has been in place since 2015, pupils at 34 selected regional schools and comprehensive schools across the state receive targeted support through additional teaching hours to help them obtain the best possible school qualification they can manage. Each class receiving support is entitled to a total of three periods per week for tuition in the core subjects German, maths and English, and for teacher coaching.	Suspended for the 20/21 school year due to the COVID-19 pandemic; expected to continue in the 21/22 school year
		Mecklenburg-Western Pomerania School Package Teachers in upper secondary level *(gymnasiale Oberstufe*) in Mecklenburg-Western Pomerania who have turned 63 additionally receive up to two teaching period credits (teaching period credit: a teacher gives one class less and performs another task instead).	Since August 2020
		New study programme for primary school teaching in the fields of mathematics, German, Protestant religion, English, art, Low German, philosophy with children, Polish, and social studies and general science The University of Greifswald has introduced a new study programme for primary school teaching in the fields of mathematics, German, Protestant religion, English, art and design, Low German, philosophy with children, Polish, and social studies and general science. In future, the practical component of the study programme for primary school teaching will be increased, with students required to complete an additional six months of practical experience during the study programme. During the study programme, students will have a fixed day of practical work from the very first semester. In the long-term, the University of Greifswald will offer 375 study places for primary school teacher training.	In the 2020 winter semester
		Higher remuneration for primary school teachers With effect from 1 August 2020, primary school teachers are remunerated according to the A 13/E 13 grade and therefore earn the same as their colleagues in other schools. Primary school administrators will also receive more money. Provisions for the higher salary grade for primary school teachers are included in the €200 million package that the *Land* government of Mecklenburg-Western Pomerania launched. In addition to the amendments to salary-related legislation and collective bargaining grades, amendments will also be made to teacher training in the primary school segment. This is due to increased demands of the job.	August 2020
		ESF-funded further training measures to promote continuing training to individualise teaching and learning processes in the field of inclusive school development Additional further training measures adopted by *Land* Mecklenburg-Western Pomerania for teachers in regional schools and comprehensive schools and also vocational schools in the period 2016–2022. These support the strategy of the *Land* government to create an inclusive education system in Mecklenburg-Western Pomerania. The focus is on further training for school administrators and teachers on various aspects of inclusion in the field of education. Inclusive education is to be achieved, in particular, through individualised lessons for all pupils in lower secondary level. Further to this, support is given to school administrators and teachers at vocational schools (upper secondary level) to introduce and implement inclusive approaches in the schools. The continuing training measures comprise courses for teachers at selected schools over a period of six months to two years, as well as workshops and continuing training courses (ranging from eight to 42 hours) for the entire faculty at a school.	This measure was suspended for the 2020/2021 school year due to the COVID-19 pandemic.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	*Measures adopted by the Länder to improve the quality of education in childcare facilities and schools*	Restructuring the flexible end-of-school phase: introduction of *"Berufsreife dual"* *"Berufsreife dual"* is a two- to three-year educational programme which qualifies the pupils to enter basic vocational training *(Berufsreife qualification)*. It is designed as an effective tool to increase the numbers of successful school leaving qualifications. At up to 50 schools (regional schools, comprehensive schools), study groups are set up for pupils at risk of not obtaining a school-leaving qualification. In these groups, pupils are taught according to an adapted syllabus through a close dovetailing of theory and practical work (long-term practical training).	Postponed due to the COVID-19 pandemic, originally planned for the 2020/2021 school year, introduction in the 2021/2022 school year
		First amendment to the Educational Leave Act *(Bildungsfreistellungsgesetz)* in Mecklenburg-Western Pomerania According to the current wording of the law, an application for the recognition of a further training event must be submitted in paper form to the competent authority, in this case the *Land* Office for Health and Social Affairs. With the amendment, the application procedure can be organised in such a way that it can meet the requirements of a digital application process in the future.	Entry into force on 1 January 2021
		ESF measure "Voluntary 10th Grade" In place since 2014, this ESF-funded measure offers a voluntary 10th grade at selected schools across the state focussing on learning-related special needs so that pupils can pass 9th grade and earn the Berufsreife qualification, which qualifies the holder to enter basic vocational training. The target group includes pupils with special educational needs or learning difficulties. The aim is to reduce the percentage of pupils who leave the general education school system without obtaining the Berufsreife qualification.	Implementation in the 2020/2021 school year: 30 classes at 26 locations with 360 pupils; graduation rate in the 2019/2020 school year stood at roughly 90 percent
		"M-V Can Swim" programme This programme seeks to ensure that more primary school pupils in Mecklenburg-Western Pomerania are confident swimmers. It assists providers of swimming courses in offering swimming classes in the school holidays to children of primary school age who are not confident in the water. The *Land* government is making a total of €130,500 available for the school holidays.	July 2020
		Further training of teachers and teaching staff from other fields at vocational schools An additional focus in Mecklenburg-Western Pomerania is placed on the further training of teachers or teaching staff transitioning into the school system from other fields, particularly at vocational schools, who teach subjects that are not in line with their formal qualifications or who do not have an adequate background in education. Support is provided against the backdrop of demographic change and the concomitant restructuring of vocational schools. Action has also been taken in response to the new challenges of vocational schools to teach young people from a migrant background in what are termed "BVJ-A" classes, i.e. preparatory classes in a pre-vocational training year for foreign pupils. With these pupils transitioning to courses at vocational schools, and as a result of current restructuring processes at vocational schools, the groups of pupils receiving instruction at vocational schools are becoming increasingly heterogeneous. This is addressed with targeted further training for teachers in vocational schools. and the Federal programme entitled "Living Democracy!"	Starts in 2021
		Promotion of democracy and political education Advice and support for the promotion of participation and political education as part of the *Land* programme to "Strengthen Democracy and Tolerance Together!" and the *Land* government's associated strategy to implement the *Land* programme entitled "Living Democracy!"	2020–2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	*Measures adopted by the Länder to improve the quality of education in childcare facilities and schools*	First amendment to the Educational Leave Act *(Bildungsfreistellungsgesetz)* Uptake of educational leave is to be increased by implementing measures to ensure the full drawdown of budgetary funds for reimbursement pay, including the measure to reduce the minimum duration of political further training events and further training events related to voluntary activities from three days to two. In this way, smaller centres for political and voluntary work-related further training can expand their offerings. Greater uptake of these offerings is expected. Furthermore, provisions are made to increase the share of the budget available for reimbursement payments for vocational further training measures from one third to one half. A greater number of requests for reimbursement for the area of vocational further training can therefore be approved in the future. In future, it should also be possible for individuals to carry over entitlements to release from work from one year to the next.	Enters into force on 1 January 2021
		Establishment of a Mecklenburg-Western Pomerania Literacy Network As part of the "National Decade for Literacy Skills" – a joint Federal/*Länder* initiative – a *Land* strategy for literacy training/basic education has been developed which also includes the establishment of a Mecklenburg-Western Pomerania Literacy Network. This network – which includes the Mecklenburg-Western Pomerania Coordination Centre for Literacy/Basic Education (part of the Association of Adult Education Centres in Mecklenburg-Western Pomerania), a Mecklenburg-Western Pomerania Chamber of Crafts and Trade, a Mecklenburg-Western Pomerania Chamber of Industry and Commerce and the Mecklenburg-Western Pomerania Ministry for Education, Science and Culture – commenced operations in the period under review and developed a model to address functional illiteracy.	Current decade until 2026
		Lower Saxony Lower Saxony plan for "More Skilled Professionals for Child Day-care Facilities" → Action to Increase Numbers in Training Create additional training places for youth work and education assistants and early childhood educators. Expand in-service and remunerated training formats as a standard offering. The full-time and part-time offerings of both training programmes have been and are being provided and expanded throughout the state, providing candidates with different ways to complete their training. They can select the training format that best suits their current situation in life and therefore receive the opportunity to get a professional qualification, participate in the economy and integrate.	Ongoing
		Lower Saxony plan for "More Skilled Professionals for Child Day-care Facilities": Recognising Educational and Professional Experience Expand conditions for entering the profession and the recognition of foreign educational qualifications. Development of adaptation courses for applicants with a foreign educational qualification to enable their integration into the field of youth work and education.	Planning through to 2022
		Introduction of a legal right to all-day care for primary school children The introduction of a legal right to all-day care for primary school children would force the pace on the development of all-day services. Pupils who are affected by child poverty could receive better support within the framework of all-day schooling. However, long-term financing must be clarified with the Federation, as must action to secure the supply of skilled labour, before the legal right can be introduced.	Negotiations between the Federation and the *Länder* still underway

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	*Measures adopted by the Länder to improve the quality of education in childcare facilities and schools*	Measures adopted by the *Länder* to improve school education, increase the provision of all-day services and reduce the rate of early school leavers With the enshrinement of all-day schooling in the School Law *(Schulgesetz)* and the new all-day school decree, all-day schooling provides a holistic range of educational services that interlink in-class instruction and extracurricular activities. By assigning more teaching staff also to extracurricular programmes, it is possible to provide individual support and encouragement to pupils irrespective of their social background.	Resources amounting to around €1.6 billion (full cost basis) are made available in the medium-term planning period (2020 – 2024) for all-day school services.
		School [PLUS] – Schools and the Living Environment programme: Schools in difficult social environments often face particular educational and organisational challenges and need extra conceptual and material support. The School [PLUS] programme contributes to achieving educational equity and equality of opportunity and aims to improve conditions at the 20 schools under the programme and gain insights for other schools. School [PLUS] is based on intensive school development, taking the schools' specific situation and regional conditions into consideration. To this end, the schools are supported and guided by four school development teams from the Regional Land Offices for School and Education and the Lower Saxony State Institute for School Quality Development (NLQ) over an initial period of two years. In addition to this advisory resource to help with school development, all schools were also granted 15 additional teaching periods per week at the start of the programme. Further to this, a total of 75 full-time teacher units and 25 full-time units for school-based social work are available to the 20 schools under the School [PLUS] programme, which can be fully and/or partially converted to capital. The programme is accompanied and evaluated by an external agency, inter alia.	October 2018 to summer 2021
		North Rhine-Westphalia (NRW) With the reform of the NRW Child Education Act *(Kinderbildungsgesetz)*, significant volumes of additional *Land*, federal and municipal funds are being made available to improve quality since the start of the 2020/2021 kindergarten year on 1 August 2020. These sums will be invested to improve staffing and provide better incentives for staff training and skilling, to make opening times more flexible, to enhance language learning and development, to make improvements in the areas of child day-care and family centres, and to extend exemption from parental contribution payment by one additional year.	Start of the 2020/2021 kindergarten year on 1 August 2020
		Measures to integrate refugees into higher education institutions and the labour market With the "NRW Paths to Study" programme, the state of North Rhine-Westphalia has been assisting higher education institutions since 2017 in the integration of refugees who are interested in studying by funding courses to prepare individuals technically and linguistically for a study programme, and by also funding advisory staff positions. Since 2020, the programme has also enabled higher education institutions to closely mentor students with a refugee background during their studies, with a particular focus on the provision of support during the transition to the labour market.	2020–2022
		Targeted resources for special education projects Positions have been created for advisory and coordination needs to support the Training Consensus; 70 positions for "No Qualifications without Prospects" *(Kein Abschluss ohne Anschluss)* have been added annually, with the result that a total of 490 positions were available in the 2018/2019 school year and 510 positions will be available annually as of the 2019/2020 school year when the initiative is in the final stage. In addition, 226 transition mentoring positions are available under the "No Qualifications without Prospects" initiative to support and guide pupils doing long-term practical training.	In the final stage from the 2019/20 school year

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	*Measures adopted by the Länder to improve the quality of education in childcare facilities and schools*	Multi-professional teams for inclusion and integration in vocational training To strengthen vocational education and training, 400 positions have been created at vocational schools for multi-professional teams for inclusion and 300 positions for multi-professional teams to mentor and support the schooling of young people who have immigrated to North Rhine-Westphalia. Furthermore, the vocational schools have been given 250 positions to improve the provision of teaching and instruction, particularly in the part-time educational programmes of the dual system of education and training. The number of positions will be increased to 300 in 2021. In addition, the vocational schools have received 200 positions to continue the "Fit for More" programme.	2021: Number of positions increased
		Rhineland-Palatinate Support programme for schools in challenging environments: S4 – Strengthen Schools, Strong Schools Under the "S4" project, schools in challenging environments are supported and strengthened with the tools to enable all pupils to achieve their best possible educational outcome irrespective of their background. The project promotes the interconnection of schools at the school management level and networking amongst the colleagues of the schools participating in the project and with partners in the social environment. As the project is monitored scientifically, the aim is to gather reliable information on what schools in challenging environments need in order to be supported on a sustained basis. On the basis of these findings, the effective parts of the project will be translated into advisory and support structures on the longer term.	Project runs from 2021–2024; Project has started with two cohorts of 53 schools in total
		Continuation of the programme to expand all-day schools The expansion of all-day schools will be continued as necessary. All-day schools are an indispensable part of educational services. They are very popular and are key to ensuring equal opportunities and reconciling child-rearing with work commitments. In organising their educational approach, the all-day school services on offer take the needs and interests of the pupils into consideration. The set framework defines four mandatory elements: measures to supplement in-class lessons, thematic projects, support and coaching, and leisure activities.	Commenced in 2002, expansion will be continued as required; currently 642 all-day schools available
		"Everyone Gets a Qualification" project *(Keiner ohne Abschluss)*: The implementation of the special 10th school year according to the principle of "Everyone Gets a Qualification" helps to improve the future prospects of young people who have had little or no chance of obtaining a certificate qualifying for a vocation and training place. Guided by the conceptual principle of the special 10th school year, schools taking part in the project have developed their own specific approaches which take into account the particularities and overall situation of the school as well as the needs of the pupils.	Currently being implemented at 14 schools; expansion will be continued as necessary Runs from March 2021 to November 2021
		Saxony School Assistance programme: Additional staff are to be recruited at schools in order to support and relieve teachers. Educational school assistants play an active role in implementing the education mandate by supporting teachers in instructing, educating, advising, assessing and caring for pupils and encouraging their development, and by relieving the burden of extracurricular activities on teachers. The School Assistance programme is to be rolled out to every second state school by the 2024/25 school year. Ideally, every state school is to have a school assistant by 2030. The programme is financed through funds of the Free State of Saxony.	Will run until 2023; subsequent expansion of programme

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	*Measures adopted by the Länder to improve the quality of education in childcare facilities and schools*	Pilot project for language and integration facilitators at selected schools One element of the "School Assistance" project are language and integration facilitators. These facilitators assist schools in Saxony in integrating pupils from a migrant background into the school system by specifically working together with teachers, school social workers and external partners. Furthermore, in some cases they also provide lessons in the pupils' native language and strengthen and develop intercultural communication and collaboration with parents.	Ongoing pilot project
		Measures for children with special learning difficulties and complicated life circumstances To improve the life skills and equal opportunities for children from socially disadvantaged backgrounds, additional early childhood educators are assigned to selected child day-care facilities with a particularly high percentage of vulnerable children. The aim is to strengthen the children's development and to address learning and developmental gaps at an early stage so that the children can be successful in the further course of their education. An external expertise and advice centre provides professional guidance and support for the additional professionals in the selected child day-care facilities.	Ongoing, additional educational professionals
		Thuringia "Thuringia Parent and Child Centres" (ThEKiZ) *Land* Strategy The "Thuringia Parent and Child Centres" Strategy, or ThEKiZ for short, aims to support the self-determination and autonomy of families, promote family networks and activate potential self-help capacities in families. In 2019, 41 ThEKiZ centres had already been established across 19 rural and urban districts. With the commencement of municipal implementation of the *Land* programme "Generations Coexisting in Solidarity" on 1 January 2019, the previous "Thuringia Parent and Child Centres" funding programme was incorporated into the "Generations Coexisting in Solidarity" programme as a special programme. The development strategy for Thuringia Parent and Child Centres is based on a five-pillar model: the networking of all stakeholders and actors in the field of early childhood education; *Land* funding for local providers of youth welfare services to develop facilities further; a coordinating transregional service centre; the provision of professional process support; and the provision of a further training programme in line with needs.	Since 2015; reorganisation of the funding framework in 2019
		"Talent in Schools" – joint initiative of the Federation and the *Länder* to mentor and support high-achieving and potentially very gifted pupils The aim of the "Talent in Schools" *(Leistung macht Schule)* initiative is to optimise the development opportunities of high-achieving pupils and those who are potentially very gifted. A particular focus is to be placed on the potential of children and young people from homes with less access to education, particularly families from a migrant background, and on achieving a gender balance, particularly with regard to girls in STEM disciplines. The initiative is targeted at pupils in grades 1 to 10 in all types of school (primary school and lower secondary levelI), and also at pupils in upper secondary level where applicable. The initiative is to initially focus on the areas of mathematics, science, German (productive writing and argumentation/reasoning skills) and foreign languages (English). Socio-emotional, artistic, creative and psychomotor potential can also be complementary focal areas. Comprehensive measures are in place in the *Länder* to improve school education, increase the provision of all-day services and reduce the rate of early school leavers. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.	Phase 1 to 2022: Development of concepts, strategies, measures Phase 2 (2023–2027): Transfer of results and roll-out to a larger number of schools

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
130.	*Measures adopted by the Länder to improve the quality of education in childcare facilities and schools*	Development of a data gathering tool to assess the intercultural competences of schools The aim of the formative assessment tool that is to be developed is to help quantify the degree of intercultural competence of schools as organisational units, and identify recommendations for the future work of the individual schools on the basis of the results. By changing the perspective of key stakeholders in schools and adapting the institution's structures, methods, curricula and practices to a in many ways pluralistic student body, the aim is to reduce the percentage of pupils who leave school without a qualification.	Tool development commenced in November 2020, testing and dissemination in 30 schools to July 2022
		Promotion of the "Active with Media – Media Mentors for Seniors" project Support to help seniors use new media is particularly important, which is why the Free State of Thuringia has been funding the "Active with Media – Media Mentors for Seniors" *(Aktiv mit Medien – Medienmentoren für Senioren)* project since 2016. The regional film service *Landesfilmdienst Thüringen e.V.* is responsible for organising the project and trains volunteers of all ages to become media mentors. On completion of the basic training, these volunteers are then able to teach older people how to use a smartphone, tablet etc. This expands and strengthens the media skills of the elderly. By increasing acceptance of media applications, this programme is helping to alleviate concerns, impart knowledge, make daily life easier for individuals and thereby improve individual quality of life. Furthermore, by promoting the use of media the programme seeks to improve individuals' social skills, increase their interaction with family members and friends, and thereby strengthen the link connecting the different ways of life of different generations. Within the reporting period, the project will receive approximately €60,000 in funding per budget year (partial funding, 80–90 percent by the *Land*).	Continuous funding planned from 2021 onwards
131.	Measures adopted by the *Länder* to promote digital education	**Comprehensive measures are in place in the *Länder* to promote digital skills. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.**	
		Baden-Württemberg: Immediate equipment programme as part of the Digital Pact for Schools (50 percent federal programme co-financing Under the programme, school authorities in Baden-Württemberg receive a total of €130 million – half from the Federation and half from the *Land* – to purchase digital end-user devices in the COVID-19 crisis. These devices can be loaned to pupils who need them, and also to teachers in individual cases. This makes it possible to purchase 300,000 devices, which would equip 20 percent of all pupils.	100 percent of funds disbursed to school authorities. Of this amount, approx. 50 percent has been invested. Runs from 07/2020–07/2021
		Baden-Württemberg: The State of the Future – Emerging Stronger from the Crisis *(Zukunftsland BW – Stärker aus der Krise)* State schools and private schools in Baden-Württemberg are receiving €40 million as a school-related budget for digitalisation measures that are not covered by the Digital Pact and supplementary agreements to the Pact, or for investments in, and operating expenses for, measures to improve the quality of indoor air and maintain health in schools. All 4,500 schools receive a basic amount plus an additional amount depending on the number of pupils.	Implementation without application procedure by December 2020
		In-service teacher training in digital teaching The activities of in-service teacher training are strengthened with the conclusion of the "Administration" additional administrative agreement. Measurable criteria have been agreed to this end. Subsequently, additional annual budget resources of €2.5 million were made available for both 2021 and 2022, and of €2.0 million for both 2023 and 2024.	In planning: 2021–2024

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
131.	*Measures adopted by the Länder to promote digital education*	New education plans at grammar schools *(berufliches Gymnasium)* Improved skills orientation. Integration of the objectives and requirements of the "Education in a Digital Age" strategy, which was adopted by the Standing Conference of the Ministers of Education and Cultural Affairs. Improve pupils' capability for tertiary education.	Concept and development completed, introduction in SY 2021/22
		Bavaria Special budget for loan equipment issued to pupils The additional €77.8 million in funding provided by the Federation through an amendment to the Digital Pact for Schools for the purchase of equipment provided on loan to pupils is being scaled up with an additional €30 million of *Land* funds. The aim is to build a pool of 250,000 mobile devices that are available on loan to ensure fair educational opportunities during the pandemic and in cases of remote learning.	Approval period July 2020 to March 2021, already largely implemented
		Establishment of the Office for Media, Education, Didactics and E-Sessions at the Dillingen Academy for Teacher Training and Personnel Management Range of videoconference-based further training formats available throughout the region; low-threshold and flexible further training offerings that are geared to the target audience and aim to strengthen media-related teaching skills.	Started in September 2020
		Berlin Vocational Education "Learning Bridges" *(Lernbrücken der beruflichen Bildung)* The "Vocational Education Learning Bridges" programme creates the framework for school-supervised at-home learning during the pandemic. The contents of the lessons are developed along the framework curricula for the individual subjects, fields of learning or study areas in the form of digital proficiency tables, assignments and checklists/solutions. Cellphone-compatible formats are also available in the study groups for pupils improving their German language skills in "welcome classes" and pupils in classes offering integrated preparation for vocational training. The programme ensures hybrid teaching formats in times when opportunities for in-person teaching and instruction are limited, and particularly improves the independence and digital skills of educationally disadvantaged students.	Largely completed in 2020, continuation planned for 2021
		Digitalisation coordinator training In this modular upskilling measure comprising a total of 160 hours, participants are trained for two years in all the relevant skills and are already deployed during this time as disseminators in their own schools. The aim of the further training programme is for participants to be deployed at their schools as coordinators for digitalisation-related issues.	Commenced in 2020, completed in 2022
		Advice and guidance for school development oriented to digitalisation Development of an approach for the provision of specialised systemic advice and guidance for schools in the areas of organisational development, lesson development and HR development, and for the scenarios of digitally supported face-to-face teaching and school-supervised at-home learning. Subsequently, all schools in the vocational field are to be given the opportunity to receive digitalisation-oriented school advice and guidance.	Commenced in 2020, completed in 2021
		Procurement and distribution of mobile devices for pupils in vocational schools/ upper secondary colleges offering general and vocational education (*Oberstufenzentrum)* A total of 2,500 mobile devices are purchased. They are distributed to schools on a percentage basis, based on the number of pupils who are exempt from payment towards learning materials. The devices are loaned to pupils who do not have access to existing technical devices in their homes. The selection is made by the schools.	1,700 devices distributed to schools in Q4 2020 and 800 in Q1 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
131.	*Measures adopted by the Länder to promote digital education*	Plan to implement the organisation of IT support at vocational schools The aim is to develop effective support resources for Education 4.0. This also means that every school has at least one position for IT support skills. Each school has a partial position (generally ½) until the IT administration positions are fully staffed (1 IT administrator per school).	Every school has a partial IT admin position in 2020.
		Digital classroom management, class register/Webuntis A pilot project for classroom management (WebUntis class register) has commenced for vocational schools and upper secondary colleges offering general and vocational education *(Oberstufenzentrum)*. All schools have the opportunity to take part in this pilot project. It is expected to enable up-to-date documentation from any location, allowing teams of teachers to have a clear overview of attendance and course content. It is possible to provide information about the lesson content and student reachability at any time in a transparent manner. Signs of regular non-attendance can be detected early on and teachers can take suitable measures to address the situation.	Started in June 2020, 17 schools were taking part in the project in October 2020.
		Web portal of vocational schools and upper secondary colleges offering general and vocational education in Berlin – web domain www.osz-berlin.online Implementation of a web-based portal that covers virtually all areas and processes that concern collaboration between school supervisory authorities and school management. All aspects to describe measures, processes and the provision of all the main forms and documents in the areas of school supervision, school authorities, boards, occupational safety, support systems and the transition from school to work have been incorporated. The www.osz-berlin.online portal makes a central contribution to the provision of administrative services online on or before the end of 2022.	The web portal is set up and a search function will be added by December 2020.
		Brandenburg The following measures for the schools are being implemented/in the planning stage: • Implementation of the Digital Pact 2020–2024 with the three amendments regarding end-user devices and the expansion of systems administration; • Purchase of tablet trolleys for €23 million for the schools from *Land* funds; Introduction of an electronic registry of the digital infrastructure of schools and day-care centres by 2022 and the creation of a sports facility registry which also captures the areas for sport in schools; • Further digitalisation of in-school, inter-school and cross-level business processes using the existing systems to support school administration, such as the introduction of a central pupil file; • Set-up and roll-out of a central e-mail address for pupils; • Continuation of the pilot testing and expansion of the Brandenburg school cloud; • Additional upskilling of all 20,000+ teachers in matters related to teaching with digital media, with measures broken down into four target groups (school management; advisors under the BUSS advisory and support system for schools and school authorities in Brandenburg; teachers; specialists in schools); • Possibility for teachers to share information and ideas about teaching concepts in a dedicated cloud.	Gradual implementation since September 2019 Immediate Expected by 2021/2022 school year Ongoing By the 2021/22 school year School cloud BB: more than 600 schools currently taking part Ongoing
		Hamburg Expansion of digital teaching at higher education institutions (HEIs) against the backdrop of the pandemic Since the summer, additional funds totalling €12.7 million have been available to the HEIs for the digitalisation of teaching at third level. The funds are earmarked, inter alia, for new hardware and software, new collaboration platforms and video-conferencing systems, better data networks, staff support requirements, the expansion of digital learning resources and the production of digital courses. An additional funding amount of €2.7 million is allocated to the Hamburg State and University Library for digitalisation measures.	Funds available since August 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
131.	*Measures adopted by the Länder to promote digital education*	**Hesse** Digital Pact for Higher Education Institutions in Hesse In the 2020-2024 period, the Digital Pact for Higher Education Institutions in Hesse is making funds available outside the higher education institution budget for the digitalisation of HEIs in Hesse. Roughly €10 million have been made available in the reporting period, including funds to support digital teaching under COVID-19 conditions.	Being implemented
		Digitally supported teaching and learning In this project, which is initially set to run until the end of 2020, all universities and universities of applied sciences in Hesse are working together on the further development of digitally supported teaching. Around €10 million are made available to the project in the 2018 – 2020 project period.	Being implemented
		Digital lesson units from the "Guide to Effectively Support Career Orientation" Lesson units have been taken from the Guide to Effectively Support Career Orientation in Upper Secondary Level *(Handbuch zur Beruflichen Orientierung in der gymnasialen Oberstufe)* and made into digital online offerings. These targeted assignments allow pupils in upper secondary level *(gymnasiale Oberstufe)* to make important discoveries in their own career orientation process. New approaches to teaching and learning are therefore explored. The additional offering is financed by the Federal Employment Agency to ensure that teachers and pupils can keep a better focus on career orientation even when schools are closed and/or study groups are split.	The online offerings for career orientation were developed in 2020 and made available to the teachers through the school portal in the 2020/21 school year.
		Mecklenburg-Western Pomerania (MV) Introduction of "itslearning" learning management system The modern and comprehensive "itslearning" learning management system is made available to all state schools. "itslearning" is a cloud-based, interactive learning management system that allows pupils, parents and teachers to communicate with one another.	In force since May 2020
		Digital Pact Immediate Action Programme for Mobile Devices for Pupils in Need The school boards are providing schools with laptops or tablets for loan to pupils. A total of €11 million is available to purchase 27,000 devices. The programme is financed through the Digital Pact for Schools as an immediate action programme.	September 2020
		Handout for online-based lessons This new handout gives teachers, pupils and parents/legal guardians educational tips and extensive instructions for online learning and online-based lessons.	Since May 2020
		Digitalisation of teacher training With this programme, the state of Mecklenburg-Western Pomerania is supporting digitalisation in teacher training with an additional €5 million in the period from 1 January 2021 to 31 December 2023.	Programme runs from 1 January 2021 – 31 December 2023
		Implementation of the Digital Pact for Schools Development of media literacy approaches (schools) and media development plans (school authorities) to create the framework for pupils to learn the skills for active participation in the digital society. Revision of all framework plans, further training of all teachers, further development of the digital teaching assistance portal. Integrated School Management System project. Annex: Immediate action programme for the procurement of school-owned end-user devices for pupils, support for device administration, procurement of school-owned devices for teachers.	2nd funding year in the reporting period

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
131.	*Measures adopted by the Länder to promote digital education*	Further training of 2,700 teachers: digital teaching In recent months, teachers have completed a total of 2,700 further training courses in the field of "digital teaching". Through cooperative arrangements between the competent Institute for Quality Development in Mecklenburg-Western Pomerania (IQ M-V) – part of the Mecklenburg-Western Pomerania Ministry for Education, Science and Culture – and external providers of online further training courses, digital and didactic skills are taught in the courses. This enables teachers to use digital technologies appropriately in the lesson and make digital technologies the subject of discussion. In this context, demand for the "Digital teaching: the virtual classroom" and "Digital tools for teaching" courses is very high. While schools were closed due to the COVID-19 pandemic, teachers in the state developed digital classes for their pupils at short notice. The IQ M-V provided further training to support teachers in performing this task.	March to October 2020
		Digital teaching and learning in the context of child and youth welfare The "Digital teaching and learning in the context of child and youth welfare" project is designed to enable specialist staff to reflect critically on their own media use and use media in a targeted, socially responsible and beneficial manner. In addition, the use of digital educational offerings is to increase the quality of education, improve learning outcomes, promote exchange, broaden knowledge and contribute to skills development. The implementation of the project is understood as a long-term development task which is designed as a reflective, shared learning process.	Runs from 2019 to 2021
		Family portal developed further The family-centric *"Familienbotschaft"* website has been relaunched as the family portal of the state of Mecklenburg-Western Pomerania (www.familieninfo-mv.de). All services related to different phases of life and development are presented in a new, easily accessible and family-friendly infrastructure on this website. The information portal includes interdisciplinary and multiprofessional service offerings. This helps increase the transparency of service providers and their services, while also boosting the competition, quality and variety of family (and educational) service offerings in the state.	Runs from 2019 to 2021
		Lower Saxony COVID-19 immediate assistance for digitalisation in higher education institutions (HEIs) Under the "Digitalisation plus" funding programme, Lower Saxony and the Volkswagen Foundation have provided €4 million in immediate assistance to HEIs under the responsibility of the state to tackle challenges deriving from the COVID-19 pandemic. The Lower Saxony Ministry for Science and Culture, the Lower Saxony Land Convention of Higher Education Institutions and the Volkswagen Foundation are setting up the joint "HEI.digital LowerSaxony" *(Hochschule.digital Niedersachsen)* umbrella association with the aim of establishing a cooperative and sustainable digitalisation strategy for HEIs in Lower Saxony. The *Land* is making funding of around €17.85 million available for digitalisation at HEIs. The goal of the digitalisation strategy for HEIs in Lower Saxony is to achieve the even broader and more professional use of digital technology and infrastructure in university studies and teaching, research and administration.	Funds made available from the second half of 2020 until the end of 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
131.	*Measures adopted by the Länder to promote digital education*	**Rhineland-Palatinate** Expansion of the digital infrastructure in schools Rhineland-Palatinate (RLP) has continuously pressed ahead with measures to connect schools to a broadband Internet infrastructure during the period concerned and will continue to do so. The municipalities have received substantial financial resources from the *Land* to deliver on this goal. With the SchoolCampusRLP project, a teaching and learning platform is being developed and is currently in the trial phase with 49 schools and six institutions for second-stage teacher training *(Studienseminar)*. The platform will gradually be opened up to all schools from March 2021 onwards. The online platform enables communication between teachers and students, the organisation of (online) classes, collaborative work on educational products and the provision of teaching media, all standardised under a single user interface and user administration system. This platform is to be made available to all schools in Rhineland-Palatinate at the end of the period mentioned. Supplementing the Digital Pact for Schools, *Land* funding of €6 million has provided, and will continue to provide, socially disadvantaged pupils with mobile devices. As a preparatory measure within the Digital Pact for Schools (devices for teachers), mobile devices have been procured for vulnerable teachers with *Land* funds of €1.5 million. During the reporting period, 266 primary schools are being incorporated into the "Media Skills in Schools" *Land* programme. Among other infrastructure, these schools are equipped with a hardware and software starter pack. This means that so far, a total of 653 primary schools have been included in the programme and provided with infrastructure. Furthermore, an instant messenger service is to be available to teachers, pupils and guardians by the end of the year. In addition, the implementation of e-mail accounts for work-related purposes and other central services for teachers is planned by the end of the year. Apart from this, further training courses for 41,249 teachers in 1,342 online formats (E-Session, online learning, online further training) were held between April 2020 and 31 December 2020.	Implementation period from April 2020 until the end of 2021 Messenger service e-mail by the end of 2021
		Digitalisation measures in higher education, immediate assistance and special funds in response to the COVID-19 pandemic €5 million in immediate assistance to implement the 2020 digital summer semester. Programme to strengthen digitalisation in higher education institutions within the framework of the Special Fund to Sustainably Address the COVID-19 Pandemic amounting to €50 million, with immediate assistance to implement the 2020/2021 digital winter semester, measures to improve the digital infrastructures in libraries and data centres, measures to strengthen digital skills in teaching, measures to improve digitalisation in the field of administration, and image-building measures in the field of research.	Immediate assistance provided in May 2020; COVID-19 Special Fund Act *(Corona-Sondervermögensgesetz)* in force since 24 September 2020
		Schleswig-Holstein Digitalisation programme Provisions of grants, with a total value of €5 million, to strengthen digitalisation at higher education institutions (HEIs). The funds were primarily used to cover the immediate needs for the online/hybrid semesters. To this end, the funds were divided into a project encompassing all HEIs and individual HEI-specific projects that address the needs of the individual higher education institutions.	1 March 2020 – 31 December 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
131.	*Measures adopted by the Länder to promote digital education*	**Saxony** Central provision of digital learning services In Saxony, central services to support digital learning have been brought together in a single format for all schools with standardised school login access. In addition to the *Lernsax* and *OPAL Schule* online learning platforms, supplementary digital education media *(MeSax, mundo)*, a videoconferencing system and an Etherpad (suitable for primary schools for example) are also offered here. These tools ensure that teachers can continue to mentor pupils in the event of school closures or partial closures during quarantine.	Started at the start of the 2020/21 school year
		Saarland Gigabit Pact for Schools in Saarland Under the Gigabit Pact for Schools in Saarland, schools receive gigabit bandwidths. A gigabit expansion contract to this effect was signed on 15 October 2020. Thanks to funding of approximately €26 million provided by the Federation, the *Land* and municipalities, the network provider will connect 316 schools in Saarland directly to the fibre network by 2022.	Implementation until the end of 2022
		Thuringia Network to promote digitally supported higher education teaching: "eTeach Network Thuringia 2021+" Since 2018, the *Land* of Thuringia and the HEIs have been pursuing the "Thuringia Strategy for the Digitalisation of Higher Education Institutions", which also includes the promotion of digital teaching at HEIs. A central measure in this context is the establishment of the *Land*-funded "eTeach Network" encompassing multiple higher education institutions. The eTeach Network is an alliance of state-run HEIs and universities aimed at the collaborative further development of digitally enriched higher education teaching. The network offers tutors a high-calibre range of further training programmes and advisory services for individual questions on teaching formats and scenarios. eTeach Network events offer tutors from all disciplines a platform to share ideas and present new developments and research findings. In the field of didactics and teaching theory, the network offers the eTeach certificate – a free qualification with a focus on digital higher education didactics. Due to the successful work of this initially only marginally institutionalised network, Thuringia had decided even before the COVID-19 pandemic to expand the eTeach Network from 2021 onwards with funds from the Future Treaty. The developments of 2020 have underlined even further the need for offerings focussed on skills development, advice and guidance for media-enhanced teaching (didactics and technology). Therefore, the eTeach services offered across the state are to be expanded even further than originally planned from 2021 onwards and institutionalised on a lasting basis.	Network established in 2018; institutional expansion and development from January 2021
		Digital Pact for Schools In this connection, the Federation is granting funding to the *Länder* on the basis of Article 104c of the Basic Law within the framework of an administrative agreement. Bolstered by *Land* funds of ten percent each year for 2019 through to 2024 under the Digital Pact for Schools, this enables investments in the following areas to support state schools and independent schools in Thuringia: • Total investment of €132,368,000 in the digital infrastructure at schools • Total investment of €7,353,778 for state-wide and regional IT infrastructure measures for schools • Total investment of €7,353,778 in multi-*Länder* projects • Total investment of €14,707,600 in mobile devices for pupils These investments in infrastructure in Thuringia are supplemented by an additional €14,707,600. This amount is to be used to relieve the burden on the school authorities for the administration of the infrastructure purchased under the Digital Pact for Schools 2019–2024.	2019–2024

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
131.	*Measures adopted by the Länder to promote digital education*	Digital Strategy for Schools in Thuringia The federal and *Land* funds made available under the Digital Pact for Schools provide the opportunity to deliver on the goals of the "Digital Strategy for Schools in Thuringia" on the medium term. The measures of the Digital Strategy for Schools in Thuringia, which are derived from the "Education in a Digital Age" strategy adopted by the Standing Conference of the Ministers of Education and Cultural Affairs, aim to ensure that by the end of the Digital Pact for Schools 2019-2024 the school infrastructure at Thuringia's schools is developed and expanded to the extent that (i) learning supported by digital media and technologies is possible for all pupils everywhere and in every school; (ii) the necessary curriculum basis for the acquisition of skills in the digital world and for learning in digital environments is developed; (iii) teachers have received further training to such an extent that they can apply teaching and learning formats that include the use of digital media for all pupils in a beneficial way; and (iv) the Thuringia school portal has been developed into a state-wide digital education platform, including a learning management system that is accessible for all schools.	2019–2024
		Introduction and continued development of the Thuringia school cloud Thuringia has made it its goal that – by 2021 – every pupil should be able to use a digital learning environment and Internet access in the course of tuition if this is reasonable and appropriate from an educational perspective. The Thuringia school portal is to be developed into a state-wide digital education platform to this end. A state-wide learning management system – the Thuringia school cloud – is a key prerequisite to enable digital learning everywhere. The introduction of the school cloud began in January 2020. The roll-out was ramped up considerably in light of the COVID-19 pandemic. By autumn 2020, 600 schools in Thuringia were already using the school cloud. By mid-2021, the goal is for all schools to be connected and actively use the cloud. After this, the cloud is to be developed further and additional functionalities incorporated. The Thuringia school cloud allows access to course content irrespective of time and place. It therefore also ensures successful learning outcomes in times when in-person learning cannot take place, or is only possible to a limited extent, on account of the COVID-19 pandemic.	Started in 2020, roll-out phase until mid-2021, further development through to 2024
132.	Measures adopted by the *Länder* to support research, development and innovation	**Comprehensive measures are in place in the *Länder* to promote innovation, research and development. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.**	
		German Marine Research Alliance With the participation of the Federal Government, the northern German *Länder* of Bremen, Hamburg, Mecklenburg-Western Pomerania, Lower Saxony and Schleswig-Holstein have founded the German Marine Research Alliance (DAM) to consolidate Germany's leading international position in marine research.	2019–2025
		Bavaria Development of a Bavaria-wide artificial intelligence (AI) network within the framework of the Bavarian Hightech Agenda (HTA) / Hightech Agenda Plus Under the HTA and the Future Treaty Strengthening Studies and Teaching, Bavaria is developing a state-wide AI research network and setting up 100 professorships in the field of AI to this end in order to strengthen teaching, research and innovation in Bavaria - a science and research centre. 50 professorships are provided to specifically strengthen the AI centre of Munich and the AI hubs in Würzburg, Erlangen-Nuremberg and Ingolstadt; the remaining 50 professorships were awarded through a Bavaria-wide AI competition. The Bavarian AI Agency and the Bavarian AI Council play a central role in the network, with the former primarily responsible for the concentration and networking of AI skills and the latter primarily tasked with steering and advising the AI Agency and responsible for representation. Furthermore, an AI Mission Institute is being set up at the AI Centre in Munich. This Institute is to bundle together and dovetail research and business activities.	AI competition completed in May 2020; process of appointment to HEIs currently underway or concluded; AI Agency: being set up; AI Council: established in Dec. 2020; AI Mission Institute in the process of being founded

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
132.	*Measures adopted by the Länder to support research, development and innovation*	Stronger Battery Research As part of the "Bavarian Hightech Agenda", Bavaria is investing in a "Bavarian Battery Network" in Augsburg, Bayreuth, Munich and Würzburg. One particular focus is the development of a new generation of more powerful climate-friendly batteries for electric mobility. To this end, a non-university research company was set up in 2019. This limited company – TUMint.Energy Research GmbH – conducts research on the entire process chain for the production of solid-state batteries – from fundamental research through to the production process of large-scale cells – in line with the needs of participating partners from industry.	Implemented since 2019/2020
		Bavarian Hydrogen Strategy The identification of hydrogen as a priority area in the Bavarian energy research programme has specifically strengthened non-university applied research. A number of new projects are to cover the entire hydrogen value chain – from production (including using biogenic waste materials) and storage to transportation and application. With the foundation of the Hydrogen Centre (H2.B) and the creation of the Hydrogen Alliance – now with over 150 businesses, research institutes and municipalities – Bavaria continues to support the development of hydrogen technologies, bringing it to the next level.	Cabinet decision 26 May 2020, Ongoing implementation since 2020
		Bavarian Top Professors Programme – the Best for Bavaria The successful recruitment of distinguished top scientists from within Germany and abroad is an essential element of a strong system of higher education. Particular incentives – such as an internationally competitive salary and facilities – are essential to attract the very best talent. Therefore, an innovative programme that allows top conditions to be provided to a limited group of outstanding scientists is designed to further improve Bavaria's chances of attracting the "best for Bavaria".	Funding was announced in 2020; first funding cases planned for the 2021/2022 winter semester
		Programme to promote applied research and development at universities of applied sciences in Bavaria; 6th round of funding (2021 – 2024): The programme seeks to raise the profile and expertise of universities of applied sciences in the field of applied research and development and step up and accelerate application-oriented knowledge and technology transfer. This time-tested programme is now being continued in the sixth round of funding. To this end, funding of around €13.2 million will be made available in the 2021–2024 period through two pillars of the programme focussing on the promotion of entry into research and the expansion of research priority areas.	Funding of approved projects 2021–2024
		Berlin/Brandenburg Berlin and Brandenburg Innovation Strategy With the continuation of the Berlin/Brandenburg Joint Innovation Strategy and the Regional Innovation Strategy of *Land* Brandenburg, which has also been revised and builds on the Joint Innovation Strategy, the course was set in 2019 for the further dynamic development of the innovation system in the German capital region. By concentrating the strengths of the region and by improving networking among actors in the business sector and scientific community in five transregional clusters involving the two states of Berlin and Brandenburg, and with a total of nine clusters in Brandenburg, the aim is to specifically address the challenges in the very dynamic innovation landscape in Berlin and Brandenburg. This includes a specific focus on the four priorities identified for the entire capital region, namely: digitalisation, regulatory sandboxes and test beds, work 4.0, and start-ups and new businesses.	Implemented since the start of 2019

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
132.	*Measures adopted by the Länder to support research, development and innovation*	**Bremen** Development of Bremen as centre of AI To strengthen the position of Bremen and Bremerhaven as centres of artificial intelligence (AI), the "BREMEN.AI – Artificial Intelligence Strategy" has been developed in a broad participation process. A central instrument of the Bremen AI Strategy is the development of a "Bremen AI Transfer Centre" with two sites in Bremen and Bremerhaven. AI research expertise is primarily concentrated in the Institute for Artificial Intelligence (IAI) at the University of Bremen, the Fraunhofer Institute for Digital Medicine (MEVIS) and at the Bremen site of the German Research Centre for Artificial Intelligence, which is soon to house a new, third department. The AI ecosystem in Bremen is to be expanded and include the newly established AI Centre for Health Care (AIC HC), the AI Centre for Space Robotics (AIC SR), the Innovation Hub for Human-Assistance Robot Interaction (IMARI), and many other centres. With its ideas, products and business models, the Digital Hub Industry Bremen currently being developed also stands for the digitalised AI-assisted industry of the future.	Measure commences in 2021
		Strengthening the focus on resilient energy In terms of environmental and industrial policy, the development of a hydrogen economy is one of Bremen's flagship projects, and of particular relevance for the steel industry, which currently accounts for 50 percent of local CO_2 emissions. A five-stage plan is currently being developed for the steelworks and Bremen's industrial ports: the aim is the development of an entire hydrogen value chain and CO_2-neutral steel production in Bremen's steel plants. Measures that have already been adopted include the HyBit project (Hydrogen for Bremen's Industrial Transformation) in the first phase of development at the Bremen steelworks plant; the establishment of a Hydrogen Economy Office; the improvement of the R&D infrastructure for hydrogen research in the field of materials and production technology for large-scale industrial applications and to speed up component production and reduce associated costs. A test region is also to be set up.	Measure commences in 2021
		Health Campus The Health Campus seeks to develop future-oriented qualifications and skills profiles that promote upgrading, professionalisation and empowerment of workers in the health care professions. In parallel, the transfer of scientific findings and innovations in medical technology to the regional health care system is being advanced. For this to be sustainable and effective, Bremen is setting up a Health Campus in which higher education institutions, technical colleges, research centres, service providers and practitioners can collaborate. The digitalisation of the health care system also plays an important role in this regard. The AI Centre for Health Care is responsible for the resulting coordination tasks.	Measure commences in 2021
		Digitalisation of HEIs in the fields of teaching, research and administration This programme is aimed at central fields of activity of higher education institutions (HEIs): seamless digital student services in a single medium format, end-to-end digital administration processes (HR management, e-files and research information), promotion of digital skills (teachers and students), further development and modernisation of the entire e-learning portfolio, and development and provision of open educational resources (OER).	Measure commences in 2021
		Land Bremen Innovation Strategy 2030 Bremen is developing an integrated strategy entitled "Keys to Innovations 2030 – Strategy for Innovation, Services and Industry in *Land* Bremen" (or *Land* Bremen Innovation Strategy 2030 for short). As the updated Regional Strategy for Smart Specialisation (RIS3), this contains the strategic orientation for the promotion of innovation in *Land* Bremen through the European Regional Development Fund (ERDF) in the 2021–2027 EU funding period. The strategy process provides an opportunity for broad consultation on innovation policy measures in the ministries for economics, science and the environment with the involvement of various social actors.	2021–2030

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
132.	*Measures adopted by the Länder to support research, development and innovation*	**Hamburg** Since 2019, Hamburg has been financing additional research projects under a new open call for proposals in which it provides support to research conducted by Hamburg's state-run higher education institutions (HEIs) together with their cooperation partners. Open to all topics, the programme aims to help get research projects off the ground. These projects are then to be eligible for funding in other external funding procedures after a period of three years. With four HamburgX projects, the strategic development of research priorities at state-run HEIs in Hamburg is also supported in the areas of infection research, materials research and urban mobility.	2019–2023
		Following a call for proposals, Hamburg provided funding in 2020 to additional projects to strengthen the transfer of innovations from the field of science, and to improve connectivity between institutions to this end.	Call for proposals in 2020
		Hesse Hesse Centre for Artificial Intelligence The Hesse Centre for Artificial Intelligence aims to concentrate and strengthen research and transfer in the field of artificial intelligence in Hesse. It is backed by 13 higher education institutions in Hesse and will have its main centre at the Technical University of Darmstadt. 20 additional professorships are being created on a permanent basis. *Land* Hesse is making €38 million available to the Centre in the five-year development phase. In the reporting period, the start of the development has been supported with €2 million.	Commencement of funding in 2020 with €2 million
		Establishment of the "Cluster Projects" funding measure The "Cluster Projects" funding guideline was created to provide project-related support for research clusters comprising Hesse-based universities, other HEIs and non-university research centres in competitive fields of research. One of the main aims is to increase the competitiveness of universities in the Excellence Strategy of the Federation and the *Länder*. In the period up to 2025, *Land* Hesse is investing approx. €40 million in six projects, including in the topical fields of artificial intelligence and energy research. This funding is complemented by the sponsored institutions' own resources. The research projects also provide important impetus for economic and social innovation.	Approval in March 2021
		Research funding programme: State Campaign for Developing Scientific and Economic Excellence (LOEWE) Since 2008, HEIs and research facilities in Hesse have been supported through funding measures from the competition-based LOEWE programme to improve their image-building and competitiveness. LOEWE interlinks the targeted further development of the research landscape with innovation measures for the business sector, particularly small and medium-sized enterprises. The programme was overhauled in 2020. To raise the profile of research further, from now on LOEWE funds will be invested in a total of five funding lines for excellent and innovative new projects and for the promotion of renowned academics and scientists who are outstanding in their field. The LOEWE budget for 2020 amounted to €60 million and is to be increased to a total of €100 million per year by 2025.	Multi-year approval periods for projects and individuals

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
132.	*Measures adopted by the Länder to support research, development and innovation*	**Mecklenburg-Western Pomerania (MV)** *Land* Research Excellence Programme The funding under this programme is geared towards the advancement of the skills of junior scientists in collaborative research networks. This is to help strengthen capacities for excellent research at higher education institutions and non-university research establishments. Further to this, the networking and concentration of potential in collaborative research networks is to contribute to improving the performance and competitiveness of higher education institutions and non-university research facilities. Currently, 14 collaborative research networks are receiving support in the field of health research, digitalisation, energy research and projects not limited to a particular topic.	The first alliances will end on 31 March 2021, the last on 30 September 2022
		Innovation Strategy The state's Strategy Council of Business and Science agreed to the new Regional Innovation Strategy (RIS) of Mecklenburg-Western Pomerania in October 2020. The RIS sets out the strategic priorities for the development of innovation potential in the state in the coming years. It was defined in a transparent process, which was open as to the outcome, with the involvement of all the relevant stakeholders and overseen by the Fraunhofer Institute for System and Innovation Research (ISI) as an external assessor.	Runs from 2021–2030
		Lower Saxony Research projects to tackle the COVID-19 pandemic With a total of €27.5 million, Lower Saxony is funding 16 projects for research into the virus to develop vaccines or medication, two studies that are being conducted in various facilities (businesses, HEIs, schools) to perform corona tests and gain insight into the course of infection, and the Lower Saxony COVID-19 Research Network (COFONI) in order to pool expertise, ensure the faster translation of research results and develop a strategy to tackle future pandemics.	In force since 25 March 2020 / 23 June 2020 and set to run for twelve or 24 months respectively; Will run for two years with an extension
		Creation of additional professorships to support the digital transformation With the creation of up to 50 additional digitalisation professorships, Lower Saxony is forcing the pace on the expansion of study programmes, in line with demand, in areas such as data science, artificial intelligence or IT security. This will create the necessary additional capacities on a lasting basis to be able to adapt the study programmes offered to the challenges of digitalisation and to train the next generation of skilled workers with appropriate digital skills in sufficient numbers. In a call for applications, 50 additional professorships were created on a permanent basis (funding volume: up to €8.76 million permanently plus roughly €42 million in project-related funding).	50 professorships approved; appointment process currently underway
		Innovation laboratories for hydrogen technology As the state with the highest production of renewable energy, Lower Saxony wishes to support the implementation of the "Green Deal" and the decarbonisation of Europe as well as the goals of the Climate Action Programme 2030. This can be achieved with the Hydrogen Strategy for North Germany adopted in November 2019. Lower Saxony already has hydrogen networks, such as the Hydrogen Research Society of Lower Saxony, which is backed by the Energy Research Centre of Lower Saxony (EFZN). The "Science Alliance for Hydrogen Technology" founded in 2019 under the umbrella of the Energy Research Centre of Lower Saxony bundles together existing research expertise. To address the central scientific, technological and economic challenges of this key enabling technology in the near term, the "Innovation Laboratories for Hydrogen Technologies" call for proposals was published at the end of 2019. This makes a central contribution to supporting the development of hydrogen as a key enabling technology and takes an important and effective step towards the development of a hydrogen economy in Lower Saxony and Germany. The selection procedure for the conceptual design phase (1st funding phase) is already completed. Since 1 July 2020, the Lower Saxony Ministry for Science and Culture has been supporting five projects, each receiving approximately €100,000 (total funding volume of €6.5 million).	The implementation phase will start following the appraisal of the full proposals by the Scientific Commission of Lower Saxony, likely to be on 1 May 2021.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
132.	*Measures adopted by the Länder to support research, development and innovation*	Digitalisation of HEIs: Under the "Digitalisation plus" funding programme, Lower Saxony and the Volkswagen Foundation are providing €4 million in immediate assistance from the Lower Saxony "Vorab" programme to HEIs under the responsibility of the state to tackle challenges deriving from the COVID-19 pandemic.	2nd half of 2020
		The Lower Saxony Ministry for Science and Culture, the Lower Saxony *Land* Convention of Higher Education Institutions and the Volkswagen Foundation are setting up the joint "HEI.digital LowerSaxony" *(Hochschule.digital Niedersachsen)* umbrella association with the aim of establishing a cooperative and sustainable digitalisation strategy for HEIs in Lower Saxony. The *Land* is making funding of around €17.85 million available for digitalisation at HEIs. The goal of the digitalisation strategy for HEIs in Lower Saxony is to achieve the even broader and more professional use of digital technology and infrastructure in university studies and teaching, research and administration.	Starts in the 1st half of 2021
		North Rhine-Westphalia (NRW) Special Programme I NRW Stimulus package with a volume of €1 billion, divided into €760 million for construction measures at university clinics, €160 million for equipment, infrastructure and IT investments at the university clinics, €80 million for measures at the university clinics in Ostwestfalen-Lippe and Bochum.	In force since 24 June 2020
		Digital Security programme line Research on the priority areas of modern IT security architectures, security and privacy engineering. With the announcement of funding for a second cohort of the NERD Research School – NERD II (North-Rhine Westphalian Experts in Research on Digitalization) – NRW is underlining the importance of the topic of IT security and is continuing to expand the existing activities and networking structures.	Planned to start in Feb 2021
		AI/ML funding line The AI/ML funding line is giving impetus to research in the field of artificial intelligence and machine learning. By setting up the multi-site Data NInJA research training school and the AI Starter, which offers young academics the opportunity to run their own research projects after completing their PhD, NRW seeks to strengthen the networking and capacity-building of well-trained AI professionals.	Starts in Dec. 2020, will run until Dec. 2024
		Development of an institute for digitalisation research Building on the Centre for Advanced Internet Studies (CAIS), which has been supported since 2017, NRW is to move forward with the development of an institute for digitalisation research on the medium term. The aim is to take an integrated, holistic approach and examine the digital transformation from all angles, with the primary focus on the potential and challenges of digitalisation for humans. Research projects are currently being developed in the field of artificial intelligence. Following the guiding principle of agile science and research, the innovative research incubator at the CAIS promotes interdisciplinary networking and collaboration.	Institute starts in April 2021
		Development of the Cancer Research Centre Cologne Essen The *Land* government is supporting the development of the Cancer Research Centre Cologne Essen (CCCE), a joint outstanding research centre for cancer medicine in Cologne and Essen. It will place a priority on pioneering topics such as medical data sciences, translational oncology and computer-assisted cancer biology. The CCCE is connected with other partners through the NRW Network of Excellence for Cancer Medicine, and thereby pursues the goal of networking and incorporating all potential in oncology research and university-based cutting-edge medicine.	First professors hired in 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
132.	*Measures adopted by the Länder to support research, development and innovation*	Establishment of a research centre for battery cell production As part of the "Battery Research Lab" umbrella strategy of the Federal Ministry of Education and Research, a research centre for battery cell production will be established in Münster in collaboration with NRW. The centre will conduct large-scale validation of research results in the field of new battery technologies and thereby provide the scientific basis for the creation and sustainable development of competitive battery cell production in Germany that leads the field internationally. NRW is currently constructing a new facility in Münster that is tailored to the needs of research into battery cell production and is investing up to €180 million in *Land* funds to this end. Complementing this, battery research is being supported with additional *Land* measures, particularly in the area of junior scientific talent, including the promotion of a new international research school for battery chemistry, characterisation, analysis, recycling und application (BACCARA) at the University of Münster with €9.5 million.	Building project underway since final decision on site taken Research school starts in July 2020
		Rhineland-Palatinate	
		Rhineland-Palatinate research initiative As a central instrument for the promotion of research at state-run higher education institutions (HEIs), the research initiative is centred on a clear research profile and the development of strategic goals in the competition among HEIs for junior scientific talent, top-quality researchers and funding. With the development and expansion of these strengths, *Land* research funding is focussing on the research areas of the HEIs that define their research profile. In addition to boosting the autonomy of the HEIs, this also gives strong and significant impetus for research, technology and innovation. The *Land* is making annual funding of €20 million available for this purpose.	2019 – 2023
		Rhineland-Palatinate research academies The research academies constitute a new *Land* programme for the promotion of cooperative doctoral programmes. In Germany, universities of applied sciences (UAS) cannot award doctoral degrees. With the research academies, research alliances are established between universities and universities of applied sciences on current research topics, enabling both university and UAS graduates to study for a doctoral degree during which they are jointly supervised by the university and the UAS. By incorporating young scientific talent into a modern programme spanning both universities and UAS, the aim is to provide UAS graduates with an additional, transparent qualification path, interconnect different scientific networks, support the research capabilities of the UAS, and promote image-building by placing a focus on research.	Ongoing since 2018
		Research fund Through the research fund, *Land* Rhineland-Palatinate supports state-run universities in attracting and retaining top scientists and further enhancing dedicated fields of activity within the university. The research fund gives state-run universities of applied sciences the opportunity to reinforce stronger areas of their university. The aim is to enable the UAS to keep scientists who are particularly important for the research profile of the UAS.	Ongoing since 2019

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
132.	*Measures adopted by the Länder to support research, development and innovation*	**Saarland** East Side Fab, Open Space and Innovation Community East Side Fab, Open Space and Innovation Community – launched as part of a funding strategy of the Saarland *Land* government – is a consortium of businesses from different sectors, research institutes, initiatives, public institutions and other interested stakeholders with the objective of safeguarding and strengthening Saarland and the greater Saarland-Lorraine-Luxembourg region as a place of business and investment. Since the launch at the start of 2020, East Side Fab has established itself as an important node in Saarland's active SME network despite the restrictions of the COVID-19 pandemic. The aim is to provide the actors involved with an innovative space for collaboration, networks, knowledge and technology transfer, to enable access to scientific research and to develop new business ideas. The first innovation projects – the results of the interdisciplinary task forces – are to start at the end of 2020 with the participation of the *Land* of Saarland. The aim is to participate in a Digital Innovation Hub Saarland (DIH-S) within the context of the Digital Europe Programme; this is actively supported by the *Land* government.	Ongoing implementation since 2020
		Measures to support coronavirus-related research projects and to provide bridging finance for research projects during the lockdown The existing *Land* research promotion programme has been scaled up by 64 percent to provide additional funding for research projects working on ways to tackle the COVID-19 pandemic. Furthermore, these funds have been able to provide bridging finance for projects that have been delayed on account of the pandemic and the resulting lockdown. This measure has contributed to the fight against the pandemic and helped safeguard jobs and the completion of projects.	Process ongoing since April 2020
		Strategy for Innovation and Technology The updated Saarland Innovation Strategy for Smart Specialisation provides new impetus, addresses current challenges facing business and science, and concentrates funding by fine-tuning the focus of individual priority areas and cluster structures. This process also meets the RIS3 requirements as a key prerequisite in the new ERDF programming period. An important element of the Innovation Strategy concerns greater action to stimulate private-sector R&D and other innovation activities through targeted technology transfer on the basis of Saarland's strengths at the cutting edge of science. In particular, these include expertise in the fields of artificial intelligence and cyber security, smart technologies (including smart factory and smart mobility), life science (including pharmaceutical and drug research) and material science.	The revision of the Strategy for Innovation and Technology, completed by spring 2021, applies for the years 2021 through to 2023
		Saxony Development of the Centre for Advanced Systems Understanding With the development of the Centre for Advanced Systems Understanding (CASUS) in Görlitz, Saxony is building a centre for digital innovations in systems research in collaboration with Poland. Interactive and explorable representations of complex systems are created in CASUS on the basis of data-intensive measurement and simulation data. The accurate and realistic representation allows scientists to predict the future interactions and dynamics of complex systems in quantitative terms and thereby make a key contribution to our ability to respond to major challenges in the future. Taking an interdisciplinary approach, scientists rethink data-intensive system research across individual disciplines; focal areas are Earth system research, materials under extreme conditions, system biology and self-driving vehicles.	Currently in the development phase as a project (runs until March 2022); scientific evaluation of CASUS in spring 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
132.	*Measures adopted by the Länder to support research, development and innovation*	**Saxony-Anhalt** Innovation Strategy • The substantial and long-term mobilisation of innovation potential is the goal of the Regional Innovation Strategy (RIS) for Saxony-Anhalt. • The focus is on stimulating the R&D activities of businesses to strengthen and expand their capacity for innovation. The five lead markets that have been identified are energy/mechanical engineering and plant construction/resource efficiency, health/medicine, chemical industry/bioeconomy, food/agriculture, and mobility/logistics. • The lead market working groups, which have been set up as part of the Strategy, successfully bring together key players in the fields of business, science, administration and civil society and together devise approaches to continuously improve regional specialisation and strengths in their thematic focus areas. • The updated Innovation Strategy factors in the challenges deriving from the COVID-19 pandemic, regional structural change due to the phase-out of coal, and from the "double" (green and digital) transition.	Regional Innovation Strategy updated in 2021 with current developments and challenges factored in
133.	Implementation of Stimulus Package Item 33: Amendment to the funding guideline for "R&D Support for External Non-profit Industrial Research Facilities – Innovation Competence (INNO-KOM)"	Through an amendment to the INNO-KOM guideline, the rates of funding were increased in the three funding modules / own contributions of the research facilities were reduced: • Market-oriented research: from 70 percent to 90 percent • Initial research: from 90 percent to 95 percent • Investment projects: from 90 percent to 95 percent • To qualify for the higher rates of funding, the research facilities concerned must furnish proof that they can no longer pay the research facility contribution in full due to the COVID-19 pandemic	In force since 15 September 2020; Valid until 31 December 2021
134.	The Future of Value Creation	The "Future of Value Creation" *(Zukunft der Wertschöpfung)* programme sets the course for high-quality manufacturing, service and labour in Germany on the long term. By funding research and development, the programme supports structural change in the innovation system, the search for new business models and organisational forms, and the development of new market services. Initial activities will focus on developing solutions and practical alternatives to shaping innovations in value creation, and will examine the ability of businesses to adapt.	Started in the first half of 2021
135.	Society of Ideas – Competition for Social Innovations	The aim of this three-phase competition for ideas is to develop and trial social innovations with a variety of actors, to involve private citizens in the development, and to select ideas through two participatory evaluation stages. Duration: 2020–2026 (conceptual design (six months, 30 projects) – trialling – (24 months, ten projects) and practical phase (24 – 36 months, up to five projects)) Total expenditure on measure, incl. applications for "support and follow-up" (communication, matching, coaching, events) and "evaluation and research": €7.8 million; €3.4 million of which for research funding.	Guideline published on 6 May 2020/project commenced in December 2020
136.	Civic Innovation Platform	In the "AI Is What We Make It" *(Gemeinsam wird es KI)* competition for ideas, awards are granted to outline ideas for AI applications that are aimed at the common good and developed by multi-sector teams (e.g. start-up + NGO). To elaborate the concept further, winners receive non-material support in the form of workshops and financial support in the form of prize money. A funding guideline is due to complement the competition in mid-2021. This means that the concrete implementation of promising projects will be supported, with each project expected to receive up to €250,000 in funding. Duration: 2020–2022 (competition for ideas (six months, approx. 30 projects/year) – funding programme from 2021 (twelve months, approx. ten projects/year).	Project launched and call for contributions to the competition for ideas published on 17 September 2020/submission deadline for 1st round of competition on 15 December 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
137.	Clusters4Future / Initiative for Future Clusters	The "Initiative for Future Clusters" was launched in August 2019 with the headline "Clusters4Future – Innovation Networks for Our Future". The aim is to bring regional partners together in innovation networks on the basis of excellent results from fundamental research. This is to make a decisive contribution to ensuring that cutting-edge technologies, scientific methods and tools are developed into concrete applications as quickly as possible. Support is provided to collaborative work with long-term prospects between future-oriented stakeholders from the scientific community, the business sector and society via research and development projects, as well as to activities to support innovation. The Federal Government plans to provide up to €450 million for this initiative in the next ten years. The first seven future clusters were announced on 3 February 2021.	The initiative has been running since 2019 with several rounds of competition conducted: 14 August 2019 (funding announcement 1st round of competition), 16 November 2020 (funding announcement, 2nd round of competition) February 2021 selection of the winners of the 2nd round
138.	Transfer Initiative	Officially launched in 2019, the Transfer Initiative is a long-term process that aims to support companies in turning research findings into products and services. In a series of dialogue with the stakeholders, approaches are developed to improve knowledge and technology transfer. The recently launched roadshow is designed to raise awareness among businesses for the "From the Idea to Market Success" *(Von der Idee zum Markterfolg)* initiatives and funding programmes, get businesses and other regional stakeholders talking, and thereby set collaborations in motion.	The "From the Idea to Market Success" roadshow was launched in 2020. The series of dialogue was continued with a variety of topics and formats.
139.	Agency for Breakthrough Innovations (SprinD GmbH)	In August 2018, the Federal Government decided to establish an Agency for Breakthrough Innovations whose aim is to drive forward the development of radical technological innovations that can be game-changers in the market. The founding director and the agency location (Leipzig) were selected in mid-2019. The agency was then founded in December 2019. Since then, the agency has identified the first ideas with potential for a breakthrough innovation. The first affiliate company was founded in December 2020. With the founding of the Agency for Breakthrough Innovations, the Federal Government has introduced pilot innovation competitions and is therefore trying out a new instrument that goes beyond previous research funding frameworks. It is designed to support innovations of particular technological and social relevance. The Federal Government has launched pilot competitions on the topics of "energy-efficient electronic hardware for artificial intelligence" ("energy-efficient AI system"), "organ replacement from the lab" and "*Weltspeicher* – one battery for the world".	Establishment: 16 December 2019 Since then, the agency has been in the development/ operational phase
140.	Regulatory sandboxes as facilities for testing innovation and regulation	Regulatory sandboxes – as facilities for testing innovation and regulation – are designed to provide the flexibility to try out innovations within specific parameters (geographical area, time and legal conditions) and also enable the further development of the legal framework that is open to innovations ("regulatory learning"). The use of regulatory sandboxes in Germany is to be strengthened through networking and the exchange of information (Network for Regulatory Sandboxes, interministerial working group, Handbook for Regulatory Sandboxes, events); practical support of specific projects ("Innovation Prize for Regulatory Sandboxes", project-specific exchange with other ministries, legal opinions); and an improved legal framework in which different legal opinions are considered ("Experimentation Clause Act *(Experimentierklauselgesetz)*", guidance on the formulation of experimentation clauses). In the context of the German European Council Presidency, Council conclusions were adopted that seek to strengthen regulatory sandboxes and experimentation clauses in the EU and at EU level.	Regulatory Sandboxes Strategy published in December 2018 Innovation Prize for Regulatory Sandboxes awarded in May 2020 EU Council conclusions published in November 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
141.	7th Energy Research Programme of the Federal Government: "Innovations for the Energy Transition"	As a strategic element of Germany's energy policy, the programme is focussed on the energy transition and, with a holistic approach to funding policy, addresses current and imminent challenges. A new focus is on the transfer of technology and innovation through Regulatory Sandboxes for the Energy Transition. As a new funding instrument, these regulatory sandboxes prepare innovative solutions for the market. The better integration of start-ups supports dynamic transfer into practice. In addition to the central research fields of energy efficiency and renewable energy, the programme places a new focus on issues spanning multiple sectors and systems, such as sector coupling, digitalisation and the energy transition in the heating, industry and transport sector, including societal aspects. Under the 7th Energy Research Programme, the Federal Government intends to make available funds totalling around €6.4 billion in the 2018–2022 period.	Agreed in September 2018
142.	Regulatory Sandboxes for the Energy Transition	Regulatory Sandboxes for the Energy Transition were established as a new funding instrument within the Federal Government's 7th Energy Research Programme to expedite the translation of technology and innovation from research into practice. Regulatory Sandboxes for the Energy Transition test forward-looking energy technologies in real-life conditions on an industrial scale and can therefore speed up the transformation of the energy system. In selected regulatory sandboxes, businesses and researchers in Germany are supported in applying their capacity for innovation to deliver the energy transition. The Regulatory Sandboxes for the Energy Transition can also aid the forward-looking further development of the regulatory framework in Germany. In addition, the new support initiative can also help traditional energy regions develop a sustainable energy and industry outlook. The first ideas competition held in 2019 focussed on hydrogen and sector coupling, electricity storage and energy-optimized neighbourhoods.	The first of the 20 projects selected in the 2019 ideas competition are being implemented; Other projects are due to start in 2021
143.	Funding initiative: "Hydrogen Technology Campaign"	With the "Hydrogen Technology Campaign" research initiative, the Federal Government is supporting research projects dedicated to the production, transportation, storage and use of hydrogen. Projects with a focus on the integration of a hydrogen infrastructure into the energy supply system through sector coupling are also targeted, as are projects dealing with overarching technological, economic and social issues.	Outline proposals can be submitted by the end of April 2021
144.	Competition inviting ideas for "Hydrogen Republic of Germany"	The call for proposals published in June 2020 is aimed, for one, at large-scale, industry-led initiatives in the central and pressing fields of hydrogen innovation. Three technology platforms focussing on the series production of electrolyzers, offshore hydrogen production and hydrogen transportation solutions, with a total of some 350 partners, will commence operations in spring 2021. In addition, the call for proposals addresses fundamental research along the entire hydrogen value chain (generation, storage, transport and use including reconversion to electricity). The focus is on material research and possible key enabling technologies of the next generation and beyond.	Evaluation and selection of the technology platforms by December 2020; projects to start from April 2021
145.	Copernicus Projects for the Energy Transition	The Copernicus Projects are one of Germany's largest research initiatives focussing on the energy transition. It aims to be an enabler for the Federal Republic of Germany to become climate-neutral by 2050. With this objective, actors from business, the scientific community and civil society work together in the four Copernicus projects to develop technological innovations and policy and social options for shaping the energy transition. The projects are dedicated to four central topics of the energy transition: grids (the ENSURE project), flexible industry (SynErgie), Power-to-X (P2X) and the interaction of innovations in the overall system including suitable policy instruments (ENavi, ARIADNE).	All projects have been in the second phase of funding since 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
C. Improving conditions for competition, designing a fair tax environment conducive to growth, reducing bureaucracy			
146.	ARC (Act against Restraints of Competition) Digitalisation Act *(GWB-Digitalisierungsgesetz)*	Amendment to German competition legislation, particularly with regard to the challenges posed by digitalisation: • Tightening abuse control for dominant companies. • Provision of a case for intervention in connection with particular conduct obligations for platforms with overriding cross-market significance. • Improved data access for competitors. • Merger control focused more on mergers that are relevant for competition.	In force since 19 January 2021
147.	Modernisation of European competition law and the Digital Markets Act	Various instruments proposed by the European Commission and initiated evaluation processes including: • Instrument against distortions of competition by state-subsidised or state-controlled companies from third countries (level playing field instrument). • Evaluation of central guidelines in EU competition law (definition of the relevant market, general horizontal and vertical block exemption regulations etc.). • Regulation on digital markets (Digital Markets Act) to ensure contestable and fair markets within the internal market for digital services with harmonised rules.	Level playing field instrument: White Paper presented in June 2020 Legislative proposal expected for the second half of 2021 Digital Markets Act (European Regulation): Legislative proposal presented on 16 December 2020
148.	"Fund Domicile Act" *(Fondsstandortgesetz)*	On 20 January 2021, the Cabinet adopted the Act to Strengthen Germany as a Fund Location and to Implement Directive (EU) 2019/1160 amending Directives 2009/65/EC and 2011/61/EU with regard to cross-border distribution of collective investment undertakings *(Gesetz zur Stärkung des Fondsstandorts Deutschland und zur Umsetzung der Richtlinie (EU) 2019/1160 zur Änderung der Richtlinien 2009/65/EG und 2011/61/EU)*, known as the Fund Domicile Act. This will make Germany a more attractive location for venture capitalists – and indirectly also for start-ups – as management services are exempted from VAT. The Act also resolves the "dry income" problem for employee shareholdings in start-ups and SMEs: Up to now, employees who acquire stock in the business at a discount are required to pay taxes instantly the moment the stock options are granted even though they have not actually received any cash at that point. This problem can be resolved by postponing the tax on the stock allocation into the future. Then employees would only be required to pay taxes when they actually receive cash, e.g. by selling their stock. Irrespective of the particularities of start-ups, provisions are also made for an amendment to the general tax-free allowance for staff shareholdings, which is to be doubled to €720 with effect from 2021.	1. Cabinet decision on 20 January 2021 2. Parliamentary procedure: expected to be concluded in the 2nd quarter
149.	Package of measures for start-ups and smaller medium-sized enterprises to combat the impact of the COVID-19 pandemic	With this package of measures worth €2 billion, equity and equity-like financing are available to start-ups and smaller medium-sized enterprises. The package of measures is based on two pillars: Pillar 1 addresses start-ups through venture capital funds. Pillar 2 is available to start-ups and small enterprises with an annual turnover of €75 million or less whose shareholder structure does not include a venture capital fund; in this case, KfW, acting on behalf of the Federation, provides the promotional institutes of the *Länder* (LFI) with global loans to partly re-finance existing and new LFI promotional programmes. These businesses can thus be given mezzanine and equity financing. For *Länder* measures, see this table, Nos. 29 and 152.	1. Federal Government announcement on 1 April 2020 2. Communication of the Federal Government on the extension of the package of measures until 30 June 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
150.	"Digital Now – Promoting Investment by SMEs"	The "Digital Now" investment grant programme launched in September 2020 supports small and medium-sized enterprises in investing in digital technologies and digital expertise. Grants of up to 70 percent are designed to encourage SMEs to specifically invest in digitalisation projects and in the upskilling of their staff, either individually or as a value-adding network of companies. This investment stimulus adds an important component to the existing support structure offered under the "SME Digital" funding programme for the digital transformation in small and medium-sized enterprises.	Funding programme commenced in September 2020
151.	Future Fund	The idea for a Future Fund envisages a combination of measures to increase the quantity and quality of existing financing options, such as KfW Capital (a subsidiary of the KfW), the High-Tech Start-up Fund, the coparion Venture Capital Fund or the instrument of the ERP Special Fund in collaboration with the European Investment Fund. It also establishes new instruments, such as a Deep-Tech Fund which has a direct stake in deep-tech businesses with a long-term investment perspective, or a Venture Capital Umbrella Fund which attracts new investor groups to broad start-up financing via special investment vehicles. The investment period of the Future Fund commences in 2021.	1. Coalition resolutions: ten November 2019 and 25 August 2020 2. Adoption of the 2021 Budget Act *(Haushaltsgesetz)*: 11 December 2020 3. Allocation to KfW expected in Q1/2021 4. Investment period: 2021–2030
152.	Measures adopted by the *Länder* to promote business start-ups	**Comprehensive measures are in place in the *Länder* to promote business start-ups. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.**	
		Baden-Württemberg Start-up BW Pre-Seed In the early stages of a company start-up, institutional investors tend to be cautious due to the high risks involved and the uncertain prospects. Start-up BW Pre-Seed, an early-phase funding programme, comes into play in this pre-seed phase: its aim is to make more promising start-up projects ready for funding. Finance is provided in the form of a subordinated loan with a conversion option (generally up to €200,000, max. €400,000 in *Land* funds including 20 percent co-investment). The start-ups are selected with the close involvement of experienced start-up incubators and accelerators. Over 100 start-ups have been able to receive funding since the end of 2018. Budget 2020/2021: €14 million, plus returns from successful first rounds of finance.	First applications in December 2018, ongoing
		Bavaria "Bavaria: Home of Start-ups" initiative Bavaria has been providing targeted support to business start-ups for many years, with successful results. The aim of the "Bavaria: Home of Start-ups" *(Gründerland Bayern)* initiative is to further improve the conditions for business start-ups in Bavaria. The initiative comprises a coherent, modular set of measures that is open to all technologies and is centred on five priority areas: 1. Optimisation of the landscape for business start-ups: infrastructure and networks: 19 digital start-up centres have been/are being set up at 27 locations across Bavaria in a three-stage process. The primary focus of the centres is to connect start-ups, established businesses, investors and the scientific community. In the next step, the digital start-up centres are to be more closely connected to universities/HEIs and the technology-oriented start-up centres. On the medium-term, the plan is to develop a start-up centre/network in the field of robotics (subject to financing).	Ongoing/from 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
152.	*Measures adopted by the Länder to promote business start-ups*	2. Advisory services: BayStartUP is the go-to point for start-ups in Bavaria for coaching and workshops. The business plan competitions support businesses in developing their particular business idea. The Bavarian pre-start-up coaching programme is open to everyone interested in starting their own business and potential business successors.	Ongoing
		3. Expansion of capital availability: The grant programmes Flügge (including validation, university spinouts), *Start?Zuschuss!* (set-up phase of digital start-ups) and BayTOU (R&D projects of start-ups) support innovative start-ups in the establishment, expansion and further development of their business and product. Demand among start-up entrepreneurs is so high that the programmes are to be scaled up from 2021 onwards (subject to financing). The technology funding programmes (R&D collaborative research) are open to more mature start-ups. Equity capital: *LfA Förderbank Bayern* – Bavaria's development bank – supports start-ups indirectly through the LfA/EIF facility with a volume of €250 million. In collaboration with the European Investment Fund, *LfA Förderbank Bayern* invests here in private funds which, in turn, provide the businesses with equity capital in the start-up, early and expansion phase. The VC funds of Bayern Kapital (seed, innovation and growth funds) finance start-ups in all life cycles. The growth fund, in particular, (stakes of up to €10 million per start-up) has proven to be very effective in establishing more mature start-ups in the market. This fund is to be scaled up in 2021. In addition, a scale-up fund is to be set up in 2021 which is to enable shareholdings of over €10 million (subject to financing). BayStartUP organises and manages one of the biggest business angel networks in Europe (over 300 business angels and 150 family offices), prepares start-ups for pitches to investors and matches up suitable start-ups and investors. Much needs to be done with regard to the availability of private VC. Several competing private funds with a minimum volume of €250 million are needed. Often, the private co-financing that is required in the case of state funds cannot be mobilised, or if at all then only through foreign investors (risk of start-up relocating). Therefore, Bavaria is urging the Federal Government to improve the framework conditions for private VC. Start-ups can also avail of the debt financing products of the LfA.	Ongoing/from 2021
		4. Internationalisation: Bavaria offered its Ois Easy Start-up Package for the first time in 2019. This package helps foreign start-ups in the growth phase to take their first steps in the Bavarian market (formalities, office in a digital/technological start-up centre, introduction to the network, coaching). The Start-up International funding programme is also planned and will be geared towards helping Bavarian start-ups enter foreign markets (subject to financing).	Ongoing / from 2021
		5. Communication campaign for *"Gründerland Bayern"*: In addition to the successful development of the modern, interactive and always up-to-date *Gründerland Bayern* information platform for start-ups in Bavaria, Bavaria will organise its services for start-up entrepreneurs according to specific target groups and market them throughout Bavaria under the single brand *"Gründerland Bayern"* (with the *Gründerland Bayern* bus also on the road). Furthermore, by presenting success stories and role models, Bavaria seeks to encourage and reassure people of all ages who wish to set up their own business. To this end, high-quality videos and podcasts have been produced to give people exciting insights into the entire start-up landscape. Additional communication measures are also to be put in place beyond 2020.	Ongoing

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
152.	*Measures adopted by the Länder to promote business start-ups*	6. Special regulations due to the COVID-19 pandemic: In light of the COVID-19 pandemic, Bavaria adapted the offerings quickly to the new situation and added the following: • Special rule for start-ups under the COVID-19 immediate assistance system. • Series of Internet seminars on "Crisis Management for Start-ups" provided by BayStartUP. • Internet seminars on government COVID-19 support measures provided by BayStartUP. • Option to defer the payment of rent in digital start-up centres. • Instant loans and COVID-19 Protective Shield Loan from the *LfA Förderbank Bayern*. • Bavaria start-up shield (implementation of the 2nd pillar of the Federal Government's €2 billion package of measures for start-ups in Bavaria).	Ongoing
		Berlin Berlin Start-up Grant Under the "Berlin Start-up Grant", business start-ups with a technology-based business project receive assistance via funding from the European Social Fund and *Land* Berlin over a period of six to twelve months provided that the prototype developed in the approach, or the prototype-like method, still requires further development before it can be launched on the market. Start-ups receive grants of up to €2,000 per person, per month during this period. The start-ups are given the opportunity to use co-working spaces and technical laboratories to implement their start-up projects, and can specifically hone their skills through coaching, mentoring and training offerings. In the current ESF funding period (2014–2020/23), Berlin is granting total support of roughly €40 million to 1,330 business start-ups with this instrument.	Programme being implemented Duration: 2014–2020/23
		VC Fund for Technology The VC Fund for Technology II enables young technology companies to put new and innovative ideas into practice. The fund, with a total funding volume of €60 million (€30 million of which from the European Regional Development Fund (ERDF)) makes venture capital available to start-ups in order to strengthen their equity base. The fund takes open minority stakes in the share/nominal capital. This provides support to innovative Berlin-based technology companies with growth potential and an exit perspective that are active in the clusters defined in the joint Berlin/Brandenburg Innovation Strategy ("Inno BB 2025"). One example of financing is the company Qinous GmbH. Qinous GmbH's business is centred on the development of microgrids and hybrid systems for electricity supply with which the company addresses the growing demand for more flexible, sustainable and cheaper solutions for our energy needs.	Ongoing Programme being implemented Duration: 2014–2020/23
		Brandenburg COVID-19 Mezzanine Brandenburg Within the framework of the 2nd pillar of the Federal Government's €2 billion package of measures for start-ups and small and medium-sized enterprises, the Investment Bank of Land Brandenburg (ILB) – in collaboration with Germany's development bank Kreditanstalt für Wiederaufbau (KfW) – is providing finance to strengthen the equity base of start-ups and small and medium-sized enterprises (SMEs). The ILB grants support in the form of subordinated loans of up to €750,000 per business/business group from the "COVID-19 Mezzanine Brandenburg" programme to businesses with competitive and established business models that have got into financial difficulty as a result of the COVID-19 crisis. The COVID-19 Mezzanine Brandenburg programme has a financial volume of €14 million.	In force since 7 September 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
152.	*Measures adopted by the Länder to promote business start-ups*	**Hamburg** Corona Recovery Fonds (CRF) Target group: exit-oriented start-ups and growth-oriented small and medium-sized enterprises. Form: dormant holding of up to €800,000.	Application possible since 1 July 2020
		Hesse In line with the Hesse Start-up Initiative, continued networking of Hesse's outstanding start-up ecosystem and action to raise its visibility is of paramount importance for *Land* Hesse. For this reason, the company *Hesse Trade and Invest GmbH* (HTAI) and the cross-industry innovation platform *TechQuartier* have been entrusted to act as the state-wide ecosystem manager of *StartHub Hessen* for the Frankfurt/Rhine-Main region. TechQuartier serves as an important liaison for fintechs and other innovative, technology-driven start-up entrepreneurs as well as for corporates and potential investors from the Frankfurt/Rhine-Main area. *StartHub Hessen* is the main point of contact for all start-ups, incubators and networks in Hesse. It offers advice and networking as well as an overview of all start-up activities. In 2020, *Land* Hesse made a total of €1.5 million available for the management of the start-up ecosystem and for *StartHub Hessen*.	Ongoing until 31 December 2020
		Lower Saxony With the Start-up Initiative and the support for start-up centres this brings with it, Lower Saxony has been providing solid start-up support since 2017. Ten start-up centres at eight locations will receive a total of €2.3 million in support in the 2020-2022 funding period. Alongside this, other funding programmes are in place to support entrepreneurs in business set-up, acquisition and growth. Examples include: • Seed (equity financing for young innovative new businesses and start-ups with up to €600,000.) • Start-up grant (starting in 2020, each year approx. 150 start-up entrepreneurs can receive support of up to €2,000 per person/month to get their business up and running. €2 million are available annually for this purpose. During the COVID-19 crisis, the maximum duration of the start-up grant was extended from eight to eleven months.) • MicroSTARTer Lower Saxony (support of small and medium-sized enterprises (SMEs) with an (unsecured) loan of up to €25,000.) • Master start-up bonus (support for the creation of a permanent job subject to social security contributions in a crafts/trades business at the master level in the form of a non-repayable grant of €10,000.) • Lower Saxony start-up loan (loans are granted for investments of between €20,000 and €500,000, and of up to €500,000 for equipment.) • Support for women entrepreneurs (co-financing of ESF project *"Gründerinnen-Consult (GrC)"* (consulting and advice for budding women entrepreneurs); funding for the "Female Entrepreneurship" project commissioned by GrC from 1 January 2020 to 30 June 2022.)	Until 30 April 2024
		Rhineland-Palatinate Special Programme: COVID-19 Venture Capital for Start-ups and SMEs Silent participations of €100,000 to €500,000 for all sectors, including start-ups	Application up to 1 November 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
152.	*Measures adopted by the Länder to promote business start-ups*	**Saxony** The Free State of Saxony has already been supporting numerous businesses in making their start-up idea a reality on the basis of the state's existing Start-up Strategy. From a political perspective, a dynamic start-up culture is the driving force for an economic structure that is competitive in the future. Start-ups are supported worldwide in both monetary and non-monetary forms. The Free State of Saxony provides support primarily in monetary form through specific grant and loan programmes and also by awarding prize money and stipends. Aside from financial support, hybrid and non-monetary support initiatives – such as start-up and business plan competitions, accelerators, the establishment of technology and innovation centres and the provision of co-working spaces – have also grown in importance in recent years. Since July 2020, Fraunhofer ISI has been preparing a study on Saxony's position as a start-up centre, along with recommendations for actions for a future start-up promotion strategy to be launched by the Free State of Saxony. The study is expected to be published in Q4 2021. Thanks to the foundation of *futureSAX GmbH* as an innovation platform of the Free State of Saxony, support for start-up entrepreneurs has been put on a permanent footing and is now more focussed and better positioned for the future. *futureSAX GmbH* lends impetus to business start-ups and start-up activities in the Free State of Saxony, the transfer of knowledge between the scientific community and business enterprises, innovations in established businesses and entrepreneurship among young people. To this end, *futureSAX GmbH* interconnects key players in knowledge and technology transfer, young people who are interested in entrepreneurship and research, innovative entrepreneurs, businesses, investors and supporters/disseminators in a wide variety of formats. In addition to the well-established technology start-up grant and advice for start-up entrepreneurs, the Free State of Saxony has also been running another pilot project – the InnoStartBonus – since 2019. It is designed to provide individuals with personal support prior to setting up a business, e.g. people setting up a business as a sideline and business start-ups in the cultural and creative industry. With support from the Free State of Saxony for the two digital hubs in Dresden and Leipzig as part of the national digital hub initiative *(de:hub-Initiative)*, new centres connecting scientific excellence and commercial utilisation are being developed.	Ongoing
153.	Federal Competition Register	In future, contracting authorities are to be able to find out quickly and easily from a Federal Competition Register whether there are reasons to exclude a bidder from the award of a public contract. The nationwide online Federal Competition Register is currently being built up by the Bundeskartellamt and is to take effect in 2021. Serious legal infringements (offences, certain misdemeanours) are to be recorded in the register. By checking this register, it will be easier for contracting authorities to obtain quick and reliable information on whether there are reasons that can or must lead to the disbarment of a bidder to whom they would like to award a contract in a procurement procedure. The technical and organisational requirements for the storage of data in the Federal Competition Register and for the communication of data to the register authority or a contracting authority are governed by a statutory ordinance. The ordinance must enter into force before the Federal Competition Register can go live. It is also to be possible to check the register via the public procurement platforms used by public contracting authorities by means of a dedicated interface.	Staggered roll-out of the Federal Competition Register planned from spring 2021: starting with the registration of contracting authorities and reporting obligations of law enforcement authorities Cabinet decision (statutory ordinance): January 2021; approval of Bundesrat required

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
154.	Act to Expedite Procurement in the Defence and Security Sector and to Optimise Procurement Statistics *(Gesetz zur beschleunigten Beschaffung im Bereich der Verteidigung und Sicherheit und zur Optimierung der Vergabestatistik)*	The Act contains amendments to the Act against Restraints of Competition *(Gesetz gegen Wettbewerbsbeschränkungen)* and a number of statutory ordinances based thereon (Ordinance on the Award of Public Contracts in the Defence and Security Sector *(Vergabeverordnung für den Bereich Verteidigung und Sicherheit)*, Public Procurement Ordinance (Vergabeverordnung), Sector Ordinance *(Sektorenverordnung)* and the Procurement Statistics Ordinance (Vergabestatistikverordnung). In terms of content, the Act primarily concerns changes to the rules of procurement law in two areas: the award of public contracts in the defence and security sector, and procurement statistics. Aiming to help expedite procurement processes in the field of defence and security, the Act clarifies exemptions from pan-EU competitive bidding (examples added), contains a number of amendments in legal protection, and specifically defines the exemption from procurement law where essential security interests are affected. The second area governed by the Act to Expedite Procurement in the Defence and Security Sector and to Optimise Procurement Statistics concerns nationwide procurement statistics, which were created in 2016 with the Procurement Statistics Ordinance as part of measures to modernise procurement law. A number of further legal specifications were required in both the Act against Restraints of Competition and the Procurement Statistics Ordinance to establish all the legal prerequisites for the logging, processing, evaluation and provision of data on procurement in Germany by the Federal Statistics Office. In addition, the range of data to be captured was also adapted so procurement statistics are aligned even more with the information needs of the Federation, *Länder* and municipalities.	In force since 2 April 2020
155.	Revision of the general administrative provision on the procurement of energy-efficient services *(Allgemeine Verwaltungsvorschrift zur Beschaffung energieeffizienter Leistungen)*	To ensure a high degree of energy efficiency in all federal procurement processes, the revised version of the general administrative provision on the procurement of energy-efficient services clarifies that procuring parties must always purchase goods and products with the highest efficiency rating available within the meaning of the EU Regulation on Energy Labelling. In addition to the amendments to the administrative provision, in a second step the Federal Government plans to issue a general administrative provision on climate-friendly public procurement in order to implement the cabinet decisions on the Climate Action Programme. This provision is to extend to particularly climate-relevant products and services. The uncomplicated execution of obligations in practice must also be ensured in this context, however.	In force since 27 May 2020
156.	Act to Amend the Legal Authorisation Basis of the Statutory Fee Schedule for Architects and Engineers *(Gesetz zur Änderung der gesetzlichen Ermächtigungsgrundlage der Honorarordnung für Architekten und Ingenieure)* and Ordinance to Amend the Statutory Fee Schedule for Architects and Engineers *(Verordnung zur Änderung der Honorarordnung für Architekten und Ingenieure)*	In its ruling of July 2019, the European Court decided that the binding minimum and maximum rates of fees in the statutory fee schedule for architects and engineers (HOAI) violate the EU Services Directive. In order to adapt national rules to the judgment, the Federal Government has first presented a bill amending the legal authorisation basis of the statutory fee schedule for architects and engineers – the Act to Regulate Engineer and Architect Services (*Gesetz zur Regelung von Ingenieur- und Architektenleistungen)*. Furthermore, on 16 September 2020 the Federal Government adopted a draft of an ordinance to amend the HOAI itself. According to this, fees for services by engineers and architects are in principle freely negotiable. In future, the fee ranges specified in the fee tables will serve as a general orientation for fees. If no fee agreement is reached, the basic fee rate – which, in terms of the amount, corresponds to the previous minimum rate – shall apply.	The rules of the revised HOAI fee schedule have been in force since 1 January 2021.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
157.	Protection of whistle-blowers	EU Directive 2019/1937 of 23 October 2019 on the protection of persons who report breaches of Union law contains, for the first time, rules for the harmonisation of the protection of whistle-blowers in the European Union. Under the Directive, whistle-blowers are to be given greater protection because they make a key contribution to enforcement. In addition to requirements regarding the protection of whistle-blowers against harm as a result of a report or disclosure, the Directive also contains requirements to establish internal and external reporting channels through which individuals can report breaches. The Member States must implement the Directive by 17 December 2021. To this end, the Federal Government plans to introduce a bill into the parliamentary procedures in good time.	Interministerial coordination of draft bill
158.	Act Modernising Insurance Tax Law and Amending Staff Regulations *(Gesetz zur Modernisierung des Versicherungsteuerrechts und zur Änderung dienstrechtlicher Vorschriften)*	The amendment to the Insurance Tax Act *(Versicherungsteuergesetz)* and the Insurance Tax Implementation Ordinance *(Versicherungsteuer-Durchführungsverordnung)* pursues several objectives: 1. Achieve greater legal certainty with clear and explicit rules; 2. Modernise insurance tax law by bringing it into line with the state-of-the-art of information technology; 3. Systematically develop insurance law further, particularly with regard to its relationship with the Insurance Tax Implementation Ordinance; 4. Simplify the application of the law.	In force since 10 December 2020
159.	Second Act on Tax Relief for Families and Adjusting other Tax Rules *(Zweites Gesetz zur steuerlichen Entlastung von Familien sowie zur Anpassung weiterer steuerlicher Regelungen)*	The Bundesrat approved the Second Act on Tax Relief for Families and Adjusting other Tax Rules (Second Families Relief Act) on 27 November 2020. Monthly rates of child benefit are increased by an additional €15 with effect from 1 January 2021, and the tax-related child allowance is adjusted accordingly. In addition, the basic personal allowance incorporated in the income tax rate will be raised as of 2021 and, in order to offset the effects of bracket creep, the other income threshold levels will be adjusted in line with the previous year's rate of inflation. This exempts the subsistence minimum from tax and compensates for the effects of the fiscal drag.	Promulgation in Federal Law Gazette I, p. 2616 (1 December 2020).
160.	Act Increasing the Flat-Rate Amount for Persons with Disabilities and Adjusting other Tax Rules *(Gesetz zur Erhöhung der Behinderten-Pauschbeträge und zur Anpassung weiterer steuerlicher Regelungen)*	A provision is made in the Income Tax Act *(Einkommensteuergesetz)* that taxable persons with disabilities can apply for a disability flatrate allowance instead of furnishing individual proof of expenditure on daily necessities due to their disability. A flatrate option is also available to taxpayers who incur exceptional costs due to the at-home care of an individual and can therefore claim a care-related standard allowance. To ensure that the flat-rate amounts can perform their simplification role in the future, the flatrate allowances for persons with disabilities and the care-related standard allowance have been adjusted in terms of the amount received and the eligibility requirements. In addition, a travel allowance on account of disability has also been introduced.	Fully in force since 1 January 2021
161.	2020 Annual Tax Act *(Jahressteuergesetz)*	The 2020 Annual Tax Act contains a series of measures, including the following: • Reorganisation of investment deductions according to Section 7g of the Income Tax Act (particularly raising of the limit for deductible investment costs from 40 percent to 50 percent and introduction of a single profit margin of €200,000 for all types of income as an eligibility requirement) • Extension of the framework under tax law for the fiscal consideration of expenses for the provision of living space at reduced rates pursuant to Section 21 (2), first sentence of the Income Tax Act • Implementation of the second stage of the VAT Digital Package • Tax exemption of employer contributions to short-time work allowance extended until 31 December 2021 • Removal of time limits on the increased tax-free allowance for single parents • Tax exemption for payments or wages-in-kind: between 1 March 2020 and 30 June 2021, employers can grant their employees up to €1,500 in aid and support in addition to wages or salaries owed in any case without this being subject to tax • Introduction of a temporary flat-rate allowance for those working from home	Promulgation in Federal Law Gazette I, No. 65 p. 3096 of 28 December 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
162.	Seventh Act Amending the Motor Vehicle Tax Act *(Siebtes Gesetz zur Änderung des Kraftfahrzeugsteuergesetz)*	This Act particularly makes provisions for CO_2 test values to be given a higher weighting in the tax rate for newly registered passenger cars with effect from 1 January 2021 and a time-limited preferential treatment of passenger cars with particularly low emissions. Furthermore, the period for granting the 10-year vehicle tax exemption for newly registered all-electric vehicles is extended until the end of 2025. The Act is to make a contribution to the goal of getting between seven and ten million electric vehicles on Germany's roads by 2030 and use the motor vehicle tax to support CO_2 reduction by 2030 while also ensuring a balanced system is in place.	Promulgation in the Federal Law Gazette I p. 2184 (22 October 2020); entered into force on 23 October 2020
D. Increasing labour force participation, making the pension system and labour market fit for the future			
163.	Second Act on the Equal Participation of Women and Men in Executive Positions in the Private and Public Service *(Zweites Führungspositionen-Gesetz)*	This Act builds on the first Act of the same name from 2015 with a view to stepping up the pace of progress on equality of women in executive positions and in bodies in the private sector and the public service. For the first time, rules are introduced requiring the minimum representation of one woman on the boards with more than three members of companies which are listed on the stock exchange and subject to codetermination. The fixed gender ratio of 30 percent on supervisory boards is to be extended to cover companies in which the Federation has a majority stake. For these companies, a minimum membership of one woman and one man on the board is to apply when the board has three or more members. The public-law welfare insurance corporations, such as statutory health insurance funds, pension and accident insurance funds, and the Federal Employment Agency are also to have at least one woman and one man in managerial bodies containing more than one person. In the public service, equal participation of women and men in leading positions is to be achieved by 2025. With a view to attaining greater equality of women in bodies of organisations, in future the rules of the Appointment to Federal Bodies Act *(Bundesgremienbesetzungsgesetz)* are extended to bodies to which the Federation seconds two members.	Cabinet decision: 6 January 2021
164.	Measures adopted by the *Länder* to increase the rate of female labour market participation, to improve equality and the compatibility of work and private life, and to increase the proportion of women in management posts	**Mecklenburg-Western Pomerania (MV)** With the support of the ESF, mentoring programmes are being promoted in various areas in MV (commerce, academia, art and *Land* administration). The aim is to support women as they develop their careers with a view to raising the proportion of women in leading positions.	Project duration until December 2022
		The ESF funding is supporting the *Land* Centre for Equality and Compatibility in MV. The aim is to shed light on the partnership-based compatibility negotiations in the family and work contexts and to stimulate a debate. Stereotypical roles are to be made visible and, if possible, broken down, as couples, companies and family advice facilities focus on partnership-based negotiation processes.	Project duration until June 2022
		The ESF is supporting projects in MV which focus on equal pay for equal work and equal treatment in SMEs. The aim is to raise understanding of equality in the business community, to analyse and if necessary, adapt the wage structure using the appropriate instruments, in order to reduce in particular the risk of old-age poverty amongst women.	Duration of current project until 06/2022
		North Rhine-Westphalia (NRW) chancen-durch-vereinbarkeit (opportunities-through-compatibility) *Land* initiative NRW's opportunities-through-compatibility initiative helps employers to implement family-friendly measures on the ground in their companies. NRW is engaged in close cooperation on this with the business community, business promotion companies and research institutes. Backed by scientific expertise, local tandems of SMEs have been set up under the initiative – learning partnerships in which new family-friendly instruments are implemented locally and experienced companies coach less-experienced businesses.	Ongoing, unless otherwise stated

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
164.	*Measures adopted by the Länder to increase the rate of female labour market participation, to improve equality and the compatibility of work and private life, and to increase the proportion of women in management posts*	The aim is to show across the entire *Land* what is possible locally. Films, podcasts and interviews on www.chancen-durch-vereinbarkeit.nrw.de present good examples of the compatibility of family life and work to the public, and offer support in the form of information, check lists and dialogue. The website is addressed to SMEs from NRW and presents concepts and possibilities to foster day-to-day compatibility for staff. Further to this, there are plans to hold round-table formats with the business community on the compatibility of family life and work. Fathers in NRW At present, the following measures are in preparation, based on a study on the situation of fathers in NRW: • Conference on factors influencing the involvement of the father in their children's lives • Support for fathers with reducing working hours and extending parental leave • Information for fathers with a migrant background • Support for couples in conflict and separation situations UNTERNEHMEN VIELFALT (COMPANIES DIVERSITY) network office In particular in view of the impending shortage of skilled workers, the deployment of diversity management is of interest for SMEs in NRW. A network office has therefore been set up which supports SMEs with the introduction and implementation of diversity management with a focus on LSBTIQ* employees in SMEs. A central task for the network office is providing free advice for owners, managers and HR officers of SMEs who are planning and implementing diversity management. This includes e.g. workshops which train diversity managers and tandems of companies, as well as a "think tank workshop" and other events. Further to this, the networking amongst the companies themselves on this issue is to be fostered. The network office provides information about projects and events at www.unternehmen-vielfalt.nrw. The network office offers SMEs: • Advice on the implementation of diversity management for LSBTIQ* in your company; • Network for the exchange of information and experience; • Provision of best-practice examples, tools and studies; • Information about initiatives and advisory services on diversity management.	
		Rhineland-Palatinate "New Opportunities" advisory centres: Information, advice and support services surrounding the gainful employment of the "hidden labour force reserve" of inactive persons.	1 January 2020 – 31 December 2020
		Centre for Equal Pay: Raising awareness for the issue of equal pay and qualifications to identify and remove pay discrepancies in SMEs.	1 January 2020 – 31 December 2020
		Pilot project for the upskilling and qualification of women from a migrant background who have a third-level qualification (not recognised in Germany). Individual advice, support, further training and an intensive German course prepare the project participants to enter the job market.	1 June 2020 – 31 July 2020
		FiT – Women in Part-time: Service with social and educational support open to all professions in which single mothers on unemployment benefit II learn a profession of their choice on a part-time basis.	1 February 2020 – 31 January 2021
		Saxony ESF-funded projects to support the participation of women in the workforce are being prepared, with special attention being paid to • target groups in more difficult situations (e.g. single mothers, women migrants), • typical interruptions to the careers of women and • compatibility of career and family life.	ESF-funded projects undergoing preparation and coordination

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
165.	Measures adopted by the *Länder* to safeguard the supply of skilled workers	**Brandenburg** *Land* Brandenburg will continue its skilled labour strategy entitled "Educate, Retain and Recruit for Brandenburg" (2014–2019) and, together with Berlin, develop it into a comprehensive labour strategy to address the growing shortages of skilled labour. Within the context of the new Skilled Immigration Act, the topic of immigration will be an important strategy approach. The strategy and the various measures it contains are designed to help businesses fill the training places and jobs they have vacant. 2020 will also see the continuation of the Brandenburg Training Consensus and action will be taken, together with partners, to strengthen vocational training. A good education is a central pillar for securing the next generation of skilled workers in the state. Key support approaches within the framework of integrated action to secure the skills base include the following ESF guidelines: • Programme for qualified training within training networks to enable young people to receive in-company training in businesses in Brandenburg • Further training guideline in order to maintain and improve employability, stabilise jobs and increase participation in continuing and further training • Brandenburg Innovation Professionals: designed to help small and medium-sized enterprises encourage (junior) skilled professionals to opt for Brandenburg-based SMEs by implementing innovation measures in their companies The ESF guideline "The Door to Your Future Career" seeks to improve the vocational integration of young people into the working world. Local coordination centres at upper secondary colleges offering general and vocational education *(Oberstufenzentrum)* organise projects for apprentices and pupils of vocational schools to improve their social and interpersonal skills. This is intended to prepare young people for training and also to help reduce the number of people dropping out of vocational training programmes. Furthermore, the local coordination centres provide information to young people, parents, schools and businesses about services to help the transition from school to work, and also guide individuals to suitable training programmes and advisory services.	Continued from 2020 to 2025 The further training guideline was extended until 30 June 2022 As part of measures to prepare for the new ESF funding period (2021–2027), the continuation of the guidelines is being reviewed
		Lower Saxony "Start Guides" projects To support the Skilled Immigration Act *(Fachkräfteeinwanderungsgesetz)* and to further improve the integration of refugees into the labour market, Lower Saxony is making provisions for two-year regional "Start Guides" projects. These projects are particularly intended to raise awareness among small and medium-sized enterprises for the recruitment of foreign skilled workers and junior employees, and to oversee and support the integration of international immigrants into the working and social environment through the provision of information and practical assistance.	Period of duration: 2021–2023

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
165.	*Measures adopted by the Länder to safeguard the supply of skilled workers*	Action plan of the "Lower Saxony Skilled Labour Initiative" In October 2020, the *Land* government presented the action plan of the "Lower Saxony Skilled Labour Initiative". The 2020 action plan contains existing and currently planned activities to secure the supply of skilled labour, and provides an overview of the many projects of the *Land* government last year. Main areas of the action plan: • Mobilisation of the potential offered by the domestic labour force • Controlled and skills-based immigration and the integration into the labour market of all groups of people with a migrant background • Expansion of education-based potential In addition to this, a focus is placed on the vocational fields of IT experts, educational and healthcare occupations due to a particularly great skills gap. This year, the various chapters also include measures initiated against the background of the COVID-19 pandemic. Examples of new measures are: • Introduction of the "Lower Saxony Continuing Education Grant" of €1,000 for master craftspeople outside the skilled craft sector. • New Start Guides funding guideline with a budget of €3 million. The Start Guides are intended to help immigrants both with and without a refugee background and companies with a view to integration into company operations, and to provide assistance.	Ongoing implementation until 2022
		Saarland Saar Future Alliance for Skilled Labour In 2015, the *Land* government worked with stakeholders from the business community to draw up a strategy to safeguard the supply of skilled labour. The implementation of the "good work" approach and the targeted support of SMEs are strategic priorities of the alliance. The overriding goal is that of making Saarland a business location that is fit for the future and an attractive place to live in order to retain skilled workers in the state, qualify skilled workers and attract new ones. Against this background, the alliance targets the skills shortage in various parts of the economy, and the specific problems suffered by specific target groups (older employees, the unskilled, etc.), and develops specific measures. In 2020, the focus was on the safeguarding of the dual vocational training system during the pandemic and the active fostering of the process of transformation of the Saarland economy with a view to retaining jobs by means of training workers.	Ongoing implementation of activities implemented to date Strategic further development of the alliance
		Saxony The "2030 Skilled Labour Strategy for the Free State of Saxony" was adopted in May 2019. It comprises four main fields of action: 1. Foster skills and aptitudes – personalised development and education to develop the next generation of skilled workers: By providing individual support for pupils, the aim is to reduce the percentage of pupils who leave the school system without a qualification. Further to this, career orientation is to be improved significantly and the system of dual education and training strengthened. 2. Attract talent – targeted recruitment of skilled staff: This pillar involves targeted outreach to university graduates, for example, and action to hire or win back skilled workers from other *Länder*. The targeted immigration of international skilled professionals is another focal area. 3. Tap existing potential – enable access to the labour market for everyone of working age: the partners to the Strategy want to focus even more on the potential of various groups, such as well-educated people with disabilities, persons from a migrant background, single parents and the long-term unemployed. 4. Retain skilled staff – create attractive jobs: Strengthen in-company further training and skills development. Jobs are also to be made more attractive, more flexibility is to be provided to make it easier for workers to reconcile work and family life, and strategic HR work is to be expanded significantly in all businesses in Saxony.	Ongoing implementation until 2030, e.g. via the Saxony Alliance for Skilled Professionals

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
		The implementation of the 2030 Skilled Labour Strategy is overseen, inter alia, by the state-wide Saxony Alliance for Skilled Professionals and 13 regional alliances for skilled labour at the rural area and urban district level. The Saxony Alliance for Skilled Professionals has set up thematic working groups that actively drive forward the implementation of measures under the various fields of action. This Alliance involves the collaboration of representatives of the business sector and trade unions, the municipal central associations, the Federal Employment Agency, various industry associations, the Saxon chambers of industry and trade, the chamber of crafts and the *Land* government. The state-wide approach is supplemented by measures of the 13 regional alliances for skilled labour at the rural area and urban district level. A system of *Land* funding for skilled labour was established to implement their measures and projects. Since 2016, more than 400 regional and *Land*-wide projects have been supported, with funding totalling €45 million. In addition, the "Homeland for Skilled Workers" *(Heimat für Fachkräfte)* was set up, a general website covering measures to secure the supply of skilled labour in Saxony.	
166.	Occupational Safety and Health Control Act *(Arbeitsschutzkontrollgesetz)*	The Occupational Safety and Health Control Act mainly covers: • Restriction on the deployment of external staff in the core business of the meat industry (slaughtering, cutting up, processing meat); use of contract workers prohibited since the entry into force of the act; supply of temporary workers prohibited in principle since 1 April 2021; an exemption from the ban exists for meat processing until 31 March 2024, allowing a restricted supply of temporary workers; total ban from 1 April 2024. The butchers trade is exempt from this. • Obligation to deploy electronic, tamper-proof registration of hours worked in the meat industry; • Cross-sectoral minimum standards for communal accommodation and documentation requirements; • Increase in the fines that can be imposed on violations of the Hours of Work Act *(Arbeitszeitgesetz)* and corresponding alignment of the fines in the Safety and Health at Work Act *(Arbeitsschutzgesetz)* and the Act on the Protection of Young People at Work *(Jugendarbeitsschutzgesetz)*; • Introduction of a minimum inspection rate for the *Länder* in the Safety and Health at Work Act and establishment of a federal office of experts for safety and health at work at the Federal Institute for Occupational Safety and Health; • Authorisation to issue temporary, specific ordinances to protect safety and health at work in epidemics national significance pursuant to Section 5(1) of the Infection Protection Act; • Establishment of a committee on safety and health for overarching issues and work on more precise provisions in the Act on Safety and Health at Work; • Electronic data exchange between the *Länder* authorities for health and safety at work and the accident insurance funds regarding site inspections.	Entry into force of most provisions on 1 January 2021
167.	Act to Improve Healthcare Provision and Care Services *(Gesetz zur Verbesserung der Gesundheitsversorgung und Pflege)*	The areas covered by the act include: • Financial stabilisation of the statutory health insurance funds via a supplementary tax-funded federal grant of €5 billion; transmission of €8 billion from the financial reserves of the statutory health funds to the revenues of the Health Fund; • Implementation of the 20,000 auxiliary care workers programme; • Establishment of a programme to promote posts for midwives totalling €65 million a year (running from 2021–2023); • Even greater use is to be made of digital possibilities for the supply of nursing aids in future, e.g. when revising the list of nursing aids.	In effect since 1 January 2021

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
168.	Act to Introduce a Basic Pension *(Gesetz zur Einführung einer Grundrente)* for long-time members of the statutory pension insurance scheme with a below-average income and for further measures to increases the old-age pension.	By introducing a basic pension in the statutory pension insurance system, the Federal Government is increasing the recognition of the lifelong contribution made by pensioners who have worked for decades and paid compulsory contributions from below-average incomes and have raised children or cared for people. In order to improve the targeted nature of this measure, the granting of the basic pension depends on a person's income. Further to this, exempt amounts are being introduced in the needs-oriented welfare systems for long-term payers of compulsory contributions into pension provision systems, e.g. in the basic welfare benefits in old age, and in the case of reduced earnings and in the housing allowance, in order not least to ensure that the improvements to the pension are not lost again in these areas. The basic pension is funded from taxation.	In effect since 1 January 2021
169.	Federal operational ESF+ programme	The strategy of the Federation's operational programme in the ESF+ programming period is oriented to the policy aim of a more social Europe – implementation of the European Pillar of Social Rights. The funding priorities contained in it take account of the country-specific recommendations of the European Commission from 2019 and the investment guidelines cited in Annex D of the 2019 Country Report for Germany. Building on this, the Federation will set funding priorities in the following areas: • social inclusion and poverty reduction, • securing skilled labour, • support for companies, and especially SMEs, and workers with coping with the demographic, digital and green transition, • improvement of the educational opportunities of disadvantaged people, and • lifelong learning.	The aim is to have an approval of the Federation's Operational ESF+ programme by the European Commission in the autumn of 2021.
170.	Alliance for Initial and Further Training	The Alliance for Initial and Further Training is an alliance of several partners from government and civil society whose aim is to help as many people as possible earn a vocational training qualification, with a clear priority given to the dual system of vocational training within a company. The Alliance's most important goal is to better match companies offering vocational training and prospective trainees. Existing programmes and activities to this affect are being continued, including "The Right Candidate for the Job", "Refugee recruitment advisors", and the "Education Chains" initiative. Furthermore, vocational training is to be made more attractive. Measures here include programmes that offer trainees a stint abroad (Erasmus, "Ausbildung-Weltweit", "Vocational Training Without Borders"). In addition, a review will be conducted to examine how trainees and businesses in regions affected by structural change can be supported more effectively.	Extended on 25 June 2020 until 31 December 2022
171.	Federal programme "Safeguard vocational training places"	Components: • a vocational training premium of €2,000 for companies and institutions providing vocational training to the same extent as in the preceding years, despite being affected by the COVID-19 crisis; • a vocational training premium "plus" of €3,000 for companies and institutions providing vocational training to a greater extent as in the preceding years, despite being affected by the COVID-19 crisis; • funding worth 75 percent of the gross pay received by trainees in SMEs that continue to offer training despite a lack of work due to COVID-19 and do not put trainees and trainers on short-time work; • a premium worth €4,000 for SMEs, inter-company educational facilities and providers of vocational training services that offer interim vocational training on demand and in cooperation with others; • a premium worth 3,000 for companies that take over a trainee from a company that is having to file for insolvency due to pandemic.	Implementation of measures (1) to (3) and (5) through funding guideline 1 (in effect since 1 August 2020, amended version in effect since 11 December 2020) Implementation of measure (4) – vocational training on demand and in cooperation with others – through funding guideline 2 (in effect since 31 October 2020)

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
172.	Measures adopted by the *Länder* to support vocational orientation and improve vocational training	**Comprehensive measures are in place in the *Länder* to strengthen vocational training and career orientation. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.**	
		Bavaria BOBY Internet platform: The internet platform at BOBY.bayern.de (short for *BerufsOrientierungBayern* or vocational orientation in Bavaria) provides a full and up-to-date overview of vocational-orientation activities in Bavaria. Its main target groups are young people, parents and teachers. The partners in the alliance (business, chambers and the labour administration) provide an overview of their many different activities. Crucially, the platform is designed with the user target groups in mind, especially school students. The content of the platform is subject to continuous development.	Internet platform went online in 2018. In 2020, the focus was on further developing it for the separate target groups of parents, teachers, and companies. This work is to be completed soon.
		Berlin Youth employment agency Berlin Berlin's youth employment agency has put in place a comprehensive careers advice system for all young people up to the age of 25, to help them with the transition from school into working life. The agency is tasked with identifying its target group, offering advice, and providing support for young people, so that these can successfully take up vocational training or a course of studies. The overarching objective of the agency is to put every young person on track towards professional qualifications by giving them comprehensive advice, including where the young persons themselves do not actively seek it, by opening up prospects for them, giving them realistic opportunities for qualifications, and by pooling measures to support the young persons until they successfully complete their vocational training, or – in some cases – take up longer-term employment with the help of all instruments that are available.	Implemented in March 2020; Next step: planning courses across all of Berlin to help those with special educational needs catch up.
		Summer school for vocational training For the first time, summer schools were offered for vocational training. They take place during the school holidays (six weeks in summer/two weeks in autumn) at schools or external venues. The "2020 summer school" was devised in response to the measures to curb the spread of COVID-19, which have included school closures and restrictions in schools, and was aimed at young people preparing for vocational training, those in vocational training, and those receiving further education, whose lessons had been cancelled.	Completed in 2020 To be continued in 2021
		Baden-Württemberg Concept for reforming the transition from school to working life. The two goals of this concept are 1) to help more young people transition directly from school to vocational training and working life and 2) to support young people with special educational needs as they make this transition. At the heart of the concept are a new regional transition management based within the public administration at district level, a training course on how to prepare young people for dual vocational training, complete with a mentoring programme, and systematic vocational orientation offered in secondary schools. It is currently being implemented in 28 urban and rural districts. The objective is to roll it out across the entire state by 2025. Funding from the Economic Affairs Ministry in the 2020/21 school year: €3.8 million.	Ongoing implementation

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
172.	*Measures adopted by the Länder to support vocational orientation and improve vocational training*	**Hesse** Manual "Effective support for vocational orientation" The manual entitled "Effective support for vocational orientation", which was developed on behalf of the Federal Employment Agency and in cooperation with the Foundation of German Business, was first made available to schools with an upper-secondary level in Hesse in 2018. The work was then followed up by means of an exchange of experience and various review sessions, before being concluded with a digital event in November 2020.	Supportive work concluded in November 2020 Since then, the handbook has been used in all schools in Hesse that teach at upper secondary level
		"Career choice passport 4.0" The "career choice passport", a portfolio instrument for vocational orientation, is given out to all school students in Hesse undergoing vocational orientation. Its goal is to foster students' individual skills and present them with useful tasks to be solved during the process of choosing a career. The passport is currently being developed into a modern, internet-based ePortfolio that can be used on mobile and stationary devices, tested by the different target groups in different types of schools, and will then be rolled out.	Individual elements are being tested until the end of 2021
		Mecklenburg-Western Pomerania (MV) Full-time school-based vocational training in the field of youth work and education There are five vocational schools offering full-time school-based vocational training courses in the field of youth work and education in MV. This addresses the significant increase in demand for youth and childcare workers, particularly in the field of child day care. Despite temporary school closures due to COVID-19, the 2019/20 school year was brought to a successful close.	Current level of implementation in the school year of 2020/21: 58 classes/1464 students
		North Rhine-Westphalia (NRW) "No Qualifications without Prospects" *(Kein Abschluss ohne Anschluss (KAoA))* – transition from school to working life in North Rhine-Westphalia The KAoA initiative in NRW has led to a uniform, tiered system of transition from school to vocational training/and or tertiary education designed to support young people throughout the process of vocational orientation, widen their horizon with regard to the professions they consider, and to hone the skills they need to make an informed decision about their career choice. In this context, vocational orientation is taking place over a period of several years, confronting each individual student with their interests, hopes, and potential as well as the skills sets required for different paths, the various paths themselves, and actual working life. KAoA is aimed at all students in NRW attending class 8 or higher, including those studying at upper-secondary level, and ends when a student takes up vocational training or a course of studies. The systematic process of vocational orientation is defined by different standard elements (or SBOs) that complement each other and that students attend in a specific order, supported by their schools.	Offered at some 2,200 schools

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
172.	*Measures adopted by the Länder to support vocational orientation and improve vocational training*	Digital vocational orientation Vocational orientation in line with the NRW KAoA initiative continues to be mandatory during the time of the pandemic. Much greater flexibility has been granted with regard to implementation of the standard elements, and a broad range of digital support tools have been provided to ensure that the process of vocational orientation does not stop or fail to begin, and to allow all of the central standard elements to be implemented in a digital format, or – in the case of practical work – to be at least partially replaced by a digital format. For instance, a digital tool allowing students to analyse their individual potential has been especially designed for KAoA. Teachers can also draw on the BO Tool NRW (short for vocational orientation tool), a comprehensive digital online tool that is particularly useful for distance learning and blended learning. Furthermore, the EDMOND NRW 122 online media service is used to distribute 360° occupational videos that can also be used offline and which, if optional cardboards are also being used, ensure a high level of passive immersion. Parallel to this, the digital field-of-occupation finder, combined with the results of the individual analysis of a student's potential, can be used to prepare for analogue and digital excursions into the fields of occupation that student is interested in. The entire KAoA process is supported by 36 digital learning modules that are built to fit into the SBO system and whose focus is on managing the transition and the various options for thereafter, as well as on compensating for those practical elements of vocational orientation that are currently not possible due to COVID-19.	
		Career choice passport 4.0 – *berufswahlapp* The career choice passport NRW (Berufswahlpass NRW (BWP)) is a portfolio instrument used throughout the entire process of vocational orientation in schools. It is customised for different target groups and its use is mandatory for all students in NRW from year 8 onwards. Since 2018, eight *Länder*, the Federal Employment Agency, the Federal Institute for Vocational Education and Training (BIBB) and a federal working group for the career choice passport, headed up by NRW, have been developing an internet-based ePortfolio that can be used on mobile and stationary devices. This *'berufswahlapp'* is to be introduced in its final version as from January 2022.	Individual elements are being tested until the end of 2021
		Chain of responsibility The 'chain of responsibility' is the name of the structured process of transition management developed by all the partners involved in KAoA. It defines each individual stakeholder's responsibilities along the process chain. Within a series of workshops currently being implemented on the basis of revolving regional work phases at administrative-district level, minimum standards for individual formats and format groupings designed to support young people throughout the period of transition and as they choose an option for thereafter are being agreed within a core working group at state level. The objective for the KAoA steering bodies is to implement binding formats locally and at the neuralgic points of the process chain whilst ensuring that minimum standards are met, that all partners make a voluntary commitment to active involvement, and that the needs of every single student are addressed.	To be expanded by the end of 2021
		Holiday courses KAoA holiday course are offered during all school holidays. These courses are an additional add-on being offered as part of the NRW "No Qualifications without prospects" (KAoA) initiative. They give year-9 and year-10 students the opportunity of a practical stint in various different vocational fields. The courses are taught in non-school vocational training and teaching workshops led by expert providers of vocational training and vocational orientation.	Started: 2020 autumn holiday

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
172.	*Measures adopted by the Länder to support vocational orientation and improve vocational training*	**Rhineland-Palatinate** Measures to strengthen vocational training and vocational orientation Based on Rhineland-Palatinate's strategy for securing skilled labour (2018–2021), the oval table for securing skilled labour and vocational training (OT), and the framework agreement concluded by the partners in the OT on vocational orientation (2020-2026): continuation of the agreement between the Federation and the *Länder* on the "education chain initiative" for 2021-2026, for the purpose of including it into the state's overall strategy programme. The agreement sets out a comprehensive strategy on career guidance and study programme orientation, on the transition from school into working life, and on measures to promote vocational training. Key projects include: • Firmly establishing and continuing the "Praxistag" instrument until 2020 – a long-term internship for students in class 8 or 9 striving towards a lower secondary school certificate. • Expanding the "Profil AC" skills and prospects analysis (since 2016). At the heart of this is training for selected teachers who will then develop and implement a strategy tailored to the school they work at. • Introduction of the position of "transition coach"; to be further developed over the 2020/2022 project period: staff from external implementing agencies to work with young people individually or in groups to coach them and offer career guidance. • A skills analysis procedure aimed at recently immigrated children and young people has been in use in more than 200 schools since 2017: the web-based "2P – potential and prospects" tool targets recently immigrated children and young people aged 10-20 and living in Rhineland-Palatinate. The 2P tool is used to measure their specific and horizontal skills and abilities. Its objective is to facilitate these young people's integration into schools, help them acquire German quickly, prepare them for vocational training, and help them take up such training. • "2P plus" support tool: Having gone through the 2P diagnosis, schools with a large number of new immigrants and/or students with poor knowledge of German can then offer an additional five lessons per week for one school year. These lessons are taught by external education providers, while the schools themselves take care of integrating them into their career guidance strategies. The idea behind this is to combine practical vocational orientation with lessons to foster specific skills and language skills. Throughout the year, the focus is on practical work. • Mentoring talks are used to better bring together school work and the work of the youth employment agencies. This is the tool via which cooperation between the schools and the youth employment agencies (= a combination of vocational orientation provider, job centre, and youth support service) is provided as from class 8.	In effect since 1 January 2021
		Funding programme for in-house continuing training Continuing training is all the more important now that the world of work is in constant, rapid change. The RP Ministry for Social Affairs, Employment, Health, and Demographics has launched a new funding programme for in-house continuing training. Under this programme, companies in RP that offer in-house continuing training are eligible for up to €30,000 in support per year. Furthermore, the existing *"QualiScheck"* funding programme, which supports individuals pursuing continuing training, has been streamlined and the maximum sum of funding that can be claimed has been raised to up to €1,500. Both funding programmes launched on 1 October 2020 and draw on funding from the European Social Fund (ESF) (www.berufliche-weiterbildung.rlp.de).	The funding programmes started on 1 October 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
172.	*Measures adopted by the Länder to support vocational orientation and improve vocational training*	"Youth employment agency plus" pilot projects Youth employment agencies (Jugendberufsagenturen (JBAs)) institutionalise the cooperation ongoing between the providers of support under the Social Code volumes II, III and VIII, thus helping young people making the transition between school and vocational training/the world of work receive tailored support. As a result of the COVID-19 pandemic, a greater number of young people than usual are at risk of being failed by the established support structures after they leave school. Youth employment agencies and outreach workers are effective in getting these young people back on track. Rhineland-Palatinate wants to strengthen its JBAs and therefore has teamed up with the Agency for Employment to create "JBA plus" pilot projects. Under these, two full-time positions are being created. The first is for a coordinator between the support offered under the three volumes of the Social code, the schools, and other local stakeholders. The second entails the role of an outreach and social worker tasked with preparing young people to use the services offered by the JBAs.	Started 1 July 2020; pilot projects to run until 31 December 2021
		Schleswig-Holstein Manufacturing schools The funding provided with the help of the European Social Fund (ESF) for seven manufacturing schools under the state's employment programme for 2014-2021 gives young people with limited vocational prospects an opportunity to develop their individual work-related practical skills. The manufacturing schools are an accessible form of transition into work open to young people up to the age of 25 who have left school without a leaving certificate, who are jobless, and difficult to place for several different reasons (e.g. because they dropped out of school, are in a difficult psychological position, tend to be violent and/or abuse drugs. These are Danish-style educational establishments that initiate learning in a company-like workshop environment where products are manufactured and services rendered for the actual market or at least close to market demand.	Throughout the entire funding period. Current programme duration: 1 August 2020 to 31 December 2021
173.	Measures adopted by the *Länder* to increase the rate of graduates from higher education	**Comprehensive measures are in place in the *Länder* to increase the percentage of people with tertiary education. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.** **Baden-Württemberg** New upper secondary level at vocational grammar schools *(Berufliche Gymnasien)* Better preparing school students for university by offering basic and advanced level courses in the key subjects of German and mathematics. Improving students' STEM skills by raising the minimum number of weekly science lessons from two to three, and by introducing computer skills as a mandatory subject to be taken for three consecutive years. Introduction of additional subjects from the field of science/technology.	Design and development concluded, to be implemented in the 2021/22 school year
		Brandenburg Measures taken to tackle the impact of the COVID-19 pandemic Brandenburg has topped up the hardship funds of its Student Services Organisations *(Studentenwerke)* to help them alleviate the social impact of the COVID-19 pandemic on students who are suffering financial hardship as a result of it. Furthermore, given that the pandemic is often causing students to fall behind on their schedules, Brandenburg has also amended its Higher Education Act *(Hochschulgesetz)* and issued an Ordinance on Higher Education during the Pandemic *(Hochschulpandemieverordnung)*. Under this new regulation, all students enrolled for the 2020 summer semester and the 2020/21 winter semester will have their exam deadlines and regular overall study periods extended by one semester. This is to secure students' continued access to financial support under the Federal Educational Assistance Act *(BaföG)* and stop them from dropping out of their study programmes.	Current

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
173.	*Measures adopted by the Länder to increase the rate of graduates from higher education*	**Hesse** "Future Contract Strengthening Studies and Teaching"	Permanent funding beginning in 2021
		• "Study-programme taken up" programme The budget for this programme is designed to reward institutes for higher education for accepting new students. The programme is to help universities, universities of applied sciences, and the HGU University of Applied Sciences uphold their capacities. At the same time, the programme also wants to boost the quality of teaching. The funding is to be used, e.g., for updating curricula, occupational orientation, the development of innovative and also digital teaching and learning methods, teaching-staff training, and for learning platforms that give students a more active role in the learning process.	An annual €50 million between 2021 and 2027
		• "Study-programme completed" programme The budget for the "study-programme completed" programme is designed as a reward for successful studies and the prevention of drop-outs from universities, universities of applied sciences, and the HGU. The programme is to make a lasting contribution to the high level of teaching and learning at the higher education institutes. The funding is to be used, e.g., for preparatory and bridging courses, orientation modules, special programmes for 1st year students, broader advisory and mentoring programmes, better selection and QM procedures (e.g. progress monitoring, alumni surveys).	An annual €30 million between 2021 and 2027
		• Infrastructure programme The funding is to be used to extend and improve the teaching-related infrastructure. Existing areas are to be renovated, equipment, furniture etc. modernised, and any remaining need for new buildings due to rising student numbers addressed by renting additional buildings.	An annual €30 million between 2021 and 2027
		• "Creation and expansion of innovative courses of study" programme The programme is to finance the creation and expansion of places for students that will later help satisfy the demand for skilled graduates. More specifically, the programme is to respond to the changes that have made some occupations that are highly relevant to our wellbeing as a society more demanding or have modified the skills sets required for them.	€4.1 million in 2021 (programme duration until 2027)
		• "High quality courses of studies and teaching" programme – for a positive academic environment (QuiS) This programme addresses developments including the higher proportion of those seeking higher education in an age cohort, more heterogeneous educational and linguistic backgrounds, and the will to make tertiary education more permeable. The funding is also to be made available for efforts to achieve a lasting positive effect on the quality of tertiary education, for additional measures to improve the structure of courses of study, and for a programme to support dual degree programmes in rural areas (QuiS-dual).	€27.34 million in 2021 (programme duration until 2027)
		Act on the Special Fund for 'Securing a Good Future for Hesse' *(GuteZukunftSicherungsgesetz – GZSG)* Additional grants to be made to the Students Services Organisations in Hesse, designed to mitigate the losses these are expected to make due to the COVID-19 pandemic (especially in terms of their catering business).	March to December 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
173.	*Measures adopted by the Länder to increase the rate of graduates from higher education*	**Mecklenburg-Western Pomerania (MV)** Improving success rates in teacher training degree programmes Academic success in teacher training degree programmes is to be increased by measures to improve aptitude assessment, strengthen teaching that focuses on implementation in practice in the professional field, and reduce the exam load for students. Initial measures, including a freshers' week for prospective teachers at regional schools, were already implemented in the 2019/20 winter semester. Between 1 January 2021 and 31 December 2023, MV is providing an additional €3 million for measures designed to improve success rates in teacher training degree programmes.	Implementation started in April 2019
		Hardship programme aimed at foreign students during the COVID-19 pandemic An existing, permanent hardship programme for foreign students suffering hardship through no fault of their own has been topped up by €200,000. The higher education institutes are disbursing this funding in the form of non-repayable grants to foreign students who are suffering hardship due to the COVID-19 crisis and who are neither eligible to receive Federal Educational Assistance *(BaföG)* nor able to access other forms of income to cover their basic needs.	Programme topped up between 27 April to 31 December 2020
		North Rhine-Westphalia (NRW) 2020 Supplementary Budget Act to Finance all Direct and Indirect Effects of the COVID-19 Crisis Provision of additional grants to the Student Services Organisations In NRW to prevent an impending insolvency. This is to mitigate the losses expected to be incurred during the period until September as a result of diminished income from catering and accommodation services due to the coronavirus mitigation measures. Volume: overall, €21.2 million is being provided for the period between March and September 2020. Of this sum, €5.2 million was paid out in immediate assistance in April 2020. Applications can be filed by all Student Services Organisations *(Studentenwerke)* that are able to prove that they have incurred losses in their catering or housing operations due to the COVID-19 crisis.	In effect since 23 June 2020
		NRWays flagships programme *(NRWege Leuchttürme)* – projects for a sustainable internationalisation of higher education institutes The new "NRWays flagships programme *(NRWege Leuchttürme)* – projects for a sustainable internationalisation of higher education institutes in North Rhine-Westphalia" launched in 2020. Under this programme funding is provided, for example, for projects preparing graduates who came to Germany as refugees (e.g. teachers) for a job in Germany that meets their qualifications, and for projects helping international students to successfully complete their studies.	Started 2020
		Model for integrated vocational training and studying The model for integrated vocational training and studying systematically interlinks dual vocational training with study programmes at higher education institutions. Core elements include the coordination of the curriculum between various places of learning, credits for training work performed, and an advisory and coaching concept. In the first phase, the candidates get experience in both the training programme and study programme format and after 1-1.5 years decide, on the basis of their experience, whether they wish to continue the dual study programme or the dual system of vocational training. This makes it possible to reduce the number of young people who drop out of their vocational training or courses of study. Vocational colleges, companies, and higher education institutes act as equal partners in this model. Integrated vocational training and studying give vocational colleges and companies access to motivated students and trainees who are especially ambitious in their vocational training. They raise the attractiveness and the level of quality of dual vocational training, thus stressing its equivalence with academic studies and making it easier for companies to secure the skilled labour they need. Within the framework of the federal competition entitled "Shaping the future – innovations for excellent vocational training" (InnoVET), the model has won €5.4 million in project funding. It will be piloted in six sites in NRW between 2020 and 2024. Three sites will begin to offer training under the project in the training year of 2020/2021. The pilot sites will be supported by three cooperation partners also receiving funding. Academic support for the implementation of the model will also be ensured.	Approval note issued and implementation started on 1 October 2020

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
173.	*Measures adopted by the Länder to increase the rate of graduates from higher education*	**Rhineland-Palatinate** Link between schools/higher education institutes/STEM All higher education institutes are offering numerous services to facilitate students' transition from school to higher education, and to help them find the right course of studies. Children's university programmes are aimed at 8-12-year-olds; open courses and holiday classes are aimed at students in secondary school. There are also 'early studies' programmes for students at higher-secondary level. The focus of these programmes is on courses in STEM. Since April 2020, the higher-education institutes have increasingly been moving these services online. This includes information events, guidance sessions, mentoring, open lectures, orientation workshops, and online classes.	Ongoing, mostly in a digital format since April 2020
		Saxony Saxony has established an ESF-financed group of young researchers working across different institutes from higher education and tasked with studying the reason for gender imbalances within the academic system and making recommendations as to how this could be addressed. Beyond this, the group of young researchers is preparing for a potential ESF programme entitled "higher education institutes" in the 2021-2027 programming period, which would focus on projects for the successful completion of study programmes, doctoral degrees, and on research groups focusing on gender equality.	October 2020 – September 2022
		Saarland Hardship programme for students The Saarland state government has introduced a short-term bridging assistance programme to support students, particularly international students, who are suffering financial hardship due to the pandemic and are not entitled to Federal Educational Assistance *(BaföG)*. More specifically, the government and the higher education institutes have established hardship funds from which students can receive a maximum of €300 at short notice. A solution for the medium term has also been provided, with existing scholarships for foreign students being doubled. This has made it possible for more international students in a particular situation of hardship to receive scholarships worth €300 per month, beginning in autumn 2020. The students were selected by the higher education institutes and *StudienStiftung-Saar*.	Since May 2020
		Schleswig-Holstein Target and performance agreements for 2020–2024 Given how important it is for students to successfully complete their study programmes and for the number of university drop-outs to be reduced, specific graduation rates are agreed in individual target agreements between *Land* Schleswig-Holstein and its higher education institutes for the 2020–2024 period. "Future Contract Strengthening Studies and Teaching" The "Future Contract Strengthening Studies and Teaching" is being implemented with a particular focus on quality teaching and, by extension, on success rates. The higher education institutes have agreed to use at least ten percent of the funds made available to them under the Future Contract Strengthening Studies and Teaching for quality improvement. The focus here can be on the transition from school to higher education institute or on improving the situation within the higher education institutes themselves; individual agreements are made with each higher education institute.	2020–2024

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
174.	Measures adopted by the *Länder* to promote STEM skills	**Lower Saxony** IT Campus In order to improve the training for IT specialists, the OFFIS Institute is planning to establish an IT campus in Oldenburg and the Leibniz University Hannover is planning to set up a campus for artificial intelligence and security. A special focus here is to be placed on applied research and networking with the business community. The state of Lower Saxony has indicated that support of €10 million will be available for Oldenburg and €16 million for Hanover from the Digitalisation Special Fund.	Project ongoing
		Robonatives Initiative The state of Lower Saxony (Economic Affairs Ministry) and the Hanover region are helping to fund the "Robonatives Initiative" skills development project of the Robokind Foundation, in which semi-skilled and unskilled workers, trainees, instructors, (vocational) school students and higher education students are to be trained in state-of-the-art robotics and artificial intelligence. Great potential is seen, particularly in logistics, electronic engineering, the automotive industry and its suppliers, in healthcare, nursing care and the information and communications sector, but also in research. The project was launched on 1 December 2019 as part of the Leine-Weser Regional Skilled Labour Alliance.	Project ongoing
		Smart Factories As part of the project initiatives entitled "Industrie 4.0/Business 4.0" and "Learning and Working 4.0", smart factories have been set up at various vocational schools with funding of approximately €1.5 million from the Economic Affairs Ministry. As this project is rolled out across Lower Saxony, 23 more vocational schools will receive a total of €600,000 and will thus be enabled to set up model smart factories for teaching purposes. The projects have been extended until the end of 2020. To facilitate the use of the smart factories, training courses are being offered by professional experts to help instructors use them in various types of schools, produce learning situations which foster media literacy, and understand the various software applications used in the relevant occupations, On 11 March 2020, the project schools in the "Industrie 4.0/Business 4.0" and "Learning and Working 4.0" projects presented their findings at the Industrie 4.0 conference in the Neustadt am Rübenberge vocational school. The results are being transferred via further training courses.	Project ongoing
175.	Act to Promote Advanced Vocational Training amid Structural Change and Enhance the Promotion of Training	The primary goal of the Act to Promote Advanced Vocational Training amid Structural Change and Enhance the Promotion of Training is to give employees and companies the best possible support as they tackle the challenges relating to digitalisation and structural change. To this end, the Act contains improvements in the funding of continuing training and the admission of measures in the field of labour promotion, in the basic security benefits for jobseekers, and in the average federal cost rates, the further development of assisted training and the possibility to register early as a jobseeker and to register unemployed online. The Act implements numerous agreements from the National Strategy for Continuing Education.	In force since 29 May 2020
176.	Measures adopted by the *Länder* to tackle child poverty and to promote educational opportunities	**Bavaria** Family allowance The Bavarian family allowance *(Familiengeld)* is continuing to relieve the burden on low-income families. The family allowance merges and tops up the previous Bavarian child care allowance and Bavarian child-raising allowance. Since 1 September 2018, families in Bavaria have received €250 per month and child for their one- and two-year-old children in the form of the family allowance. From the third child, this amount rises to €300/month. The family allowance is intended to give parents financial scope. The aim is to enable them to foster the development of their children even better. For this reason, the family allowance aims to support early child-raising and education, all forms of child care and child health. Where families receive assistance under Social Code II and XII, the family allowance does not affect the level of that assistance.	In effect since 1 September 2018

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
176.	*Measures adopted by the Länder to tackle child poverty and to promote educational opportunities*	**Berlin** State Commission for the Prevention of Child and Family Poverty Within the framework of the State Commission for the Prevention of Child and Family Poverty, the *Land*- and district-level administration authorities and civil society players are developing a city-wide strategy for the prevention and reduction of child and family poverty. The development and implementation phase is designed to incorporate multiple ministries and involve the districts and civil society in order to develop effective and concerted measures to reduce child poverty. An overarching strategy framework provides guidance for all stakeholders. The State Commission supports and initiates projects and measures, inter alia, to promote the labour market integration of single parents, to improve access to the education and participation package, and to support the development of an infrastructure of guides and networks for the target group. Implementation takes place at either *Land* or district level, depending on the division of responsibilities.	State Commission established since June 2017. Ongoing development of the strategy and development and implementation of corresponding measures.
		North Rhine-Westphalia (NRW) Handout and flyer on the Education and Participation Package The handout is to cover the issue of the Education and Participation Package in an overall context and to address current problems which derive from the on-the-spot assessment. It is to give practitioners help with applying the rules on the granting of benefits for education and participation in a timely and legally compliant manner and with adherence to the preconditions that affect decision-making. This is necessary in particular to ensure that the decision-making can withstand legal challenges. The handout provides a checklist of the criteria to be examined when the granting bodies take their decisions. The handout is being drawn up together with practitioners on the ground. Also, a flyer is being issued in German, Turkish, Russian, Arabic and Tigrinya. A supplementary note sent out with the decision on housing allowance also draws the attention of families in North Rhine-Westphalia to the fact that recipients of housing allowance may also be entitled to education and participation benefits.	Ongoing implementation
		Saxony-Anhalt "Strengthen Families – Create Prospects" The "Strengthen Families – Create Prospects" programme, which is supported from ESF funding, is addressed to young single-parent families and families in Saxony Anhalt who receive basic security benefits under Social Code II. The *Land*-wide support network of family integration coaches offers them targeted support as they cope with individual and family problems with a view to integration into employment. This programme, which has been tried and tested over many years, is continuing in 2021.	Ongoing projects, project extended for the period from 1 January 2021 to 31 December 2021
177.	Measures adopted by the *Länder* to integrate the long-term unemployed into the labour market	**Comprehensive measures are in place in the *Länder* to integrate long-term unemployed persons into the labour market and to combat poverty. Examples of some of these measures are provided below. Furthermore, many measures whose effects are still felt were already implemented before the reporting period of this National Reform Programme.** **Berlin** The state of Berlin's pilot programme entitled "Solidarity-based basic income" (Solidarisches Grundeinkommen) is funding a total of 1,000 jobs for people in long-term unemployment (unemployment of between one and three years). Funding goes towards jobs subject to social security contributions in additional fields of activity relating to the common good in the interest of urban society. The support includes assumption of 100 percent of the wage costs at the level of the *Land* minimum wage or the collectively agreed wage up to salary level EG 3, and coaching during the period of employment. Participants who, despite intensive efforts, are unable to find the route into non-subsidised employment at the end of the five years of employment, are given a promise of continued employment at the same conditions in the public service of Berlin, and are thus offered an alternative to unemployment benefit II.	2019–2025 The filling of the vacancies has been ongoing since July 2019. The last jobs funded under the scheme will terminate on 31 December 2025.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
177.	*Measures adopted by the Länder to integrate the long-term unemployed into the labour market*	**Mecklenburg-Western Pomerania (MV)** In order to prevent old-age poverty, support is given as early as possible to potential and skills in order for example to improve acquired rights to pension insurance contributions as early as possible and on a case-by-case basis in line with the nature and degree of the individual disability. The basis for this is, for example, the Second *Land* Programme to support the transition of severely disabled pupils with special education needs from school into an in-company training programme or employment requiring compulsory social security payments on the regular labour market for school years 2019/2020 and 2020/2021.	Ongoing implementation
		Thuringia Projects to promote social and occupational integration and to tackle poverty in the context of the ESF Activation Guideline In three separate areas eligible for funding, jobless persons who have been unemployed for more than one year, or who are unlikely to be introduced to the labour market within a year on account of serious or multiple barriers to placement, are to be socially stabilised and brought closer to the training and labour market over a long-term period through the creation of opportunities for social participation. 1. Advice centres for younger people Youth and young people up to the age of 30 receive support at the advice centres to tackle their personal problems through low-threshold outreach work. Once the situation of these young people has stabilised, the aim is to get them involved in follow-up services and measures that provide support in the sense of a support chain to continue their development. 2. TIZIAN and TIZIAN plus TIZIAN: The Thuringia Initiative towards Integration and Combating Poverty in a Sustainable Context (TIZIAN) was developed in 2009 as a measure to combat family and child poverty with the help of the ESF. TIZIAN is geared towards long-term unemployed parents who are at the margins of the labour market, and their children. With close collaboration between youth welfare services and the job centres, the aim is to integrate the parents at a social and occupational level, to strengthen their parenting and family skills, and to support the children's development. TIZIAN plus: Similar to TIZIAN. However, the participants do not need to be parents. In addition, certain specific problems which the participants face can be addressed with a low-threshold approach. 3. Practical measures for young people With group measures and individual measures combined with youth worker support, the aim is to stabilise young people and young adults (up to a maximum age of 30) through local services that provide structure to their day, and make the individuals ready (again) for training and employment within a period of twelve to 18 months. A total of €65 million in ESF funding is available for the measures during the entire 2014-2021 ESF programming period.	The ESF activation guideline has been in force since 2 December 2014 and terminates on 31 December 2021.

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
178.	Measures adopted by the *Länder* to integrate people from a migrant background and refugees into the labour market	**Berlin** *Land* programme for city district mothers As part of a peer-to-peer approach, mothers in various parts of Berlin are being trained and deployed as "city district mothers" to advise and assist families from a migrant background with children up to the age of twelve. City district mothers are themselves mothers from a migrant background and therefore part of the target group. They visit families with a migrant background at home, or meet them at places of family relevance. Further to this, they are available at kindergartens and schools to talk to parents at parents' cafés. City district mothers act as role models for other women from a migrant background, encourage language learning and early education, and through their work make a key contribution to strengthening educational and parenting skills. In addition to the support and advice for families with a migrant background, the aim is also to improve the (occupational) integration of the city district mothers themselves.	Launched on 1 January 2020; 150 city district mothers throughout Berlin; approx. €4.3 million in the area of family support and €1.8 million in the area of employment promotion in 2020, increasing in the subsequent years
		North Rhine-Westphalia (NRW) *Land* initiative "Getting Started with Education and Employment" With the "Getting Started with Education and Employment" *Land* initiative, the state of North Rhine-Westphalia seeks to improve the education, training and skills development opportunities of adult refugees aged between 18 and 27. A particular focus of this initiative is on refugees who are in the municipalities on the basis of permission to remain pending their asylum decision or temporary suspension of deportation. The initiative is divided into the following six funding modules: 1. Funding for coaching to provide easy-access, tightly meshed and individual support for refugees during the integration process. 2. Funding for in-service skilling and/or language development. 3. Funding for second-chance acquisition of a recognised school-leaving qualification *(Hauptschule 9/10A)* with integrated language development. 4. Funding of courses that combine vocational and language training with guidance concerning values, and support for low-threshold courses in German in order to improve an individual's capacity for training. 5. Funding of innovative project ideas that serve as models for integration into training and work within the framework of an innovation fund. 6. Funding of participation management positions in the municipalities in the alliance which provide individual advice and support for the integration process of young people who have a status of temporary suspension of deportation or permission to remain pending the asylum decision.	Duration: July 2019–2022
		Lower Saxony The *Land* government of Lower Saxony is funding measures across the state that are geared towards career orientation, placement in training and employment, and supporting and guaranteeing successful in-company integration. These measures include the state-wide "Integration project for skilled craft training for refugees and asylum seekers" which was launched by the six skilled craft chambers in Lower Saxony and will be supported until the end of 2022, and 22 regional pilot projects for "inter-company integration facilitators" which were funded in the period until the summer of 2020. The approach taken in the current programme "inter-company integration facilitators" will be continued in the successor programme entitled "Start Guides". The regional support services will then be available not only for refugees but also for immigrants travelling to Germany for training and employment. The new Start Guides projects will begin in January 2021 for a two-year funding period.	Period of duration: 2020–2022

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
178.	*Measures adopted by the Länder to integrate people from a migrant background and refugees into the labour market*	Strengthening the participation process of people who have migrated to Lower Saxony People with a migrant background and a need for support are given targeted thematic advice and assistance. They are given the assistance they need to help themselves so that they are empowered to participate equally in society's resources and systems and can take responsibility for an independent lifestyle. 2020 €10,100,000 2021 €9,660,000	In effect from 14 July 2017, ends on 31 December 2021
		Saxony "Basic education relating to a professional field for refugees who are no longer of school age and have a low level of prior school-based education": The measure is designed to improve the work-related and other language skills of the programme participants to the extent that they can successfully transition to existing paths towards vocational training or employment in the regular labour market. Priority is given to integration into vocational training by individuals reaching the educational maturity for successfully completing a course of vocational training. Action to bring refugees closer to local structures is supported by a range of low-threshold education offerings that are developed and trialled within the framework of the "Integration Measures" funding guideline.	Ongoing since 2018, end depends on evaluation
		Land programme "Cosmopolitan Saxony – for Democracy and Tolerance" (funding guideline) Targeted project funding of measures to strengthen democratic skills and unprejudiced interpersonal contacts, e.g. in the field of vocational schools, helps to create and consolidate a good and unprejudiced working environment. This is the precondition for the successful integration of people with a migrant background into society and work. The target groups are trained by external experts/project managers in line with the funding guideline in special training sessions, and are given advice and support.	Ongoing
		Thuringia From May 2019 until initially the end of 2020, Thuringia's *Land* interpreting programme can be used by a large number of eligible institutions which come into contact with immigrants in their daily work. The eligible bodies include public agencies, doctors, hospitals, communal accommodation, prisons, schools and kindergartens. Advice centres and job centres (as special institutions of eligible municipal providers) are also entitled to access audio and video interpreting services provided by Thuringia's Ministry for Migration, Justice and Consumer Protection (TMMJV) at a flat rate fee. The interpreting services can be obtained via terminal equipment such as personal computers, laptops, tablets, smartphones and the telephone. The service is provided by SAVD Videodolmetschen GmbH in Vienna. The *Land* video interpreting programme is implemented with the support of *Gesellschaft für Arbeits- und Wirtschaftsförderung des Freistaats Thüringen mbh* (GfAW). Further information about the interpreting programme can be found at https://justiz.thueringen.de/themen/migration/. A continuation of the programme is planned.	May 2019 to December 2020
		The Start Deutsch *Land* programme closes the funding gap in the language services for people who are no longer of school age and lack access to the integration course. Throughout Thuringia, courses in German as a second language are being offered up to Level A1 (including literacy), and to attain Levels A2 and B1. The *Land* programme is based on project funding from the Thuringian Ministry for Migration, Justice and Consumer Protection on the basis of the integration project funding guideline. It is being managed by *Thüringer Volkshochschulverband e. V.* (https://www.vhs-th.de/index.php?id=322)	January 2020 to December 2020 (in each case annual funding under the integration project funding guideline)

No.	Title of the measure	Description and expected impact of the measure	Status and timetable
179.	Measures adopted by the *Länder* to integrate people with disabilities into the general labour market	**Mecklenburg-Western Pomerania (MV)** Second *Land* programme to support the transition of severely disabled pupils with special education needs from school into an in-company training programme or employment requiring compulsory social security payments on the regular labour market. The aim is to improve opportunities in working life on the labour market for the participants.	The funding is available for school years 2019/2020 and 2020/2021, and reaches around 270 participants from the target group in each school year, primarily with a view to promoting intellectual development.
		Saxony-Anhalt Local participation management system In order to promote the participation of people with disabilities, the Ministry of Labour, Social Affairs and Integration has implemented an ESF programme supporting the development of a local participation management system. The programme, which makes a major contribution towards the sustainable implementation of the inclusion and participation goals of the UN Convention on the Rights of Persons with Disabilities and the horizontal ESF objective of anti-discrimination in Saxony Anhalt, is being continued into 2021 via the extension of the individual projects. Also, the programme is part of the planning for the 2021–2027 programming period for the structural funds. The central tasks of the participation managers include the drafting of a municipal action plan which lists measures to implement the UN Convention at municipal level. The action plans have now been confirmed by the local political bodies in six rural districts and towns. 2021 is expected to see the adoption or updating of action plans in all the assisted municipalities which have local participation management systems.	Ongoing project until the end of 2021