Joint Statement on Cooperation between the Federal Ministry for Economic Affairs and Energy of the Federal Republic of Germany and the Ministry of Economy, Trade and Industry of Japan regarding the Internet of Things/Industrie 4.0

The Federal Ministry for Economic Affairs and Energy of the Federal Republic of Germany (BMWi) and the Ministry of Economy, Trade and Industry of Japan (METI) (the Sides):

- recognize that the digitization and the linking of production processes along the whole global value chain via internet, i.e. smart manufacturing using the Internet of Things (IoT)/Industrie 4.0, offers great economic potential for the economies of both countries;
- underline the importance of their industries undergoing a smooth transition into the digital age;
- emphasize that cooperation among companies, research institutes and platforms, namely the Robot Revolution
 Initiative and Plattform Industrie 4.0, from both countries in the field of IoT/Industrie 4.0 will have a positive impact
 on the competitiveness of the industrial sector in both countries; and
- recognize the importance of IoT/Industrie 4.0 in the context of the G7 and G20.

Therefore, the Sides have come to the following recognition:

1. Objective of Cooperation

BMWi and METI intend to:

- exchange best practices on encouraging and supporting the entities in both countries to respond to IoT/Industrie 4.0;
- promote and support cooperation between companies, research institutes and platforms, namely the Robot Revolution Initiative and Plattform Industrie 4.0, from both countries in the field of IoT/Industrie 4.0;
- discuss recommendations for improving cooperation among companies, research institutes and platforms from both countries; and
- explore common interests and joint contributions to international fora with regard to the fields of cooperation.

2. Framework of Cooperation

(1) The Sides intend to meet at Director-General level on an annual basis, with meetings to be held alternately in Germany and in Japan. The meeting should take place as part of the newly launched dialogue on industrial policy, if appropriate. Relevant entities from the field of IoT/Industrie 4.0 in both countries, e.g. companies, research institutes and platforms, should attend the meeting. The meeting should be prepared by experts of BMWi and METI in coordination with the platforms of both countries.

Concerning the various fields of cooperation, governmental responsibilities are to be respected, existing and upcoming mechanisms should be synchronized and duplicate work be avoided.

- (2) BMWi and METI intend to invite other government organizations and/or private-sector entities concerned to join in the cooperation.
- (3) BMWi and METI will each nominate a ministry contact for coordinating cooperation.

3. Fields of Cooperation

- (1) Fields of cooperation between Japan and Germany should include but not be limited to:
- Industrial cyber security
- International standardization
- International regulatory reform
- Support for small and medium-sized enterprises (SME)
- Human resource development
- Research and Development (R&D)

(A list of potential forms of cooperation is attached.)

(2) The Sides wish to share the progress of cooperation and to identify the areas where further cooperation is required. The Sides intend to invite relevant experts from the private and public sectors to contribute to the cooperation in line with the activities being undertaken by the platforms mentioned above.

4. Financial Considerations

- (1) Cooperation under this Joint Statement will be subject to and dependent upon the availability of the funds and resources of each Side.
- (2) The Sides should bear the costs that they each incur themselves, unless otherwise approved in writing.

5. Duration of the Cooperation

- (1) It is intended for the Joint Statement to be in operation for an initial period of five years. It can be extended once, also for a period of five years, if both ministries express their wish to do so in writing.
- (2) Either Side can terminate the cooperation under this Joint Statement by written communication at least 90 days before the envisaged date of expiration.

Tokyo, Japan, April 28th, 2016

For the Federal Ministry for Economic Affairs and Energy of the Federal Republic of Germany For the Ministry of Economy, Trade and Industry of Japan

Matthias Machnig State Secretary Takayuki Ueda Vice Minister Attachment to the Joint Statement on Cooperation between the Federal Ministry for Economic Affairs and Energy of the Federal Republic of Germany and the Ministry of Economy, Trade and Industry of Japan regarding the Internet of Things/Industrie 4.0

Potential Forms of Cooperation

Industrial Cyber Security

- Exchange of information and best practices on the enhancement of companies' cyber security (including that of SMEs);
- joint exercises on cyber security for industrial control systems (e.g. guidelines); and
- cooperation on international cyber security regulation.

International Standardization

- Sharing use cases and outcomes;
- cooperation on standards and reference architecture models (e.g. RAMI 4.0, smart home [e.g. Echonet Lite and EEBus]); and
- cooperation to establish international standards fully utilizing RAMI 4.0 as one of the most important architectures;
 BMWi and METI intend to encourage their standardization bodies and companies to focus and cooperate on achieving internationally harmonised outcomes.

Regulatory Reform

- Cooperation in multilateral fora (e.g. OECD, G7 and G20);
- exchange of information on the utilization of data and privacy (including data ownership); and
- exchange of information on IoT related regulation (including aspects of autonomous-driving and smart home related to Industrie 4.0).

SMEs (including challenges in human resources)

- Exchange of information on challenges and policy experience regarding IoT for SMEs (including German competence centers [i.e. Mittelstand 4.0-Kompetenzzentren] and Virtual Fort Knox); and
- possible joint projects based on the information above (e.g. reciprocal visits to both countries, business matching, and mutual access to competence centers/testbed infrastructure).

R&D on IoT/Industrie 4.0

- Exchange of information on R&D roadmaps relating to IoT technologies; and
- other R&D cooperation, e.g. possible joint projects between research institutes (e.g. AIST and DFKI) driven by the vision of IoT/Industrie4.0.

Platforms

Mutual access to the platforms, namely the Robot Revolution Initiative and the Plattform Industrie 4.0, for companies
from both countries in line with the respective access regulations.