

Demonstration Project Initiatives (hereinafter referred as DPI) play an important role in implementing China's industrial policy. They are deployed to support national strategic plans in relevant industry areas and to support enterprises to adopt and develop new technologies. Apart from advancing development objectives in relevant fields, government subsidies are also distributed through them.

This policy briefing provides an overview of Chinese DPI relevant to Intelligent Manufacturing. It aims to provide hands-on guidance for enterprises to understand the characteristics of different key initiatives, their focus areas as well as their latest development trends.

### ***What are Demonstration Project Initiatives?***

This policy briefing defines Demonstration Project Initiatives as Chinese government programs, that publicly select, award and promote best practices from the industry. These demonstrators are typically initiated by enterprises and showcase new technology applications in an industry environment.

The DPIs in this briefing are highly relevant for Intelligent Manufacturing policies in China. They are identifying best practices on a national level. The following list of DPIs is by no means exhaustive. For more details, please refer to their respective websites mentioned in their descriptions further below.

### ***Relevance for Enterprises***

#### **Indicator for Market Developments**

- DPIs reflect the current industrial development focus of national and regional governments. They are an instrument to accelerate the implementation of national guidelines.
  - The latest [Demonstration Project Initiative on the Integration of New Generation Information Technology and Manufacturing Industry](#) lays the foundation for the current five year period until 2025.
  - Whereas earlier DPIs selected innovative applications at company level, the latest DPIs increasingly shift towards intelligent manufacturing technology applications across sectors.

#### **Practical Incentives for Companies**

- Selected enterprises benefit from increased visibility in the Chinese market.
- Participating in DPI may facilitate access to local government actors and subsidies.

### ***MIIT's Key Demonstration Project Initiatives***

DPI implementation is closely guided by specific industrial policy guidelines. DPIs mostly follow a top-down structure and are usually planned and organised by government departments. The Ministry of Industry and Information Technology (MIIT) plays the most important role for Intelligent Manufacturing.

By selecting best practices of applied industry technologies, MIIT's DPIs reflect national industry benchmarks.

Descriptions of key DPIs, their technology focus areas as well as target groups follow below:

### **Intelligent Manufacturing**

**Integration of New Generation Information Technology and Manufacturing Industry Demonstration Pilot Initiative (since 2021 annually; called Intelligent Manufacturing Demonstration Pilot Initiative from 2016-2020)**

A national level DPI designed to promote upgrading in the manufacturing industry by selecting pilot projects in standard development, industrial platform application and Sino-German Intelligent Manufacturing cooperation. This initiative aims to implement [Guiding Opinions of the State Council on Deepening the Integrated Development of Manufacturing Industry and Internet](#). It is also the first official Intelligent Manufacturing initiative of its kind that includes international cooperation.

#### **Target groups**

1. Advanced manufacturing enterprises which have highly digitalized systems and are capable of internet and system integration applications.
2. Information technology enterprises, internet enterprises and scientific research institutes which have product solutions for large-scale applications and experience in providing system solutions for manufacturing enterprises.
3. The applicants of Sino-German Intelligent Manufacturing cooperation must be an institution registered in China, including manufacturing enterprises, information technology enterprises, scientific research institutes, industrial parks or a consortium in China.

#### **Latest trends**

In 2021, the implementation of "Dual Integration" (informatization and industrialization) management systems was included in the official categories. Most selected projects in 2021 were allocated to this category. The second most popular category was "Specialized Internet platforms".

The latest list of selected companies can be found [here](#).

### **Industrial Internet**

**Industrial Internet Demonstration Pilot Initiative (since 2018, annually)**

This national DPI aims to promote the development of the Industrial Internet. It supports the implementation of the [2017 State Council Guideline on the Integration of Industrial Internet in the Advanced Manufacturing Industry](#) as well as the [Industrial Internet Development Action Plan \(2018-2020\)](#).

#### **Target groups**

Leading manufacturing enterprises, information technology enterprises, internet enterprises, telecom operators, universities and scientific research institutes with innovative technology or application scenarios in the following fields:

1. Infrastructure capacity improvement
2. Construction of identification analysis system
3. Industrial Internet platform construction
4. Breakthrough of core technical standards

5. Cultivation of new models and new business formats
6. Industrial ecological financing development
7. Enhance security management mechanism
8. Promote international cooperation

### **Latest trends**

The most selected category in 2021 was the Industrial Internet platform and supply chain collaborative solution. Since last year, Industrial Internet platforms with green and low-carbon solutions were added as a new category to promote the carbon emission reduction of the manufacturing industry in China.

The latest list of selected companies can be found [here](#).

### **Big Data**

**Big Data Demonstration Pilot Initiative (since 2018, includes manufacturing since 2021)**

This national DPI supports the implementation of the **Action Plan on Promoting the Development of Big Data (2015-2018)** and the **Big Data Industry Development Plan (2016-2020)**. From 2021, there has been no new policy released. This DPI continues supporting the implementation of the 2015 Action Plan.

### **Target groups**

Manufacturing enterprises, information technology enterprises, Internet enterprises, telecom operators, universities and scientific research institutes whose technology or application scenario is at the top of domestic Industrial Internet developments or comparative to advanced international developments in the following fields:

1. Big Data storage management
2. Big Data analysis
3. Big Data security management
4. Industrial innovation on Big Data application
5. Cross-industry integration
6. Big Data test and evaluation
7. Big Data standard setting

### **Latest trends**

From 2016-2020 this DPI focused on overall Big Data capability developments, like Big Data storage and security management etc.. Since 2021, the integration of Big Data and manufacturing has become an additional focus area. The most selected categories are enterprise production process optimization, followed by industrial chain and supply chain management and control.

The latest list of selected companies can be found [here](#).

### **Sustainable Manufacturing**

**Green Industrial Design Demonstration Pilot Initiative (since 2019, annually)**

This DPI aims to promote manufacturers with advanced eco-friendly designs. It supported the implementation of the **Development Plan on National Strategic Emerging Industries in the 13<sup>th</sup> Five-Year Plan** from 2019 to 2020. Since the release of **Green Industrial Development in the 14<sup>th</sup> Five-Year Plan**

and the [State Council's Guiding Opinion on Accelerating the Establishment and Improvement of a Green, Low-carbon and Circular Economic Development System](#) in 2021, this DPI states its support on these two government policies. It is the first green manufacturing DPI supporting China's development plans towards a sustainable industry.

### **Target group**

Enterprises with leading green industrial designs in the areas of building materials, textiles, electronics, machinery, automotive and chemical production.

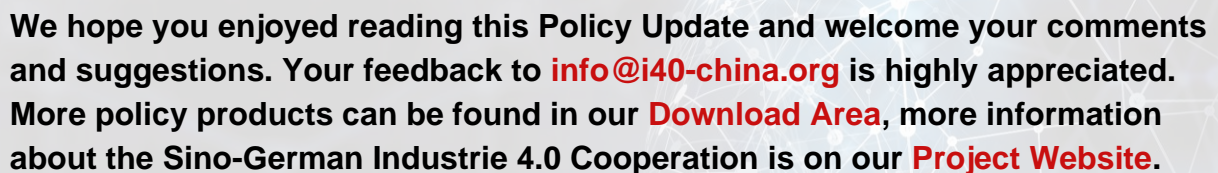
### **Latest trends**

The latest call for application of this initiative was published in April 2022 with an ongoing submission deadline until 30<sup>th</sup> June 2022. It can be found [here](#). The Chinese government announced the following preferences for the upcoming selection process:

1. Enterprises that incorporate green design concepts and low-carbon development requirements into the enterprise development strategy and have the basic capability for carrying out product life cycle carbon footprint, water footprint and/or environmental impact analysis and evaluation are preferred.
2. Enterprises with the capability to utilise basic databases for green design and advanced design tools and methods, the ability to transform green design applications such as inspection and verification, measurement and testing, large-scale production, etc are preferred.
3. Enterprises that participate in the formulation of technical specifications, standards or policies related to green products are preferred.

The list of selected companies in 2021 can be found [here](#).

Our project published a Policy Briefing of this initiative, please click [here](#) for more information.



**We hope you enjoyed reading this Policy Update and welcome your comments and suggestions. Your feedback to [info@i40-china.org](mailto:info@i40-china.org) is highly appreciated. More policy products can be found in our [Download Area](#), more information about the Sino-German Industrie 4.0 Cooperation is on our [Project Website](#).**