# Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development

### [Basic Information]

Hosts:

For addresses &

keynote speeches: He Qing Moderator, SMG

For panel discussion: Li Wei Deputy Secretary of the Party Committee of

China Academy of Industrial Internet

Addresses:

Zhang Yunming Vice Ministor of the Ministry of Industry and Information Technology of the

People's Republic of China

Zou Ciyong Managing Director of the United Nations Industrial Development Organization

Keynote speeches:

Wolfgang Wahlster Academician of German Academy of Science and Engineering, CEO of German

Artificial Intelligence Research Center

Li Peigen Academician of the Chinese Academy of Engineering

Pan Jiaofeng President of Institutes of Science and Development,

Chinese Academy of Sciences

Lu Chuncong President of China Academy of Industrial Internet

Panel discussion:

Frank Meng Chairman of Qualcomm China

Jiang Peijin General Manager of Tongling Nonferrous Metals Group Co., Ltd.

Zhang Mengqing Director and Secretary of the Board of Directors of Anhui Heli Co., Ltd.

Chen Wen Director and General Manager of Hony Capital

Huang Xuan Senior Vice President of China Unicom Equipment Manufacturing Corps

### **[Brief Introduction]**

The Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development was held in Shanghai on November 5th as part of the 5th Hongqiao International Economic Forum. It was hosted by the Ministry of Commerce, Ministry of Industry and Information Technology, and People's Government of Anhui Province, organized by the Chinese Academy of Industrial Internet, Anhui Provincial Department of Commerce, Anhui Provincial Department of Economy and Information Technology, and Anhui Communications Administration, and co-organized by Anhui Branch of China Academy of Industrial Internet. Zhang Yunming, Vice Ministor of the Ministry of Industry and Information Technology of the People's Republic of China, attended and addressed the forum. Zou Ciyong, Managing Director of the United Nations Industrial Development Organization, and Wolfgang Wahlster, Academician of German Academy of Science and Engineering, CEO of German Artificial Intelligence Research Center, gave speeches via video link. The forum included a panel discussion on how industrial Internet can promote the transformation and upgrade of manufacturing and stimulate the growth of industrial economy, along with other topics. Representatives from relevant departments of the Ministry of Industry and Information Technology, Anhui Provincial Department of Commerce, Anhui Provincial Department of Economy and Information Technology, Anhui Communications Administration, and China Academy of Industrial Internet were also present at the forum. Xinhua News Agency livestreamed the whole process of the forum, and China Economic Times, China Industry News, and other media outlets also covered the event.



### 第五届虹桥国际经济论坛 THE FIFTH HONGQIAO INTERNATIONAL ECONOMIC FORUM

## 工业互联网推动制造业高质量发展分论坛

PARALLEL SESSION ON INDUSTRIAL INTERNET ENABLES MANUFACTURING INDUSTRY TO ACHIEVE HIGH-QUALITY DEVELOPMENT

主办单位: 商务部 工业和信息化部 安徽省人民政府

Hosted by: Ministry of Commerce Ministry of Industry and Information Technology People's Government of Anhui Province

承办单位: 中国工业互联网研究院 安徽省商务厅 安徽省经济和信息化厅 安徽省通信管理局

Organized by: China Academy of Industrial Internet Anhui Provincial Department of Commerce Anhui Provincial Department of Economy and Information Technology Anhui Communications Administration

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### [Addresses]



Zhang Yunming, Vice Ministor of the Ministry of Industry and Information Technology of the People's Republic of China, attended and addressed the Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development in Shanghai.

Zhang Yunming, Vice Ministor of the Ministry of Industry and Information Technology of the People's Republic of China, pointed out that China's industrial Internet has progressed faster in systematic development in recent years with a series of phased landmark outcomes. He said that the Ministry of Industry and Information Technology, committed to high-quality development of the sector, will continue to enhance its ability of providing technological support, pursue integrated applications with greater sophistication, and carry out open cooperation on a higher level. It will also make efforts to improve the market-oriented, law-based and internationalized business environment, and deepen international cooperation in such areas as technology, standard, application, and IP, striving to open a new horizon for the development of industrial Internet.



Zou Ciyong, Managing Director of the United Nations Industrial Development Organization, attended and addressed the Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development via video link.

Zou Ciyong, Managing Director of the United Nations Industrial Development Organization, noted that China's accelerated implementation of the strategy of innovative development of industrial Internet has made its enterprises more resilient and created good job opportunities. However, there is a wide gap in digitalization between developed countries and developing ones, large enterprises and small ones. The governments of all countries should work faster to roll out policies, and the United Nations Industrial Development Organization is willing to work with the international community to advance the innovative applications of industrial Internet technologies.

### [Keynote Speeches]



Wolfgang Wahlster, Academician of German Academy of Science and Engineering, CEO of German Artificial Intelligence Research Center, gave a keynote speech at the Parallel Session on

Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development via video link.

Wolfgang Wahlster, Academician of German Academy of Science and Engineering, CEO of German Artificial Intelligence Research Center, noted that in the first decade of Industry 4.0, we developed the industrial Internet and Internet of Things for smart plants, introduced the Digital Twin technology, and collected a plethora of industrial data. In the second decade of Industry 4.0, we must develop machine learning, machine understanding, edge computing or even sky computing of industrial data to support the tremendous reform in the manufacturing sector and make the circular economy sustainable. How Industry 4.0 will proceed in the next decade will be subject to the effects of six trends-industrial AI, edge computing, edge cloud, plant application of 5G and 6G, coordinated autonomous mobile robotics, and reliable data infrastructure. Industry 4.0 has gained the attention and recognition of the global scientific, business and political circles. We should continue to develop semantic interoperability in an open ecosystem and intensify international cooperation.



Li Peigen, Academician of the Chinese Academy of Engineering, gave a keynote speech at the Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development via video link.

Li Peigen, Academician of the Chinese Academy of Engineering, expounded on how high-quality manufacturing development is manifested in such aspects as improving product quality, refining processes, enhancing user experience, promoting low-carbon and green development, and building the symbiotic relation between employees and the employer. He suggested that backed by industrial Internet and other digital technologies, we should pursue high-quality manufacturing development in the following ways: reforming the quality management model with intelligent processes, improving quality inspection process with machine visual identification, developing customer-centered R&D models on open, innovative platforms, collecting and analyzing energy consumption data and making improvements with Internet of Things, and aligning organizations' developing goals and talent development plans with digital and intelligent means.



Pan Jiaofeng, President of Institutes of Science and Development, Chinese Academy of Sciences, gave a keynote speech at the Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development in Shanghai.

Pan Jiaofeng, President of Institutes of Science and Development, Chinese Academy of Sciences, pointed out that the 20th CPC National Congress kicked off a new journey in advancing the new type of industrialization at full tilt, and the high-quality development of manufacturing is a pivotal element for establishing a modern industrial system. Promoting the high-end, intelligent and green transformation of manufacturing requires three fundamental supportive forces-scientific and technological innovation for integrated development with the industry chain; digital and intelligent technologies for transforming and upgrading the sector; and green and low-carbon capabilities for decarbonizing the industry while increasing its value. In the meantime, basic safeguards should be adopted in three aspects. First, we must intensify opening-up and cooperation to better coordinate and integrate the domestic and international markets as well as their resources. Second, we must perfect the talent cultivation system to reserve more professionals engaged in areas of strategic importance. Third, we must improve the scientific and technological innovation platforms to establish the innovation service system.



Lu Chuncong, President of China Academy of Industrial Internet, gave a keynote speech at the Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development in Shanghai.

Lu Chuncong, President of China Academy of Industrial Internet, said the CPC Central Committee and the State Council have attached great importance to the innovative development of industrial Internet. China has seized the new opportunities for doing that as the wave of digitalization is sweeping across the world and a new round of scientific and technological revolution and industrial transformation is unfolding in depth. As a result, the development of network system has notably picked up speed, public service platforms are playing a considerably bigger role, and integrated applications are employed on a deeper level. The new momentum gathered by the 5G Plus industrial Internet has significantly boosted the integrated innovation of information industry and manufacturing. However, we must keep in mind that both 5G and other technologies should be applied step by step, level by level instead of all at once. At the moment, we are faced with three obstacles in pushing industrial Internet forward, namely a weak foundation for digitalization, the need to uplift the software and hardware for industrial control across the board, and the necessity to advance more sophisticated applications. To overcome these obstacles and pursue high-quality development of industrial Internet, we should be prepared to make concerted and sustained efforts, particularly to tackle key problems in critical domains.



He Qing, Moderator, SMG, hosted the "addresses and keynote speeches" section at the Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development.

#### [Panel Discussion]



Frank Meng, Chairman of Qualcomm China,
participated in the panel discussion at the Parallel Session on Industrial Internet Enables Manufacturing Industry to
Achieve High-quality Development in Shanghai.

Frank Meng, Chairman of Qualcomm China, said the biggest highlight in China's current march toward Industry 4.0 is interconnectivity, and the 5G technology is empowering the industrial Internet business and accelerating the advent of Industry 4.0. According to him, many countries have begun studying the possibility of planning separate frequency spectra for industrial Internet and industrial manufacturing, and licensing the spectra to be used in specific areas. Regarding the cross-domain integration of 5G and industry, Qualcomm has been working hard to promote the industrial application of 5G by developing private 5G networks for companies around the globe.



Jiang Peijin, General Manager of Tongling Nonferrous Metals Group Co., Ltd.,
participated in the panel discussion at the Parallel Session on Industrial Internet Enables Manufacturing Industry to
Achieve High-quality Development in Shanghai.

Jiang Peijin, General Manager of Tongling Nonferrous Metals Group Co., Ltd., shared what his company, a traditional manufacturer, has achieved in digitalized transformation and upgrade based on industrial Internet. Regarding supply chain management, all parties on the supply chain are connected, which has not only largely improved the working efficiency, but also saved a lot of manpower at some links. Regarding manufacturing coordination, the whole manufacturing process has been transformed and upgraded for better coordination, resulting in a much higher efficiency in production organization and management.



Zhang Mengqing, Director and Secretary of the Board of Directors of Anhui Heli Co., Ltd., participated in the panel discussion at the Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development in Shanghai.

Zhang Mengqing, Director and Secretary of the Board of Directors of Anhui Heli Co., Ltd., shared the experience of his company, an expert on manufacturing industrial vehicles, in promoting intelligent and efficient operation by applying industrial Internet. He made three points. Firstly, the industrial Internet system has turned "mute cars" into "connected cars" as the dispatching and management system based on industrial Internet can upload all information-from vehicle status, working efficiency to dispatch of work and completion of tasks-to the system network. This helps improve the equipment's working efficiency, save energy, and control ineffective mileage. Secondly, the intelligent supply chain system developed on the basis of industrial Internet enables all parties involved to exchange views more conveniently, equally and timely, thus ensuring better preventive maintenance and post-market support. Lastly, industrial Internet can be a mega platform for mutual help and empowerment across the industry.



Chen Wen, Director and General Manager of Hony Capital,
participated in the panel discussion at the Parallel Session on Industrial Internet Enables Manufacturing Industry to
Achieve High-quality Development in Shanghai.

Chen Wen, Director and General Manager of Hony Capital, noted that industrial Internet has captured close attention in the capital market in the past two years. Investors generally pay special attention to two types of projects. One is the platform-like projects incubated by gigantic industrial enterprises or industrial leaders. These projects can give a strong impetus to the industry chain. The other is products or projects that can build capabilities for general-purpose links. In particular, enterprises good at developing strong products can leverage industrial Internet to become more capable of solving crossindustry and cross-domain problems.



Huang Xuan, Senior Vice President of China Unicom Equipment Manufacturing Corps, participated in the panel discussion at the Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development in Shanghai.

Huang Xuan, Senior Vice President of China Unicom Equipment Manufacturing Corps, held that compared with industrial automation, which is extrinsic, tangible, local and equipment-related, industrial Internet is intrinsic, intangible, comprehensive and data-related. The two are both related and differentiated. Generally speaking, industrial automation is the foundation for industrial Internet-the latter would not exist without the former. But industrial Internet has expanded the scope of connections and mined the value of data in comparison with industrial automation.



Li Wei, Deputy Secretary of the Party Committee of China Academy of Industrial Internet, chaired the panel discussion at the Parallel Session on Industrial Internet Enables Manufacturing Industry to Achieve High-quality Development in Shanghai.