

State Council's Guidance on

Promoting Healthy Development of Internet-of-things Industry

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People governments at all levels, and State Council's all departments and direct institutions :

The internet-of-things industry refers to a new kind of modern information technology with high integration and united application, also consisting of all-sided strong penetrability, large leading feature, and marvelous comprehensive benefits. The long-term development of internet-of-things is promised to realize the shift of both daily life and society management towards intelligent, elaborate and networked direction, indeed, which shows a big significance in many aspects, such as promoting the national economy and society life information level, promoting the government's entire service level, science development and technological innovation, industrial restructuring and development modes. In reality, the internet-of-things has become an indispensable part in the strategic emerging industries plan.

The internet-of-things presently stays in the primary development stage, which means abundant of broad prospects and god-given favorable opportunities could be accessible during the specific process of technology development and application. With several years' development in the internet-of-things, China has attained some solid basic experiences and abilities of technological research & development, standard confirmation, industrial cultivation & application, thus, lots of negative problems are also discovered that key core technologies to be accomplished, weak industrial base, internet information security with potential dangers as well as the irregular construction phenomena in some places, herein, all of which need to be worked out with further guidance. In order to keep the healthy and persistent development of internet-of-things industry in domestic, the guiding opinions are proposed respectively as follows:

1. Guiding thoughts, basic principles and development goals

(1).Guiding Thoughts.

Three items, including “Dengxiaoping Theory”, “Three represents theories” and “Scientific Outlook on Development”, are taken as the guiding principles to meet the practical requirements of the present economic society with targeting the invention of key technologies as well as a completely mature internet-of-things development ecosystem with international competitiveness. In such a market-oriented industry, the secure premise, reasonable plans and innovative models are great important elements used to evaluate the merits of breeding the industry, while making contribution to the sustainable development of the whole economic society.

(2). Basic principles

Plans & coordination. A series of strategic problems in the future development of the internet-of-things need to be adequately acknowledged, therefore, scientific plans and coordinated work could be effectively executed by different departments or industries or individuals, with the related combination between economic development and national defense construction.

Innovative development. It's necessary to form a mature and solid means system for creating more key innovative technologies; thus, the broad thoughts, new business model and service industries are all required to realize the perfect public service platform and intensively innovative practical competence construction.

Demonstrated examples of requirements. It just aims at meeting the major requirements in promoting society development and ensuring state's security that planned deployment gradually assists in inner motives inside the internet-of-things with the anticipation of the market mechanism.

Ordered advance. According to the practical requirements and industrial bases as well as information circumstance, regional features and important steps are adopted to dominate in

the healthy development of the internet-of-things. For instance, resource integration and coordination are strengthened to promote its utilization efficiency to avoid the repeated construction.

Security under control. It's to intensify the security consciousness, and focus on the information system security management and data protection; herein, the safety assessment and risk evaluation of the internet-of-things surveillance system while major base infrastructures and business system and key areas' applications are proclaimed to be under control.

(3) .Development goals

Overall goals. The key technologies should be confirmed to promise the safe and reliable internet-of-things industrial system, which can also be used as the main force to promote the intellectualization and sustainable development in the economic development.

Recent goals. In 2015, the first series of industrial key technologies will be invented to primarily build the whole internet-of-things industrial system as the security support capacity is obviously promoted.

-Collaborative innovation. Despite of the large progress of the R&D and innovation capacity of the internet-of-things, network communications area and information processing area as well as industrial Key technologies gradually catch the international advanced level, which is closely near to the standards in the developed countries. Then, the innovative resources and available means could take the effective cooperation in depth so that the persistent development of the modern society is carried out.

-Demonstrative application. The overall application level obviously gets a large promotion in large numbers of different areas, such as the industry, agriculture, energy saving, business deal circulation, traffic energy, public security, urban management, safety production and national defense construction, as herein a series of outstanding corporations achieve so much in such an application service industry.

-Industrial system. A group of skeleton enterprises and innovative medium & small enterprises are cultivated to form a great entity to promise the primary formal system of the internet-of-things.

-Standard system. A series of standards system for key technologies and major applications are urgently required to confirm to primarily meet the scale application and industrial requirements in the internet-of-things area.

-Safety guarantee. With the target of a full set of internet-of-things system owning safely practical system and reliable data security, both perfect safety-level protection system and completely mature internet-of-things system evaluation mechanism are produced rapidly to improve the overall safety support ability.

2. Main Task

(1). Fasten technological researches, solve all the industrial obstacles. The technological innovation is always regarded as the focus, and the industrial urgent requirements are the main development goal; what's more, reliable intelligent sensor with low-power-consuming and high efficiency are put into strong research while the big data processing and intelligent analysis can be improved to fasten the fusion development of the internet-of-things industry, new mobile communication, cloud calculating, next-generation internet mode as well as satellite communication. The existing innovative resources are integrated to form the first batch of R&D labs, engineering centers and the enterprise technology center, to reinforce the cooperation between application companies, relevant technologies and product & service suppliers.

(2) . Promote the economic development with the demonstrative applications.

Indeed, the internet-of-things technology can be fully applied into a variety of areas in the whole society, for instance, industry, agriculture, business delivery, energy saving ,safety manufacturing, public traffic, water resources, physic distribution, operation management and etc. Therefore, such a pioneering technology can be used to improve the traditional

industries while reconstructing the management and decisive strategies, and promoting the production & operation efficiency in the basic. What's the most important is that, safe production, innovative models and industrial upgrading are always the main points needed to be realized in the present conditions.

(3).Better social management and public service. New management and service models will be applied in multiple areas such as public security, medical treatment and public health, urban management, people's live-hood service and etc. The internet-of-things technical edges could be used to promote the management and service level, and to improve the people's life quality.

(4)Dominate the regional features with the scientific ordered development. It's beneficial to make the appropriate development orientation for the internet-of-things with combing application bases, local trends, sequential strategies, certain features and edges as well as scientific plans. All efforts those internet-of-things applications make also help fastening the construction of Wuxi sensor network innovation demonstration; thus, building special intelligent cities will be emphasized with the new-generation information technology, dominated features and effects.

(5) Strengthen the overall design, form the perfect standard system. Intensified coordination and mechanism are all done to confirm the standard system construction in such a background. According to the fixed common principles, military and civilian, all kinds of domestic institutions could be encouraged to anticipate in the international standards laying down process, therefore, a series of technical norms are finally confirmed with international advancement.

(6) . Broaden the key industries, improve the supporting capacity. Despite of the need of both fastening the key industries development of internet-of-things, as well as improving the sensation recognition manufacturing industrial development level, a series of service industrial chain forms while skeleton enterprises and innovative style medium

& small enterprises are encouraged to build to constantly perfect the facility manufacturing, software researching, and service integration.

(7). Innovate business model, breed the new industrial environment. Positive search for the new business model within the cooperation between the upstream and downstream of the internet-of-things industry; promote the application service to meet the domestic market's requirements, and improve the service outsourcing industrialization development; thus, a new series of service industries come out to promote the operation of subsequent engineering projects while certain enterprises are encouraged to join in the information service, system integration, telecom operation and other items of promotion projects.

(8) Strengthen the protection management, ensure the information's safety. It aims at improving the internet-of-things safe information management and data protection level, therefore, the relevant information security technology are strengthen to effectively promise the security in all segments like the information collection ,transmission, processing and application. Altogether, related systems solutions, key equipments and operation service will be under safe control.

(9) Intensified resource integration promotes the collaborative sharing. The existing public communication and network basic infrastructures are fully used to promote the interaction among different information system in the internet-of-things.

3. Supporting Measures

(1) Strengthen plans and coordination to form the common development force. It's suggested to set up the batch of internet-of-things plans and coordination mechanism applied into different departments and regions, thus, some political measures and major strategic movement plans are confirmed to work out big problems , and to strengthen application promotion, technological research and development, standards making, industrial chain construction, basic infrastructure and etc. What's more, with the semidetached coordination among some plans, important scientific projects as well as

industrial projects, resource sharing and work formation of collaborative promotion are used to figure out and strengthen the regional division of cooperative work.

(2) Building great development environment. It's suggested to set up a batch of political system beneficial for the internet-of-things promotion, innovative incentives and ordered competition. It's also urgent to lay down relevant laws and rules in both information safety and privacy protection. Besides, the public service platform construction needs to extent the patent portfolio of the internet-of-things industry.

(3)Strengthen the financial policy support. The state central finance department should increase supporting forces; so that the government's major scientific projects could be executed effectively to the largest extent. Within the powerful financial support, the existing human resources should be arranged to carry out the key technology research so as to construct the standard system and innovative capability as well as major demonstrative projects. All the internet-of-things corporations conforming to the existing software and integrated circuit preferential tax policies, could formally enjoy all related preferential policies.

(4)Perfect the investing and financing policies. The financial capitals, risk investment and private capitals are encouraged to put into the internet-of-things industry and related applications, while the financing system in such an area needs to get large supports, for example, the major important internet-of-things project with high technologies, obvious edges and strong holding power should be given the prior crediting support. The internet-of-things corporations with positive attitude and enough qualifications have the access to the direct investment in the domestic and foreign capital market. Private equity funds in such an area are encouraged to set up as the state new industry investment plan can largely support building a series of internet-of-things investment fund.

(5). Promote the overall level of international cooperation. Positive communication & cooperation in internet-of-things technologies are suggested to use with taking the full

advantage of the international innovative resources. Foreign corporations are encouraged to set up professional internet-of-things R & D, or in another saying, its goal is to attract the foreign fund to the domestic internet-of-things industry. Due to the present status and key competitiveness of the internet-of-things application in China, all the corporations anticipating in such a project aim at promoting its own total level and reducing the differences under the comparison with other foreign corporations.

(6)Strengthen the great intelligent personnel training and maintaining. Build a mature service system for the personnel training in the internet-of-things area; support related colleges and universities and institutions to set up certain professional courses to cultivate related genius students rapidly. Any possible channels, like scientific plans, major projects, key enterprises, as well as special policies coming out particularly for overseas talents, can be all adopted to recruit more high-level intelligent elites to fulfill the requirements of executing relevant measures and task, and to bring out brilliant efficiency for the long-term development of the internet-of-things.

Local governments and departments at all levels should realize the significance of the internet-of-things according to this document, moreover; besides, all departments also need to take the mutual cooperation so as to carry out assorted policy measures through serious real-time communication and coordination, also with producing a series of actual effects.

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http://www.gov.cn/zwgc/2013-02/17/content_2333141.html