

Pilot Program for an International Data Marketplace

Policy Update on the Beijing International Big Data Exchange Initiative | November 2020

On September 7, 2020, the Beijing Municipal Government has published the "1+3" policies to boost technological innovation and opening up Beijing's service sector and digital economy¹:

The "1+3" policies include:

One programatic document:

Beijing Action Plan for Promoting the Innovation and Development of Digital Economy (2020-2022) led by the Beijing Municipal Bureau of Economy and Information Technology.

Three important focus points:

- Implementation Plan for the Establishment of an International Big Data Exchange² led by the Beijing Local Financial Supervision and Administration.
- Beijing's Implementation Plan on Building a Digital Trade Pilot Zone led by Beijing Municipal Commerce Bureau.
- Work plan for the Pilot Project of the Beijing Municipal government on Data Cross-border Flow Security Management led by the Commission for Cyberspace Affairs of the Beijing Municipal Party Committee.

Why are data marketplaces important?

The utilisation, pricing and monetisation of relevant data in the area of intelligent manufacturing is still at a very early stage.

Data marketplaces provide neutral platforms, assess data quality, address IT security, and ensure compliance with terms of data usage. The provider is paid a fee to ensure that companies maintain control over their data and that data is anonymised. The data marketplace provider becomes a data trustee who enables transactions and business models that would otherwise have been unprofitable or unfeasible for companies. In doing so, the market becomes more efficient.³

With China's enormous data collection potential, the development of an open, international data market place is of utmost importance for German and international manufacturers, seeking to profit from innovative, data-driven business models.

Further information on the national strategy on Big Data Development can be found in our previous policy briefing on the Guidance on Developing Industrial Big Data on the project website.

¹ News announcement by Beijing Municipal Bureau of Economy and information Technology (in Chinese): http://jxj.beijing.gov.cn/jxdt/zwyw/202009/t20200907_1998786.html ² Full text of the Implementation Plan (in Chinese): http://jrj.beijing.gov.cn/tztg/202009/t20200929_2103035.html

³ Sino-German Company Working Group on Industrie 4.0 and Intelligent Manufacturing (AGU) Expert Group Digital Business Models (2020): Value Networks as the Foundation for Digital Business Models - Use Cases from Germany and China: https://www.plattform-i40.de/PI40/Redaktion/DE/Downloads/Publikation/China/value-networks.html

What are the objectives of the Beijing International Big Data Exchange?

Main milestones

- Build a leading domestic big data trading infrastructure.
- Create a major international big data cross-border trading hub.

International data market place characteristics

- Integrate data resources
- Standardise the exchange of data
- Promote network-based sharing, intensified integration, collaborative development and efficient utilisation of data elements
- Support the rapid development of the digital economic industrial chain

What functions and features will be implemented?

Establishment of an official data information registration platform

- Establish a unified data management system with unified data regulations within Beijing
- Kick-start the platform with public data and continue to attract private sector data
- Build a standardised data product library

Installation of a widely recognised data exchange platform

- Establish data product transaction rules and business specifications
- Data products should include: business data, data analysis tools, data solutions concepts, etc.
- Transaction categories of data products include: ownership, right of use and cross-border transaction
- Transaction modes include assignment agreements, listings ("bidding"), etc.

Setting-Up data operations and a data management platform encompassing the entire industrial value chain

- Establish an operation and management system for intermediary data service agencies
- Cultivate professional intermediary data service providers and agents
- Establish a data operation service system for the entire industrial value chain

Data-centric financial innovation service platform

- Exploration of the development of financial innovation services such as data asset pledging, data asset insurance, data asset guarantees, and data asset securitisation.
- Provide multiple services for pledged underlying assets, such as realisation of asset disposal, risk compensation, evaluation and value assessment.

Innovative financial technology services

• Enhance the role of secure multi-party computation in areas such as data security and data application and promote the assetisation and commercialisation of data.

- Enable functions such as online trading, smart evaluation, smart matching and risk warning on the trading platform.
- Create an interconnected system with the existing Beijing exchange supervision system and Beijing exchange registration and settlement system.
- Join the Beijing Municipal Data Cross-border Flow Security Management Pilot Project, to test real time monitoring of trading processes and fund settlement

What about other data exchange initiatives in China?

There are currently 14 data exchange initiatives driven by local governments in China. They are located in Guizhou, Shaanxi, Hubei, Jiangsu, Zhejiang, Heilongjiang, Henan, Chongqing, Shanghai und Beijing⁴.

Two selected examples:

- 1.) Global Big Data Exchange Initiative (GBDEx) at Guiyang, Guizhou⁵
 - Founded in 2015 the GBDEx is aiming to create a major domestic data exchange marketplace and leading international platform.
 - The platform includes 2000+ members, 4000+ products covering 30+ areas, and is connected to 225 databases (status: 2018).
- 2.) Jiangsu Big Data Exchange (BDEX) at Yancheng, Jiangsu Province⁶
 - Founded in 2015 the GBDEx is the first cross-region, officially regulated and state-owned provincial big data exchange platform in Eastern China.

We hope you enjoyed reading this Policy Update and welcome your comments and suggestions. Your feedback to 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 on our Project Website.

Homepage of Jiangsu BDEX: http://www.bigdatahd.com/index.html

⁴ Whitepaper on China Digital Economy Development (2020), CAICT (in Chinese): http://www.caict.ac.cn/kxyj/gwfb/bps/202007/P020200703318256637020.pdf

⁵ Report about GBDEx, China Daily: http://govt.chinadaily.com.cn/s/201810/26/WS5bd2b13f498ebfcd07bef0a0/big-data-industry-expands-rapidly-in-guiyang.html

Overview and milestons of GBDEx, Guizhou government: http://www.eguizhou.gov.cn/guiyang/2016-05/05/content 25087966.htm

⁶ Report on Yancheng Big Data development, China Daily: https://www.chinadaily.com.cn/regional/2015-08/11/content 21578581.htm