Connectivity in the Digital Age. Digital Futures of Trade and Economic Cooperation in Eurasia

Dmitry Erokhin
Research Assistant, Advanced Systems Analysis Program
erokhin@iiasa.ac.at

International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria
Purpose of the project

• Analysis of digital development trends in Eurasia

• Comparative analysis of the level of digital development and identification of comparative advantages of countries in Eurasia

• Review of the experience of trade and economic digital cooperation and the possibility of applying these practices in Eurasia

• Formulation of proposals for the development of a roadmap for digital economic and trade cooperation in Eurasia
Digitalization comparison in Eurasia
<table>
<thead>
<tr>
<th>Indicator</th>
<th>(latest available)</th>
<th>Organization</th>
<th>Country/Union</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2C E-commerce Index</td>
<td>(Score) 2017</td>
<td>International Telecommunication Union</td>
<td>China</td>
<td>61.70</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EAEU</td>
<td>73.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EU</td>
<td>86.56</td>
</tr>
<tr>
<td>World Digital Competitiveness</td>
<td>Ranking (Ranking) 2018</td>
<td>International Institute for Management Development</td>
<td>China</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EAEU</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EU</td>
<td>23</td>
</tr>
<tr>
<td>The Networked Readiness Index</td>
<td>(Score) 2016</td>
<td>World Economic Forum</td>
<td>China</td>
<td>4.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EAEU</td>
<td>4.51</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EU</td>
<td>5.26</td>
</tr>
<tr>
<td>ICT Sector Value Added</td>
<td>(Millions of Current Euros) 2015</td>
<td>European Commission</td>
<td>China</td>
<td>476226.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EAEU</td>
<td>26029.66</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EU</td>
<td>581361.46</td>
</tr>
<tr>
<td>Study</td>
<td>Score</td>
<td>Country</td>
<td>Value</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------------</td>
<td>----------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>ICT Development Index (Score) 2017</td>
<td>China</td>
<td>5.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EAEU</td>
<td>7.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU</td>
<td>8.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-Readiness Ranking (Score) 2010</td>
<td>China</td>
<td>4.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EAEU</td>
<td>3.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU</td>
<td>7.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blockchain &amp; Cryptocurrencies Regulation Index (Score) 2018</td>
<td>China</td>
<td>5.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EAEU</td>
<td>5.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU</td>
<td>7.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Digital Economy and Society Index (Score) 2016</td>
<td>China</td>
<td>0.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EAEU</td>
<td>0.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU</td>
<td>0.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Cybersecurity Index (Score) 2018</td>
<td>China</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EAEU</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU</td>
<td>0.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-Government Development Index (Score) 2018</td>
<td>China</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EAEU</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index</td>
<td>Source</td>
<td>China</td>
<td>EAEU</td>
<td>EU</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Gross Domestic Spending on R&amp;D (% of GDP) 2017</td>
<td>Organisation for Economic Co-operation and Development</td>
<td>2.129</td>
<td>1.109</td>
<td>1.963</td>
</tr>
<tr>
<td>ICT Service Exports (% of Service Exports, BoP) 2017</td>
<td>International Monetary Fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICT Goods Exports (% of Total Goods Exports) 2017</td>
<td>United Nations Conference on Trade and Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Patent Filings (Resident + Abroad, Including Regional) 2017</td>
<td>World Intellectual Property Organization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital Society Index (Ranking) 2019</td>
<td>Dentsu Aegis Network (United Kingdom)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Innovation Index (Score) 2019</td>
<td>World Intellectual Property Organization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>Yellow</td>
<td>Red</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>--------</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>EAEU</td>
<td>0</td>
<td>6</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td>10</td>
<td>6</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Digitalization in the EAEU and the EAEU countries
What they can offer to the EU and China
EAEU Digital Agenda Projects

- Selection of digital projects:
  - Goods digital traceability system
  - Eurasian digital industry platform
  - Eurasian network of industrial cooperation, subcontracting and technology transfer
  - Unified electronic trading platform
  - Digital investment platform for the implementation of industrial and infrastructure projects with a strategic planning system
Armenia

- Soviet Silicon Valley
- Leader (in the EAEU) in the conversion of customs administration into electronic format
- Treaties on digitalization of cross-border control with Iran, Georgia and EAEU countries
- Participant of EU4Digital: supporting digital economy and society in the Eastern Partnership (also Belarus)
Belarus

- Silicon Valley of Eastern Europe (The Wall Street Journal)
- Minsk – paradise for programmers (Eric Gundersen)
- High export of software and computer services per capita ($162 USD vs. $74 in USA, $72 in Ukraine, $66 in Armenia, $50 in Korea, $41 in India, $31 USD in China, $28 in Russia and $24 in Japan)
- Bitcoin-friendly country (the first in the world to legalize Blockchain, cryptocurrencies, smart contracts, and ICO)
- High-Tech Park residents exempted from most taxes, including value-added tax and income tax
- Say Games – number 3 in downloads after Facebook and Google (Q3 2019)
- Digital Neighborhood Initiative
Kazakhstan

- Digital Silk Road
- Leader in new technologies in Central Asia
- TransCaspian fiber-optic communication line
- Astana Hub residents exempted from most taxes
- Smart Astana, Smart Karaganda, Smart Ontystuk, Smart Almaty, Smart Aktobe
Russia

- 60% e-commerce market growth in 2018 (14.2% in the US and 24% in China)
- The volume of the Russian e-commerce market 50 times smaller than the Chinese market - a huge potential
- United Nations ranks Moscow top for e-government services
- Selection of digital projects:
  - 5G pilot zones in Moscow
  - Digital B2B platform “Made in Russia”
  - Yandex self-driving cars
  - E-visa
  - Skolkovo global roaming-free space
Digitalization strategies in Eurasia
EAEU digitalization strategies – summary

• General and vague proposals

• Very ambitious goals (share of the digital economy, of employed in the high-tech segment, of exports of digital goods and services and traditional goods through digital channels at least 20% by 2025)

• International cooperation:
  – International experience and best world practices
  – Digital international integration (e.g. mutually beneficial data use mechanisms, international IT standards)
  – Global risks (digital sovereignty, cyberthreats, global digital platforms as monopolies)
China digitalization strategies – summary

• Make China a cyber power

• Multi-facetedness of strategies (economic, cultural, social, military and other aspects)

• Huge financing (e.g. 630 billion U.S. dollars to achieve the goals of the program Made in China 2025)

• International cooperation:
  – Formulation of international norms and standards
  – Internet governance on the basis of sovereignty and fairness
  – Exchange on the principles of equal cooperation and mutual benefit
EU digitalization strategies – summary

• Few, but concrete goals
• EU-wide digital single market
• Make the EU a more attractive location for global companies
• Free trade agreements with digital provisions
• International cooperation:
  – Promoting EU standards
  – Internet governance to keep the Internet free, inclusive and open
  – FTA and security agreements as an instrument
Cases of digital trade and economic cooperation in Eurasia
Digital rules in EU trade agreements

- EU-Singapore FTA
  - Elimination of customs duties on digital products and electronic transmissions
  - Electronic authentication and electronic signatures (partially)
  - Paperless trading (partially)
  - Cross-border transfer of information
  - Liability of intermediary service providers (partially)
• EU-Japan Economic Partnership Agreement
  – Elimination of customs duties on digital products and electronic transmissions
  – Electronic authentication and electronic signatures
  – Domestic electronics transactions framework (partially)
  – Online consumer protection
  – Measures against unsolicited commercial electronic communications
  – Cross-border transfer of information
  – Non-disclosure of software source code and related algorithms
Digital Silk Road

- Chinese investment in digital infrastructure abroad, including next-generation cellular networks, fiber optic cables, and data centers
- Domestic focus on developing advanced technologies that will be essential to global economic and military power, including satellite-navigation systems, artificial intelligence, and quantum computing
- Promotion of e-commerce through digital free trade zones by reducing cross-border trade barriers and establishing regional logistics centers
- Establishment of an international digital environment through digital diplomacy and multilateral governance
Digital Free Trade Zone between China and Malaysia

- Digital Free Trade Zone (DFTZ) launched on 3 November 2017
- Established to facilitate seamless cross-border trade and enable local businesses to export their goods with a priority for eCommerce
- Physical zone:
  - e-Fulfillment Hub: development of a regional eCommerce and Logistics Hub KLIA Aeropolis
  - Satellite Services Hub: development of Kuala Lumpur Internet City (KLIC) as premier digital hub
- Virtual zone:
  - e-Services Platform: efficient management of cargo clearance and other processes needed for cross-border trade
Austria-China online trade agreement (2018)

- Promote Chinese corporate relocations to Austria
- Strengthen cooperation and exchange of experience between the cross-border ecommerce platforms of both countries
- Facilitate contacts with the major Chinese ecommerce platforms and promote presence of Austrian businesses on the Chinese market
- Support import and export of quality products and services through ecommerce platforms
Estonian data embassy in Luxembourg

- Innovative concept for handling state information, since states usually store their information within their physical boundaries
- Data Embassy resources under Estonian state control, secured against cyberattacks or crisis situations, capable not only providing data backups, but also operating the most critical services
- Located in Luxembourg under the highest level of security for data facilities
- Founding agreement based on the Vienna Convention on Diplomatic Relations, but something completely new under international law
- Fully under the control of Estonia but the same rights as physical embassies such as immunity
German Russian Initiative for digitalization of the Economy

- Promotion of the modernization of the Russian economy and the competitiveness of German and Russian products through the exchange of experience and the creation of model cooperation models
- Expansion of the market presence of the GRID members and the establishment of cooperation channels between the market leaders of Russia and Europe
- Elaboration of a roadmap with concrete measures and solutions for the optimization of digitalization processes in the economic sector
- Development of models and mechanisms for effective international and intersectoral cooperation in the implementation of the "Industry 4.0" concept
- 15 Partners: Skolkovo, Siemens, Kaspersky, SAP, Bosch, Rostec, Volkswagen, Remondis...
EU-Russia Green Corridor pilot project

- Faster customs clearance and reduction of customs controls for the goods exported from the EU with the destination in Russia by the road mode of transport
- Reduced time to pass through border crossing points and release goods through automated data exchange between the EU and Russia
- Interconnection of transit systems of the Russian Federation and the EU
- The exact timing of the pilot project implementation is unknown (EU initiative, last time discussed 6 November 2019 by the Working Party on Customs Union of the Council of the European Union)
Digital ASEAN initiative

- Pan-ASEAN Data Policy: shaping a common regional data policy
- ASEAN Digital Skills: building a shared commitment to train digital skills for the ASEAN workforce
- ASEAN e-Payments: building a common ASEAN e-payments framework
- ASEAN Cybersecurity: nurturing cooperation and capacity building in ASEAN cybersecurity
Possible areas of digital cooperation of countries in Eurasia
• Exchange of experience and know-how

• Clear and common definitions of digital technologies, digital economy and their metrics

• Convergence of regulatory standards in the digital environment

• Electronic authentication and electronic signatures

• E-Payments

• Harmonization of consumer legislation

• Cooperation in individual sectors: common rules for cross-border e-commerce, protection of intellectual property

• Interstate and interunion regulatory sandboxes

Cross-border e-governance
Thank you for your attention