Securing Science: Understanding EU Research Security Initiatives towards China

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Outline

- EU research policy
- China in global science
- Implications for European universities





1. EU research policy: 2014-2019

- "3O" approach: Openness
- EU in China
 - Growing S&T role in EU-China relationship
 - Horizon 2020 etc. welcoming Chinese
 - Member States' projects and programmes
 - Joint calls and thematic priorities
 - IPR, reciprocity but not security



Carlos Moedas (Wiki 2024)



European Commission - Speech

Open Innovation, Open Science, Open to the World

22 June 2015

Carlos Moedas – Commissioner for Research, Science and Innovation

Brussels, 'A new start for Europe: Opening up to an ERA of Innovation' Confe

"I am convinced that excellent science is the foundation of future prosperity, and that openness is the key to excellence. Europe is a global leader in science, and (to) remain relevant and competitive (...) we need to engage more in science diplomacy and global scientific collaboration."

Carlos Moedas (2015) Commissioner DG Research and Innovation



1. EU research policy: After 2019



Mariya Gabriel (EC 2023)

- EU Strategic Outlook on China (2019)
- Global Approach to R&I (2021)
- "strategic, open, reciprocal"
- Values and principles, closer to other policies
- Proposal for Council recommendations on enhancing research security
- "as open as possible and as closed as necessary"

"(O)penness and collaboration are part of the DNA of great science, but they can also make it vulnerable to malign influence and the undesirable transfer of critical technologies. This can undermine our security."

Iliana Ivanova (2024) Commissioner DG Research, Innovation, Education Youth and Sport



1. EU research policy: After 2019

EU Security Union Strategy (2020/7)	EU Strategic Compass for Security & Defence (2022/3)	European Economic Security Strategy (2022/6)
EC List of critical technology areas (2023/10)	Defence of Democracy package (2022/12)	White paper on European R&D dual use of home-grown tech. (2024/1)

EU Green Diplomacy (2024/3) EU Science Diplomacy (tbc 2024)



2. China in global science

- China boats world's second biggest R&D expenditures (83% of USA)
- In 2023, that was 3 trillion RMB (459 billion USD), 2.55% of its GDP
- S&T of highest relevance of Chinese pol. economy
- Self-reliance, talent cultivation, military-civil-Party integration
- Pragmatic approach based on country's needs + regional implementation



2. China in global science





2. China in global science



Sino-German coauthorship in physical sciences

3. Implications for European universities

Tampereen yliopisto Tampere University

Research security: An approach protecting research ecosystems	Compliance	Export Control and Dual Use
and legitimate national security and economic interests (OECD 2024)	Security Architecture	Regulatory Framework

Cybersecurtiy



3. Implications for European universities

Risk management: New tensions

Autonomy and control

Administrative and academic staff

Diversity and unity in the EU



Conclusions

- Shift from openness to address risks
- Structural turn in research policy
- Risk management as the new normal
- New dilemmas for European universities
- More research needeed!

Kiitos!

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