GHENT
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RECONNECT

D1.6 WP1 SUMMARY REPORT (M12-M24

Project Information	
Acronym	ReConnect China
Title	ReConnect China: generating independent knowledge for a resilient future with China for Europe and its citizens.
Project no.	101061483
Type of Action	RIA
Deliverable Information	
Title	D1.6 WP1 Summary Report (M12-M24)
WP number and title	WP1
Authors	Henning Kristoffersen, Peng Gao
Description	The ReConnect China project has been kicked off on Nov 2022 in Ghent and came to Year Two (M13-M24). Since the Year One Report D1.5 covered M01-M11, this report will cover M12-M24.During this period, WP1 had delivered five policy briefs and three reports.
Lead Beneficiary	IN
Type	R: Document, report
Dissemination Level	PU: Public
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History of Changes	
Draft version 0.0	Henning Kristoffersen, Gao Peng (5th Sep. 2024)
0.1	Henning Kristoffersen, Gao Peng, Philipp Brugner, John Seaman (24th Sep. 2024)
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0.3	Henning Kristoffersen, Gao Peng (20th Oct. 2024)
Version 1.0	Henning Kristoffersen, Gao Peng (30th Oct. 2024)

1   LIST OF ABBREVIATIONS

Abbreviation	Meaning
BAST	Beijing Association for Science and Technology
CEATEC	China Europe Association for Technological and Economic Cooperation
CIPDA	China Intellectual Property Development Alliance
CTSA-CCUS	China Technology and Strategic Alliance for CO2 Capture and Storage
DoA	Description of the Action – annex 1 to the GA
EC	European Commission
EU	European Union
EUCCC	European Union Chamber of Commerce in China
NCCS	Norwegian CCS Research Centre
WIPO	World Intellectual Property Organisation
WP	Work package
CCUS	Carbon Capture Utilization and Storage
WGDO	World Green Design Organization
CHA	China Hydrogen Alliance
ECKF	Europe China Knowledge Forum

2   EXECUTIVE SUMMARY

After the ReConnect China has been operating for one year (M01-M12), it entered into the Year Two (M13-M24) with many deliveries from WP1. After communication with UGENT, the D1.5 Report covered M01-M11, and this D1.6 Report covers M12-M24, agreed by UGENT. During the period of M12-M24, WP1 has delivered five policy briefs and three reports, detailed as follows,

Policy briefs

1. Policy Orientations on EU-China Relations on Semiconductors: An outlook on bilateral and multilateral agendas (Task 1.3 ELCANO-M13)
2. China's approach to Artificial Intelligence (UTU-M24) M20, July 2024
3. EU's technological dependencies towards China (IAI- M22)
4. Technical standards in Artificial Intelligence (IFRI-M20) M24 Oct 2024
5. Quantum technologies (IFRI-M16) M24, Oct 2024

Reports

D1.3 Report on the results of the Research cluster on China's Advances in Frontier Technology (IFRI-M24)
D 1.4 Report on the results of the Research cluster on the Economic Dimension of S&T Cooperation (IAI- M23)
D 1.6 WP1 Summary Report (M12-M24) – M24 IN

WP1 members had discussions about the plan of the Year Two (M12-M24), as well as works on each delivery. Meetings of WP1 had been organized by IN with WP1's consortium members of ReConnect China. The agenda and minutes are as follows,

Minutes of ReConnect China WP1 meeting 2024-1.docx (sharepoint.com)

Minutes of ReConnect China WP1 meeting 2024-2.docx (sharepoint.com)

The last one was specifically for the ECKF in Tartu, with the participation of Tartu University, in order to contribute to the success of this event, as well as a fruitful Consortium Conference and gathering of the ReConnect China project.

Deviations

There are very little deviations for the deliverables times from Task 1.3 and Task 1.4 of WP1. Adjustments are as follows,

Task 1.3 China's Advances in Frontier Technologies (leader: IFRI, UTURKU, ELCANO)

1. "China's approach to Artificial Intelligence" was slightly adjusted to "China's Artificial Intelligence Ecosystem" (UTURKU-M24) and will be delivered within M20 (before 30 June 2024), four months earlier than planned.
2. Technical Standards in Artificial Intelligence (IFRI-M20) moved to M24 (Oct 2024)

Task 1.4 Economic Dimension of S&T Cooperation

D 1.4 Report on the results of the Research cluster on the Economic Dimension of S&T Cooperation (IAI- M22) moved to M23 (Sep 2024)

Therefore, with the joint efforts of WP1 members, there are totally eight deliverables from WP1 in the Year Two (M12-M24), as follows,

- Policy Orientations on EU-China Relations on Semiconductors: An outlook on bilateral and multilateral agendas (Task 1.3 ELCANO-M13) - **Delivered**
- The Chinese AI Innovation Ecosystem: Spurring Innovation or Consolidating Monopolies? (Task 1.3 UTURKU-M21) - **Delivered**
- EU's technological dependencies towards China: the case of EV batteries (Task 1.4 IAI-M22) - **Delivered**
- Technical standards in Artificial Intelligence (IFRI-M24) - **Delivered**
- Quantum technologies (IFRI-M23) - **Delivered**
- D 1.4 Report on the results of the Research cluster on the Economic Dimension of S&T Cooperation (IAI- M23) - **Delivered**
- D 1.3 Report on the results of the Research cluster on China's Advances in Frontier Technologies (IFRI -M24) - **Delivered**
- D 1.6 WP1 Summary Report (M12-M24) IN-M24 - **Delivered**

Human Resources

There were also some human resources adjustments in WP1 during the M12-M24. Ms. Bingqi Caroline joined IN China team (Task 1.2) in 2023. Hereafter, the position was replaced by Ms. Melo Wang in August 2024.

Francesca Maremonti joined IAI in March 2024 and contributed to Task 1.4.

3   INTRODUCTION

ReConnect China aims to answer the question in which domains collaboration of the EU with China is desirable, possible or impossible. The question in which domains EU collaboration with China is desirable, possible, or impossible starts from the acknowledgment that in the modern geopolitical and geo-economic world, the EU and China stand in a perpetual dynamic relationship with each other. This project therefore identifies the following key fields on which the EU should upgrade its independent knowledge: Science & Technology, Economy & Trade, Domestic Governance, and Foreign Policy. To carry out this project, a database which will provide access to new sources of information will be developed. The independent knowledge that will be generated in this project will bring together stakeholders and experts in a Europe-China Knowledge Forum. The project also envisages to enhance awareness of China among the general public and youth.

3.1   Deliverable scope

This report is based on the works, activities and events of members of the tasks of WP1, focusing on the deliverables from each Task. There are four Tasks in WP1:

Task 1.1 EU-China research cooperation (co-patent/co-publication analysis) – (Leader: ZSI, Members: IN, IFRI, IAI, UTURKU)

Task 1.2 The legal and regulatory aspects of S&T development - (leader: IN, Member: IAI, UGENT)

Task 1.3 China's Advances in Frontier Technologies (Leader: IFRI, Members: UTURKU, ELCANO)

Task 1.4 Economic Dimension of S&T cooperation (Leader: IAI, Members: IN)

This report is a periodical summary about WP1 Year Two (M13-M24). Work of M12 has also been mentioned because the report D1.5 only covered M01-M11. UGENT had finally agreed with IN's suggestion of submitting the annual report by the end of M24 or even at the very beginning of M25, just for the purpose to cover all the activities of the complete Year Two. The same holds for Years Three/Four in the future.

3.2   Reference documents

1. EU Grant Agreement, including the DoA– annex 1 to the GA
2. Proposal of ReConnect China- HORIZON CL2-2021-TRANSFOMATIONS-01
3. Consortium Agreement
4. EU guidelines for project implementation and documentation

5. [ReConnect China Policy Brief WP1-Task 1.1_EU27AC-China STI](#)

6. [ReConnect China Policy Brief WP1-Task 1.1_ Rethinking China's Covid-19 Aid Diplomacy](#)

7. [D1.1 Report on the results of the research cluster on EU-China research cooperation (co-patent/co-publication analysis)](#)

8. [D1.5 First progress report on research clusters WP1](#)

9. [ReConnect China Policy Brief – WP1-Task 1.3_Racing to the Moon](#)

10. [ReConnect China Policy Brief -_WP1- Task 1.4 Navigating EU-China Investment Dynamics](#)

11. [ReConnect China_Policy Brief -_WP1-Task 1.3 Semiconductors](#)

12. [ReConnect China_Policy Breif-WP1-Task 1.4](#) [EU's technological dependencies towards China: the case of EV batterie](#)

13. [D1.4 Report on the Results of the research cluster on the economic dimension S&T cooperation](#)

Note: some deliverables submitted by the end of Year Two have not been listed as publications yet.

Four Policy Briefs

- China's approach to Artificial Intelligence (UTU-M24) M20, June 2024
- Technical Standards in Artificial Intelligence (IFRI-M20) M24, Oct 2024
- Quantum Technologies (IFRI-M16) M23, Sep 2024
- EU's Technological Dependencies towards China (IAI- M22) Aug 2024
- Technical Standards in Artificial Intelligence (IFRI-M20) M24 Oct 2024

Three Reports

- D1.3 Report on the results of the Research cluster on China's Advances in Frontier Technology (IFRI-M24)
- D1.4 Report on the Research cluster on the Economic Dimension of S&T Cooperation (IAI-M22)
- D1.6 Second progress report on the research clusters of WP1 (IN-M24)

4 WORKS AND DELIVERIS OF WP1 TASKS

Task 1.1 led by ZSI had contributed most deliverables in Year One, and had successfully fulfilled their targets in WP1, while Task 1.3 led by IFRI and Task 1.4 led by IAI have taken the main workload for deliverables in the Year Two.

4.1 Works and Deliverebles of Task 1.1

Task 1.1 EU-China Research Cooperation (co-patent/co-publication analysis) – (Leader: ZSI, Members: IN, IFRI, IAI, UTURKU)

Task 1.1 had already submitted and published all their deliverables in Year One, which fulfilled their targets in this program. They also contributed to some other activities in this program in Year Two, including giving comments to other Task's deliverables.

4.2 Works and Deliverables of Task 1.2

Task 1.2 The legal and regulatory aspects of S&T development - (leader: IN, Member: IAI, UGENT)

Because the deliverables from Task 1.2 were planned to be submitted at a later stage of the program, therefore, its work in Year Two focused on networking and partner searching for the preparation of further studies, as well as coordinating the works of WP1, and collaborative works of the program led by UGENT.

During the period from M12 to M24, in order to prepare for the IPR workshop, IN Beijing has joined the IPR Working Group of the EUCCC with discussions and workshops, as well as in dialogue with Chinese authorities and associations concerned with IPR issues, seeking for data and information both from Europe and China for the IPR workshop and policy brief preparation for ReConnect China in M6. In M7, IN also had a meeting with Center for International Knowledge on Development (CIKD), and Beijing IPR Protection Association etc. for proper data and policy resources, as well as for searching for China IPR challenges and EU China cooperation in this field.

For the CCUS sector, IN has built up contacts with the International Hydrogen Centre, China Hydrogen Alliance, and Beijing Tsinghua Industrial Institute for CCUS combined hydrogen production, called Blue Hydrogen, in the aspects of technology, situation and policy. IN joined the International CCUS Forum in Beijing with European participates including Norway, for networking with potential partners both in China and Europe.

On the 21st of March 2024, Mr. Henning Kristoffersen joined the "China and the Green Shift" – conference organized in Oslo by the Centre for International Climate Research (CICERO), and gave a presentation particularly on Europe's challenge of balancing national industrial policy/national security/green shift, as well as for giving a brief introduction about the ReConnect China project. The conference focused on green technology and renewable energy development in China and global consequences, with participates from governments and industries.

IN also had a meeting with the World Green Design Organization (WGDO) for discussions about the policy and regulatory issues between Europe and China, and primary intention for a joint workshop in the future.

In M19, IN joined the Europe China Economy Forum organized by the China Europe Association for Technological and Economic Cooperation (CEATEC) in Beijing, and briefly introduced the ReConnect China project and discussed cooperation in the EU China S&T workshops, and EU China cooperation and competition.

IN M23, IN joined the the 4th Carbon Neutrality Summit - Navigating the Path to Global Net-Zero Supply Chains organized by EUCCC in Tianjin. Dr. Gao Peng gave a presentation on Europe-China S&T Cooperation- Green Transition- ReConnect China- Hydrogen & CCUS.

The above-mentioned parties can be potential cooperation partners for the workshops of Task 1.2 in the future.

4.3 Works and Deliveries of Task 1.3

Task 1.3 - China's Advances in Frontier Technologies (Leader: IFRI, Members: UTURKU, ELCANO)

Following the completion of the first Policy Brief of Task 1.3 in October 2023, Year Two began with the second Policy Brief, written by Elcano's Raquel Jorge Ricart entitled "Policy Orientations on EU-China Relations in Semiconductors: An outlook on bilateral and multilateral agendas". The Brief was completed end of October and published on the network's website in November 2023.

Work on the third Policy Brief by UTURKU's Junhua Zhu and Mikael Mattlin picked up in earnest over the spring of 2024 with background research, interviews, and analysis of original documents. The text was submitted in early June, underwent an internal review process among all WP1 members, and was ultimately published at the end of June 2024 with the title "The Chinese AI Innovation Ecosystem: Spurring Innovation or Consolidating Monopolies?".

Task 1.3's two final Policy Briefs, both written by IFRI, were published in October. Work on the first of these briefs – technical standardization in the field of Artificial Intelligence – was delayed so as to benefit from the framework analysis done by the UTURKU team. The second, on China's advances in quantum sciences and technology, has also been delayed from its initial publication

date of September 2024 so as to give time for additional interviews necessary to complete the analysis.

IFRI's John Seaman has been responsible for coordinating the work of Task 1.3, including discussing topics with authors, providing substantive feedback to drafted texts, collecting feedback from other WP1 members, and final copy editing.

The final report for Task 1.3, summarizing the work done and drawing analytical conclusions, was completed on time by the end of October 2024 (M24).

List of Policy Briefs, authors and expected publication dates for Task 1.3		
Space Technologies	Marc Julienne (IFRI), Paul Wohrer (IFRI)	October 2023 (M12)
Advanced Semiconductors	Raquel Jorge (ELCANO)	November 2023 (M13)
China's Artificial Intelligence Ecosystem	Junhua Zhu (UTURKU), Mikael Mattlin (UTURKU)	June 2024 (M20)
Technical Standardization and Artificial Intelligence	John Seaman (IFRI)	October 2024 (M24)
Quantum Technologies	Marc Julienne (IFRI)	October 2024 (M24)

4.4 Works and deliveries of Task1.4

Task 1.4 - Economic Dimension of S&T cooperation (Leader: IAI, Members: IN)

Along the second year of the project (M12-M23), IAI researchers have continued contributing to Task 1.4 laying the ground for the following deliverables:

- Policy Brief on EU's technological dependencies towards China (IAI- M22) Aug 2024
- D1.4 Report on the Research cluster on the Economic Dimension of S&T cooperation (IAI-M23)

IAI's focus within Task 1.4 was primarily directed towards desk research, aligning with the core objective of evaluating the economic dimension of S&T cooperation between the EU and China.

The policy brief narrowed down the scope of the research on "EU's technological dependencies on China" to the supply chain of a critical green technology, namely lithium-ion batteries. It explored the EU's and China's heft along the supply chain, evaluating the EU's capacity to reduce dependence on China for EV batteries.

The key findings and conclusions derived from IAI's two policy briefs of Task 1.4 (1) China's acquisitions and outbound investments in the EU and (2) the EU's technological dependencies on broader report [D1.4]. The report included the findings highlighted in the two policy briefs and offered a comprehensive analysis of the EU's economic security dimension, complemented by a case study to expose the EU's technological dependencies from China. Within the broader picture of the EU's economic security strategy and measures, the report provided insights into the electric vehicles (EV) sector and the lithium-ion batteries supply chain.

In summary, the activities conducted in the development of the two policy briefs and the report can be summarised as follows:

- **EU's technological dependencies towards China** (IAI: Francesca Maremonti, M22 – August 2023): The policy brief research process was grounded on desk research, which encompassed extensive literature reviews and data analysis sourced from open-access databases. Our team conducted an examination of the available data, discerning prevalent patterns, potential risks, and promising opportunities within EU-China S&T cooperation. The policy brief was reviewed internally at a IAI level, then submitted to WP1 on M22 as scheduled.
- **Report on the results of the Research cluster on the Economic Dimension of S&T cooperation** (M 22– August 2023). Preliminary preparations for this report were undertaken by IAI during M1-M11, laying the foundation for the comprehensive analysis that will be presented in the final document. During the second year, the IAI team laid out the data and findings provided by the two policy briefs of Task 1.4 and engaged in a collaborative effort to structure the report comprehensively.

Throughout M12-24, the IAI team has also actively participated in various meetings and internal workshops (e.g. Scientific Board meeting – in February 20 and June 12; WP1 meetings – May 6 and June 18). These engagements aimed to support the planning of the activities in the project, to report progress, to share achievements in our work. Along the drafting process of the policy brief "EU's technological dependencies from China", Francesca Maremonti took this opportunity to create synergies at the ReConnect China consortium level. She engaged in conversation with John Seaman (IFRI) and Victor de Decker (Egmont Institute) to discuss matters on energy, green technologies and economic security, and gained valuable insights for the policy brief on "EU's technological dependencies from China".

5   OTHER WORKS AND ACTIVITES

On January 23rd 2024, the Norwegian authorities organized the Experience Conference in Ålesund, focusing on maritime industry exports to China – influences of geopolitics. Mr. Henning Kristoffersen gave a presentation on balancing the need for cooperating with China for technological development and innovation and at the same time balancing security needs. The ReConnect China project has been briefly introduced, with the key points of several policy briefs.

On the 8th of Oct 2024, Dr. Gao Peng from IN gave a presentation in the Shanghai Hydrogen Summit about CCUS and Hydrogen, where the ReConnect China project was introduced, and was called for partners for the WP1 Task 1.2's CCUS Workshop in 2025.

On the 22nd of Oct 2024, Dr. Gao Peng from IN gave a presentation in Oslo to introduce the ReConnect China project in an event organized by the Chinese Embassy and Chinese Enterprise Association. Leaders from IN Asia also participated the event.

6   CONCLUSIONS

With the joint efforts of all members of WP1, all targets have been successfully accomplished in the Year Two. We expect the same achievements will be reached in Year Three as well.

There are eight deliverables in total planned to be delivered in the Year Two (M13-M24) of the program. All have been successfully submitted before the end of M24, including this one - D1.6. WP1 has achieved its tasks in the Year Two after all above mentioned deliveries have been submitted. Relevant human resources have also been adjusted, contributing to the success of the implementation of the ReConnect China project.