

Project for the Development and Pilot of a Data Sharing System to Realize the Ouranos Ecosystem

NEDO dept. in charge: Semiconductor and Information Infrastructure Department
METI dept. in charge: Commerce and Information Policy Bureau
Digital Economy Division
Innovation and Environment Policy Bureau GX Policy Group
Resource Efficiency and Circular Economy Division

Project Overview

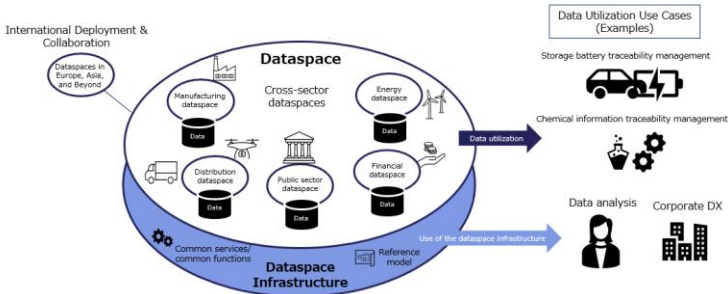
1) Project Objectives

- Currently, supply chains in many industries extend across international borders from upstream to downstream. Ensuring product safety requires the seamless flow of product-related data throughout the entire supply chain. To achieve this, a reliable mechanism for sharing data across corporations, countries, and industries is essential.
- Responding to recent developments in Europe, such as strengthened environmental data management in areas including resource circulation and chemical substance information, has also become an urgent priority.

2) Project Details

- In addition to developing interoperability functions with overseas platforms that will serve as a foundation for promoting dataspace, the project will conduct research and surveys related to the creation of guidelines for dataspace builders and users, as well as outreach activities to encourage the broader adoption and expansion of dataspace.
- The project will also develop and demonstrate data-linkage systems in the fields of batteries and chemical substance information, where demand from industry is particularly high.

■ Dataspace Contributing to the Ouranos Ecosystem



3) Project Structure

Project period: FY2025 to FY2027
Budget amount: 1.394 billion yen (FY2026) (General Account)
Support type: Entrustment; subsidies of 1/2 or 2/3
Legal basis under the NEDO Act: Article 15, Item 2, Item 3, and Item 9

Connections to Policies and Other Projects

- Digital Infrastructure Development Project for Digital Transformation of Industries (FY2022 to FY2024)**
- Digital Lifeline Development Project (FY2024 to FY2025)**

Through the projects above, data-linkage infrastructure has been developed for the DX of human flow and logistics, including spatial information infrastructure, smart buildings, system-wide safety, and the early implementation of digital lifelines. Data-linkage infrastructure has also been developed for the DX of commercial and financial flows, including transactions and supply chains. The results of the Ouranos Ecosystem project, including its open-source software, are also being used by participants in the Digital Lifeline Development Project (Drone Routes), and research and development are underway to expand use cases

Targets

1) Output Targets

- R&D Item 1: The project will develop functions to enhance common capabilities across fields, which are essential for smooth data linkage in data-linkage systems that span companies, industries, and national borders, while ensuring safety, reliability, and other considerations. The project will establish these functions as technologies that can be used in actual operation. (TRL 5 or higher; at least one case)
- R&D Item 2: The project will develop data-linkage systems and functions for use cases with particularly high industry demand and establish them as technologies that can be implemented in society. (TRL 7 or higher; at least one case) For R&D themes beginning in FY2026 or later, the project will develop the target data-linkage systems and functions and establish them as technologies for use in actual operations in the envisioned usage environment. (TRL 6 or higher; at least one case)

2) Outcome Targets

- Real-world social implementation of data-linkage systems: at least one case (FY2032 target)
- Capture a market of at least 110 billion yen across the entire project (FY2032 target)

(Initiatives to Achieve Outcome Targets)

- The project will establish an intellectual property strategy with commercialization in mind and implement appropriate intellectual property management.
- The project will establish common functions for use cases, including developing systems necessary for interoperability with overseas platforms and other systems, as well as functions to enhance reliability. It will also establish standard methods, including rules for international connections.

Project Organization

NEDO

Technical Advisors: IPA/DADC (Information-technology Promotion Agency, Japan/Digital Architecture Design Center)

Collaboration



R&D Item 1

(A) Project for the Development and Promotion of a Dataspace Infrastructure Contributing to the Ouranos Ecosystem (Entrustment)

- Automotive and Battery Traceability Center Association, Inc. (ABtC)
- NTT DATA Group Corporation

R&D Item)

(B) Project for Enhancing the Distribution of Carbon Footprint Data in the Battery Traceability Sector (Subsidy)

- Automotive and Battery Traceability Center Association, Inc. (ABtC)

Other Activity

- (D) Survey for Data Space Development, Expansion, and Project Management Office Operations (Entrustment)
- Deloitte Tohmatsu LLC

R&D Item 3

(C) Project for the Development of a Chemical Substance Data Sharing System (Entrustment, Subsidy)

(C-1) Development of a Traceability Management System for Chemical Substance Information (Subsidy: 1/2)

- NTT DATA Group Corporation

(C-2) Demonstration of Applications of a Traceability Management System for Chemical Substance Information (Subsidy: 1/2, 2/3)

- dotD inc.
- Sotas Co., Ltd.
- NEC Corporation
- Fujitsu Limited

(C-3) Study on Traceability Management for Chemical Substance Information in the Downstream Sector of Resource Circulation (Entrustment)

- Nomura Research Institute, Ltd.

(C-4) Study on Promoting the Adoption of a Chemical Substance Information Traceability Management System (Entrustment)

- Japan Environmental Management Association for Industry (JEMAI)

(C-5) Study on Connecting the Chemical Substance Information Traceability Management System with Domestic Infrastructure Platforms (Entrustment and Subsidy)

- Boston Consulting Group K.K.

(C-6) Study on Connecting the Chemical Substance Information Traceability Management System with External Systems and Platforms (Entrustment and Subsidy)

- NTT DATA Group Corporation

(C-7) Special Training Course for Human Resource Development to Support the Dissemination and Implementation of Applications for the Chemical Substance Information Traceability Management System (Entrustment)

- Agekke Corporation

(C-8) Proof-of-Concept Demonstration for the Design of a Platform Contributing to Domestic Resource Circulation through DPP Compatibility (Entrustment and Subsidy)

- Deloitte Tohmatsu LLC Corporation

Schedule

Projects Starting in FY2025

	2025	2026	2027	
R&D Item 1: R&D for Strengthening Cross-Cutting Functions Project for the Development and Promotion of a Dataspace Infrastructure Contributing to the Ouranos Ecosystem (Entrustment)				Final Evaluation
R&D Item 2: Development, Evaluation and Verification of Domain-Specific Systems (B) Project for Enhancing the Distribution of Carbon Footprint Data in the Battery Traceability Sector (Subsidy: 2/3)				
R&D Item 2: Development, Evaluation and Verification of Domain-Specific Systems (C-1) Development of a Traceability Management System for Chemical Substance Information (Subsidy: 1/2)				
R&D Item 2: Development, Evaluation and Verification of Domain-Specific Systems (C-2) Demonstration of Applications of a Traceability Management System for Chemical Substance Information (Subsidy: 1/2, 2/3)				
R&D Item 2: Development, Evaluation and Verification of Domain-Specific Systems (C-3) Study on Traceability Management for Chemical Substance Information in the Downstream Sector of Resource Circulation (Entrustment)				
Other Activity (D) Survey for Data Space Development, Expansion, and Project Management Office Operations (Entrustment)				
Actual Expenditure (JPY 100 million)	-	-	-	
Budget (JPY 100 million)	16.49	13.94	-	3

	2025	2026	2027
R&D Item 2: Development, Evaluation and Verification of Domain-Specific Systems (C-4) System Development for Chemical Substance Information Distribution/Study on Promoting the Dissemination of Traceability Management Systems for Chemical Substance Information (Entrustment)			
R&D Item 2: Development, Evaluation and Verification of Domain-Specific Systems (C-5) System Development for Chemical Substance Information Distribution/Study on Connecting Traceability Management Systems for Chemical Substance Information with Overseas Information Infrastructure (Entrustment and Subsidy)			
R&D Item 2: Development, Evaluation and Verification of Domain-Specific Systems (C-6) System Development for Chemical Substance Information Distribution/Study on Connecting Traceability Management Systems for Chemical Substance Information with External Systems (Entrustment and Subsidy)			
R&D Item 2: Development, Evaluation and Verification of Domain-Specific Systems (C-7) System Development for Chemical Substance Information Distribution/Special Training Program for Human Resource Development to Support the Dissemination and Implementation of Applications of Traceability Management Systems for Chemical Substance Information (Entrustment)			
R&D Item 2: Development, Evaluation and Verification of Domain-Specific Systems (C-8) Proof of Concept for Designing a Platform Supporting DPP and Domestic Resource Circulation (Entrustment and Subsidy)			
Actual Expenditure (JPY 100 million)	—	—	—
Budget (JPY 100 million)	16.49	13.94	—



Technical Steering Committee

Final Evaluation