



Contribution ID: 203

Type: **Session**

Legal and organisational aspects of data interoperability: climate adaptation case studies

Thursday 16 October 2025 11:00 (1h 30m)

Building data-driven solutions to support climate change adaptation is inherently a cross-disciplinary and cross-organisational challenge. Legal compliance and organisational practices and assumptions will provide requirements and constraints for the technical solutions that can be deployed in the operational environments. This session will investigate these challenges and present an initial roadmap towards standardised legal and organisational agreement frameworks that can facilitate solving privacy, IPR and other compliance issues in a transparent and traceable manner.

The methodology and analysis is based on the world of the EU-funded Climate-Adapt4EOSC project with three specific case studies: urban climate vulnerability, principally heat; coastal/estuarine/port hazard resilience, including overtopping; shrink-swell of clay soils, with attendant issues of building damage and insurance. The work builds on the EOSC Interoperability Framework and other work on Legal and Organisational Interoperability, to develop 1) a diagnostic list of commonly encountered issues, and 2) an easy-to-use approach to mapping and understanding data flows and exchanges, so as to highlight and address legal and organisational interoperability obstacles. Both of these approaches are being tested with the Climate-Adapt4EOSC case studies. The session will present, and seek feedback on, these methodologies as well as the organisational and legal challenges encountered as part of the requirement analysis and service design.

In addition to presenting the initial results of the agreement framework, the session aims at identifying opportunities to reuse and enhance the solutions based on an interactive workshop. The session will test this approach and to understand how issues of organisational and legal interoperability are being addressed in other geographies and settings. There will be an interactive activity to review the diagnostic list (and identify any gaps) and to explore the mapping approach, as well as the findings and recommendations. Research infrastructures encountering legal and organisational interoperability issues in analogous circumstances will present and discuss the approach they are taking to overcome them and the solutions identified.

Programme (short presentations highlighting key issues, followed by discussion and interactive exercises with the diagnostic list and mapping approach.)

Simon Hodson and Matti Heikkurinen (CODATA), Hilde Orten (Sikt), The Climate-Adapt4EOSC approach of legal and organisational interoperability.

Hamish Holewa, Rebecca Farrington, Tim Rawling, Legal and organisational interoperability in the ARDC Planet Commons

Adrian Burton, Legal and organisational interoperability in the ARDC People Commons

Michelle Heupel, Legal and organisational interoperability in Coast RI

Pascal Perez, Legal and organisational interoperability in Aurin

Shaily Gandhi (or MHT contact?), Legal and organizational interoperability for urban heat mitigation in India.

Thanasis Sfetsos, Legal and Organizational interoperability for socially just climate adaptation, the case of Egaleo Greece

Discussion.

Exercises around the diagnostic list and mapping of data flows and exchanges.

Feedback.

Primary authors: Dr BURTON, Adrian (ARDC); Dr HOLEVA, Hamish (ARDC); Dr ORTEN, Hilde (Sikt); Dr DRUCKEN, Kelsey (ACCESS-NRI); Dr WYBORN, Lesley (ANU); Dr REHBEIN, Mark (AODN); Mr HEIKKURINEN, Matti (CODATA); Dr HEUPEL, Michelle (Coast RI); Dr PEREZ, Pascal (AURIN); Dr FARRINGTON, Rebecca (AusScope); Dr GANDHI, Shaily (ITU Linz); HODSON, Simon (CODATA); Dr SFETSOS, Thanasis (Demokritos); Dr RAWLING, Tim (AuScope)

Presenters: Dr BURTON, Adrian (ARDC); Dr HOLEVA, Hamish (ARDC); Dr DRUCKEN, Kelsey (ACCESS-NRI); Mr HEIKKURINEN, Matti (CODATA); Dr PEREZ, Pascal (AURIN); Dr GANDHI, Shaily (ITU Linz); Dr SFETSOS, Thanasis (Demokritos)

Track Classification: SciDataCon2025 Specific Themes: Open research through Interconnected, Interoperable, and Interdisciplinary Data