# NeXt-Generation Data Governance 2024 (NXDG 2024)

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**Abstract**

The NeXt-generation Data Governance workshops aim to bring together technical, legal and societal researchers, and industry experts to discuss data governance, emergence of data spaces and the impact of the European strategy for data in such systems. The 2024 edition promoted submissions on topics related to semantics and interoperability, AI and data governance, data protection, privacy, policy management and enforcement. From the received 8 submissions, 5 were accepted and 2 were initially conditionally accepted for publication following an open review strategy by researchers with a background knowledge on the technical, legal and/or societal domains promoted by this workshop. We aim towards having a second edition of this workshop next year, to further establish collaborations between researchers in this field.

**Keywords**

Data governance, data spaces, data protection, policies, semantic web

**Workshop webpage:** https://w3id.org/nxdg/2024

## 1. Workshop description

It's 2024 and we *still* can't visit any website without clicking "Yes" on a cookie banner, exchanging access to our most private data for the right to browse around. Managing and enforcing our privacy preferences in a personalised manner is also quite challenging. Additionally, data protection laws are emerging exponentially following in the footsteps of the GDPR.

In this context, the NeXt-generation Data Governance 2024 workshop aims to bring together technical, legal and societal researchers, and industry experts to discuss data governance, emergence of data spaces and the impact of the European strategy for data in such systems. The workshop aims to support the development of solutions to manage data, policies and provenance in a trustful and interoperable manner and to aid in the management and reporting of legal documentation falling from the EU's General Data Protection Regulation (GDPR) and Data Governance Act (DGA), Data Act, AI Act and European Health Data Space regulation (EHDS) to create legally-aligned, AI-powered data ecosystems, using semantic-based specifications such as the Open Digital Rights Language (ODRL) [1], the Data Privacy Vocabulary (DPV) [2] or Solid [3].

As such, this workshop has presentations and discussions of interest to both data providers and consumers, researchers, standardisation bodies, businesses, and citizens who want to interoperate in the Data Spaces era. Broadly, we welcomed submissions on topics related to semantics and interoperability, AI and data governance, data protection, privacy, policy management and enforcement.

## 2. Accepted Papers

The workshop received 8 submissions and each submission was reviewed by at least 2 members of NXDG's Programme Committee. From these submissions, 7 were accepted and 1 was rejected based on the reviewer's comments. The reviewing took place on the OpenReview platform with the reviews

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The 7 accepted papers are as follows:

1. *Initiating interdisciplinary research for future-proof data protection in the context of Data Spaces and semantic interoperable data sharing* by Michiel Fierens which addresses challenges currently facing data protection law in the context of a widespread implementation of Data Spaces and semantic interoperable data sharing;
2. *Towards Cultivating Decentralised Data Privacy, Interoperability and Trust with Semantic PETs and Visualisations* by Anelia Kurteva and John Domingue which proposes development of a human-centered approach for building trusted self-sovereign decentralised spaces for personal data governance based on combining semantics with privacy enhancing technologies (PETs) and the utilisation of graphical visualisations;
3. *Towards time privacy policies in ODRL* by Juan Cano-Benito, Andrea Cimmino, Raúl García-Castro which addresses current challenges regarding the use of ODRL by extending the ODRL ontology and aligning it to other well-known ontologies to support time or temporal policies;
4. *Mapping Data Governance Requirements Between the European Union's AI Act and ISO/IEC 5259: A Semantic Analysis* by Kuruvilla George Aiyankovil, Dave Lewis, Julio Hernandez which uses semantic web vocabularies to map AI Act Article 10 regarding data governance to the relevant provisions of the ISO SC42 standard 5259 on 'Data Quality for Machine Learning';
5. *Me want cookie! Towards automated and transparent data governance on the Web* by Jesse Wright, Rui Zhao, Beatriz Esteves proposes a semi-automated approach for data governance on the Web by using policy languages to describe data terms of use, and having browsers act on behalf of users to enact policy-based controls;
6. *Defining a new perspective: Enterprise Information Governance* by Alastair McCullough proposes a novel definition of 'regulatory enterprise information governance' as a strategic framework that acts through control mechanisms designed to assure accountability in managing decision rights over information and data assets in organisations;
7. *Using ODRL to represent access rights to Public Records at The National Archives (UK)* by Robert Walpole, Alex Green introduces a prospective model for describing access rights to public records held at The National Archives (TNA) by using ODRL to manage the record access policies based on UK Government legislation that has evolved over time.

## 3. Concluding Remarks

The NXDG workshop programme highlights the renewed focus on data governance based on the 'next-generation' paradigms emerging in the current ecosystem - namely Data Spaces, AI, Web Privacy, and Standards. We hope the workshop acts as a lightning rod to attract renewed interest in applying data governance fundamentals to these new areas and the workshop becomes a regular event for stakeholders to gather and discuss data governance, data protection, privacy, and policy in a manner that facilitates discussions and leads to advances in responsible innovation in the aforementioned areas.

## References


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