

Preface for the Proceedings of the 1st NeXt-generation Data Governance Workshop 2024 (NXDG 2024)

co-located with 20th International Conference on Semantic Systems (SEMANTiCS 2024)

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Workshop webpage: <https://w3id.org/nxdg/2024>

Organisation of the Workshop

The first NeXt-generation Data Governance (NXDG) workshop was designed to unite experts from technical, legal, and societal research, as well as industry experts, to explore key issues surrounding data governance, the emergence of data spaces, and the implications of the European data strategy on these. It encouraged submissions on a range of topics, including semantics and interoperability, AI and data governance, data protection, privacy, and policy management and enforcement.

The workshop received 8 paper submissions, of which 1 was rejected based on reviews, 5 were accepted for presentation and publication, and 2 were conditionally accepted (and later on accepted after the authors revised the publications and included the suggestions of the reviewers). Each submitted paper was reviewed by two members of an international program committee (full list below), with a relevant background in the technical, legal and/or societal domains promoted by this workshop and aligned with the submission. The workshop reviewing was open/non-blind - both the authors and reviewers had their identity visible, and the OpenReview platform was utilised for this purpose. The reviews of all the submitted papers are openly available at <https://openreview.net/group?id=SEMANTiCS.cc/2024/Workshop/NXDG>.

The following papers were presented at the workshop:

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';

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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.

The workshop was conducted as alongside other workshops and events within the SEMANTiCS conference. The workshop program consisted of a keynote delivered by Professor Dave Lewis (Trinity College Dublin, Ireland) “*AI Act, Interoperability and the Semantic Web*” which enriched the workshop given the timeliness of the topic and its inspirational dissemination of knowledge.

Given the relevance of the topic, the evolving landscape of regulations and policies related to data governance within the EU and international forums, and the enthusiasm of the attendees within the workshop, we intend to continue iterations of this workshop in the future.

Program Committee

We thank the following people for being part of the Program Committee and for supporting this work with their time and expertise in reviewing the submissions.

PC Members

- Inès Akaichi (Vienna University of Economics and Business, Austria)
- Rob Brennan (University College Dublin, Ireland)
- Michiel Fierens (KU Leuven, Belgium)
- Kimberly Garcia (University of St Gallen, Switzerland)
- Patrick Hochstenbach (Ghent University – imec, Belgium)
- Joshua Hovsha (Trinity College Dublin, Ireland)
- Anelia Kurteva (Delft University of Technology, Netherlands)
- Dave Lewis (Trinity College Dublin, Ireland)
- Lola Montero Santos (European University Institute, Italy)
- Victor Morel (Chalmers University of Technology, Sweden)
- Victor Rodriguez-Doncel (Universidad Politécnica de Madrid, Spain)
- Wout Slabbinck (Ghent University – imec, Belgium)
- Melanie Verstraete (Ghent University – imec, Belgium)
- Rigo Wenning (W3C Legal Counsel)
- Rui Zhao (University of Oxford, United Kingdom)

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