ODRL-based Usage Control

Establishing a Community of Practice
Position Statement – W3C Workshop on Privacy and Linked Data

Jaroslav Pullmann, Fraunhofer FIT
Christian Mader, Fraunhofer IAIS
Andreas Eitel, Fraunhofer IESE
Context / Industrial Data Space / Architecture

http://www.industrialdataspace.org/en/
**Motivation / Usage Control Enforcement**

- **Specification Level Policies (SLP)** - declarative contracts (natural language or machine-readable)
- **Implementation Level Policies (ILP)** - machine-interpretable and enfor-cable (technology-dependent)

![Diagram showing the relationship between coverage and enforcement levels.](image-url)
Proposal / Action Points

- **Usage Control**
  - Agree on language for Specification Level Policies for digital assets (ODRL + Profiles)
  - Emphasize (technical) **enforcement**
    - Define requirements and investigate limitations (Non-enforceable ↔ enforceable policies)
    - Investigate implementation options (Legal contracts ↔ enforcement framework, e.g. IND2UCE)

- **Scope**
  - Integrate *domains* beyond media (B2B data marketplaces, IOT and industrial agents etc.)
  - Consider legal restrictions (GDPR), licensing and “data residency” topics

- **Specification**
  - Explicate assumptions and implicit *conceptualization* (action, leftOperand)
  - Provide guidance on intended usage and unambiguous interpretation of ODRL constructs

- **Community of Practice**
  - Establish a live, community-driven **reference** (modeling patterns, templates etc.)
  - Establish a *governance infrastructure* (issue management, vocabulary extensions etc.)
  - Involve **user community** (digital asset providers, solution providers etc.)
  - Involve implementors of enforcement solutions
    - Relate to existing standardized software architectures (e.g. XACML 3.0)
  - Involve **lawyers and legal experts**
    - Clarify legal liability, semantic equivalence, translation to readable contracts etc.