Current global middleware infrastructure exposes shortcomings for data identification, discovery and use.

No good approach for automated services dealing with millions of objects in short timeframes.

Needed: A tiny, selected amount of meadata injected into PID records.

Benefits: Scalability, automation, cross-community solutions.
7 Guiding Principles for PID Kernel Information

- Independent of specific infrastructure or technologies
- Geared towards minimizing human interaction, long-term stability of processes relying on Kernel Information

- Draft Kernel Information profile
- Exemplary high-level architecture
- Use cases and community adoption
Initial Adopters

- RPID project: Pilot test bed for combining multiple RDA recommendations for advanced PID usage
- European Network for Earth System Modelling: Streamlining existing use of Kernel Information for CMIP6 to be aligned with recommendation
- DOI Foundation: Evaluation of Kernel Information concept for range of DOI applications
- EUDAT B2HANDLE service: PID profiles for the EOSC-hub
Expected Impact of the Deliverable

- Guiding Principles for sustainable, scalable middleware PID usage
- Core Kernel Information profile as reliable common core across infrastructures and community applications
- Provide nucleus for community or application-specific extensions
Feedback Desired from RDA Community

- Are the Guiding Principles applicable and is their scope well suited?
- Are there alternative good approaches to the architecture design?
- Are there additional service perspectives or other use cases?