CELTIC EUROGIA
Online Proposers Day
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DataSEC: Data Sovereignty for the European Cloud

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TEASER
AREA: ICT

Enabling the European Cloud, taking into account data sovereignty across all layers
The Fraunhofer Society

The Fraunhofer Gesellschaft undertakes applied research of direct utility to private and public enterprise and of wide benefit to society.

- 28,000 staff
- 74 institutes and research units

Finance volume 2020

- €3.2 billion
- €2.8 billion

- More than 70% is derived from contracts with industry and from publicly financed research projects.
- Almost 30% is contributed by the German federal and state Governments.
- Major infrastructure capital expenditure and defense research.
Fraunhofer Institute for Software and Systems Engineering ISST (Dortmund, Germany)

Founded in 1992

3 Divisions

100+ staff members, Ph. D. candidates and student assistants
Fraunhofer Institute for Software and Systems Engineering ISST

Fraunhofer ISST offers »Digitalization made in Germany« - focused on three industrial sectors

■ ISST one of main drivers behind International Data Spaces initiative; centrally involved with GAIA-X
■ Institute director Prof. Boris Otto: one of initiators, Vice President of IDSA
■ Jan Jürjens: contributor to Reference Architecture

■ Selection of relevant ongoing projects
■ [H2020] Amable, TRUSTS: IDS vs Blockchain
■ [H2020] Qu4lity, DataPorts: IDS in production / logistics (with Univ. Koblenz)
■ [H2020] AI4EU: Leading the IDS task
■ [National] Legal Test Bed: IDS vs Blockchain / Smart Contracts
■ [National] Servicemeister, IIP Ecosphere, XAPS: IDS in production systems (with Univ. Koblenz)
Univ. Koblenz (Germany): Faculty of Informatics

- Fraunhofer ISST will be supported by its linked third party University of Koblenz
- One of the strongest Computer Science Departments in Germany: Recently ranked fourth nation-wide in CHE research ranking (by combination of external research funding and scientific publication).
- Collaborations with external research institutes:
  - Fraunhofer Institute for Software- and Systems Engineering ISST
  - Max-Planck Institute for Informatics
  - GESIS – Leibniz Institute for the Social Sciences
- Institute for Software Technology (IST): Internationally leading in Secure Software Engineering (>6000 citations / h-index 40 @ Google Scholar), Lead of University Research Priority „Engineering Trustworthy Data-Intensive Systems“
IDS and GAIA-X: Add the Missing Data Sovereignty

**Data Ecosystem**
- **Data Provider**
- **Data Consumer**
- **Data Sharing**
- **Identity & Trust**
  - Identity provider
  - Certificate Authorities, PKI Services
- **Federated Catalogue**
  - Data Catalogue: Meta Data Broker
  - Self-Descriptions
  - Connector Ontologies
- **Identity Provider**
- **IDS Connector**
- **IDS and GAIA-X**
- **App Store Provider**
- **App Provider**
- **Broker Service Provider**
- **Vocabulary Provider**
- **Clearing House**
- **Certification Body**
- **Sovereign Data Exchange**
  - Data Usage Policies
  - Trusted Environment
- **Usage Control**
- **Compliance**
  - Certification Body
  - Governance

**Infrastructure Ecosystem**
- **Node 1**
  - Data Processing or Storage Service
- **Node 2**
  - Data Processing or Storage Service
- **Interconnect**
Looking for partners (or existing consortia) interested in International Data Spaces and GAIA-X
Please Do Get in Touch!

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Presentation available by email request or via: