

Energy Data Exchange Austria (EDA)

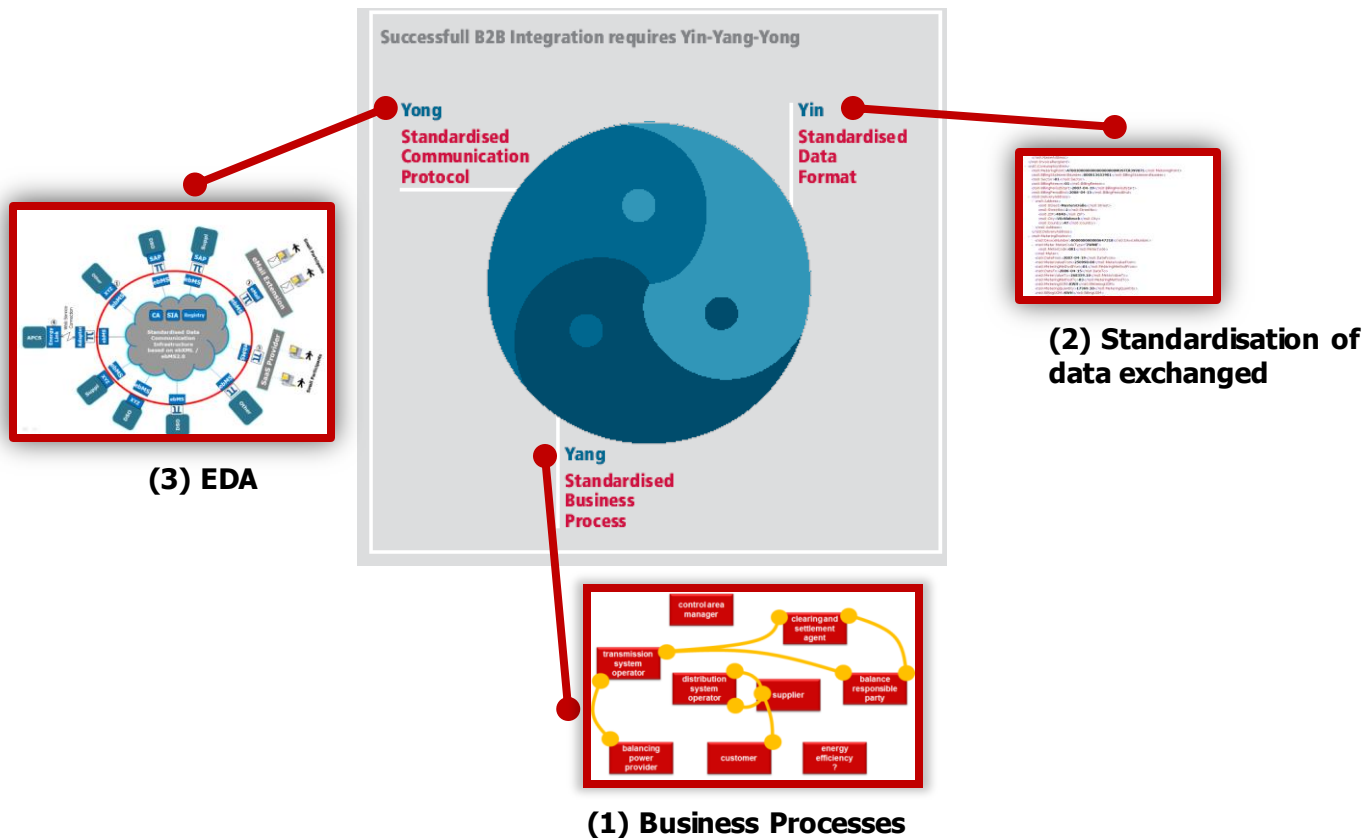
EDA – the Data Space for Austrian Energy Market Communication

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Yin-Yang-Yong of Standardisation in Austria



Principles of Energy Data Exchange in Austria: transparency and openness

- **Standardised data exchange in AT started in 2012** with supplier switching processes.
- Further market communication processes followed: **billing and measurements data exchange**, integrated **data-sharing**, **energy communities** and **distributed flexibility**, amongst a variety of other energy-related use cases.
- **Technical documentation** (processes, schemas, etc.) is elaborated by **ELECTRICITY AND GAS** companies via their *associations*.
- For this purpose, responsibility was transferred from/by the Austrian regulator to the *Austrian associations* in 2015 (regulated in market rule specifications “Sonstige Marktregeln – Kapitel 5” [1]).
- **Each new market process is publicly consulted via industry website www.eutilities.at and must be implemented** by everyone after completion of the consultation in a binding manner. Website www.eutilities.at embodies a **one-stop service point**.
- As a guiding principle, data is **kept at the source** and **only exchanged within the context of clearly defined business processes**. This is highly compatible with data protection and systems safety/security requirements and makes it straight-forward to **work alongside established distributions of responsibility** in many domains.
- Developments led organically to a democratised *Austrian Energy Data Space* rather than to the creation of centralised data hubs.

Main anchor point: EbUtilities.at

ebUtilities ← Startseite / Verfügbare Netzanschlusskapazitäten

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• **Verfügbare Netzanschlusskapazitäten**
Datenschutzinformation
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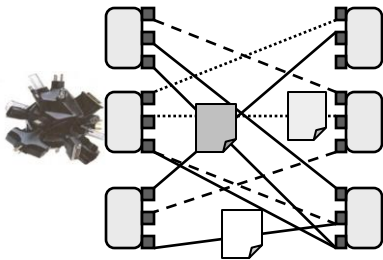
Angemeldet als
Marktteilnehmer
Administrator

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georg.hartner@gmail.c...
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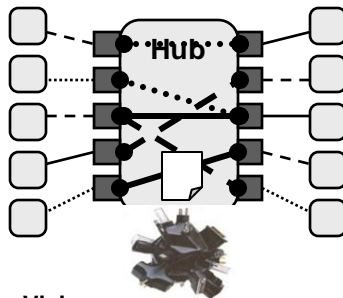
Common standards for highest degree of interoperability



Dead End: „Spaghetti Communication“

- No Document Format Standard
- No Messaging Standard
- No Hub
- # Converters = # Participants x (#-1)

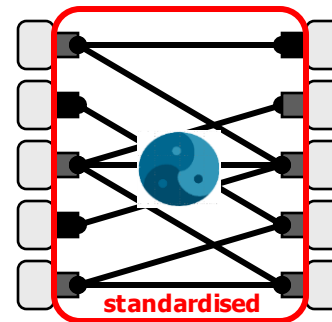
- ⊖ Very high investment (many converters)
- ⊖ Very high integration costs (no document standard, one adaptor only)
- ⊕ Low transaction costs, but high maintenance effort



Vision: „Central Hub makes it right“

- Document Format Standard
- No Messaging Standard
- Hub
- # Converters = # Participants

- ⊖ High central investment (central SW + converters)
- ⊕ reduced integration costs (Hub operator takes care)
- ⊖ Hub operation does not prevent from standardisation effort



„Full Interoperability“ / “Yin/Yang/Yong”

- Document Standard
- Interoperable Software
- No Hub
- # Converters = # Participants

- ⊕ Low investment (shared SW costs)
- ⊕ Low integration costs (document standard, one adaptor only)
- ⊕ Low transaction costs (no Hub)

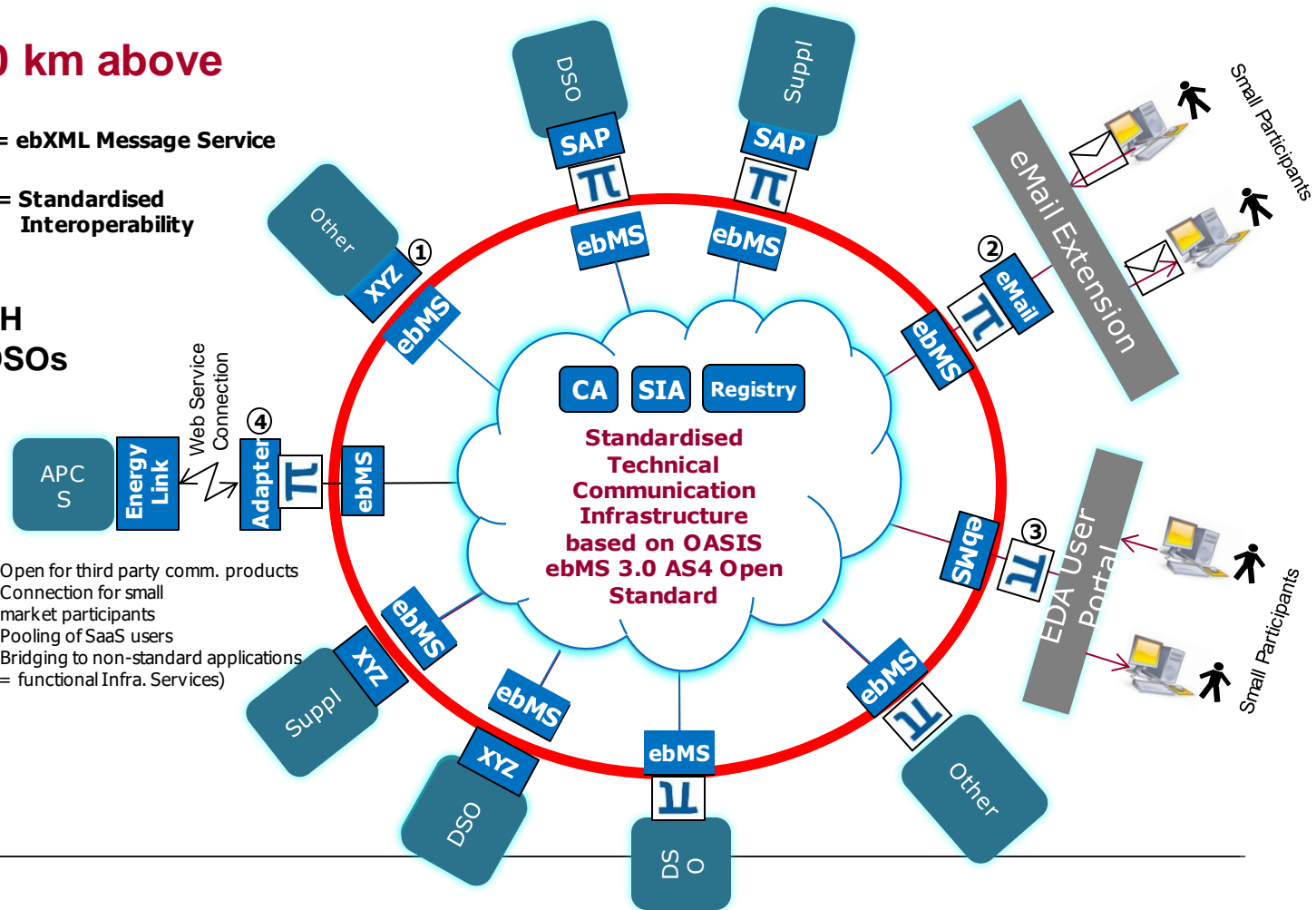
Lesson learned: If standardisation is done well, there is no advantage in centralisation!

EDA From 10.000 km above

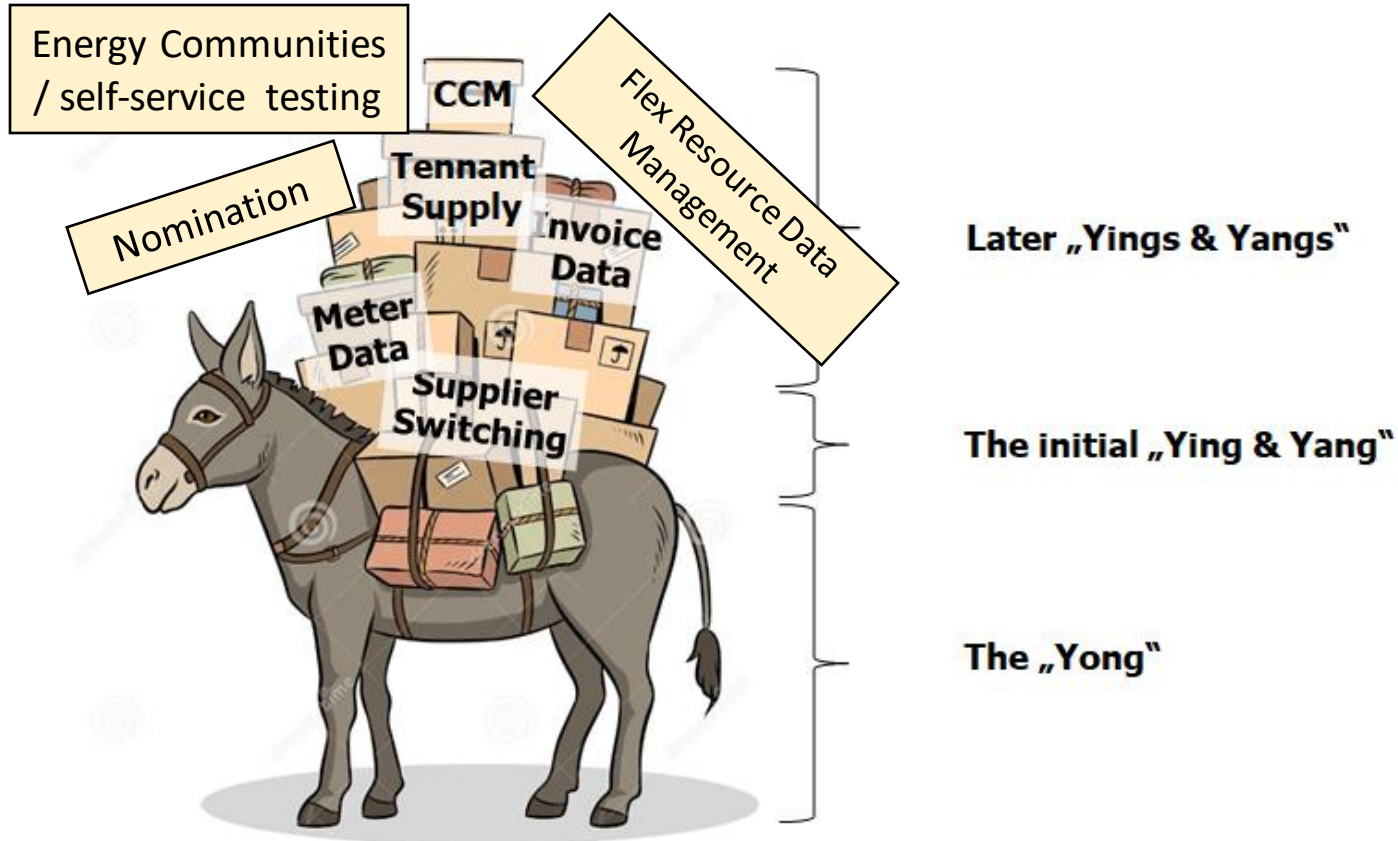
π = ebXML Message Service
 ○ = Standardised Interoperability

**Technical Infrastructure
 Maintained by EDA GmbH
 (co-owned by Austrian DSOs
 and TSO)**

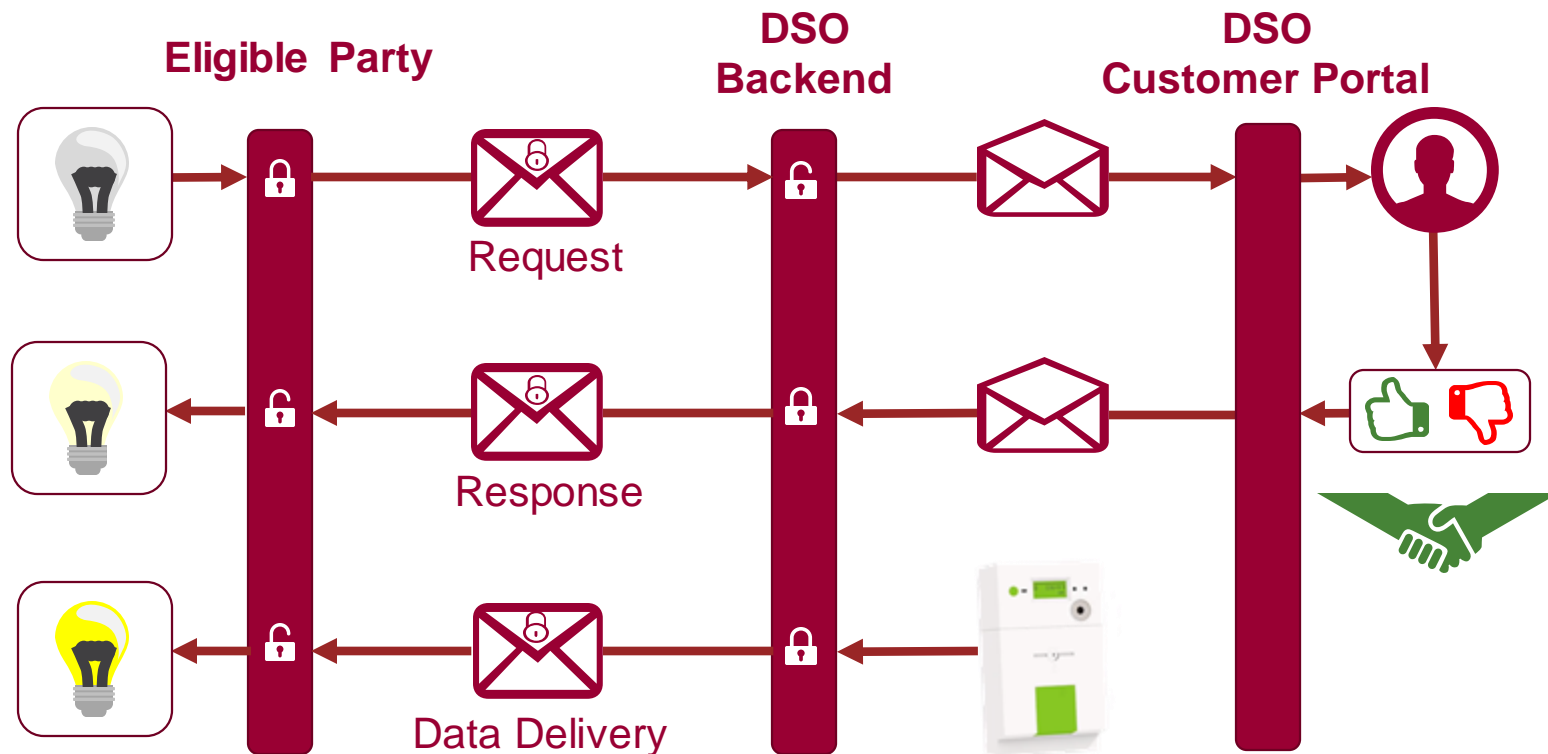
- (1) Open for third party comm. products
- (2) Connection for small market participants
- (3) Pooling of SaaS users
- (4) Bridging to non-standard applications
 (= functional Infra. Services)



The Energy Market Communication Donkey



Customer Consent Management - Process (CCM Online Request)

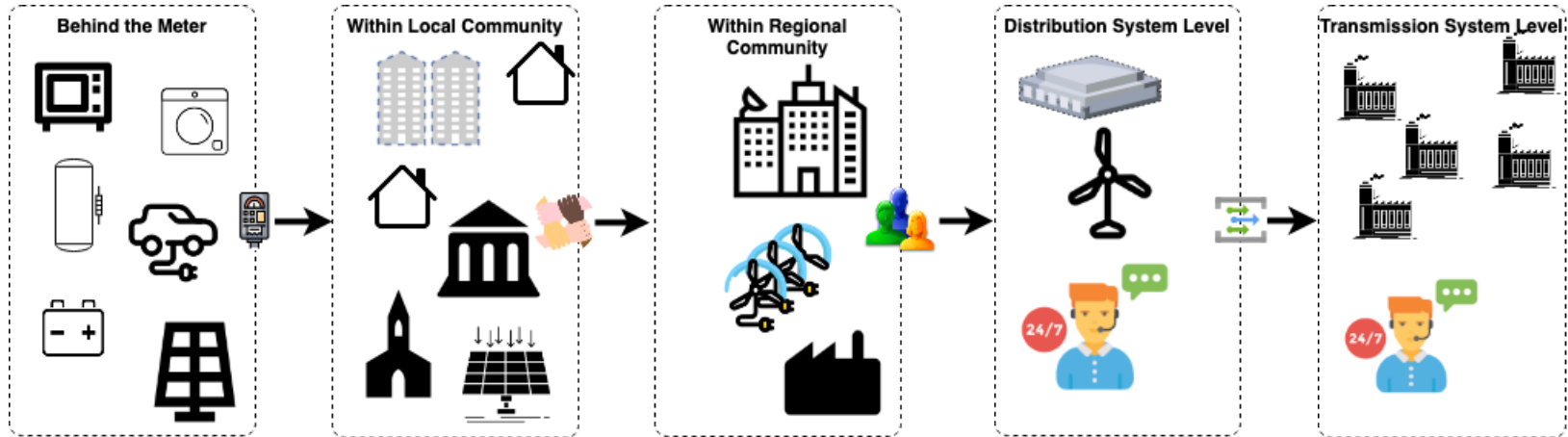


Lessons Learned

- **Best Practice: Very flexible and de-centralised data-sharing mechanism** (called *CCM* for *Customer Consent Management*). It is used to make available master data, measurement data, but also information on distributed flexible assets and for requirements of energy communities. Basically, **any role can share data using the same process**. This is a big asset, as more and more complex use cases and a diversity of roles need to be supported.
- EDA features a **low-barrier approach** and **prevents vendor lock-ins**.
- **Best Practice: Austrian Energy Association and EDA are working on a concept to support EU Logins and EIDAS** consistently integrated (step-by-step) across the whole energy domain.
- **Best Practice: The Austrian De-Centralised Energy Data Space is used to integrating diversified players using open standards** in a bottoms-up manner – a good preparation for the challenges ahead.
- Best Practice: **Self-service testing** also for less-professionalised players (e.g. energy communities)
- **In Austria, market communication is extending constantly and rapidly, in a step-by-step manner, DONE BY ITS USERS AND DRIVEN BY THEIR NEEDS.**

A Push for a Bottom-Up Transition Schema...

Around 250 new Energy Communities each month since April!!!



...incentivising best-effort balancing at different levels.

The benefits of eIDAS for Energy Market Communication and Data Spaces

▪ For Final Customers

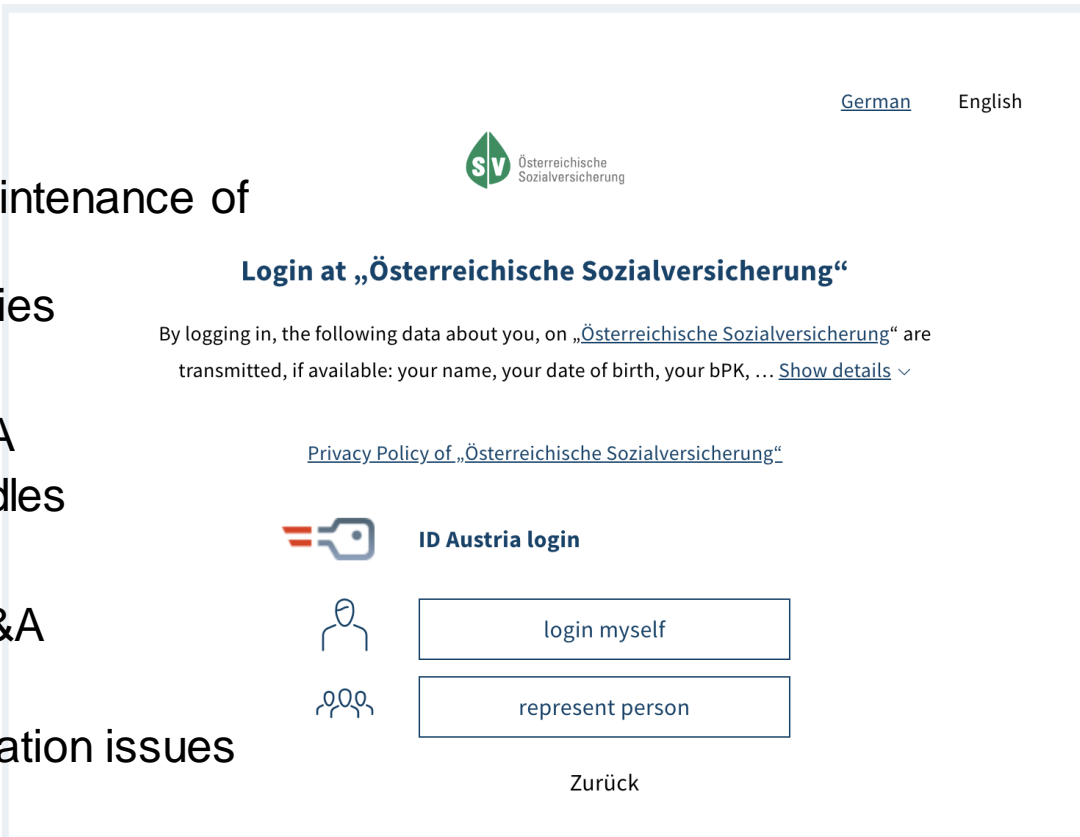
- One login for all platforms
- No need for media breaks and maintenance of many credentials
- Reliable authentication of companies

▪ For Service Providers


- Easy and reliable cross-border I&A
- No paperwork or bureaucratic hurdles

▪ For Data-Sharing Infrastructures

- Reliable means for cross-border I&A
- No need for proprietary structure
- Automatic integration of representation issues




[German](#) [English](#)


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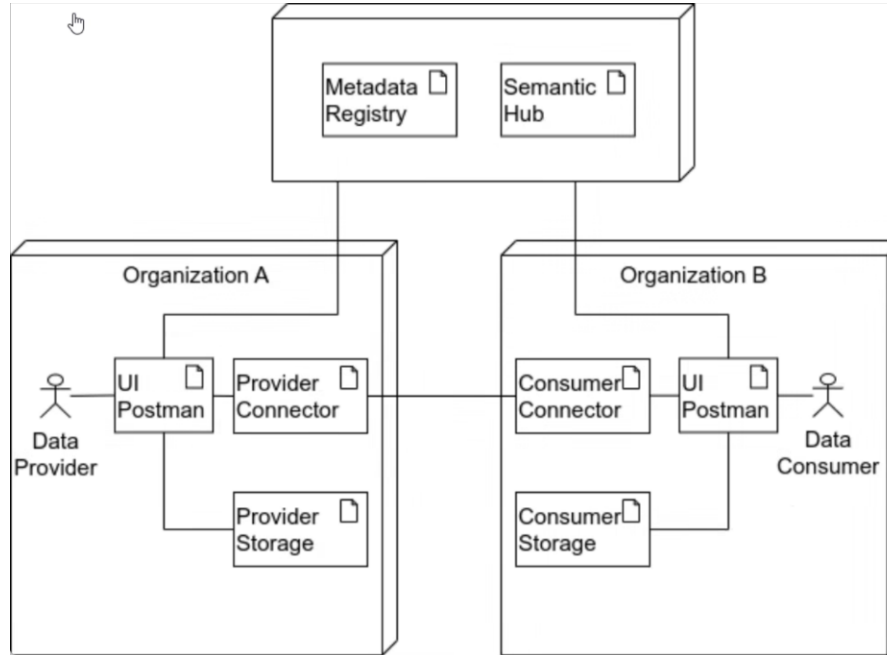
 **ID Austria login**



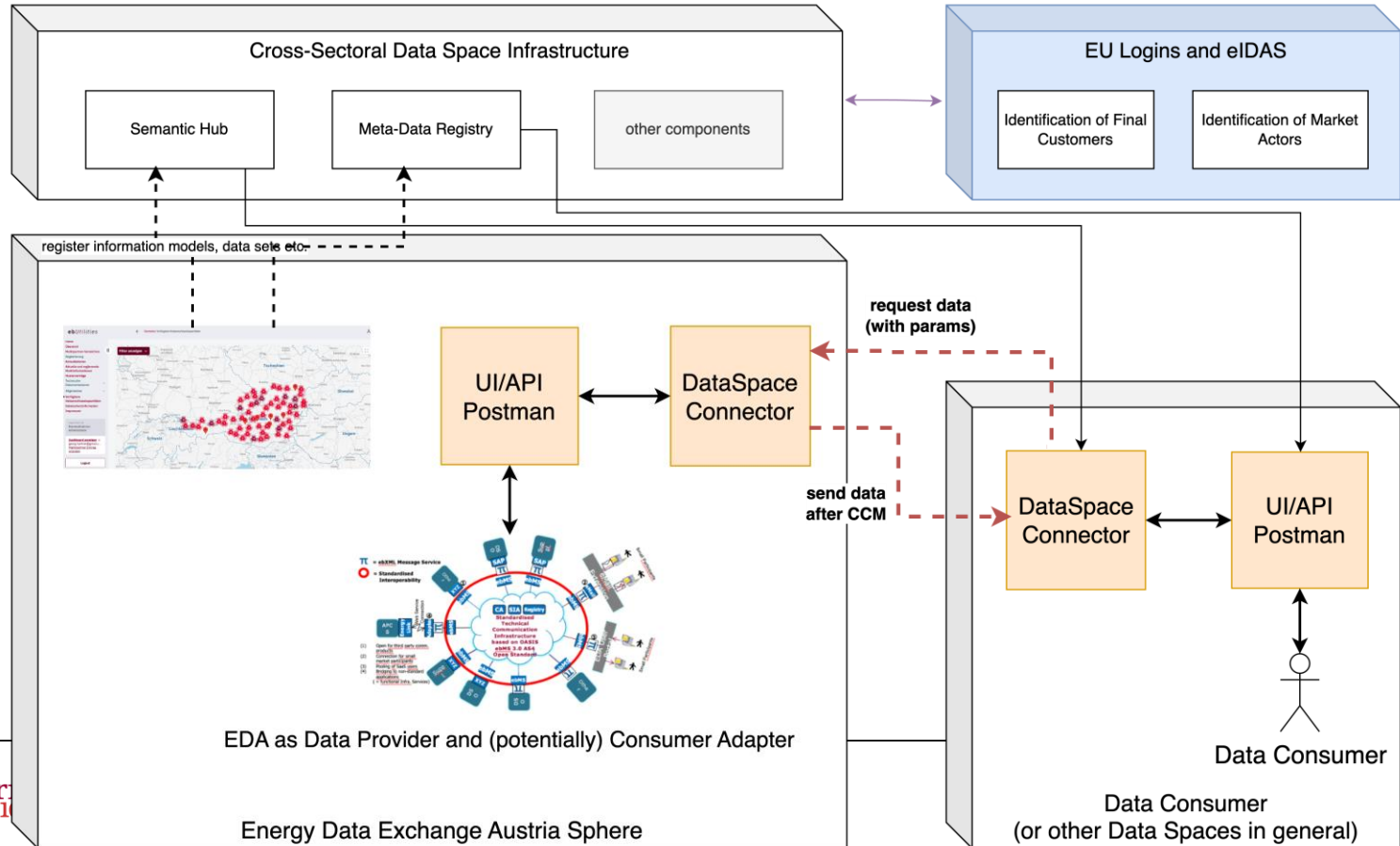


[Zurück](#)

Give-a-little, get-a-little between EDA <> other Data Spaces (2/2)



Give-a-little, get-a-little between EDA <> other Data Spaces (2/2)



Thank you