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XÖV Framework (XML for German Public administration) Metadata Governance in the German public sector

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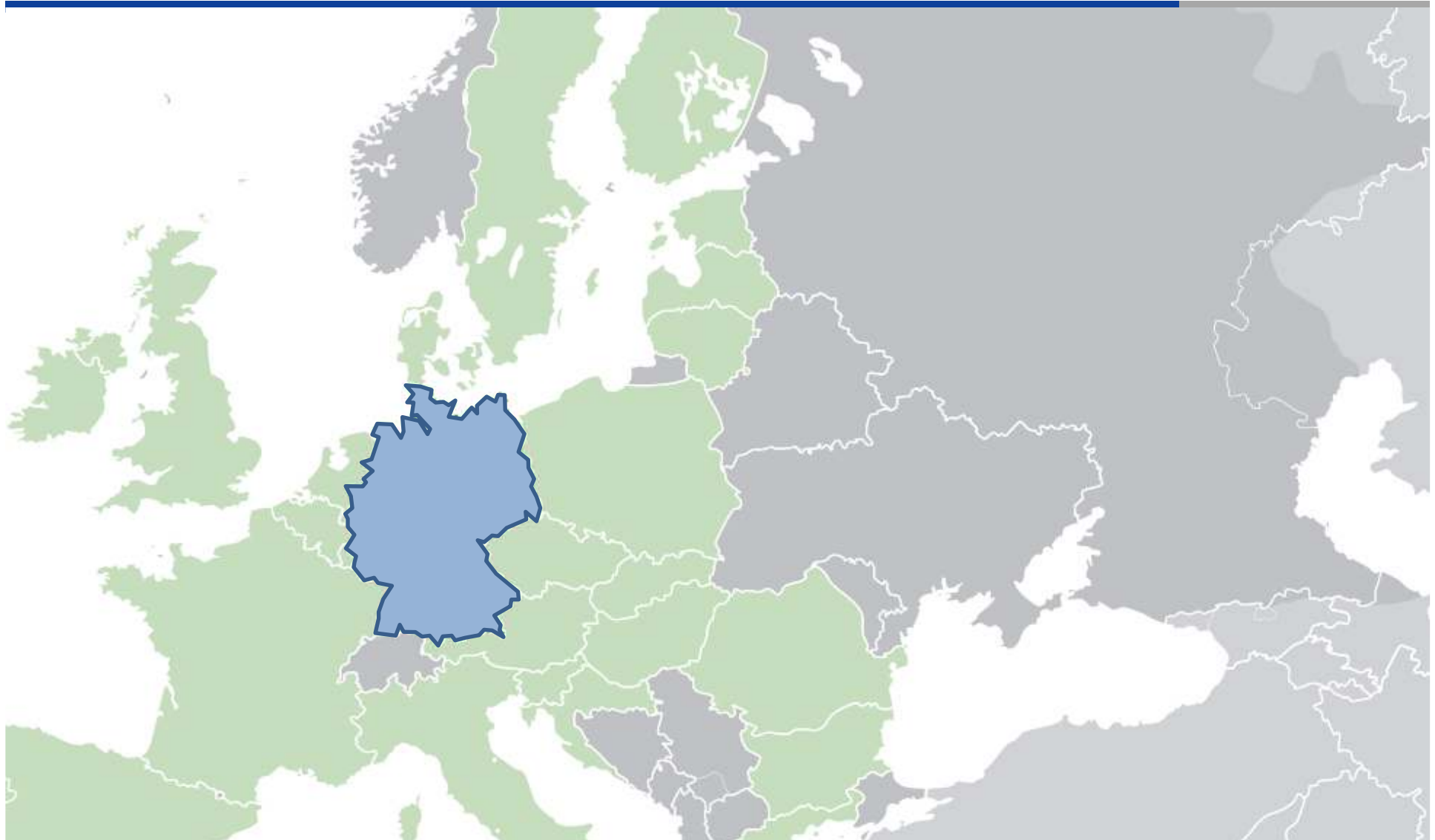
Sebastian Sklarß |]init[AG

26th of November 2015 | Share PSI 2.0 | Berlin



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Background: Germany





Background: Federal Republic of Germany



- ... comprises sixteen States (Länder)
- each State has its own state constitution
- each State is largely autonomous regarding its internal organisation

- ... comprises 11.000 municipalities



XÖV History: Residents Registration

- 2000 - paper based data interchange between German residents registers at municipalities
- 2001 – setup of a systematic approach to develop specifications for electronic data exchange
- 2003 – “XMeld Specification” (~900 pages, 420 complex types)
- 2007 – XMeld has been made legally binding
- 2008 – based on XMeld approach XÖV has been developed and applied to other projects
- nowadays ...
 - 300.000 XMeld-Messages are sent per day
 - appr. 25 so called XÖV-Specifications are published and in operation



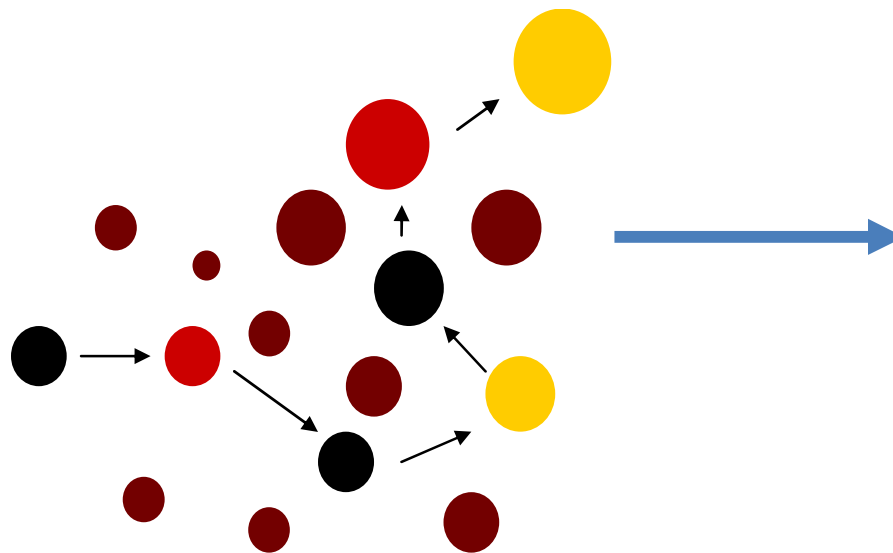
XÖV - Foster the Reuse

- Reuse of methodologies, semantic assets, tools and infrastructure
 - improve quality while simultaneously reducing costs
 - increase interoperability
 - improve openness / access to specification
- Semantic assets to be reused are
 - Core Components
 - Code Lists
 - Data Types
 - Specifications





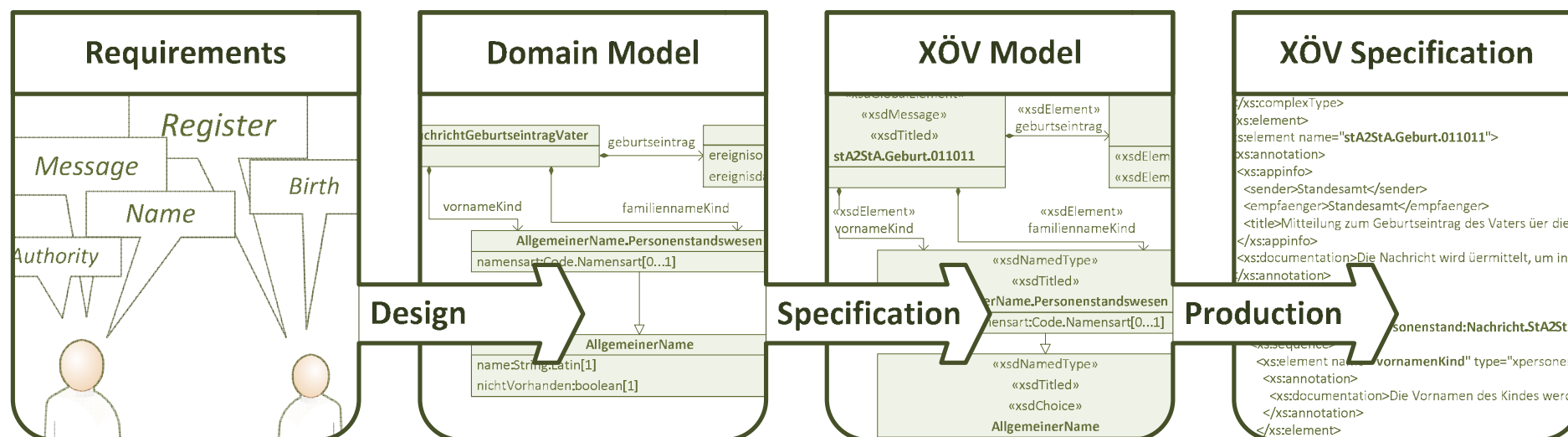
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Steps in Creating XÖV Specifications





Components of the XÖV Framework



Regulations

- Criteria of XÖV Conformance
- Naming and Design Rules
- ...



Tools

- XGenerator
- [InteropBrowser](#)
- [Genericoder](#)
-



Semantic Assets

- Core Components
- Code Lists
- Data Types (string.latin, ...)
- Specifications

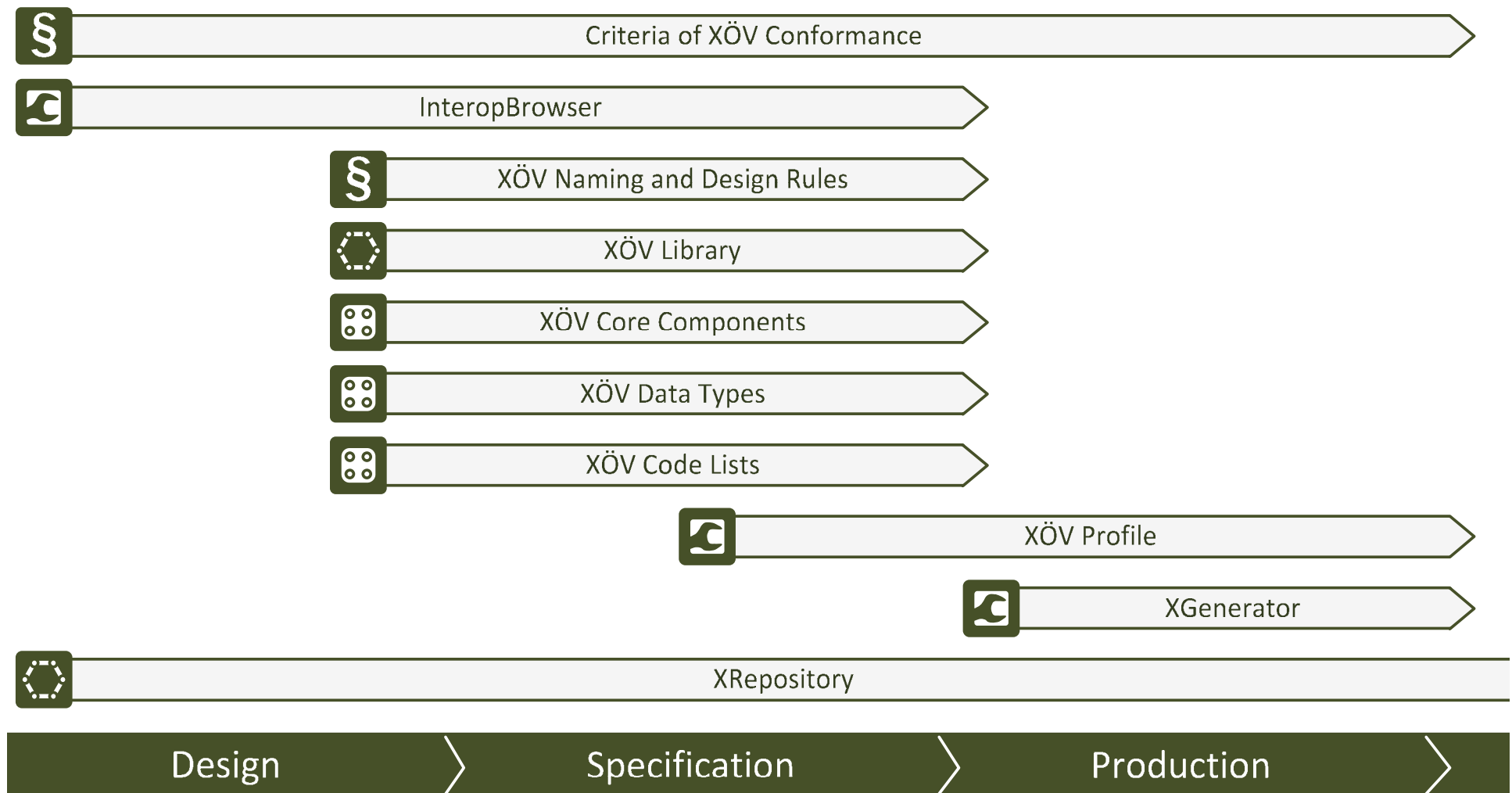


Infrastructure

- XÖV Library
- [XRepository](#)
- OSCI-Transport
- ...

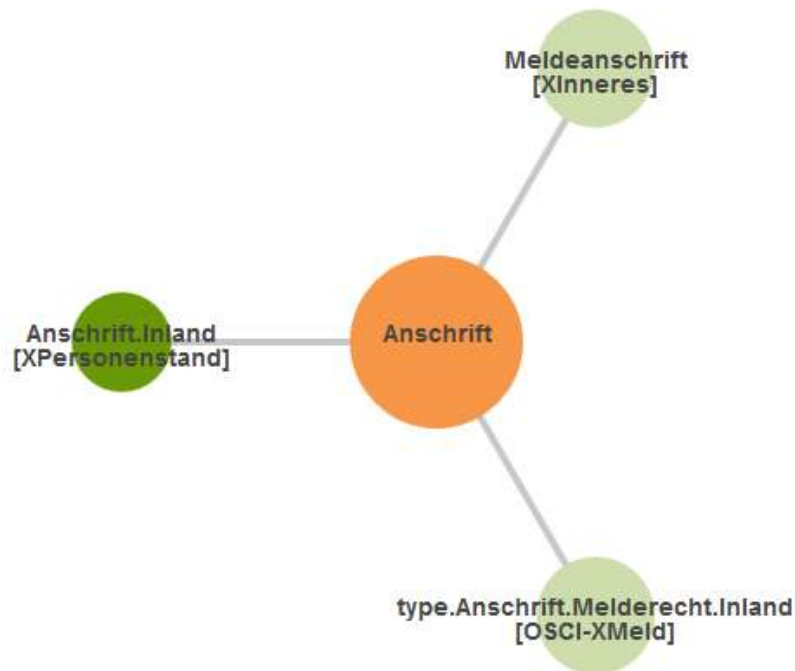


Components of the XÖV Framework





Core Components and [InteropBrowser](#)



ACC Anschrift

Semantische Beschreibung: +

BCCs

- 3 hausnummer : String.Latin [0..1] +
- 0 id : ID [0..1] +
- 3 ort : String.Latin [0..1] +
- 3 ortFruehererGemeindename : String.Latin [0..1] +
- 0 ortsteil : String.Latin [0..1] +
- 0 postfach : String.Latin [0..1] +
- 3 postleitzahl : String.Latin [0..1] +
- 3 strasse : String.Latin [0..1] +
- 0 strassenschluessel : Code [0..1] +
- 0 typ : Code [0..*] +
- 2 wohnungsgeber : String.Latin [0..1] +
- 2 zusatz : String.Latin [0..1] +

ASCCs

- 0 geokodierung : [Geokodierung](#) [0..*] +
- 0 staat : [Staat](#) [0..1] +
- 0 verwaltungspolitischeKodierung : [VerwaltungspolitischeKodierung](#) [0..1] +





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Further Readings

- F. Büttner, et al., Model-driven standardization of public authority data interchange (pdf, 355.5 KB), Science of Computer Programming (2013)
[dx.doi.org/10.1016/j.scico.2013.03.009](https://doi.org/10.1016/j.scico.2013.03.009)
- <https://www.xrepository.de>
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- <http://www.it-planungsrat.de>