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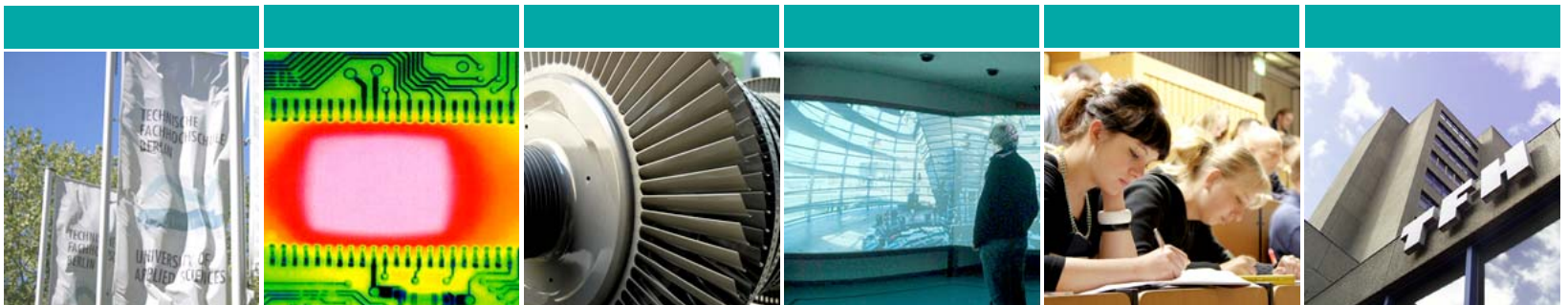


Prof. Dr.  
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# SDI API

INSPIRE Conference 2010  
Krakau

2010-06-24

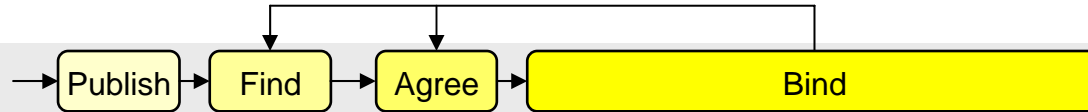


- SDI INSPIRE architecture as introduction
- Problem statement
- Approach and Functionality
- Configuration
- Proposed architecture
- Conclusion

# INSPIRE Architecture



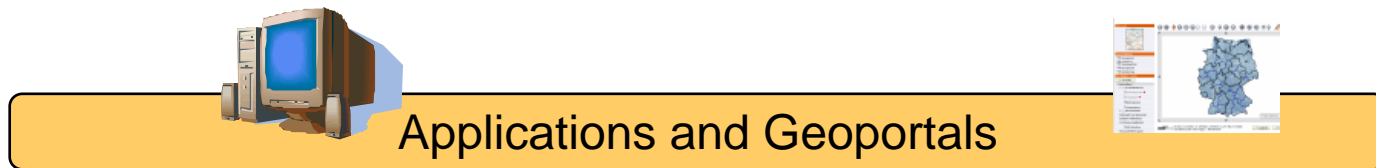
Process



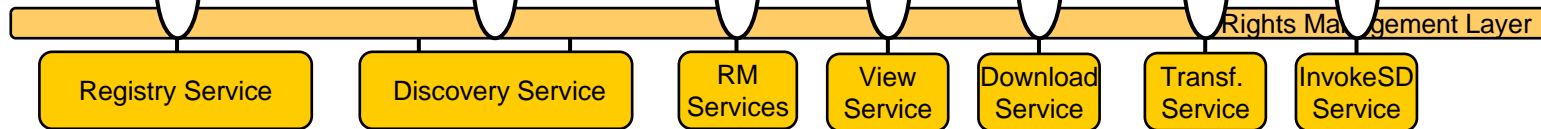
Phases

Tiers

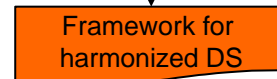
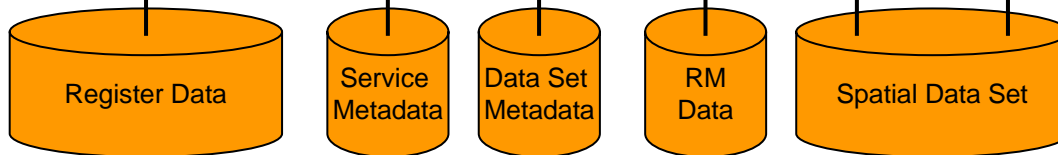
Appl.



Service



Data



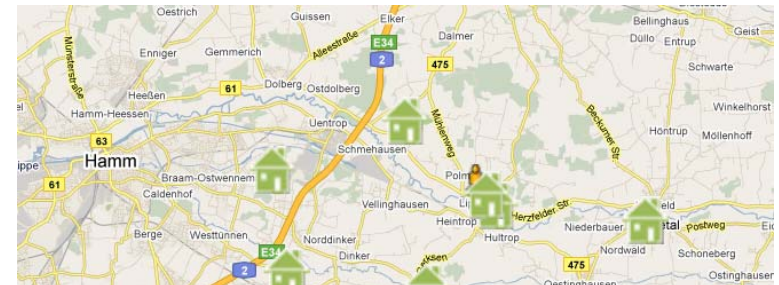


- The **SDI** process chain “publish-find-agree-bind” got already so **complex** that SDI experts have difficulties.
- A non-SDI software engineers working for a domain application portal supplier, e.g. real estate portal software company, have a **major** threshold in understanding and adaption
- They usually do **not** have a deep interest to dig into SDI details

## Mass Market:

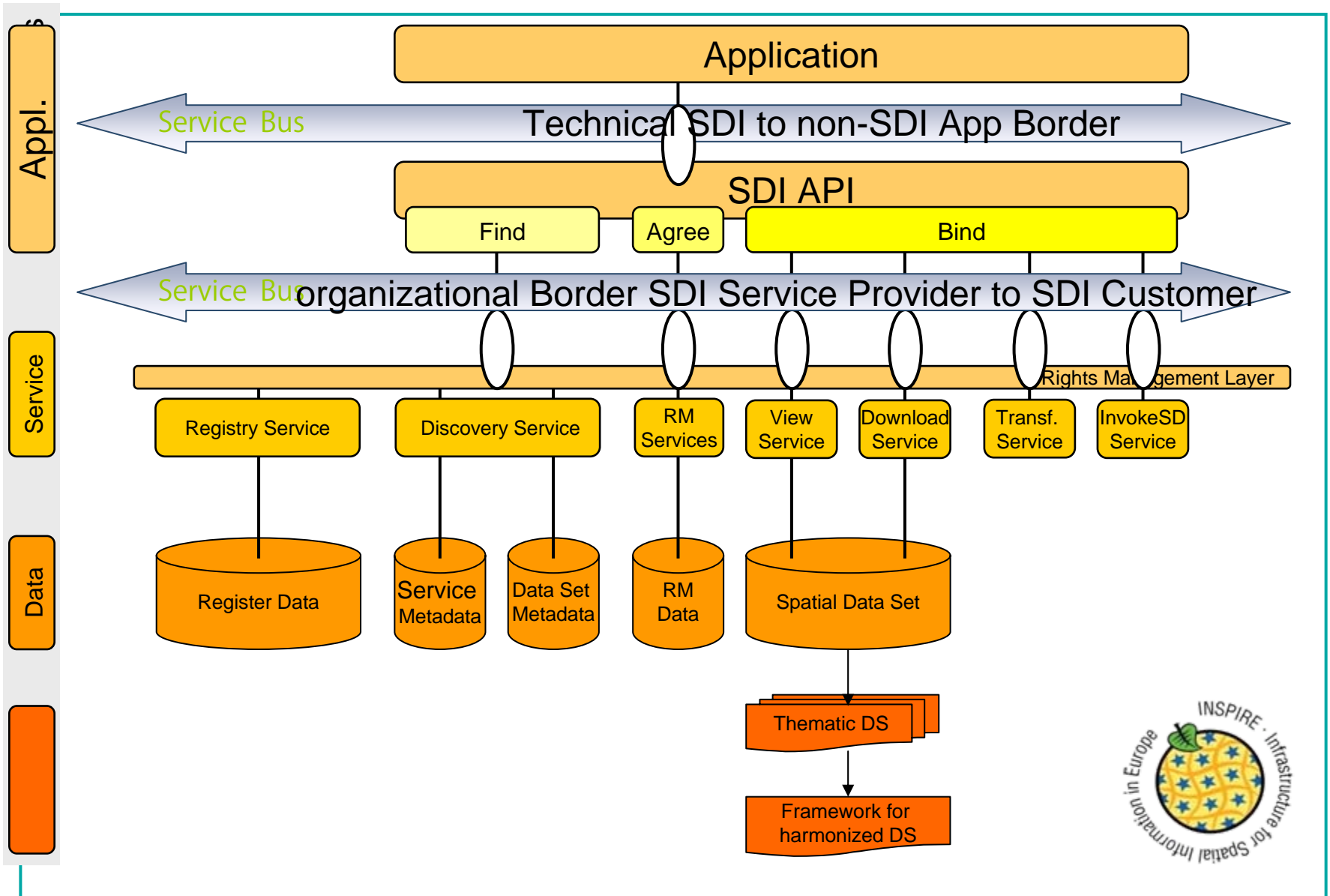
- Move from human expert to fixed machine use, e.g. aerial images for real estate portal
- too many SDI details are offered, which can not be used, e.g. by a potential house investor
- GI data / function is usually only an add on, e.g. zoom/pan for maps
- Microsoft / Google / ... offer simple APIs with great success, e.g. for a real estate portal

wohnm.de		Wohnimmobilien	
	<b>** Wie im Neubau - Fast alles Neu - hier kann man sich wohlfühlen **</b>	400m	
	Anzahl Zimmer: 3.0 Wohnfläche: 65.0 m² Kaltmiete: 350.0 Euro		➔
	<b>Hier stimmen Preis und Leistung!</b>	927m	
	Anzahl Zimmer: 3.0 Wohnfläche: 55.0 m² Kaltmiete: 210.0 Euro		➔

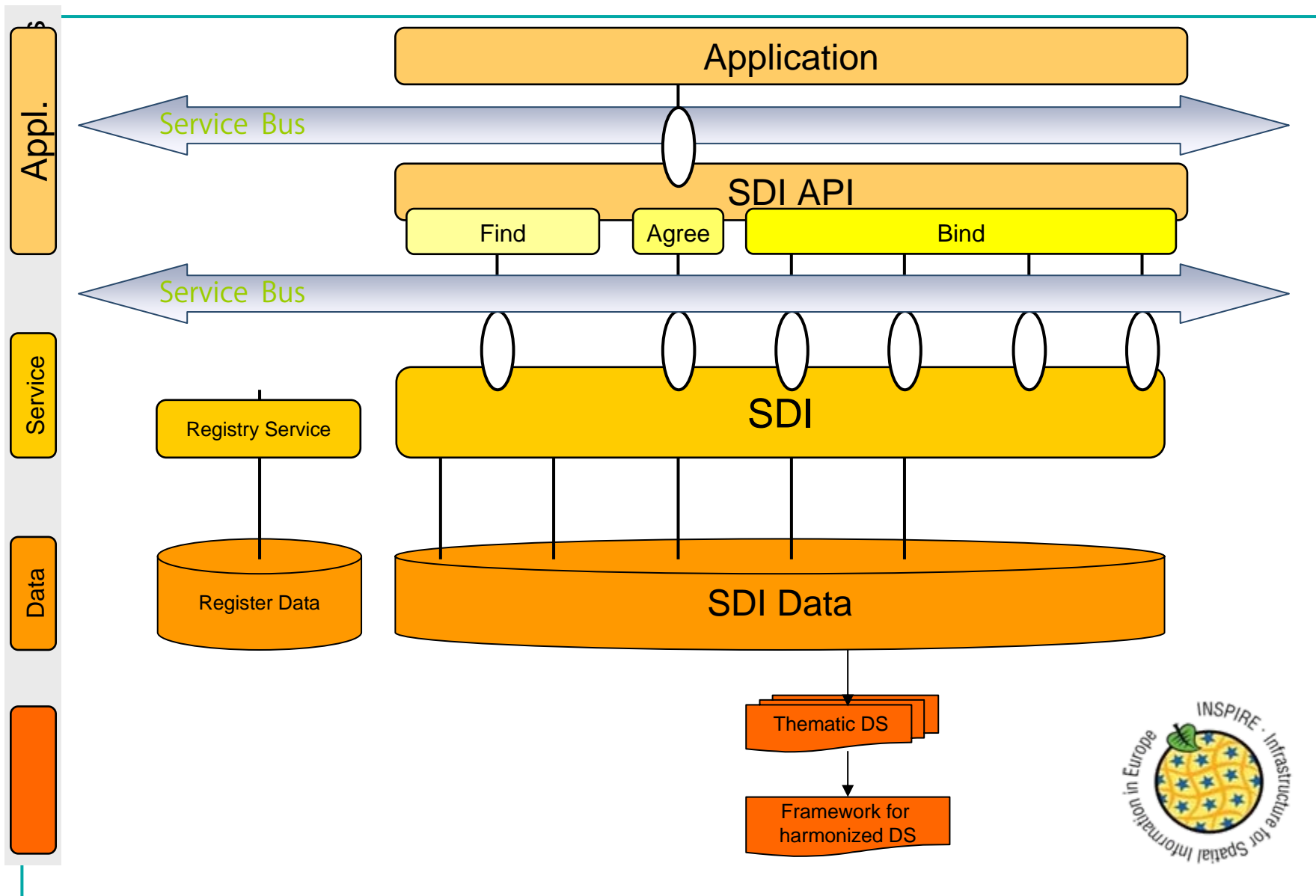


- Reduction of complexity by encapsulation
- Usually APIs libraries are used to encapsulated and to integrate
- **New:** INSPIRE defines a registered and well known taxonomy for data specification, which saves major parts of meta data description and allows roaming due to defined **product types**
- SDI distribution needs to be encapsulated to a single outlet, e.g. similar to Google MAP API.
- **SDI API**
- Key Functionality for SDI API:
  - Distribution resolving
  - Geo Rights Management
  - Integration of distributed sources

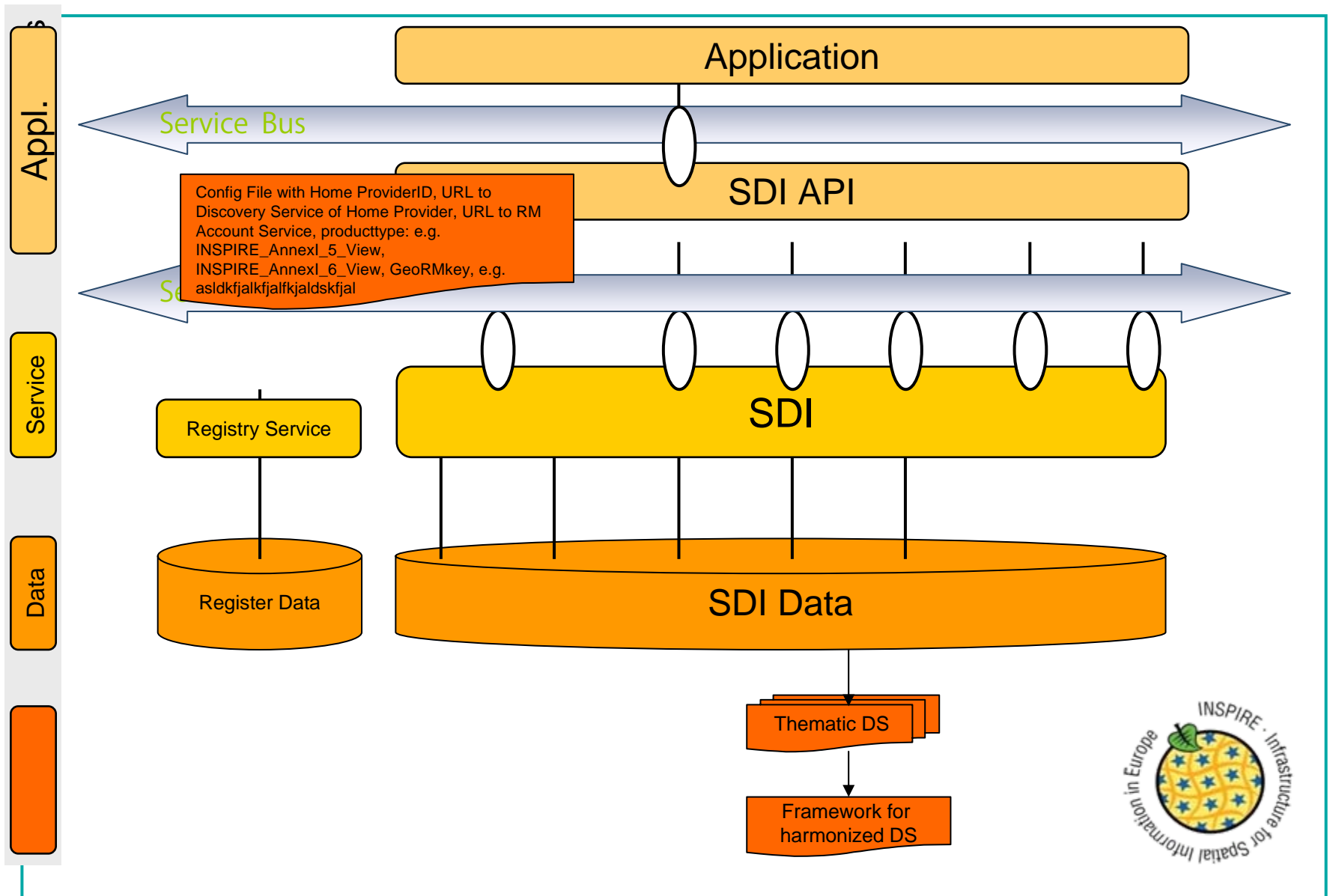
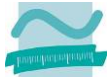
# A second interoperability tier



# Encapsulation of SDI

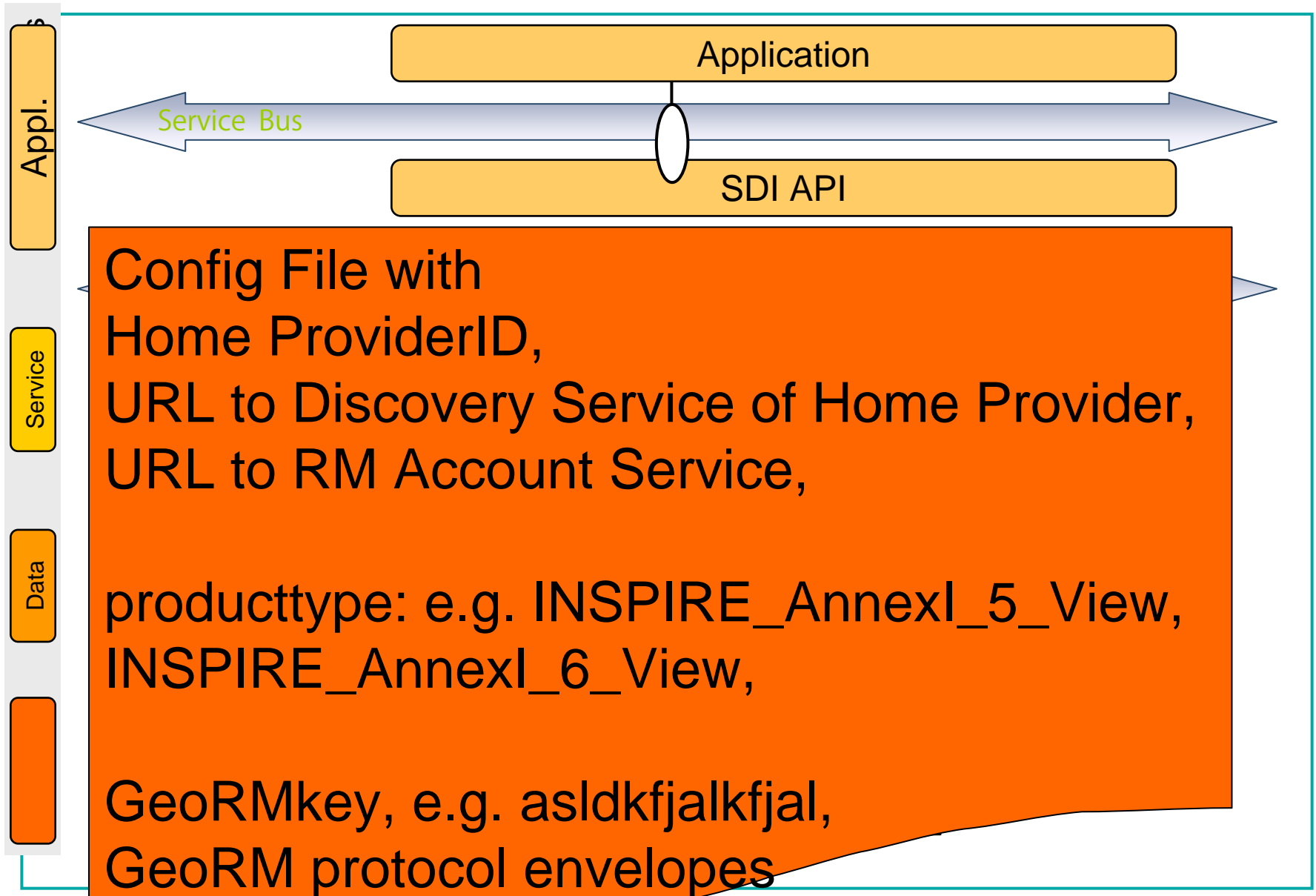


# Standardized configuration file...

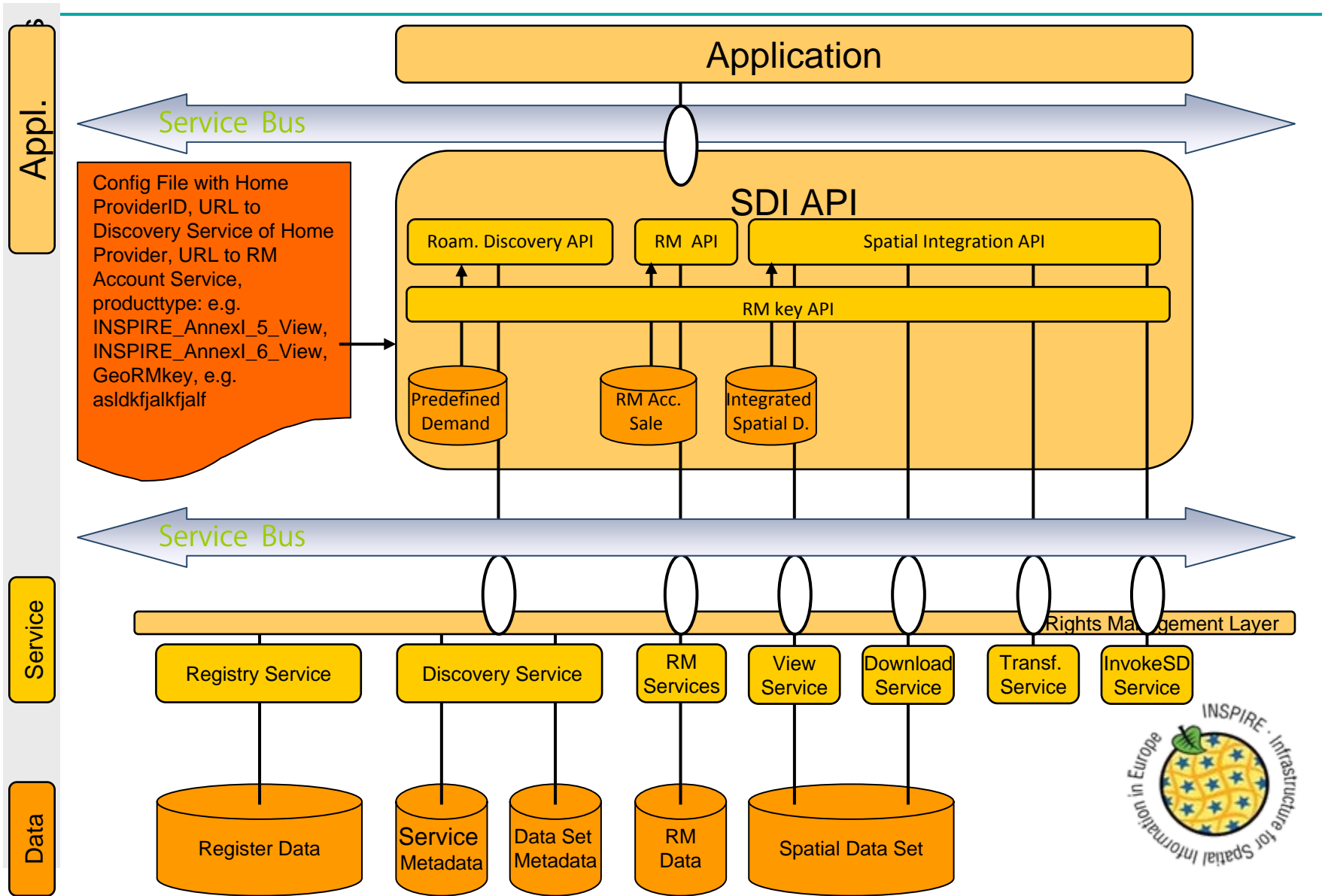




...send by SDI Service Provider with...



# SDI API main functions



- SDI components get more and more complex
- INSPIRE defines the content (34 thematic themes) with a clear and in EU legally binding taxonomy and data schema.
- Foreign domain software supplier do not want to get into SDI details and want a single outlet (although the services are distributed)
- SDI Roaming Operation Model shows a solution how to run a distributed model, but with seamless business & technical interoperability, and with a single outlet.
- Proposal: **SDI API** (might be SOAP based), but has a standardized “configuration” file
- Proposal: Use of Google Maps API and open competition



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