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SDI & INSPIRE Business: a new approach for SMEs

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SUMMARY

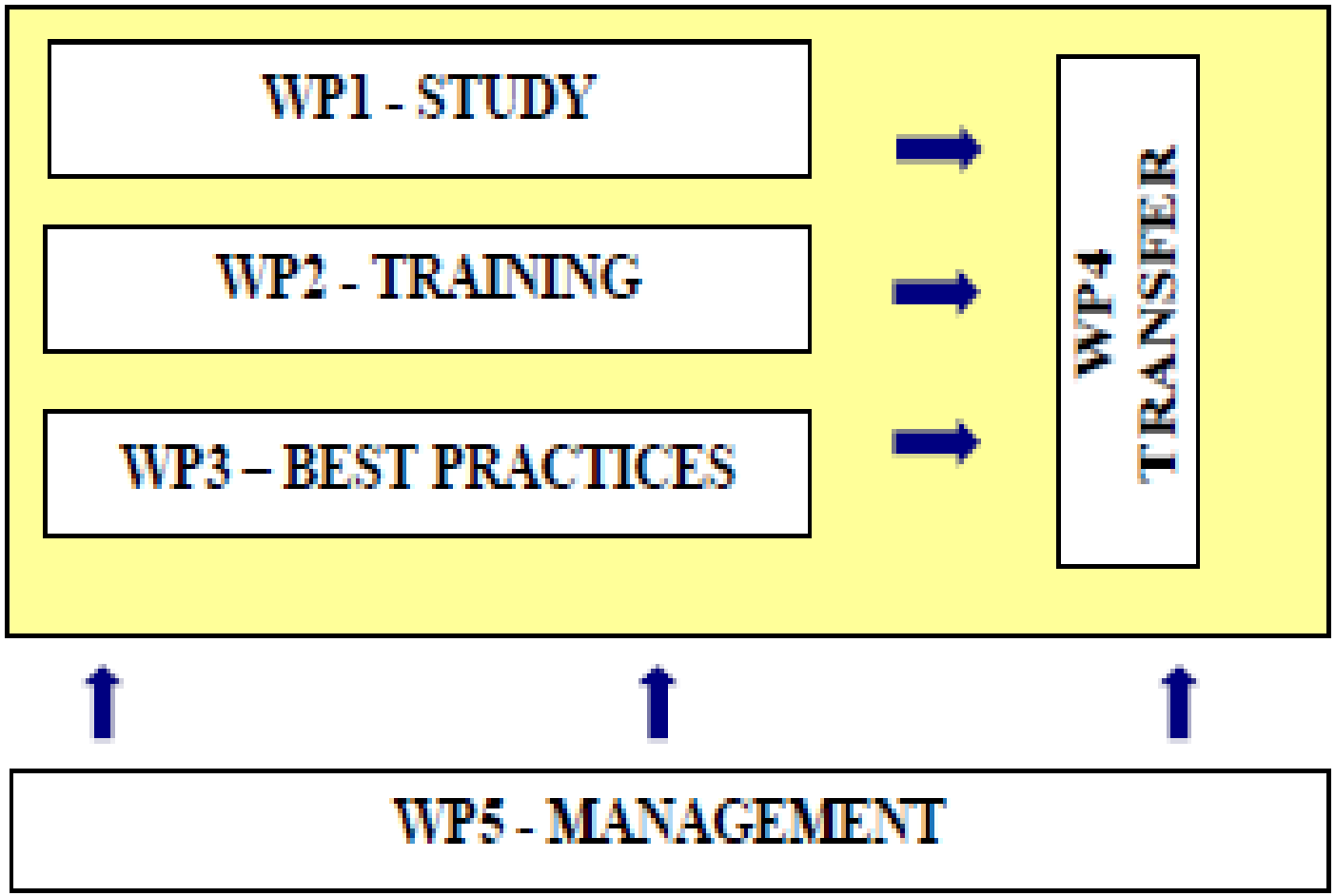
- The context
- Main project features
- 8 concrete outputs
- Target groups and end-users
- The partnership
- Preliminary results achieved
- ArcGIS for INSPIRE Solution

Marc Döring Presentation 1:30-2:00 p.m

The context

- SDI implementations adhering to the INSPIRE rules have technological and organizational complexities that may create barriers for the geo-ICT SMEs.
- On the other hand, new business opportunities for the geo-ICT will emerge for those SMEs overcoming such barriers.
- The FP7 Support Action smeSpire aims at bridging this gap.

Work Breakdown Structure



Work Breakdown Structure

WP n°	WP Title	WP Leader	Task n°	Task Title	Task Leader
WP1	STUDY	JRC	T1.1	Study methodology and guidelines	JRC
			T1.2	Study in the 12 participating MS	K.U.LEUVEN
			T1.3	Study review and assessment	JRC
WP2	TRAINING	EPSIT	T2.1	Vocational training curricula	K.U.LEUVEN
			T2.2	Training package	EPSIT
			T2.3	Training platform	GISIG
WP3	BEST PRACTICE	GiSt	T3.1	Best Practice Catalogue structure and specification	IL
			T3.2	Best Practice catalogue guidelines	GiSt
			T3.3	Best Practice catalogue compilation	GiSt
WP4	TRANSFER	GISIG	T4.1	Dissemination toolkit	GISIG
			T4.2	Exploitation	FG
			T4.3	smeSpire Business Model	EPSIT
			T4.4	smeSpire days	GISIG
			T4.5	smeSpire network	GISIG
			T4.6	smeSpire Challenge	FG
WP5	MANAGEMENT	EPSIT	T5.1	Overall Support Action coordination	EPSIT
			T5.2	Financial and Administrative Management	EPSIT
			T5.3	Reporting to EC	EPSIT

Gantt diagram

WP n°	Task n°	May 12	June 12	July 12	Aug 12	Sep 12	Oct 12	Nov 12	Dec 12	Jan 13	Feb 13	March 13	Apr 13	May 13	June 13	July 13	Aug 13	Sep 13	Oct 13	Nov 13	Dec 13	Jan 14	Feb 14	March 14	Apr 14
WP1																									
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Milestones	MS1																								
	MS2																								
	MS3																								
	MS4																								

Main project features

Starting date	01 May 2012
Duration	24 Months
Project Partners	15 from EU
Website	www.smespire.eu

8 concrete outputs

1. Assessment, in 12 EU Member States, of the market potential for geo-ICT SMEs in relation to INSPIRE as an integral component of the DAE, to characterize the obstacles for geo-ICT companies to enter this market in terms of knowledge gaps and training needs as defined in WP1.

8 concrete outputs

2. A training package based on vocational training curricula, designed to train environmental data analysis professionals, expert in the maintenance and exploitation of environmental data commons. The training package, including a catalogue translated in all the official languages of the participating Member States, will be made available on an e-learning training platform.

8 concrete outputs

3. A Best Practice catalogue, including lessons learned and unsuccessful outcomes, in the field of the management of environmental digital content across Europe.

8 concrete outputs

4. Dissemination events, in the form of smeSpire days, which will include training workshops, to be organized in the 12 participating countries , potentially organized as ePractice workshops.

8 concrete outputs

5. A network of SMEs and other institutional stakeholders aiming at bridging the gap between the INSPIRE driven demand of environmental digital data and the industry-driven offer of geo-ICT solutions, stimulating, encouraging and facilitating the participation of SMEs.

8 concrete outputs

6. A business model aiming at enabling already established and new geo-ICT SMEs in Europe to convert technological innovation which is inside the INSPIRE implementation process into economic value.

8 concrete outputs

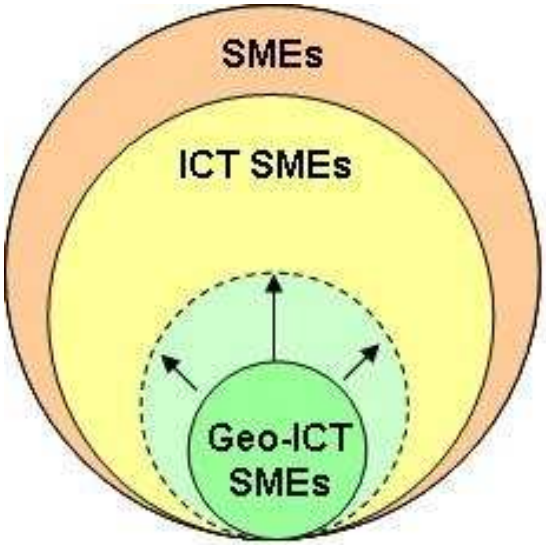
7. A database containing information about the geo-ICT SMEs in Europe, enabling complex business intelligence studies and analysis, even beyond the project lifetime, useful to extract real indicators and to map competences from SMEs across Europe.

8 concrete outputs

8. General awareness about the importance of interoperability, about the EIS/EIF, and about relevant results from the ISA programme.

Target groups and end-users

- The following target groups, all of them being end-users at the same time, will be addressed by smeSpire:
  - already established SMEs active in the geo-ICT domain
  - new entrant SMEs in the geo-ICT domain, consisting of:
    - already established ICT SMEs, looking for new business opportunities
    - start-up SMEs.

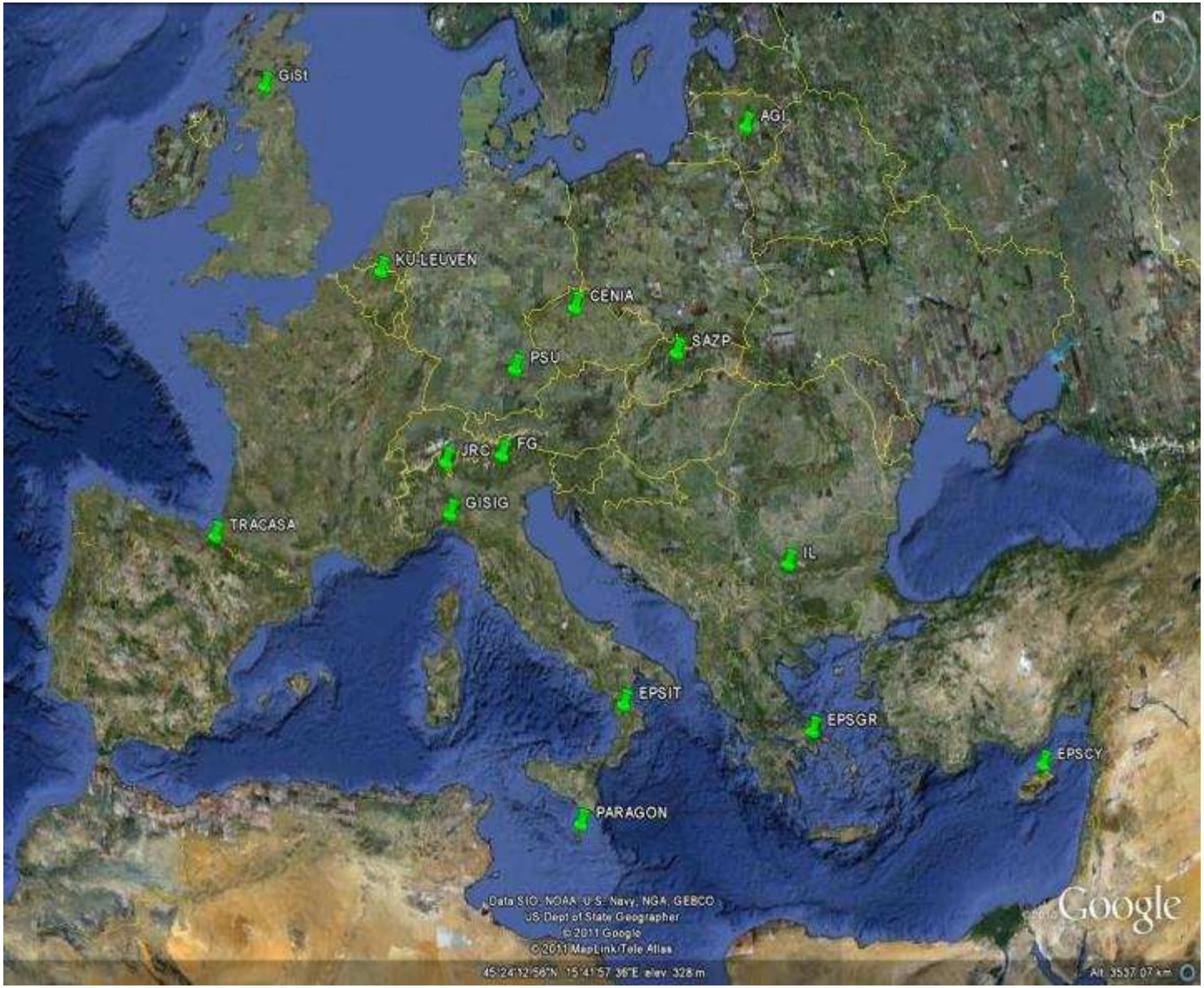


The partnership

- 15 partners from 12 Member States.
- smeSpire is a Support Action for SMEs driven by SMEs: 8 of the 15 partners are SMEs all of them active in the geo-ICT sector, one partner SME is the Project Leader and three partners SMEs are WP Leaders, with a 51% of the total budget allocated to the 8 participating SMEs.
- The consortium is complemented by 3 Research Centres (JRC, K.U.LEUVEN and Fondazione Graphitech), 2 National Environmental Agencies (CENIA and SAZP), the no-profit association GISIG (recently qualified as an SME) and the government owned body Tracasa, with high skill in geo-ICT technologies.

The partnership (2/3)

The partnership (3/3)



Preliminary results achieved

- A first set of 1200 geo-ICT SMEs have been surveyed in the 12 participating countries
- A detailed questionnaire to assess the geo-ICT sector through the performance, the skills owned vs. those required, the innovation of the geo-ICT SMEs is under finalization

Preliminary results achieved

- A matrix relating the INSPIRE/SDI business processes with the INSPIRE/SDI job profiles, in order to identify for each cell the skills required, as basis for the design of the vocational training curricula, is under finalization.

Preliminary results achieved

- A project website with INSPIRE/SDI news at national/regional level and links to already existing training modules and best practice catalogues is operational since the beginning at www.smespire.eu.
- A massive participation at the INSPIRE Conference 2012, as well as at European and National events, in order to increase dissemination and networking opportunities, is pursued.

Preliminary results achieved

- A first draft data model to harmonize the information to be stored into the smeSpire database and to enable complex business intelligence studies and analysis, even beyond the project lifetime, useful to extract real indicators and to map competences from SMEs across Europe, is under finalization.

ArcGIS for INSPIRE Solution Pack

INSPIRE Solution Pack for FME

Simplifying INSPIRE Schema Mapping Challenges

ESRI European User Conference 2012 – Oslo (NO), 16.10.2012

ArcGIS for INSPIRE

- The aim is to design the schema mapping as simple as possible
- Uses FME Standard functionality (ETL)
- Upgrades FME for INSPIRE specific information and functionalities

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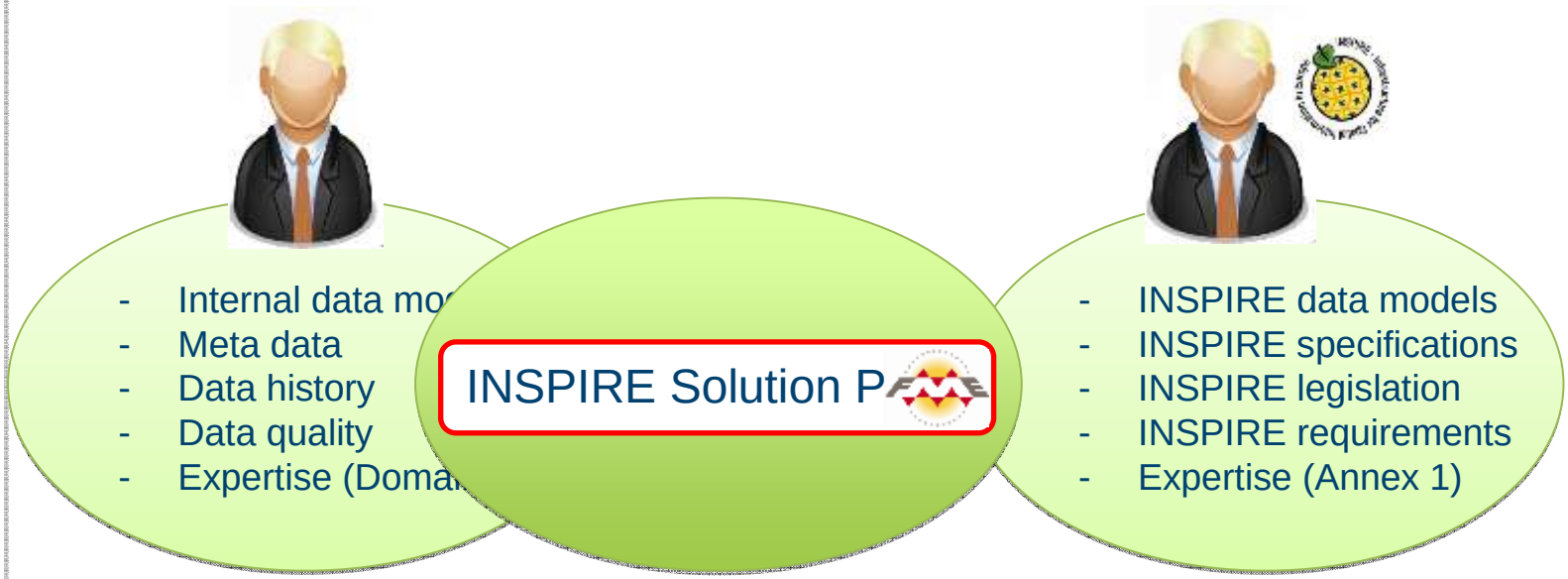
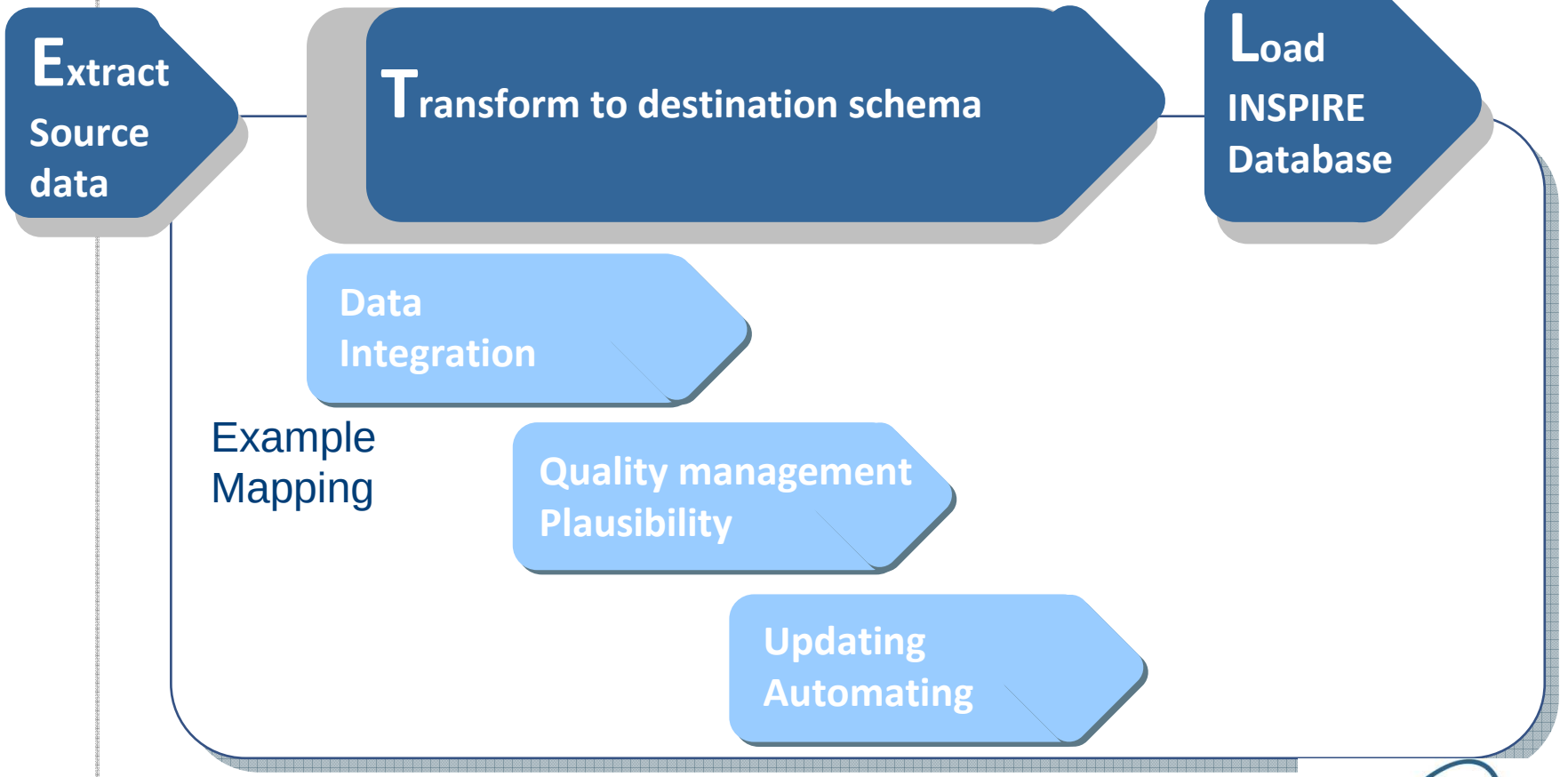
Initial situation of INSPIRE Schema-Mapping

- **INSPIRE expert knowledge and domain expertise are required**
- **High complexity of the source data and the INSPIRE Model**
- **It has to be accounted for local characteristics (quality, history, contents)**



ETL-Technology as a base for the INSPIRE Mapping

FME Mapping Process



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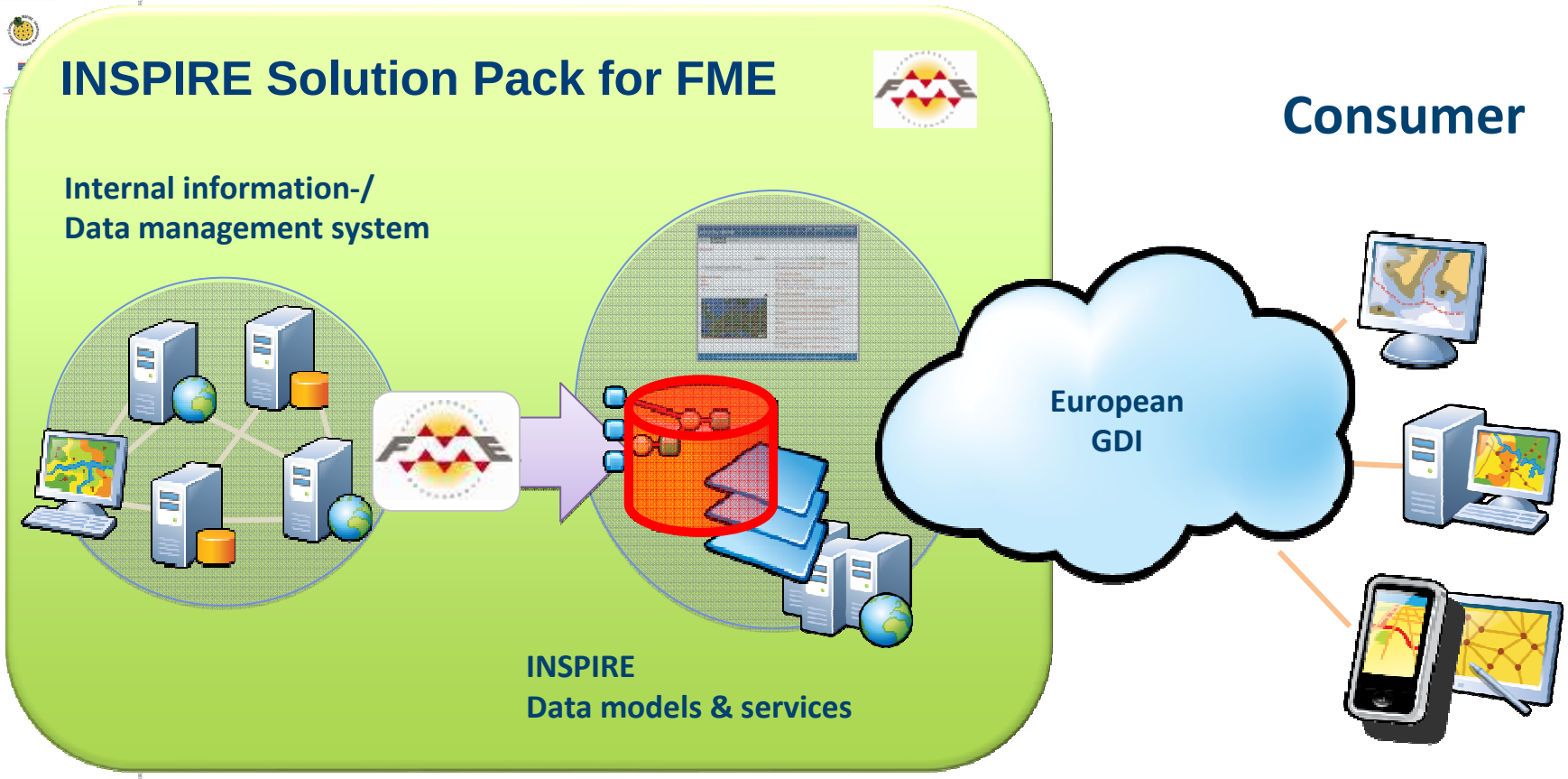
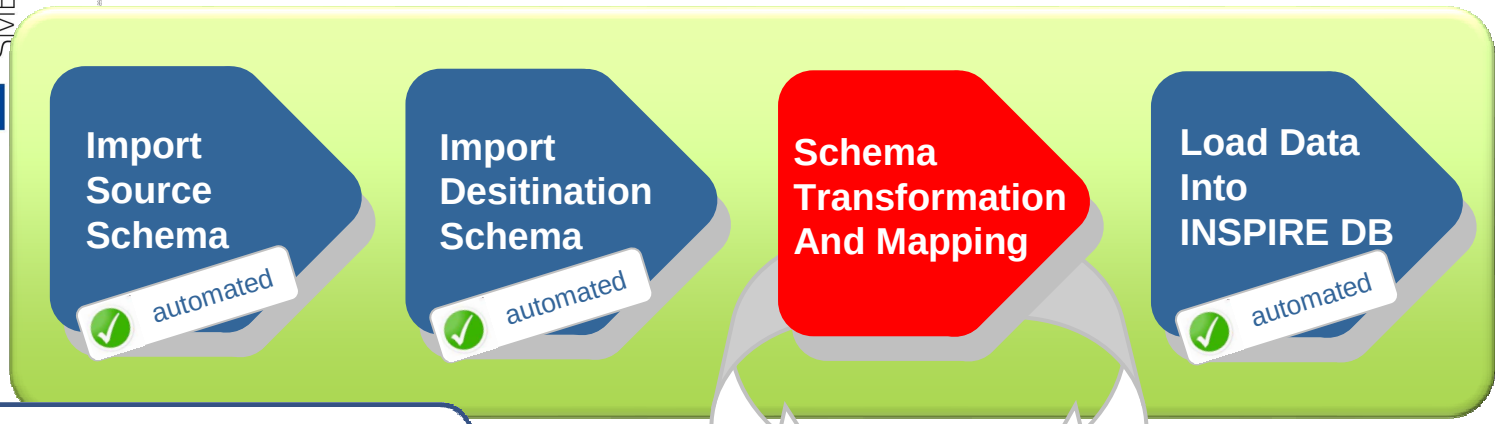
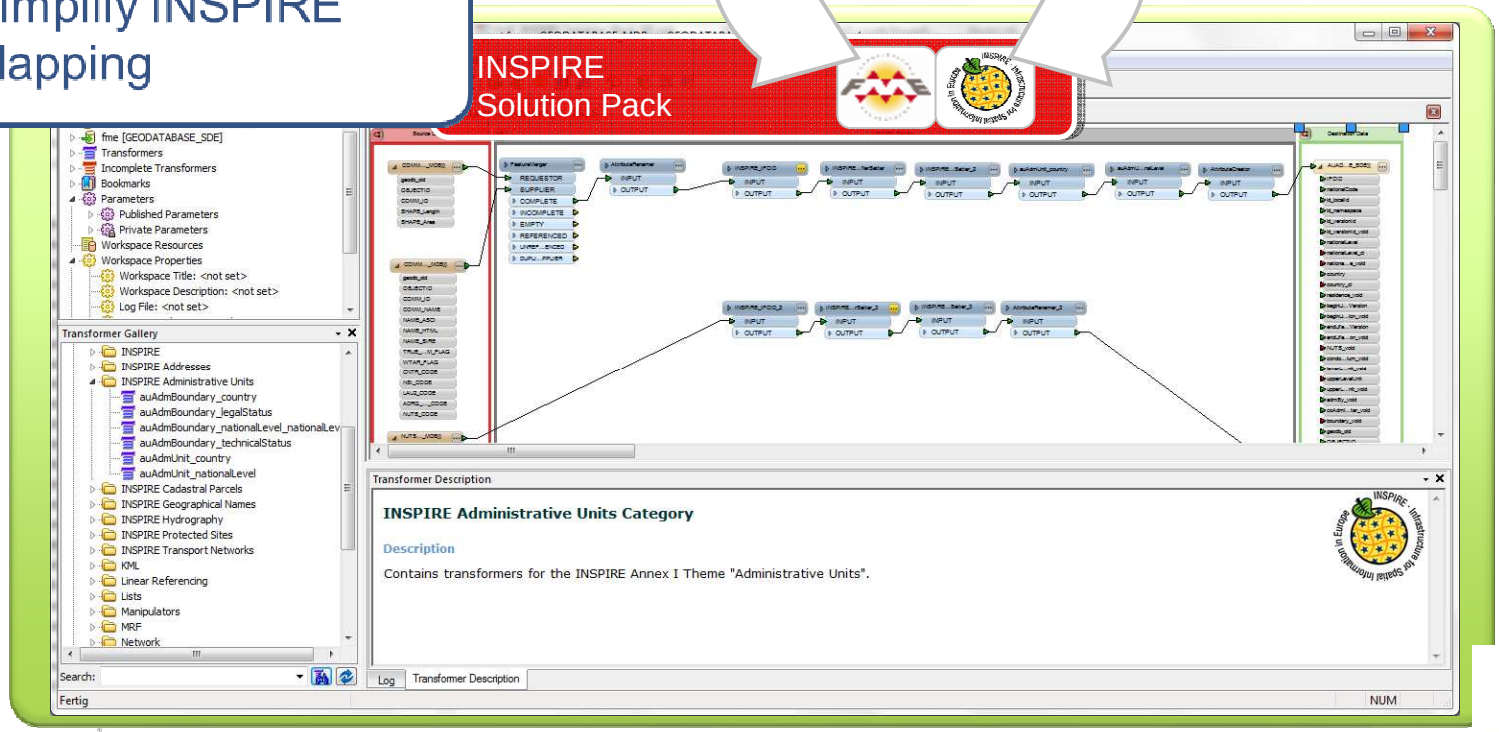
Data model as a common base



INSPIRE ETL Workflow Description



Simplify INSPIRE Mapping



Scope of benefits of the INSPIRE Solution Pack for FME

Functional extension of the FME Workbench

- As many as 100 additional INSPIRE Transformers
  - > INSPIRE specific creation of attributes, setting of values and relations
  - > INSPIRE specific functions (Transformers), INSPIRE_LifeSpanSetter, INSPIRE_IdentifierSetter,

- FME Workbench „Template Workspaces“ for all Annex I Themes
  - > Prepared interface for the ArcGIS for INSPIRE data models
  - > INSPIRE specific transformers are already connected with the correct destination featuretypes

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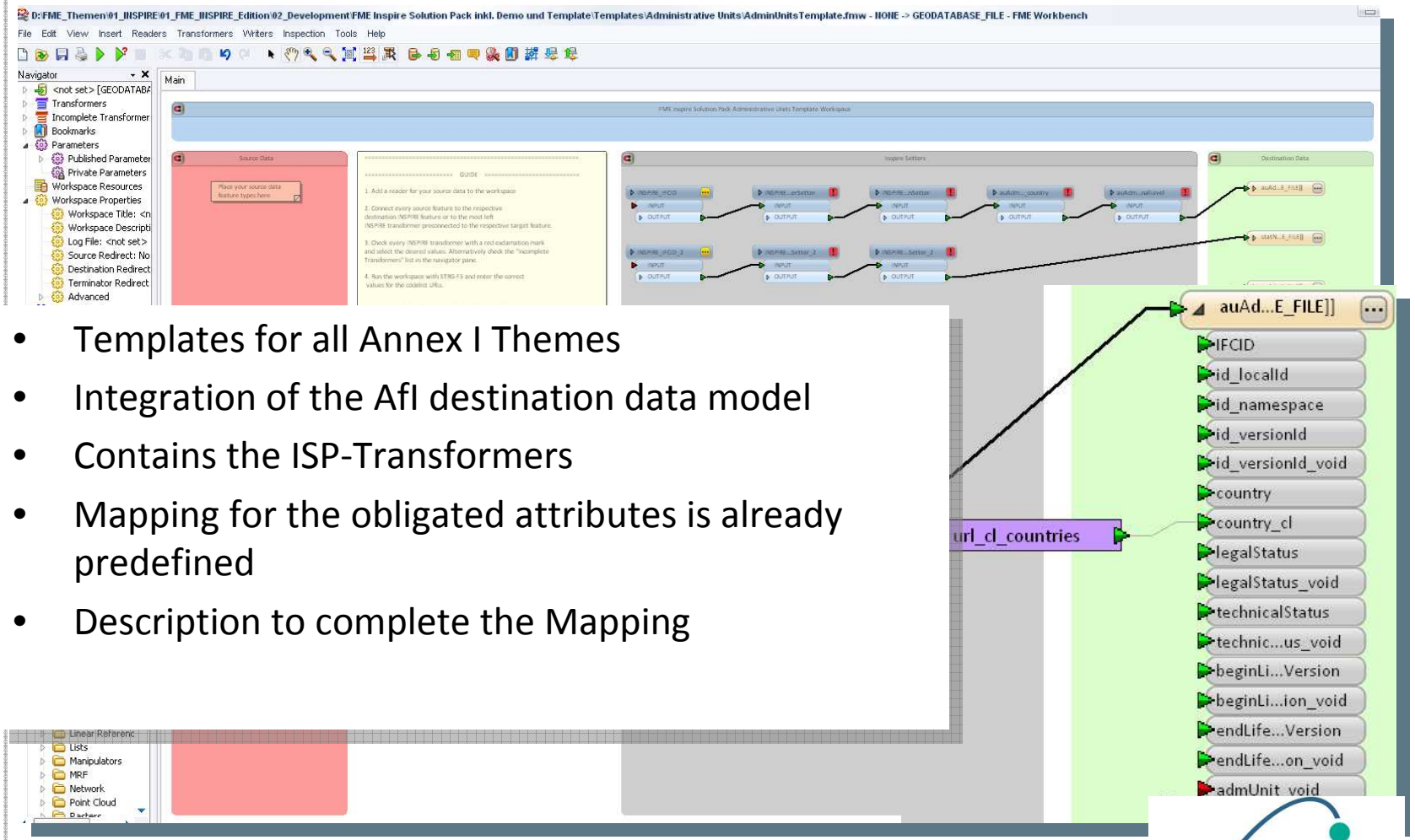
Scope of benefits of the INSPIRE Solution Pack for FME

INSPIRE specific help within the FME Workbench

- FME Workbench „Tutorial Workspace“ with Reference-Mapping example for Administrative Units
  - Source data and exemplary destination data model
  - Step by step instructions and examplary Mapping

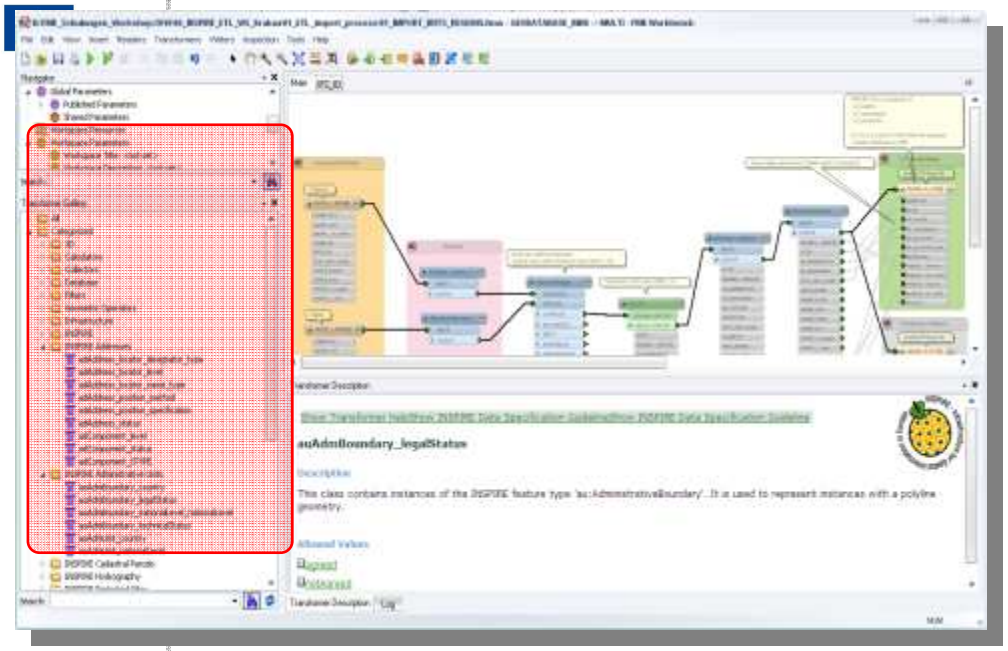
- Extension of the integrated FME Workbench Help for detailed INSPIRE specific information
  - Description of all transformers incl. Technical INSPIRE description
- Direct access to the INSPIREspecifications and Annex-descriptions from the FME Workbench

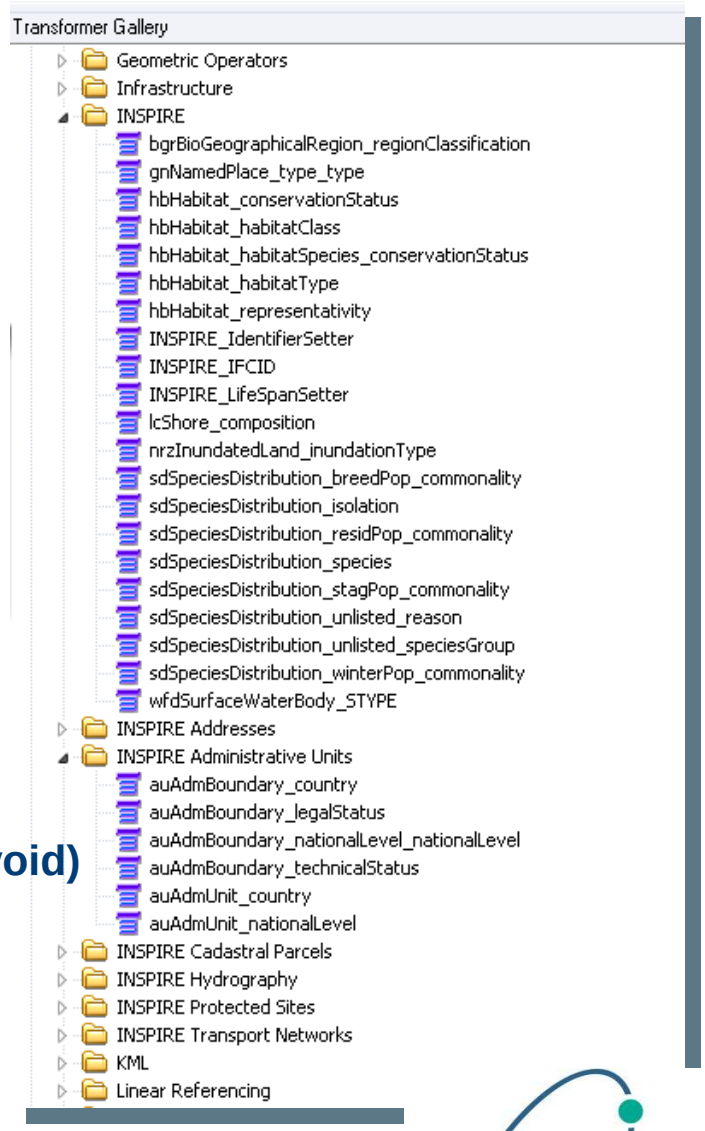
Concrete Examples:
FME Workbench „Template Workspaces“



- Templates for all Annex I Themes
- Integration of the AfI destination data model
- Contains the ISP-Transformers
- Mapping for the obligated attributes is already predefined
- Description to complete the Mapping

New FME INSPIRE Transformer categories

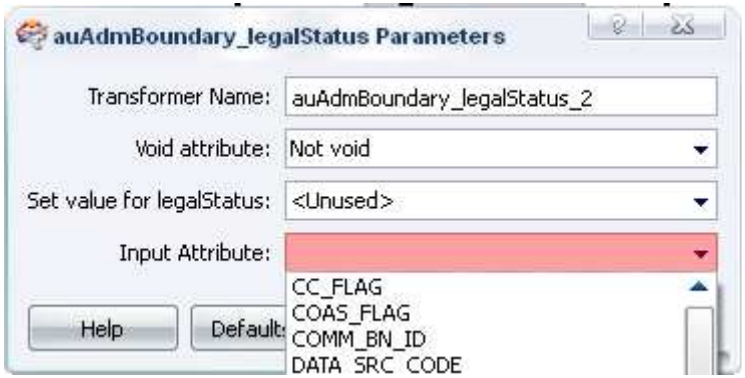




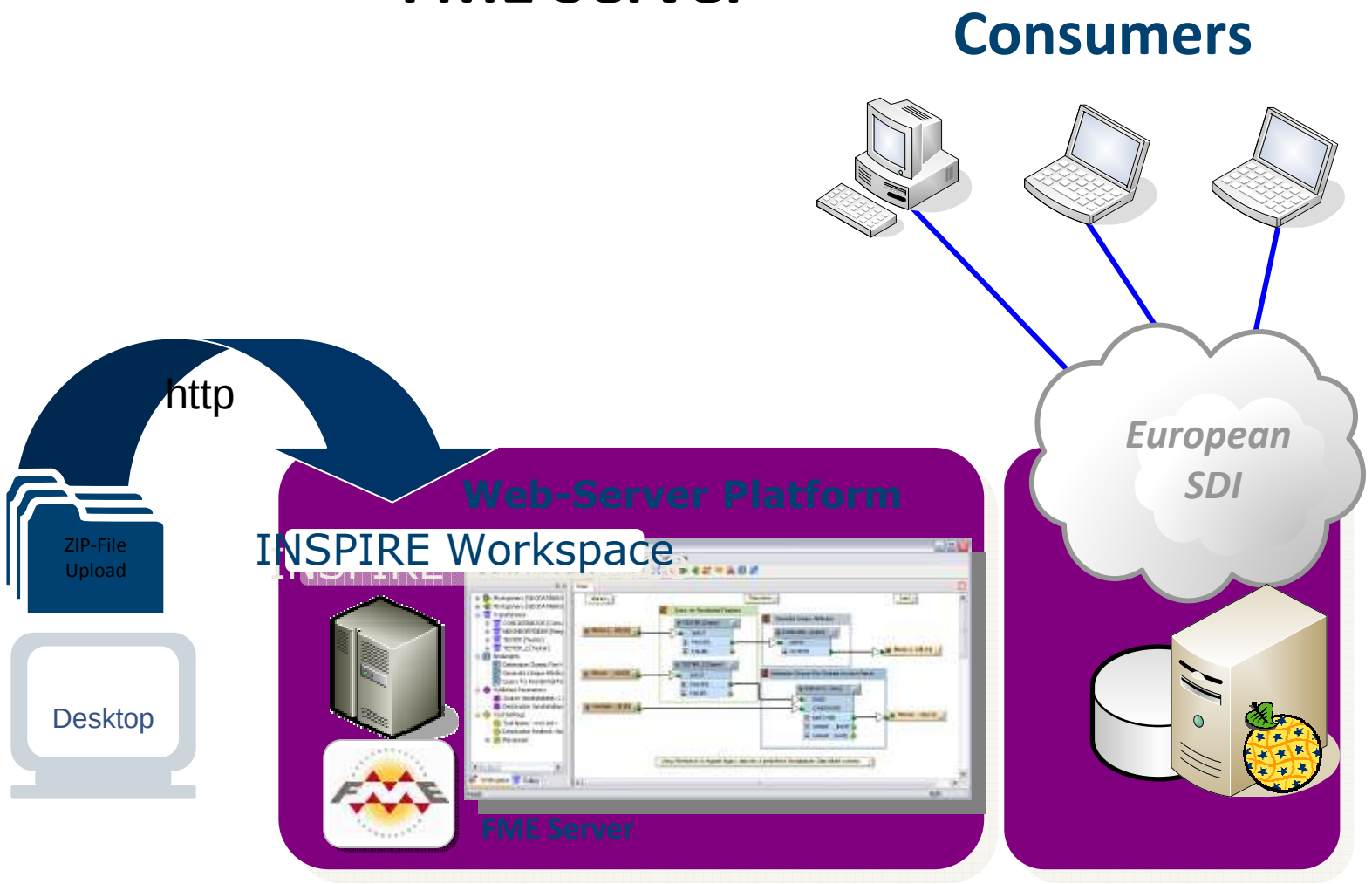
- **Categories for every Annex I Theme**
  - > **Definition of attributes (create, valueMapper, void)**
- **General INSPIRE Transformers**
  - > **INSPIRE-functionality (IFCID, LifeSpanSetter)**

INSPIRE Transformers (AttributeMapping)

- Automated creating of the obligated attributes
  - > legalStatus
  - > legalStatus_void
- The obligated attributes are filled with possible values (if not void)
  - > agreed
  - > notAgreed
- Predefined choice for ‘void value’
  - > 0 = no reason given
  - > 1 = reason: unkown
  - > 2 = reason: unpopulated
- AttributeRenamer
  - > Values can be adopted from existing attributes



Data provision via “data upload” with FME Server



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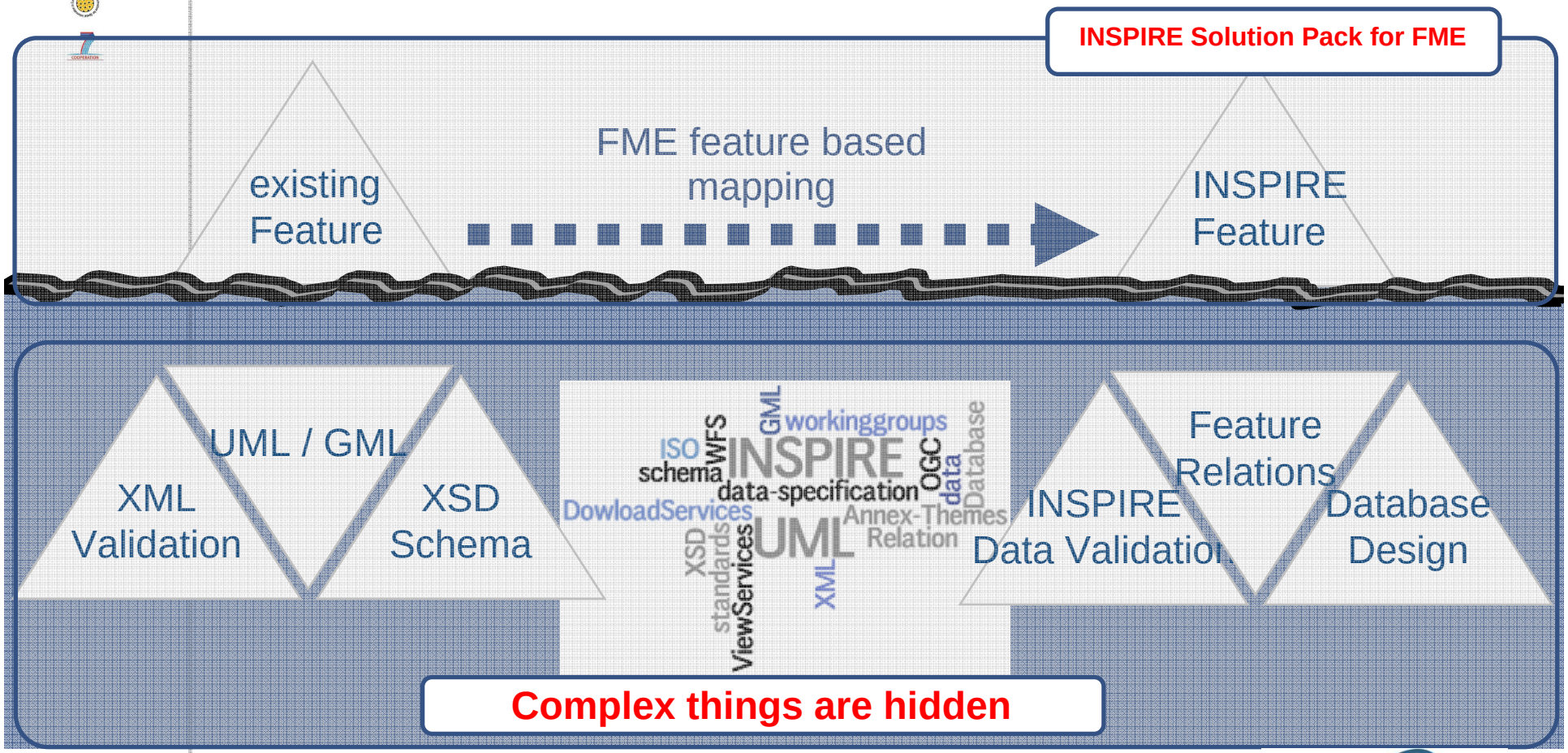
Conclusion:

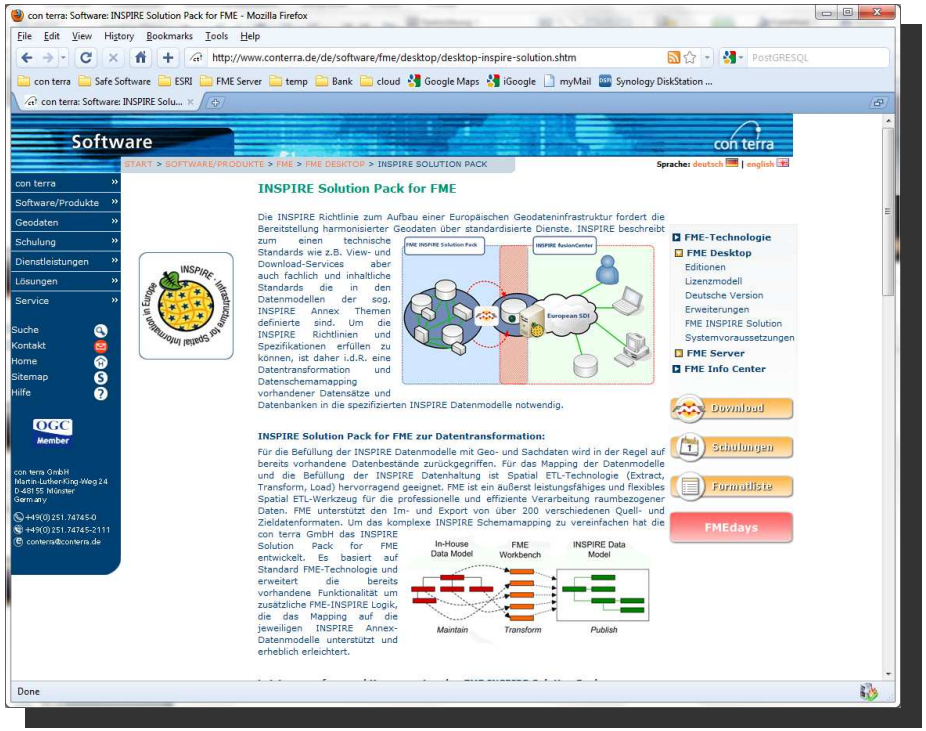
The tip of the iceberg model



Further information:

www.conterra.de/isp

- Test licenses are available
  - Tutorial incl. Data (OSM)
  - AdminUnits Transformer



Testlicense

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Thanks and join us …

www.smespire.eu