Status of INSPIRE Drafting Teams

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Outline

- Review of INSPIRE initiative
- Drafting Teams – tasks and deliverables
- Legislative Co-decision process

The Mission

- Establishing an infrastructure for spatial information in the Community (INSPIRE)
- INSPIRE lays down the general rules for the establishment of an infrastructure for spatial information in Europe
- For purpose of environmental policies or related actions
- Proposal for a *Directive of the European Parliament and of the Council*, adopted by the Commission on the 23th July 2004

Structure of Proposed Directive

- Holds 34 „Articles“ in the following Chapters:
  - Chapter I: General provisions
  - Chapter II: Metadata
  - Chapter III: Interoperability of spatial data sets and services
  - Chapter IV: Network services
  - Chapter V: Data-sharing and re-use
  - Chapter VI: Coordination and complementary measures
  - Chapter VII: Final provisions
- Annexes I, II and II define themes of „spatial data sets“ that are concerned

Time Schedule

- Preparatory Phase 2005 – 2006:
  - Elaborate *draft Implementation Rules (dIR)*
  - In parallel with the legislative co-decision process in the European Parliament and the Council
- Transposition into national legislation of member states 2007 – 2008
- Implementation 2009 - 2013

Concept for Stakeholder Participation

- Establishment of *Spatial Data Interest Communities (SDICs)* **,e.g., EUREF**
  - Bundle expertise and resources of users, producers or transformers of spatial data and services
  - Provide stakeholder to participate in the development of the dIR
- 3 Phases for dIR
  - Association phase: Create drafting teams and collect reference material
  - Drafting phase: Establishment of dIR
  - Review phase:
    - feedback from SDICs
    - implementation feasibility feedback from *Legally Mandated Organisations (LMOs)*
    - Organization of public consultation

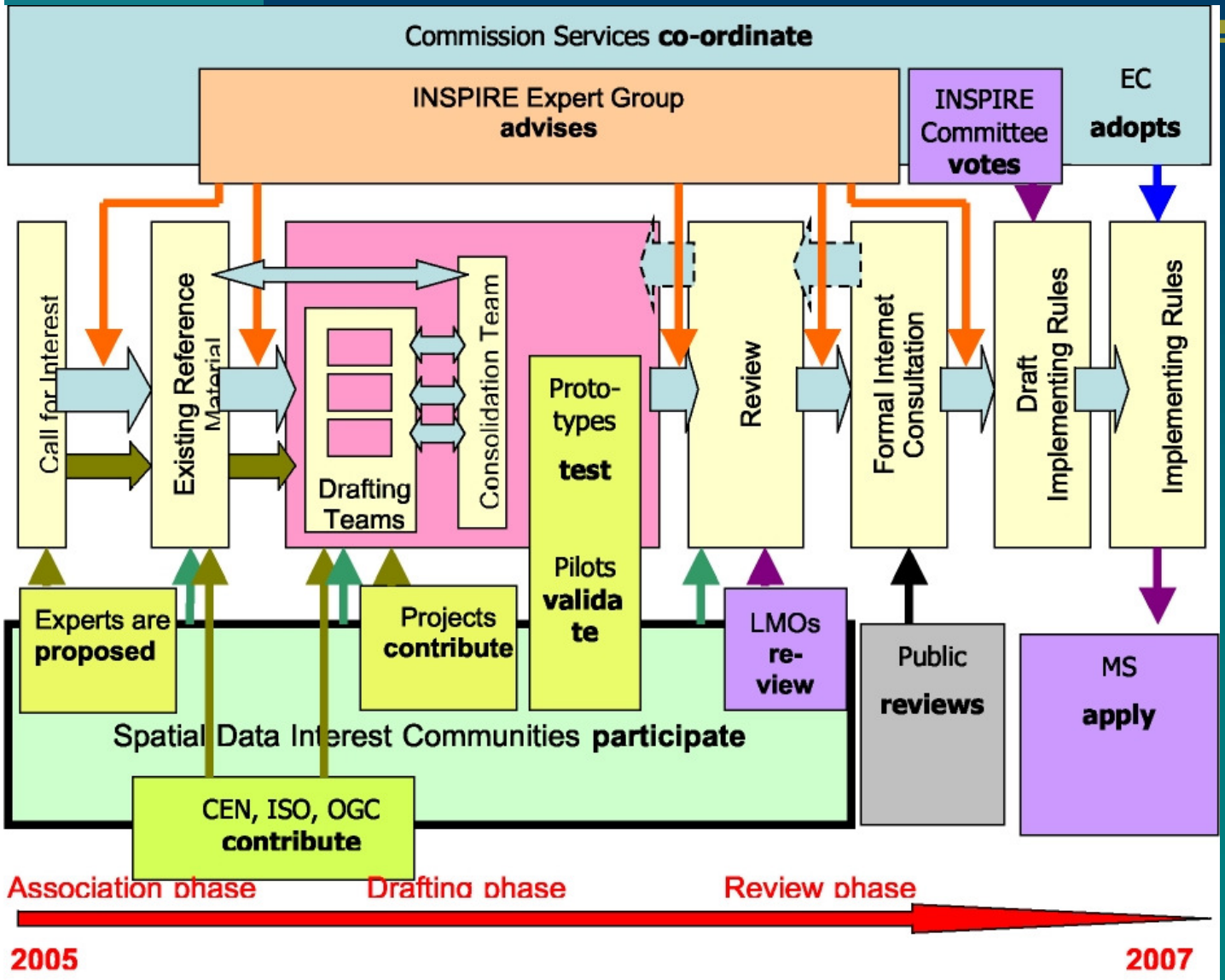
Drafting Teams

- *5 Drafting Teams (DTs)* were formed to develop the dIR (*). Each DTs consists of (core/supporting) members:
  - Metadata Drafting Team (7/7)
  - Data Specifications Drafting Team (7/16)
  - Network Services Drafting Team (6/9) + 6 of „Interface Team“
  - Data and Service Sharing Drafting Team (7/7)
  - Monitoring and Reporting Drafting Team (5/7)

(*) DTs cover all Chapters of the Directive

- *The Consolidation team (CT)* consists of EC staff and coordinates the activities and outputs of the DTs.

Organization of Communities and Role of DTs



EUREF Contribution

- Expression of interest for the preparatory phase (2005 – 2006) submitted in April 2006
  - EUREF registered as SDIC
  - 2 experts nominated, 1 expert accepted as member of Data Specification DT
  - 3 reference documents registered (additional documents uploaded to CIRCA Server later on)
- EUREF will contribute to the review phase for the dIR

Work Programme Preparatory Phase
- *Breakdown and Milestones* -

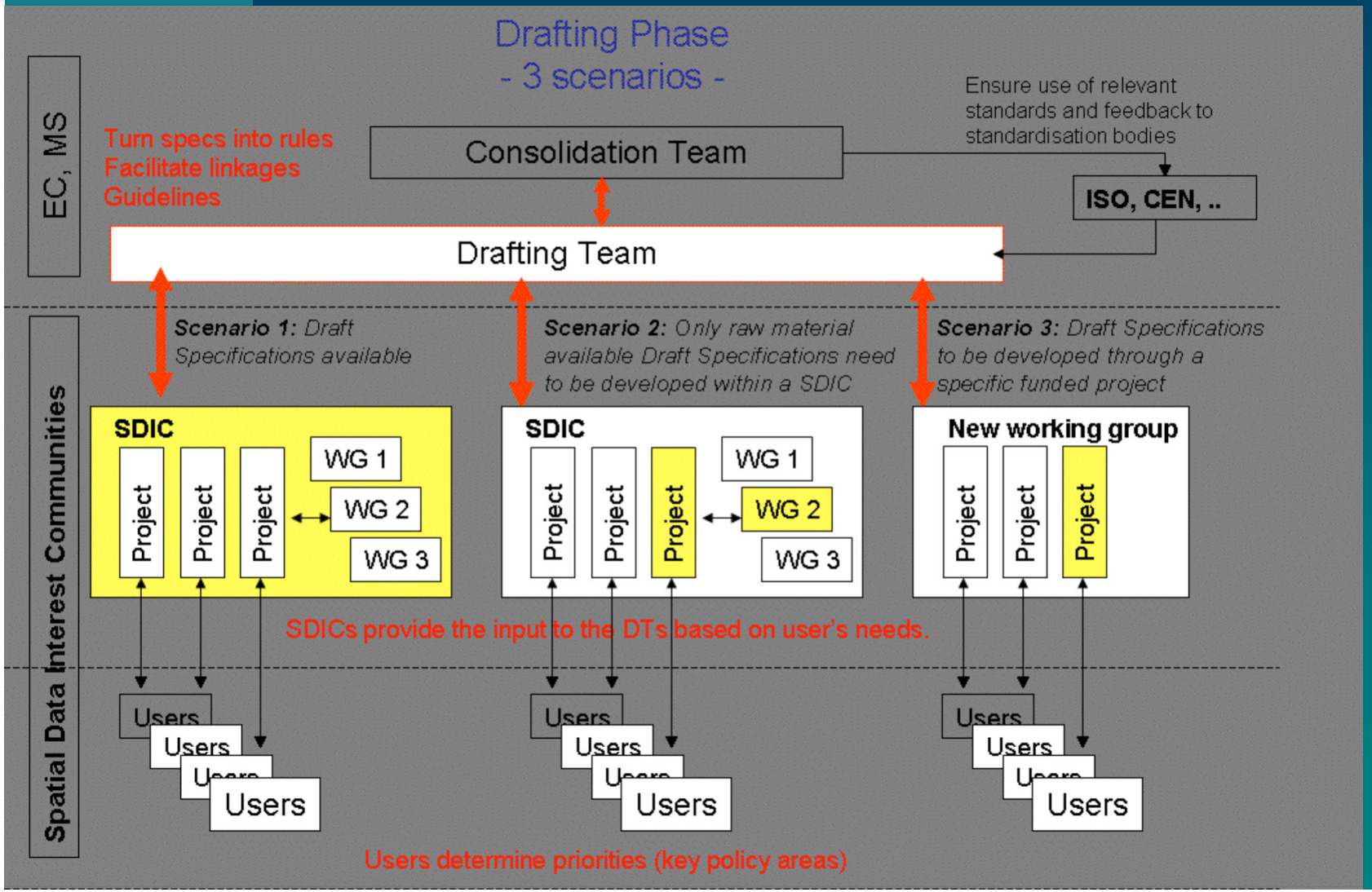
- DTs will deliver a couple of reports. Deliverables of „Data Specification“DT are as follows:

Deliverable	Titel	Original Milestone	Who
D2.1	Detailed high Level INSPIRE definition on harmonised data specifications and / arrangements for the exchange of spatial data	4/2005	JRC/CT
D2.2	Survey of existing initiatives at European, national and sub national levels , covering Conceptual Models and Methodologies used to develop specifications for Annex Data	7/2005	JPC/CT
D2.3	Definition of Annex I/II/III Themes and Scope	7/2005	DT
D2.4	Comparative review of existing National and European Conceptual Models and Methodologies to develop specifications for Annex Data	9/2005	CT
D2.5	First draft version of the Conceptual Model (generic aspects).	12/2005	DT
D2.6	First draft Methodologies to develop specifications for Annex Data	3/2006	DT
D2.7	First draft of Implementing Rules on the arrangements for the exchange of spatial data	3/2006	DT
D2.8	First version of the Conceptual Model(s) (generic aspects) and Methodologies to develop specifications for Annex Data	6/2006	CT
D2.9	Reports on the impact assessment of the conceptual model as a basis for Annex I data specifications	12/2006	LMOs,SDICs, CT

Note

- There exists the document „INSPIRE Work Programme Preparatory Phase 2005 – 2006“. It includes the following paragraphs:
  - Implementing INSPIRE in the Broader Context
  - 6. Organisational structures and process for stakeholder participation
    - 6.1 The concept of Spatial Data Interest Communities
    - 6.2 The role of Spatial Data Interest Communities
    - 6.3 Organising the interaction with the Spatial Data Interest Communities
    - 6.4 The role of Projects, Pilots and Prototypes
    - 6.5 INSPIRE and GI standardization initiatives
    - 6.6 The role of the Commission services and European Environment Agency
  - 7. Action Plan 2004-2006
    - 7.1 Metadata for spatial data
    - 7.2 Spatial data specifications and harmonisation
    - 7.3 Network services and interoperability
    - 7.4 Data and Service Sharing
    - 7.5 Monitoring and reporting
    - 7.6 Organisational structures and co-ordination of INSPIRE
    - 7.7 Integration and Horizontal measures
  - 8. Terms of Reference
    - 8.1 Spatial Data Interest Community terms of reference
    - 8.2 Drafting Teams' terms of reference
    - 8.3 Consolidation Team terms of reference
    - 8.4 Legally Mandated Organisations terms of reference
    - 8.5 Overall Co-ordination by Commission services

Drafting Phase



Note

Working methods:

Initial reference material and guidelines to the DT are directly provided by the Consolidation Team. Based on its scope and available reference materials, the DT shall, in collaboration with the Consolidation Team, define its precise agenda and action plan. For the drafting process of the Implementing Rules, two scenarios are foreseen:

1. A SDIC is providing or could provide reference material to start the process of drafting
2. No material is available or only pieces scattered among many SDICs.

In the first case we have two possibilities:

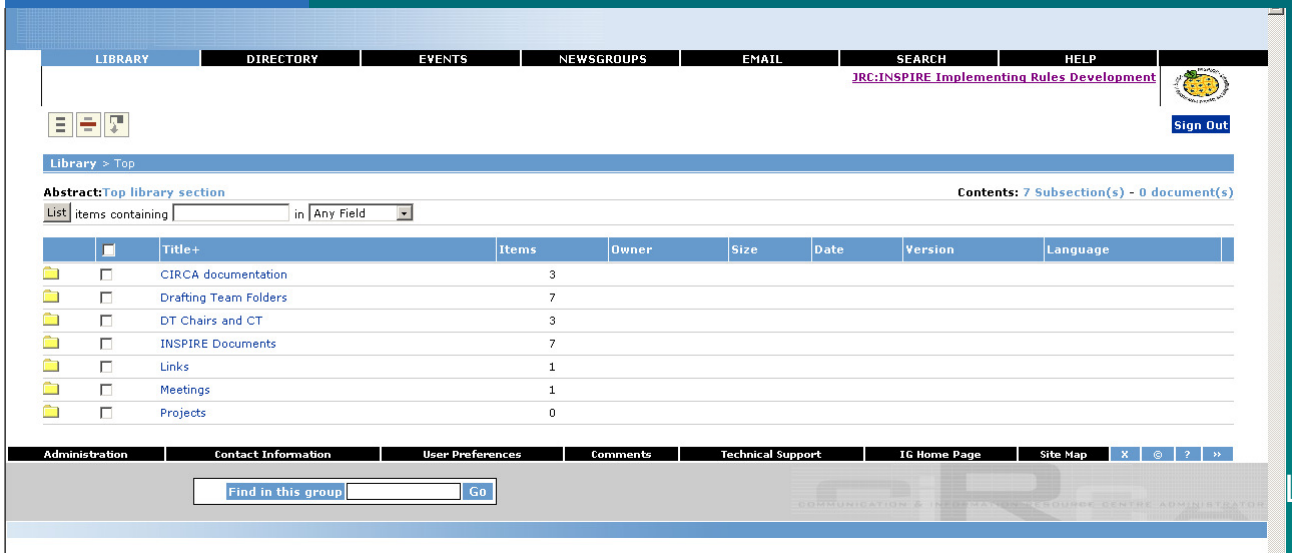
1. The reference material is mature and satisfies the INSPIRE requirements. Then the DT is only required to make a peer review or fine tuning with only limited interactions with the SDIC.
2. The reference material is under development or could be developed by a specific working group inside a SDIC. In this case the DT will wait until the results are made available31.

In the second case, the CT in collaboration with the DT will facilitate the creation of a new working group that is needed to develop the missing material. The working group could be established within an existing SDIC or be a temporary independent association funded through a specific project.

These scenarios will influence the way in which a DT organizes itself. The CT shall facilitate the DT in establishing direct relationships with SDICs and in particular with their existing working groups (developing the reference material).

„Circa“ Intranet of JRC and ISO

- The DTs got access to the „Circa“ Intranet of the European Community
  - Dedicated area for file up-/downloads
  - Mail exploder for the project
- ISO standards are frequently used as reference
  - Free access for DTs
  - INSPIRE may become the first „wider use“ of ISO standards



Drafting Team Meetings

- Common Meetings of all DTs
  - Kick-Off Meeting Ispra, 3 – 4 October 2005
- Meetings of „Data Specification“ DT
  - Data harmonisation roadmap meeting, Frankfurt, 12/13 December 2005
  - 1st Generic conceptual model meeting, Munich, 26 April 2006
  - 2nd Generic conceptual model meeting, Insbruck, 19/20 June 2006
  - Bi-weekly telecons since kick-off

DT „Data Specifications“ Members

Expert	Country	Expert	Country
Clemens Portele (chair)	Germany	Anne Ruas	France
Andreas Illert (co-chair)	Germany	Andre Bernath	Switzerland
Peter Van Oosterom	Netherlands	Francis Bertrand	France
Claudia Pegoraro	Italy	Kristine Asch	Germany
Keith Murray	United Kingdom	George Panopoulos	Greece
Arvid Lillethun	Norway	Ron Lake	Canada
Eric Bayers	Belgium	Stepan Kafka	Czech Republic
Markus Erhard	EEA	Markus Seifert	Germany
Dominique Laurent	France	Marek Baranowski	Poland
Marcel Reuvers	Netherlands	Therese Libourel	France
Andrew Woolf	United Kingdom	Heinz Habrich	Germany
Stephan Gruber	Austria		

Note

- The chairman of the data specification DT Clemens Portele works for a private company („interactive instruments GmbH“, in Bonn, Germany) but he is paid by German state survey for acting within INSPIRE and representing the German interests.

Planned DT „Data Specification“ Deliverables (2006)

Deliverable	Target date [1)]
D 2.3: Scope and Definition of Annex I/II/III Themes	May 2006 (submitted to CT on 29 May 2006)
D 2.5: Generic Conceptual Model (first draft)	July 2006
D 2.6: Methodologies for data specifications (first draft)	November 2006
D 2.7: Implementing rules for exchange of spatial data (first draft)	November 2006

- Priority in 2006: Creating the foundation for data specifications and developing a methodology

[1)] Target dates are for drafts for review by other DTs and CT

D2.3 Table of Contents
- Scope and Definition of Themes -

1. Purpose of the document
2. Introduction
3. History of INSPIRE Data Specification
4. Structure of spatial data
5. Annex I Themes
   - 5.1 Coordinate reference systems
   - ...
   - 5.7 Protected sites
6. Annex II Themes
   - 6.1 Elevation
   - ...
   - 6.6 Geology
7. Annex III Themes
   - 7.1 Statistical units
   - ...
   - 7.21 Mineral resources
8. List of acronyms and abbreviations

D2.3 Structure of Theme Description

Definition	As given in the Annexes I, II, III of the proposal for a Directive (’Council’ version)
Description	Explains the theme in more detail
Scope, use examples	Prominent use examples and reference to Community policies
Important feature types and attributes	Non-exhaustive list of the most prominent feature types and attributes (note: this is not yet an attempt to define content requirements!)
Overlaps and links	Lists known relationships with other themes
Reference material	List of the reference documents that are considered relevant to the theme
Contributors to specification work	SDICs and/or LMOs that have contributed to the descriptions in this document, or are considered to be important contributors in the drafting process; the list is not exhaustive with respect to the latter group

D2.5 Generic Conceptual Model (1st draft)

Achieved:

- General agreement on components (aspects) of data harmonisation reached in joint meeting with RISE
- Compilation of summaries of SDIC/LMO approaches with respect to core aspects of the generic conceptual model
- Discussion papers for the every priority data harmonisation component for D2.5
- Decision to use Enterprise Architect as the UML tool for INSPIRE Data Specifications

Ongoing:

- Drafting of a proposal for the generic conceptual model (per component)

Data Harmonisation Components Overview

Focus on generic aspects / priority components

1. INSPIRE Information Model

1.1 INSPIRE Principles	1.4 ISO 19100 Profile	1.7 Object referencing modelling
1.2 Reference model	1.5 Multi-lingual text and cultural adaptability	1.8 Data translation model/guidelines
1.3 Application Schemas	1.6 Coordinate refe-rencing and units model	1.9 Portrayal model

2. Operational components/registers

2.1 Identifier Management	2.3 Feature catalogues	2.5 Conformance
2.2 Terminology	2.4 Dictionaries	

3. Guidelines & Best Practice

3.1 Metadata	3.5 Derived re-porting & multiple representations
3.2 Maintenance	3.6 Consistency between data
3.3 Quality	3.7 Data capturing
3.4 Data Transfer	

These components apply to all types of spatial data including vector and coverage data (note that coverages are features, too). For the different spatial representation types, the components will in general be different.

Note

- For the topics given in „white boxes“ there exist now discussion papers.
- Input from experts to the discussion is welcome
- EUREF is asked to comment on the topic
  - 1.6 Coordinate reference system and units model.

D2.5 - Draft results (subject to change!)

1.3 Rules for Application Schemas

- Based on ISO 19109 and ISO/TS 19103 – with some constraints on the GFM and the use of UML

1.4 ISO 19100 Profile

- Identification of a profile of ISO 19107/19108/19123/etc. not possible due to the wide range of spatial information in the themes
- Recommendation to use the Simple Feature profile of the spatial schema (ISO 19125-1) when possible
- Potential SDIC/LMO consultation: spatial object types and interpolation types that are in use

D2.5 - Draft results (subject to change!)

1.5 Multilingual text and CLA

- Based on recommendations of CEN draft technical report
- Conceptual model may be based on ISO/TS 19139
- Requirements for multilingual/multicultural support in ESDI need more discussion

1.6 Coordinate reference system and units model

- Based on revision of ISO 19111 (CRS) and ISO 19136 (units)
- Known limitations of today‘s standards: linear reference systems, CRS using physical parameters (e.g. pressure)

D2.5 - Draft results (subject to change!)

2.2 Terminology

- Proposal to establish a “Glossary of Generic Geographic Information Terms in Europe” to define the meaning of terms regarding spatial information that are used within the INSPIRE Legislative and Implementing Rule documents

1.7 Object referencing

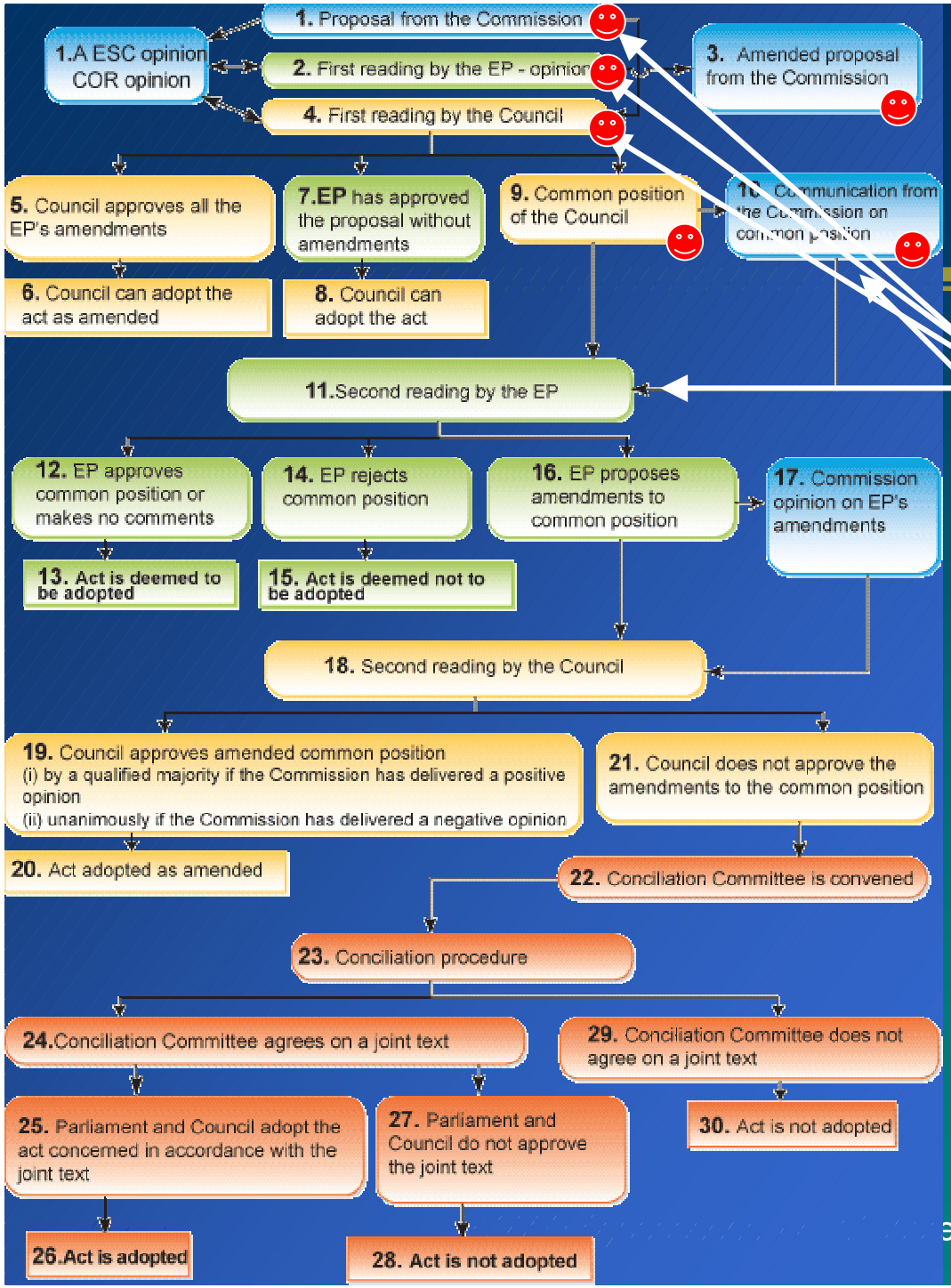
- Under discussion
- Relevant aspects include:
- Interpretation of the Directive
- How to reference an object (or a cell of a grid coverage object) in the ESDI?
- How to build spatial objects based on reference data?
- Gazetteers and European gazetteers

D2.5 - Draft results (subject to change!)

2.1 Identifier management

- Requirements for unique identifiers for spatial objects of Annex I and II: uniqueness, persistence, traceability, feasibility
- Use co-ordinated identifier management: rules are defined to ensure unique identifiers in INSPIRE but each data provider creates its own identifiers; an identifier consists of two parts:
  - A namespace identifying the data provider (structure of the namespace under discussion)
  - A local identifier part assigned by the data provider (lexical grammar under discussion - potential SDIC/LMO consultation)
- Thematic identifiers will be modelled as part of the domain application schemas

Legislative Co-Decision Procedure



- 12 June 2006: Second reading in Parliament

Note

- 23 July 2004: Proposal for INSPIRE directive adopted by Commission
  - Will become law once adopted by Council *and* Parliament
- 7 June 2005: First reading in Parliament
  - Amended (changed) proposal adopted
- 23 January 2006: First reading in Council
  - Adoption of a „Common Position“ (but not of the directive)
    - Sets out the conditions for public data access.....
    - ...possibility of licensing to and requiring payment from other public authorities...
- 14 February 2006: „Communication from the Commission“ to the Parliament
  - Common Position of Council not accepted by Commission
- 12 June 2006: Second reading in Parliament

Outlook

- The legislative co-decision process is ongoing
- Elaboration of „draft Implementation Rules“ already started
  - First deliverables of the Drafting Teams submitted to the Consolidation Team
  - Review of deliverables by SDICs and LMOs coming soon
- EUREF is asked to
  - Contribute to discussion paper 1.6 of 2.5 deliverable until end of July 2006
  - Contribute to the SDIC review process later on

Thank you