Topic iv: Standards and metadata

- Main objectives:
  - are standards useful /necessary for <u>integration</u>, <u>storage</u> and <u>dissemination</u> of statistical and geospatial data both inside and outside the agency ?
  - how <u>organisations</u> are coordinating the development of standards and metadata ?
- Specific topics
  - focus on models
  - role of metadata for data integration (from disparate sources)
  - tools and methodologies in the collection, evaluation, and dissemination of data
  - some real examples

Preliminary remarks

- Is the word 'standards' understood in a <u>standard</u> way ?
  - Data standards
  - Technological standards
  - Statistical standards
  - …
  - Is there a common element between the various concepts ?
- Who knows about metadata
  - Is GI metadata different from other metadata ?
  - Are you aware of advantages/disadvantages ?
- Why a session on 'standardisation' ?

The way forward for this session

- Part 1: GI-GIS aspects (invited papers)
  - OpenGIS
  - GI Standards in European Commission
- Part 2: Statistical aspects (working papers)
  - US standards for definition of Metropolitan areas
  - Territorial aspects in statistics in Serbia
- Two discussant
  - Annoni (GI-GIS) ----------- Gallego (Statistical)
- Part 3: A common approach to standardisation (you all)

Why Standardisation ?

- Advantages
  - Interoperability ?
    - Accessibility, sharing, discovery, …
  - Avoid duplication ?
  - Avoid repetitive procedures for 'data harmonisation'?
- Disadvantages
  - Conversion of existing systems ?
  - Policy harmonisation (access, copyright, price, ..) ?
  - Impact on organisations (technical, political) ?

Content standardisation (Data,Metadata)

- ✍ First level of complexity
  - – Common Reference systems
  - – Well described data model
  - – Standard metadata (core elements)   ✍ Data Policy
- ✍ Second level of complexity
  - – Understanding Semantic differences
  - – Human Language
  - – Common Data model
  - – Standard metadata (communities profiles) ✍ Data Policy
- ✍ Third level of complexity ?
  - – Organisational issues (data quality, Updating & maintenance)
  - – Dependencies (protocols, MoU, ..)
  - – Inter-sector collaboration (e.g. water quality, Flooding, planning, …)
    ✍ Policy

Technological Standards

- ✍ Link with standardisation bodies
  - – ISO, OGC, CEN, Others
- ✍ Link with industry
  - – Influencing development (through a collaborative framework)
  - – Transparency (using standards Metadata to document sw procedures ?)
  - – Understanding technology development

Statistical Standards

- Nomenclature (Eurostat since….????)
- Administrative units: NUTS
- Other areal units (catchments). What do we want them for?
- Sustainability, environmental indicators (ongoing)
- Definition of urban/rural areas????
- Definition of urban agglomerations

Statistical Standards

Should we define standard criteria to attribute coordinates to:
- Persons?
- Farms?
- Companies?
- Vehicles?

Coordinate attribution should be

Precise, accurate?

With an indication of accuracy?

AFFORDABLE

Compatible with attribution criteria to administrative units.

The future ?

- Services standardisation
  - Focus on Usability & Accessibility
  - How ?
    - Catalogs
    - User interfaces
    - Common models
    - Common functionalities
    - Common policy
    - …