

ISO/TC 211

Geographic information/geomatics

Advancing SDIs –
the role of standards

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Infrastructures as means

- ICT infrastructure
- spatial data infrastructure
to support
- sustainable development
- eGovernment
- eCitizen

The infrastructures for spatial information should be designed to

ensure that spatial data are stored, made available and maintained at the most appropriate level

that it is possible to combine spatial data from different sources in a consistent way

share them between several users and applications

that it is possible for spatial data collected at one level of public authority by other levels

that spatial data are made available under conditions that do not restrict their extensive use

that it is easy to discover available spatial data, to evaluate their fitness for purpose and to know the conditions applicable to their use.

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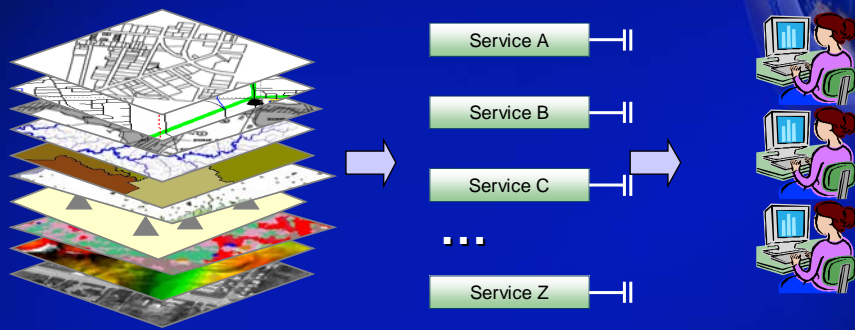
We need

interoperable services that will help to produce and publish, find and access, and eventually, use and understand geographic information

consequently, standards are needed in all these fields!

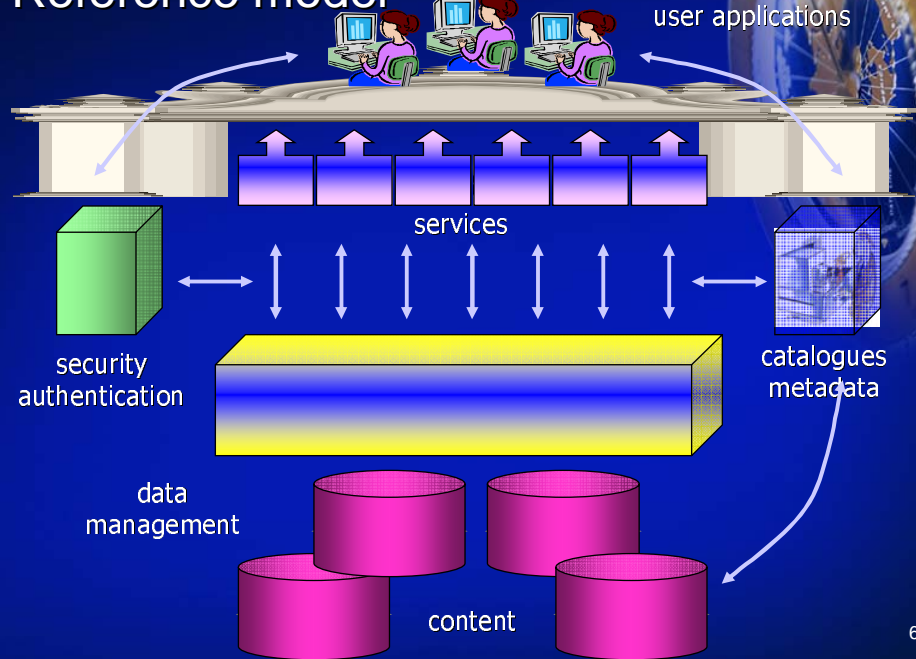
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Service oriented architecture



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Reference model



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Standard levels

Applications

Geographic application area specific standards
ISO/TC 211, OGC, ...

Geographic infrastructure standards
ISO/TC 211, OGC

ICT-standards
ISO JTC 1, W3C, IETF, OASIS, OMG etc.

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ISO published standards (19)

- ISO 6709:1983 Standard representation of latitude, longitude and altitude for geographic point locations
- ISO 19101:2002 Geographic information -- Reference model
- ISO 19105:2000 Geographic information -- Conformance and testing
- ISO 19106:2004 Geographic information -- Profiles
- ISO 19107:2003 Geographic information -- Spatial schema
- ISO 19108:2002 Geographic information -- Temporal schema
- ISO 19110:2005 Geographic information -- Methodology for feature cataloguing
- ISO 19111:2003 Geographic information -- Spatial referencing by coordinates
- ISO 19112:2003 Geographic information -- Spatial referencing by geographic identifiers
- ISO 19113:2002 Geographic information -- Quality principles
- ISO 19114:2003 Geographic information -- Quality evaluation procedures
- ISO 19115:2003 Geographic information -- Metadata
- ISO 19116:2004 Geographic information -- Positioning services
- ISO 19119:2005 Geographic information -- Services
- ISO/TR 19120:2001 Geographic information -- Functional standards
- ISO/TR 19121:2000 Geographic information -- Imagery and gridded data
- ISO/TR 19122:2004 Geographic information / Geomatics -- Qualification and certification of personnel
- ISO 19125-1:2004 Geographic information -- Simple feature access -- Part 1: Common architecture
- ISO 19125-2:2004 Geographic information -- Simple feature access -- Part 2: SQL option

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The goal – a distributed network of cooperating organizations and individuals



to support the *real* goals of the infrastructure

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