

Implementation and adoption of standards for the global geospatial information community

Item 7

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5th Meeting of the Committee
of Experts, New York



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United Nations Initiative on
Global Geospatial Information Management

Positioning geospatial information to address global challenges

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International Hydrographic Organization *Organisation Hydrographique Internationale*

- Intergovernmental consultative and technical organization – 85 Member States, 7 pending.
- Each Member State represented by its national Hydrographer or equivalent
- Observer status: UN Assembly, IMO, IOC
- Relevant IHO standards underpin UN Conventions (UNCLOS, SOLAS, ..)
- **A principal Aim** of the IHO is to ensure that all the world's seas, oceans and navigable waters are surveyed and charted by:
 - establishing international standards
 - coordinating activity
 - capacity building programme

www.iho.int



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International
Organization for
Standardization

- ISO = equal
- World's largest developer of standards
 - Network of national standards institutes from 163 countries
 - 19 500 standards published
- Established in 1946-1947
- Recognized by the UN
- Principal activity is developing technical standards
- Technical Committees (TCs)
 - From *From food safety to computers, and agriculture to healthcare*, ISO International Standards impact all our lives
 - ISO/TC 211, *Geographic information/geomatics*
 - Lawrence D. Eicher Leadership Award in 2010

www.iso.org

www.isotc211.org



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- Industry consortium of around 500 members
- 2000+ implementations of standards and specifications, some certified to be compliant
- Focus
 - to define, document and test implementation standards for use with geospatial content and services
 - integration of geospatial content and services into applications for the benefit of mankind

www.opengeospatial.org



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Co-operation

ISO/TC 211, OGC and IHO have been formally – and practically - co-operating since 1994.

They benefit from access to a range of experienced experts working actively in and across organizations.



The standards landscape

Domain related geospatial standards

Many, like IHO, DGIWG, WMO, ICAO, but also OGC and ISO/TC 211

Generic geospatial standards

ISO/TC 211, OGC, but also others
...

Basic ICT standards and other cross-discipline standards

W3C, OASIS, IETF, IEEE, ISO/IEC JTC1, OMG, etc.



UN-GGIM and International Standards

2/103

Inventory of issues to be addressed by the UN-GGIM Committee of Experts

Suggestion by ISO Technical Committee 211 (geomatics and geographic information) to provide a paper related to standard-setting issues in the international community, jointly with the OGC and the IHO.



New York,
13-15 August 2012
Second session of the
UN Committee of Experts on
Global Geospatial
Information Management



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UN-GGIM and International Standards



Draft report submitted

Second High Level Forum on Global Geospatial Information Management

Qatar National Convention Centre, Doha, Qatar, 4-6 February 2013



Full report

Third Session of UN-GGIM Committee of Experts

Cambridge, UK, 24-27 July 2013



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Existing Standards and the Inventory of Issues

	UN-GGIM issue	Number of standards		
		ISO	OGC	IHO
(a)	Developing a national, regional and global strategic framework for geospatial information	6	5	1
(b)	Establishing institutional arrangements and legal and common frameworks	5	2	7
(c)	Building capability and capacity, especially in developing countries	5	2	2
(d)	Assuring the quality of geospatial information	7	6	8
(e)	Promoting data sharing, accessibility and dissemination	63	24	15
(f)	Embracing trends in information technology	20	18	3
(g)	Promoting geospatial advocacy and awareness	-	4	2
(h)	Working in partnership with civil society and the private sector	-	-	-
(i)	Linking geospatial information to statistics	7	6	-



4th Meeting of UNGGIM – New York

- 4/110 Implementation and adoption of standards for the global geospatial information community The Committee of Experts:
- (c) Agreed that the 'Guide to the Role of Standards in Geospatial Information Management' and the 'Companion Document on Standards Recommendations by Tier' are important methodological guidelines to assist Member States in implementing and adopting geospatial standards within their national frameworks.
- (d) Noted that there is still a need to continue to raise the awareness of standards and related policies to e-government agendas, and that relevant case studies and best practices are an important means to demonstrating the value to decision makers.
- (e) Took note of the suggestions by a number of Member States to build on the Guide and Companion Document to include the following areas; case studies, business value proposition, data capture and quality issues, and related policies.





A Guide to the Role of Standards in Geospatial Information Management

Prepared cooperatively by the
Open Geospatial Consortium (OGC);
The International Organization for Standards (ISO)
Technical Committee 211 Geographic information/Geomatics;
and the
International Hydrographic Organization (IHO).

July 2015



A Guide to the Role of Standards in Geospatial Information Management

Companion document on Standards
Recommendations by Tier

Prepared cooperatively by the
Open Geospatial Consortium (OGC);
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**To help everyone better
understand what standards to
use, when and why.**



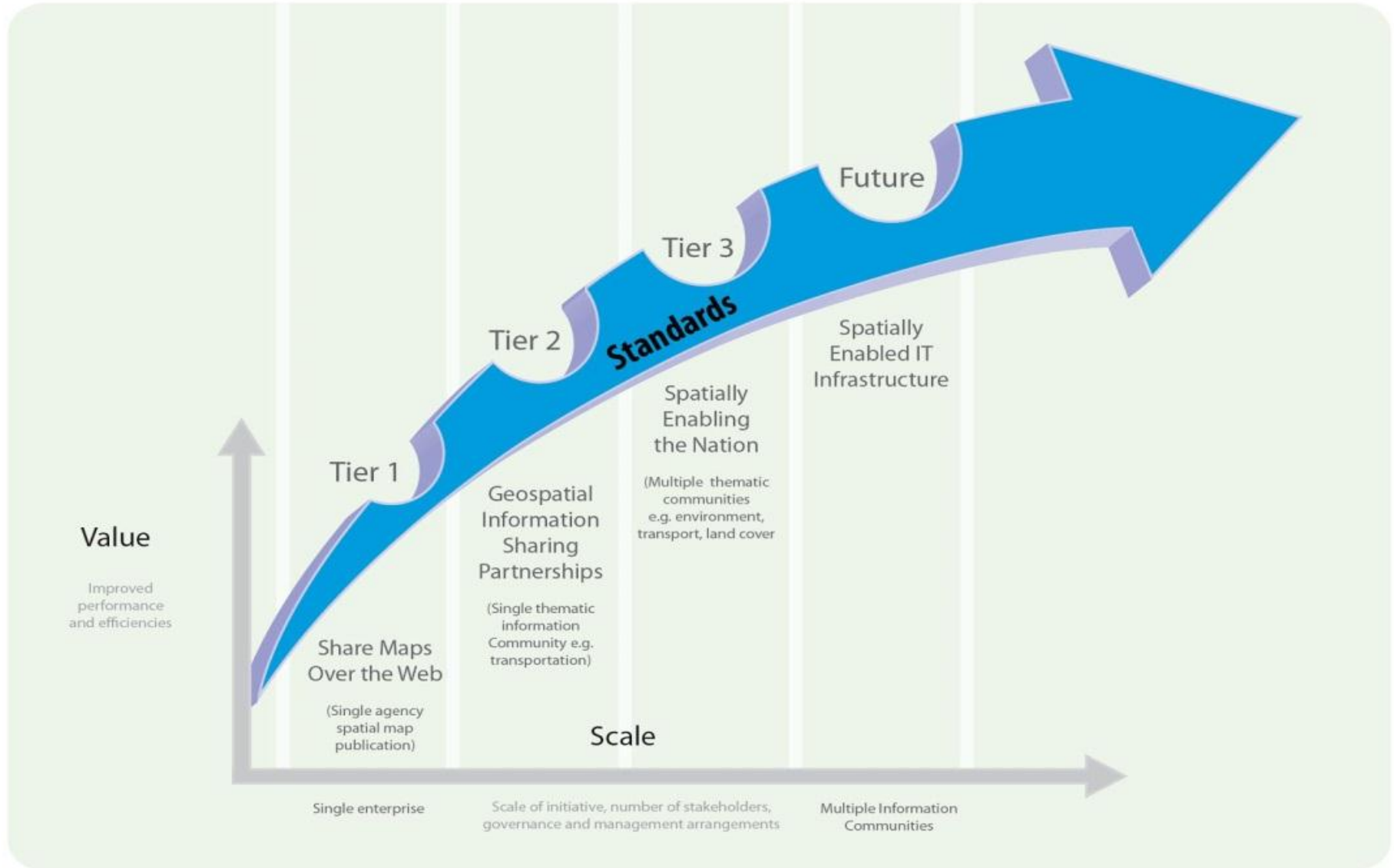
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SDI Standardisation Maturity Model



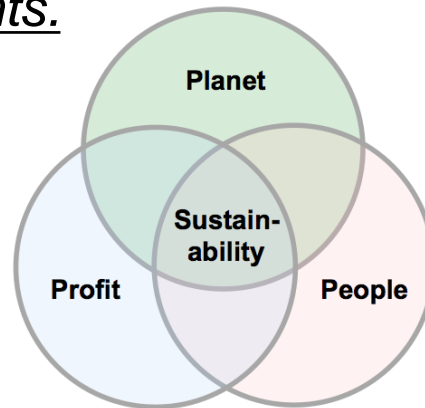
Side Session

- Case Studies
 - Data Cube & National Map (Australia)
 - 3D Standards in Bahrain (delivered by UK)
 - Disaster Response (Geothings, Asia region)

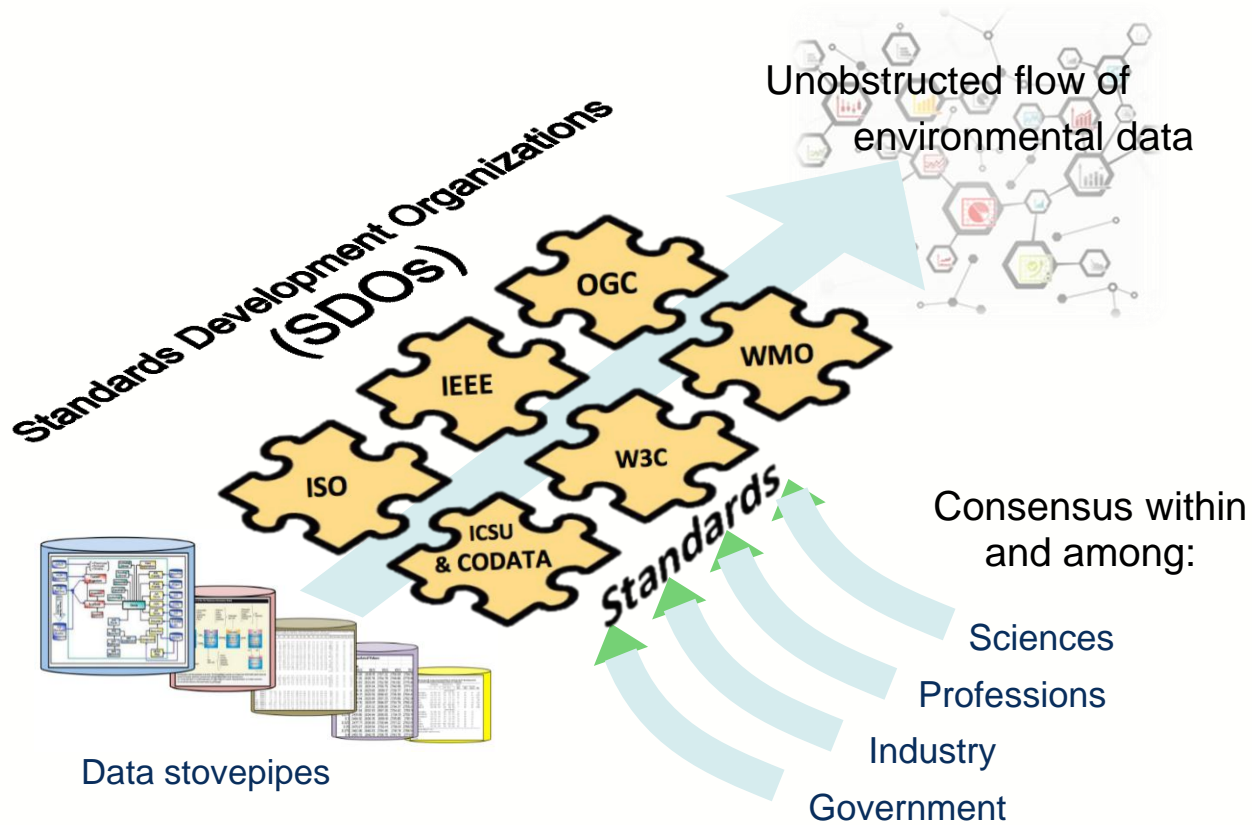


Sustainable Development

- Sustainable development will impact commerce, corporate “good will” accounts, government oversight, taxes, and perhaps monetary systems.
- All of these will require environmental measurements & trustable, transparent, and digitally useful communication of environmental measurements.



Standards are essential!



Next steps – Joint Study Group

- Building on the strong cooperation between the Standards Development Organisations, ISO, IHO and OGC will convene a JSG to review the SDGs and indicators
- The JSG will:
 - identify relevant existing supporting geospatial standards and identify gaps in the existing geospatial standards architecture that may need to be developed
 - Invite the relevant ISO statistics committees in particular with ISO/TC69 – Statistical Methodologies and ISO/TC 154 - Processes, data elements and documents in commerce, industry and administration (SDMX standard)
 - Invite members and observers of the UNGGIM to participate in the JSG in particular from the Expert Group on the Integration of Statistical and Geospatial Information
- The JSG will report back to the UNGGIM at its next meeting.



Points for discussion and decision

- a) Adopt the published “Guide to the Role of Standards in Geospatial Information Management” and the “Technical Compendium” as the international geospatial standards best practice for spatial data infrastructure and encourage all Member States to implement the recommended standards appropriate to their countries’ level of SDI maturity;
- b) Encourage Member States to adopt and implement the available standards and to work in cooperation with the international standardization bodies, including participation, as appropriate, in the work programs of the OGC, ISO/TC211 and the IHO;
- c) Encourage Member States to offer translation services to enable the Guide and Companion documents to be accessible in all languages;
- d) Provide guidance on the way ahead for the further development of harmonized standards between the statistics and geospatial communities;
- e) Encourage Member States to participate in the international geospatial standards development processes of OGC, ISO/TC211 and the IHO to ensure that the geospatial standards required to achieve the SDGs are available.



We are here for you!

- Many of you are members of the SDOs
 - through your organizations
 - through your national standards organizations
- More of you are encouraged to participate

***Help us to help you!
We are here to serve you
and your community's need!***



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Thank you



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