Open Geospatial Consortium | IHO International Hydrographic Organization | ISO International Organization for Standardization TC 211

Geo-Enabling the Global Village: No one should be left behind

International Standardization is International Collaboration

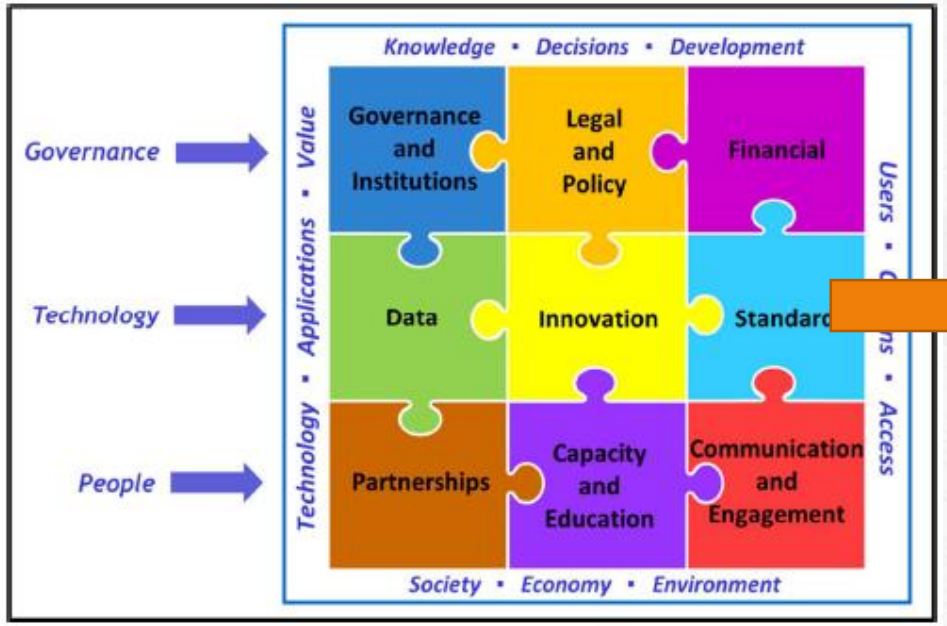
part of

2nd UN World Geospatial Information Congress
October 10th - 14th, 2022

International Organization for Standardization TC 211

Open Geospatial Consortium

IHO International Hydrographic Organization



UN-GGIM Standards Guide

http://standards.unggim.ogc.org/

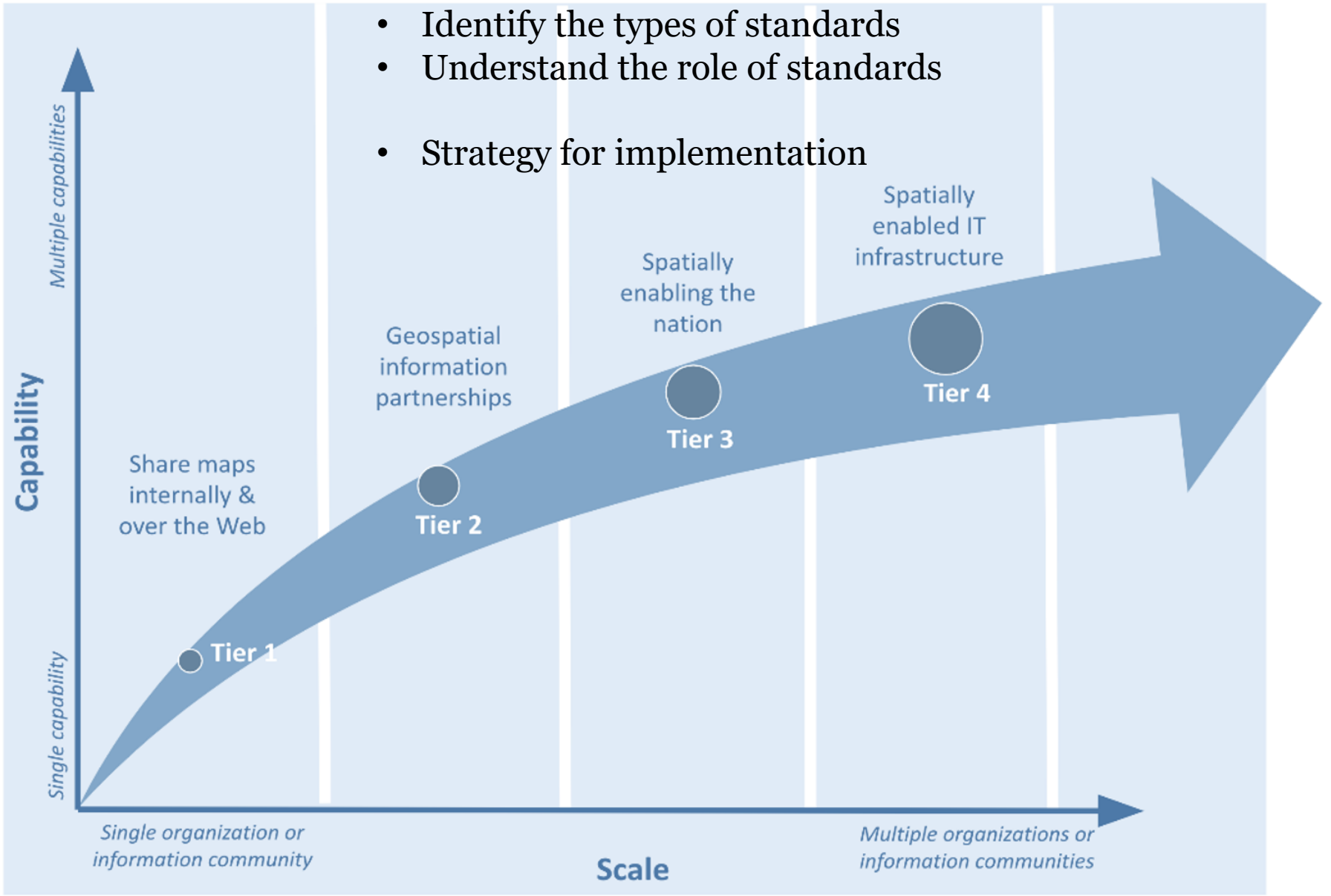
Knowledge • Decisions • Development
Governance and Institutions
Policy and Legal
Financial
Data
Innovation
Standards
Partnerships
Capacity and Education
Communication and Engagement
Technology • Applications • Value
Users • Access
Society • Economy • Environment

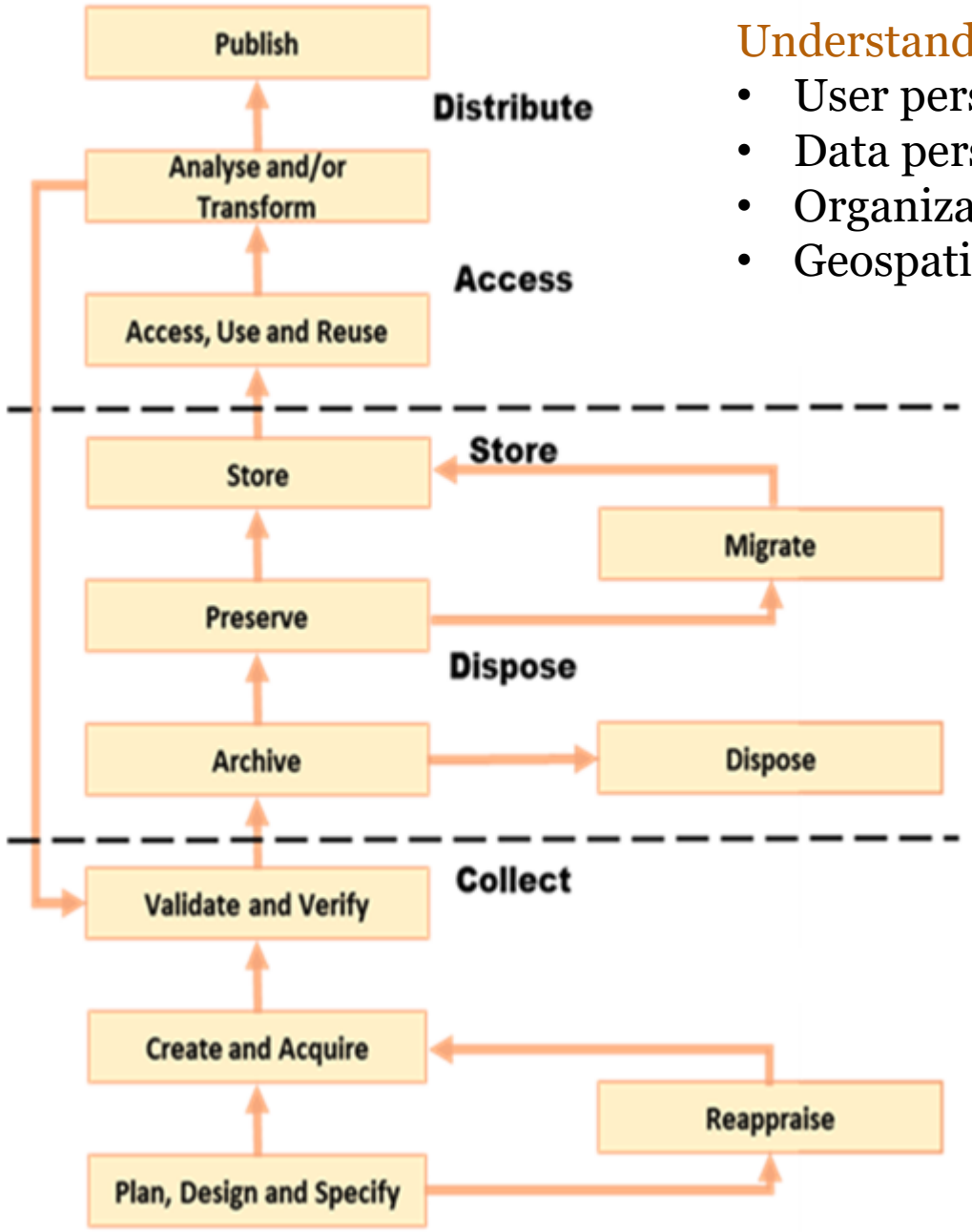
Direction Setting
1
Standards Governance
Standards Awareness
Strategic Goals
Understanding National Needs
2
National Governance Model
Interrelated Actions
• Governing Body (SP1)
• Geospatial Information Coordination Unit (SP1)
• Specialist Working Groups (SP1)
• Communication Plan (SP9)
Standards Baseline Survey
Baseline Survey
Standards Inventory
Planning for Change
3
Institutional Arrangements
Action Plan
Standards Needs Assessment and Gap Analysis
Roles and Responsibilities for National Standards Governance
Needs Assessment and Gap Analysis
Interrelated Action
• Data Inventory (SP4)
• Stakeholder Identification (SP9)
Taking Action
4
Implementation
Interrelated Action
• Metadata Management (SP4)
• Communication Plan (SP9)
Interrelated Action
• Community of Practice (SP8)
Communication and Engagement
Standards Training, Tools and Related Resources
Ongoing Management
5
Standards Review Program
Community of Practice
Risk Assessment
User Community Case Studies and Statements of Benefits
Community Good Practices
Capacity Development
Outcomes Achieved
6
Success Indicators
Compliance
Achieving Outcomes
Interrelated Action
• Benefits Realization (SP3)

Direction setting

- Understand the benefits of standards
- Identify the types of standards
- Understand the role of standards

- Strategy for implementation





Understanding organizational needs

- User perspective
- Data perspective
- Organizational / institutional perspective
- Geospatial data lifecycle

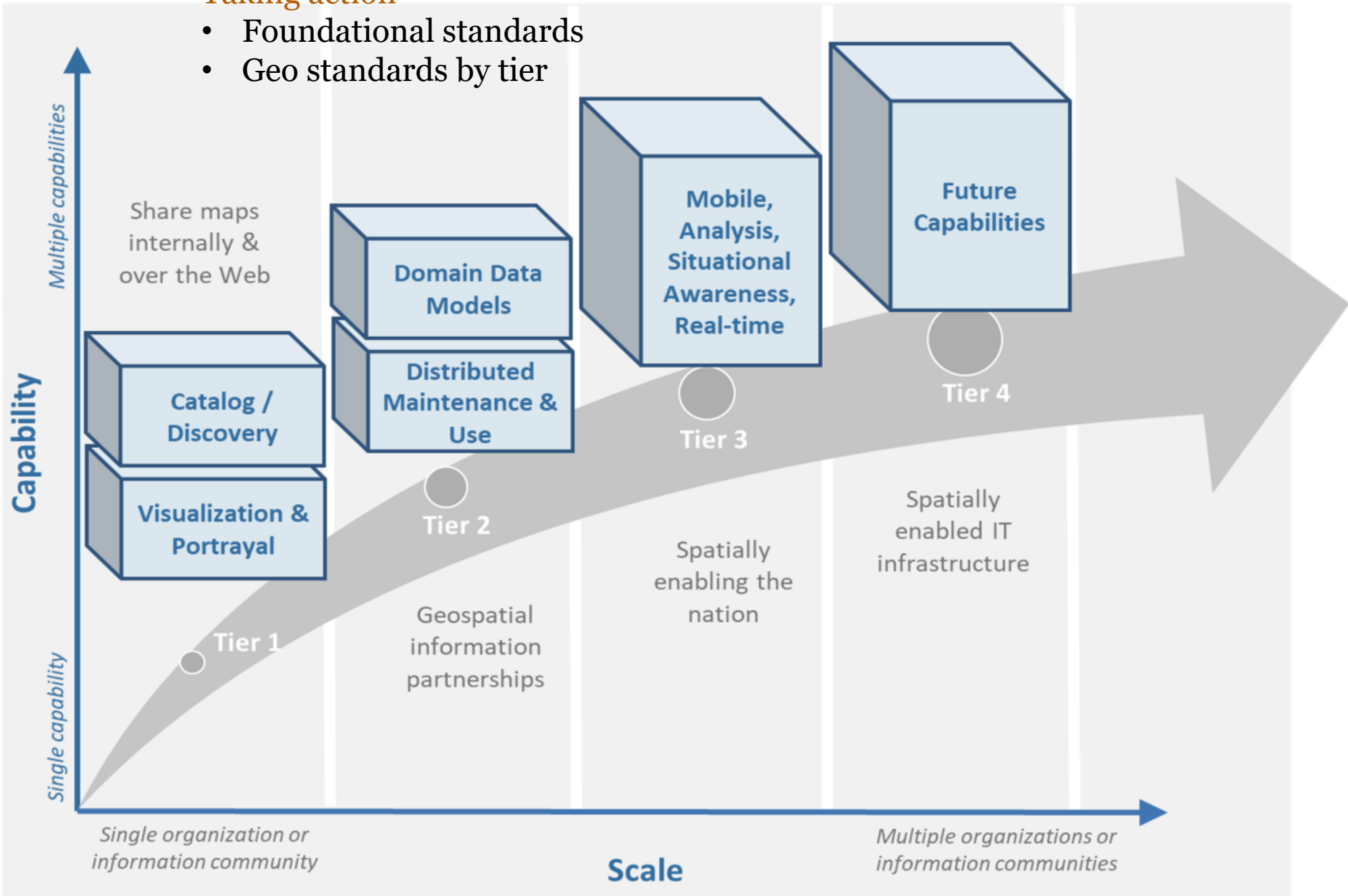
Planning for change

- Institutional arrangements
  - Governing bodies
  - National standards bodies
  - Standards development organisations
- Influencing adoption
  - Directives
  - Negotiation
  - Certification & compliance
  - Engagement
  - Spend controls

- Action plan: who, what, when
  - Costs & funding

Taking action

- Foundational standards
- Geo standards by tier



Ongoing management

- Review programme
- Communities of practice

Achieving outcomes

- Compliance
- Success indicators
- Training, tools, and resources
- Strategic goals and planning

Full of links & examples

UN-GGIM Standards Guide

online version

UNGGIM Standards Guide (ogc.org)

http://standards.unggim.ogc.org/

Open for continuous update

UN Sustainability

gital geographic information.

Geo data helps various SDGs

Good address data helps:

- recover from disasters (USA / Hurricane Katrina)
- plan & deliver health interventions (South Korea / COVID-19)
- deliver education (South Africa)
- enable voter registration & participation (South Africa)

Land cover mapping helps:

- Plan & monitor food production

City model for planning (Vienna, Austria; Chongqing, China)
Land administration / registration

TC 211 have been collecting examples: https://tinyurl.com/geo-stds-un

Standards help geo data do that

	General examples	Geo examples
APIs	SOAP “REST” / Open API	OGC API Features (ISO 19168) OGC Web Map Service (ISO 19128)
Formats	CSV XML JSON	OGC GML (ISO 19136) GeoJSON OGC GeoPackage
Semantics	Adobe PDF/A Dublin Core metadata	IHO S-100 Hydrographic data model OGC CityGML ISO 19115 Metadata

Standards help no get left behind

- Using standards at interfaces avoids having to buy into the same implementation everywhere
- “Borrowing” proven solutions – get a hand up
- Most standards have many implementations, commercial & open source, and communities to support them
- Fledgling software industries can get a ‘leg up’ implementing agreed specs

Accelerating implementation

- Geodata helps deliver (and monitor) SDGs
- Open standards help implementation – making data “FAIR”:
  - Findable
  - Accessible
  - Interoperable
  - Reusable
- Implementations deliver geodata
- Using standardised implementations enables delivering …

Why are the 3 SDOs presenting today?

- To raise awareness of the importance of standards
- To encourage more feedback on the Standards Guide
- Standards aren't really there for "compliance"
  - Accelerate implementation, reduce costs, enable innovation,…
- And we're here to help!

Contact us: three SDOs

UN-GGIM Standards Guide

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