International Cartographic Association
Association Cartographique Internationale

ICA Commission on **SDI and standards**

Full Commission Meeting

Aalto University, Helsinki

10-11 June 2016

WE MAPS
INTERNATIONAL MAP YEAR 2015–2016

Friday	
11:30	*Lunch*
13:00 – 14:00	Comments and suggestions on the Commssion's poster for the UN GGIM exhibition in August
14:00 – 14:30	Remote contribution by Sven Schade on JRC's "Geospatial Data Set Approach", followed by discussion of possibilities
14:30 – 16:00	Standards Wiki: status and further development, see wiki.icaci.org, click on Standards

Saturday	
9:00 – 10:00	Background on the ICA's SDI model (by Antony Cooper)
10:00 – 12:30	Collaborative work on an SDI conceptual model for universities etc. → Topic for ICC2017 (26 Oct), e.g. international SDI for universities → Topics for Masters projects
12:30 – 13:30	*Lunch*
13:30 – 15:00	Suggestions for the Interoperability Manifesto (paper & website)
15:00 – 15:30	Standards Wiki: status and further development, see wiki.icaci.org, click on Standards
15:30 – 16:00	Conclusions and next steps

Poster: comments/suggestions

- Data collection section
  - Add a picture for person-to-person survey (e.g. Census enumerator)
- Text on gray arrows
  - Remove bold text (headings) on arrows
  - Increase size of text on arrows, should be larger than other text (the arrows show the storyline, flow)
- Section with 8 maps
  - No need to add the index map of Gauteng
  - Text on the left: replace 'various with' 'many'
  - Add 'Living Conditions' to each of the four maps in the second row
- Section with geoportal screenshots, etc.
  - Remove 'SDI' heading
  - Table of stakeholders
    - Move table to below text defining an SDI?
    - Table heading: 'SDI stakeholders according to the ICA's SDI model' (merge columns for heading row)
  - Geoportal screenshots
    - Replace top left + CSIR geoportal with Korean and Chinese screenshots (see image notes)
    - Increase size of screenshots, it is important part of the poster
  - Reduce text to the left and right of geoportal screenshots
    - See document with revised text
- Remove list of references and information data sources
  - See proposed credits document
- See document with revised text

JRC's Geospatial Data Set Approach

- Remote contribution by Sven Schade

- Available on Commission website

United Nations
Economic Commission for Africa

ICA
ACI
International Cartographic Association
Association Cartographique Internationale

- **Mapping Africa for Africa**
  - Initiative of UN ECA CODIST-Geo
  - Endorsed and supported by the ICA

- **Guidelines of Best Practice for the Acquisition, Storage, Maintenance and Dissemination of Fundamental Geo-Spatial Datasets**
  - Target audience: practitioners in African countries
    - Usually but not always from national mapping organizations
    - Take account of conditions experienced in African countries
  - Open resource
  - Practical, 'hands-on' guide
  - Edited by Derek Clarke, former ICA Vice-President

Guidelines of Best Practice for the Acquisition, Storage, Maintenance and Dissemination of Fundamental Geo-Spatial Datasets

Editor: Derek Clarke

sdistandards.icaci.org

Part A: **Introduction**
Part B: **Ontology** of fundamental geo-spatial datasets
Part C: **Standards** for fundamental geo-spatial datasets
Part D: **Acquisition** of fundamental geo-spatial datasets
Part E: **Storage** of fundamental geo-spatial datasets
Part F: **Maintenance** of fundamental geo-spatial datasets
Part G: **Dissemination** of fundamental geo-spatial datasets
Part H: **Organizational issues**
Part I: **Users perspective** of fundamental geo-spatial datasets
Part J: **Versioning** of document
Annexures
References

Standards Wiki

- Status
  - Guidelines of Best Practice for the Acquisition, Storage, Maintenance and Dissemination of Fundamental Geo-Spatial Datasets
    - PDF converted to Wiki site
    - http://wiki.icaci.org, click on Standards
- Target audience
  - For practitioners who need to implement standards
- Objective
  - Information about benefits of implementing standards
  - Good practice guide for implementing standards
  - From the wiki, link to other resources about implementation of standards

Standards Wiki

- Tromso
  - Confirm with Bjornhild
    - Inclusion of figures OK?
    - Add text from Standards Guide to individual pages?
      - http://wiki.icaci.org/index.php?title=Standards#Infrastructure_standards
      - Format of standard names?
  - Ask Jean Brodeur to mention at OGC?
  - Invite translations
  - Edit-a-thon todo list
    - Add explanation for each standard on the Standards Home page (with each bullet, before clicking and opening next page)
    - Add images/pictures
    - Add 'See also' links
      - http://wiki.icaci.org/index.php?title=Addressing_%E2%80%93_Part_1:_Conceptual_model#See_also
      - Wolfgang Kresse's book

Standards Wiki

- After Tromso
  - Link to Standards Wiki from Commission website
  - Notify ICA Commission Chairs + Executive + Derek Clarke
    - Encourage them to add other sections to the Wiki
  - Submission to ICA Newsletter

Background on the ICA's SDI model

- Presentation by Antony Cooper

- To be made available on the Commission website

Who are these stakeholders in an academic SDI?

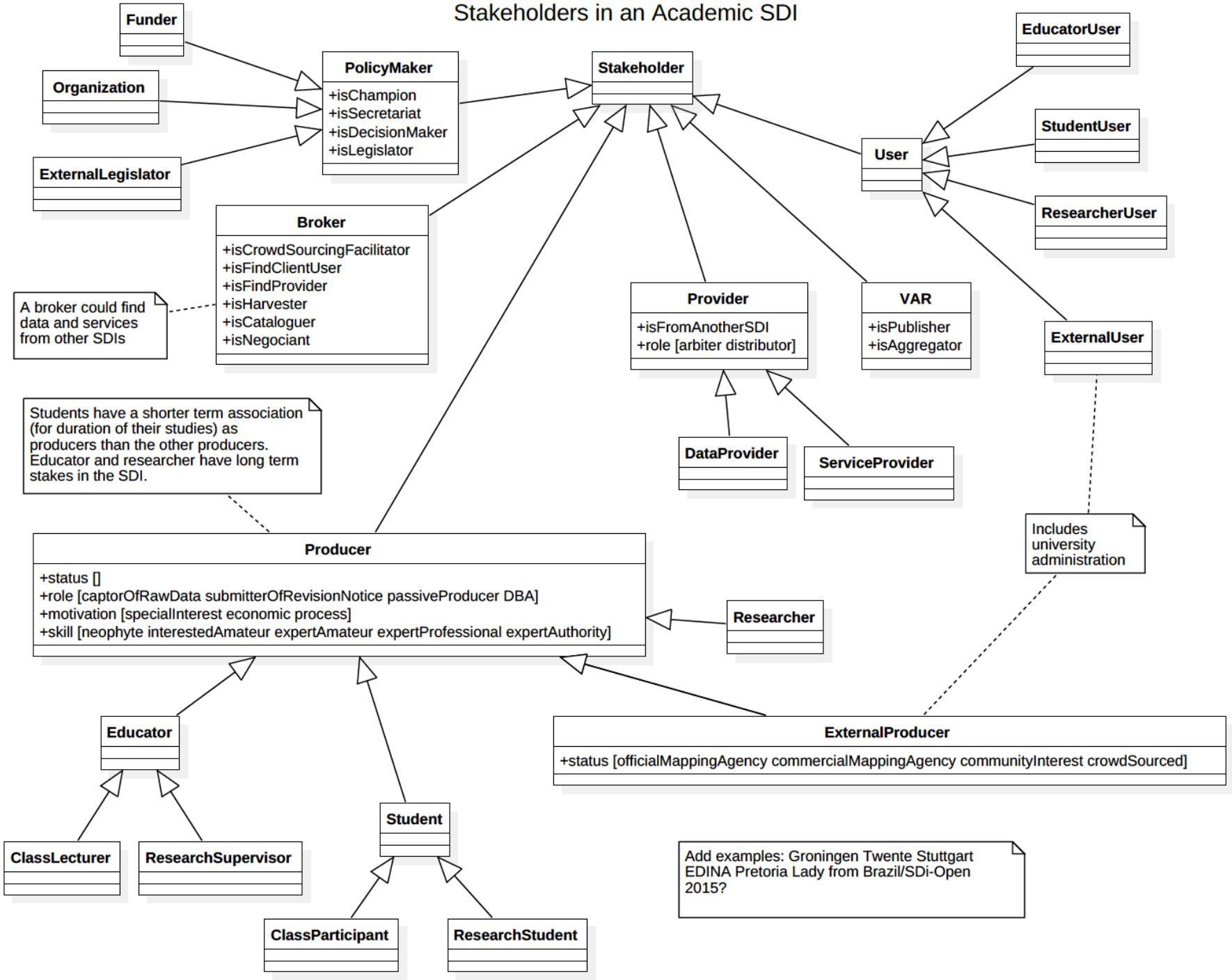
SDI stakeholders	
Policy maker	Sets the policy pursued by an SDI and all its stakeholders
Producer	Produces SDI data or services
Provider	Provides data or services to users throughout SDI
Broker	Brings users and providers together and assists in the negotiation of contracts between them
Value-added reseller	Adds some new feature to an existing product or group of products, and then makes it available as a new product
User	Uses the SDI for its intended purpose

Collaborative work

- Use the ICA's SDI model to describe an academic SDI
  - Stakeholders, roles, activities
  - Information viewpoint classes
  - Progress in Helsinki
    - First definition of an academic SDI
    - Sub-class the stakeholders

Academic SDI

- Academic SDI
  - A spatial data infrastructure that facilitates sharing and exchange of *spatial data produced for research and education and from research and education within universities and research institutes*
- National SDI
  - A spatial data infrastructure that facilitates sharing and exchange of *public spatial data* in a country


Stakeholders in an Academic SDI
Funder
Organization
ExternalLegislator
PolicyMaker
+isChampion
+isSecretariat
+isDecisionMaker
+isLegislator
Stakeholder
EducatorUser
StudentUser
ResearcherUser
User
Broker
+isCrowdSourcingFacilitator
+isFindClientUser
+isFindProvider
+isHarvester
+isCataloguer
+isNegociant
A broker could find data and services from other SDIs
Provider
+isFromAnotherSDI
+role [arbiter distributor]
VAR
+isPublisher
+isAggregator
ExternalUser
DataProvider
ServiceProvider
Students have a shorter term association (for duration of their studies) as producers than the other producers. Educator and researcher have long term stakes in the SDI.
Includes university administration
Producer
+status []
+role [captorOfRawData submitterOfRevisionNotice passiveProducer DBA]
+motivation [specialInterest economic process]
+skill [neophyte interestedAmateur expertAmateur expertProfessional expertAuthority]
Researcher
Educator
ExternalProducer
+status [officialMappingAgency commercialMappingAgency communityInterest crowdSourced]
Student
ClassLecturer
ResearchSupervisor
ClassParticipant
ResearchStudent
Add examples: Groningen Twente Stuttgart EDINA Pretoria Lady from Brazil/SDi-Open 2015?

Proposed paper for ICC2017

- First draft early in September
  - Skype calls
  - Contributions from other universities/research institutes about their SDI experiences
    - Stuttgart, Groningen, Twente, EDINA, Pretoria, CSIR
    - Anybody else?
- Final draft 26 September
- Submission on 26 October

Interoperability Manifesto

- Presentation by Franz-Josef Behr
- To be made available on the Commission website
- Followed by discussion…

Spatial data interoperability manifesto

- Target audience for the manifesto?
  - Encourage or inspire general users e.g. students

  OR
  - Define spatial data interoperability (by and for experts)
- Example
  - *Noting that*
    - *(problems)*
    - *…*
  - *We want a world in which*
    - *(ideal situation)*
    - *…*
  - *We commit ourselves to*
    - *Using open standards for spatial data encoding*
    - *Capturing metadata about spatial data*
    - *…*

To be decided…

Could be something like this…

Spatial data interoperability manifesto

- Next steps
  - Drafts of the manifesto (before July 2017)
  - Workshop on the manifesto at the ICC2017 in Washington
    - Together with the Commission on Open source geospatial technologies
  - Possible journal paper after that?

Member mailing list

- Mailing list for discussions
  - ica-sdistandards@lazarus.elte.hu
- WordPress Registered Subscribers for notifications
  - http://sdistandards.icaci.org
- If you want to join, email one of the Chairs
  - serenacoetzee@gmail.com or franz-josef.behr@hft-stuttgart.de

Progress on Commission Plan…

2016

✔ Full Commission meeting in June/July 2016

- AGILE 2016, June 2016 in Helsinki or XXIII ISPRS Congress, July 2016 in Prague
- Possible agenda items
  - Interoperability Manifesto
  - ICA conceptual model for an SDI for universities
  - Further work on the impact of SDIs on value added resellers

Mini-meeting at ISO/TC 211 week?
Mini-meeting at ISPRS Congress?

✔ Special issue in International Cartographic Journal

Reviews due 14 June

- *The role of SDI, standards, open data and open source in mapping*
- Invite authors of extended abstracts at SDI-Open 2015, but open to all
- Guest Editors
  - Chair, Vice-Chair, Previous Chair of Commissions on SDI&Standards, Open source geospatial technologies

Call for papers opens:	1 December 2015
Paper submission:	1 March 2016
Notification of acceptance:	1 June 2016
Publication of special issue:	1 December

Submit full conference paper to ICC2017 with results from the full Commission Meeting

2017	2018	2019
Full Commission Meeting: ICC2017 in *Washington DC*	Full Commission Meeting: Geomatics Indaba 2018 in *South Africa*, together with ICA Commission on Map Production and Geoinformation Management	Full Commission Meeting: ICC2019 in *Tokyo, Japan*
Submit journal article following on Full Commission Meeting in 2016	Submit full conference paper to ICC2019	Submit journal article following on Full Commission Meetings in 2017/8
Reporting session @ ICC2017 in *Washington DC*	-	Reporting session @ ICC2019 in *Tokyo, Japan*
Mini-meetings at other events, e.g. ISO/TC 211 plenary weeks, OGC meetings, other conferences, etc.		
Liaison ISO/TC 211 Geographic information/Geomatics Open Geospatial Consortium (University DWG) Global Spatial Data Infrastructure Association (GSDI)		

Spatial data interoperability manifesto?

Conclusions and next steps

- 2016
  - Feedback from Helsinki to other Commission Members
    - ISO/TC 211 in Tromso (13-17 June 2016)
    - ISPRS Congress in Prague (July 2016)
  - Activities
    - Wiki edit-a-thon in Tromso
    - Jean Brodeur/Dave Danko about Wiki at OGC in Ireland?
  - Paper submission (26 Oct)
- Commission meeting in Washington, July 2017
  - Pre-conference workshop
    - Spatial data interoperability manifesto
    - Together with the Commission on Open source geospatial technologies
    - Open (not restricted to members)
    - 1-2 days