

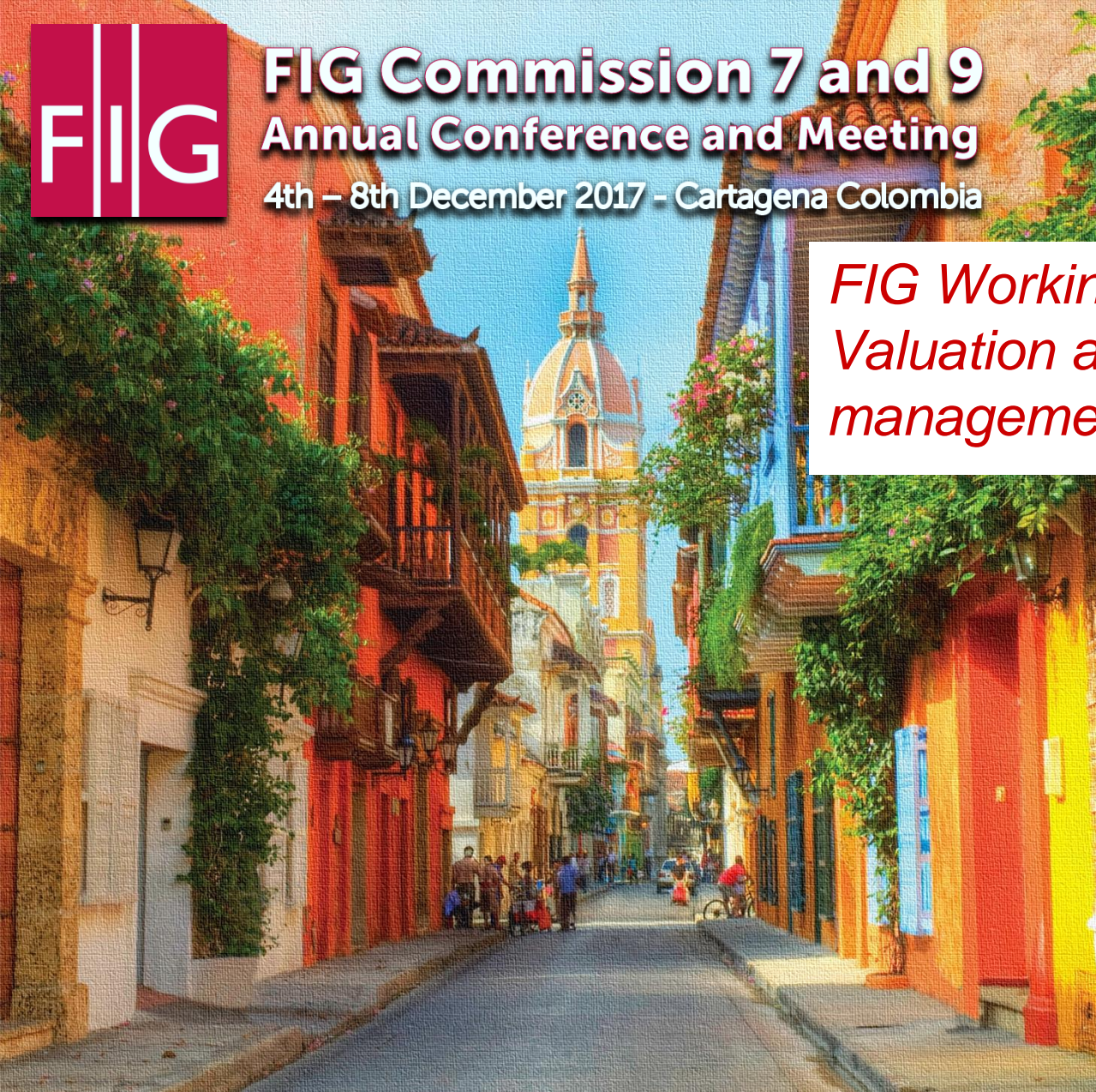


FIG Commission 7 and 9 Annual Conference and Meeting

4th – 8th December 2017 - Cartagena Colombia

FIG Working group 9.2 - Valuation and Real estate management through Fin-tech

Manohar Velpuri



Working Group 9.2

Introduction

Projects

Timeline and working group project updates

II plenary - ISO TC 307 report

Integration of Geospatial statistics and standards

UNGGIM HLPF

Conclusion and Reference



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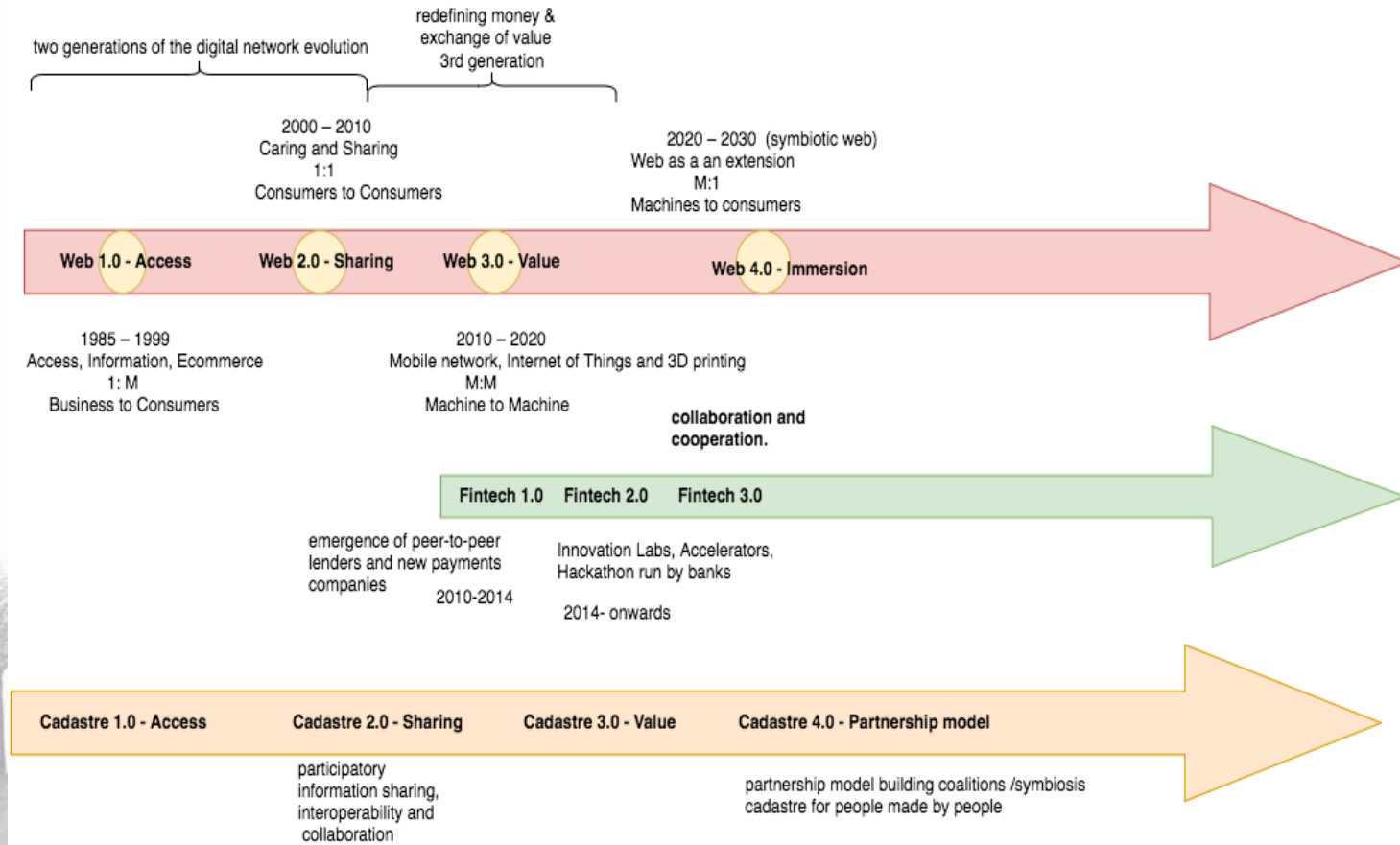
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- Working Group 9.2 - Valuation and Real estate management through Fin-tech focuses on fourth generation technologies used by the World Bank's approach to land engagement. Blockchain technology has been hailed by custodians as being the future of the real estate management industry with potential to streamline processes such as land and property registration, valuation of property and many more digital actions.
1. Does Fin-tech advance the professional practice of valuers and property managers working in most areas of real estate valuation and management;
 2. Research and publish “best practice use cases of Blockchain” for the benefit of surveyors in different jurisdictions and sectors of the industry. This will benefit the surveying community and improve our services to the wider public;
 3. Does Fin-tech's third and fourth wave facilitate and generate the exchange of information, knowledge and experience between surveyors for the benefit of the profession, our clients and the wider public in relation to the World Bank's fourth generation technologies on land engagements;
 4. Block-chain's role in publicizing and promoting the work of surveyors to the public, particularly to young people, governments and non-government organizations. Additionally, to enhance the value and perception of surveyors and the services they can deliver, especially in support of the global sustainability agenda and the UN Millennium Development Goals;
 5. Does Fintech 3.0 and 4.0 lead to better alternative financing and sustainable real estate markets while also enabling better policy framework through reforms.

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LandTech, Realtech and Fintech - (connects almost all commission's)



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Project 1 : Does Fin-tech advance the professional practice of valuers and property managers working in most areas of real estate valuation and management;

- Developing a framework as shown in figure below and it is being tested in several member nations of FIG.
- A poster was also presented in WB for formalising the informal using blockchain
- The role of Access to credit peer reviewed publication in FIG, working week, Helsinki.
- Property Taxation will have bigger impact due to the Fintech.
- DILRM project of India (16% of world population) to assess the impact of Fintech and changing technology on Real estate management.

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Project 2 : Research and publish “best practice use cases of Blockchain” for the benefit of surveyors in different jurisdictions and sectors of the industry. This will benefit the surveying community and improve our services to the wider public;

- Contacted several experts in different countries.
- Currently 6 contributors agreed to contribute.
- Projects in Ghana and Georgia. (WB support in Kenya)
- Articles in RICS - Land journal



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Project 3 : Does Fin-tech's third and fourth wave facilitate and generate the exchange of information, knowledge and experience between surveyors for the benefit of the profession, our clients and the wider public in relation to the World Bank's fourth generation technologies on land engagements;

- MoU with Government of Andhra Pradesh through an industry partner - Trade land finance consortium.
- The State of Andhra Pradesh, India was also featured in the guide on valuation of unregistered lands ranked No. 1 in Ease of doing business in India
- Fourth generation technologies used by the World Bank's approach to land administration systems that integrates important data (zoning, taxation, financial sector, market research, utilities and development of smart cities) as part of E- government programs.



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Project 4 : Block-chain's role in publicizing and promoting the work of surveyors to the public, particularly to young people, governments and non-government organizations. Additionally, to enhance the value and perception of surveyors and the services they can deliver, especially in support of the global sustainability agenda and the UN Millennium Development Goals; Why it fits the SDG and and WB/UN goals?

- UNGGIM Expert group meeting on Land administration domain model, TU delft, participated in LADM to support the global sustainability agenda
- sound real estate management is fundamental to achieving the 2030 Global agenda as set by the Sustainable Development Goals (SDG) of United Nations through improved access to credit
- Of the 17 goals, seven feature specific language on financial inclusion
 - SDG 1: No poverty
 - SDG 2: Zero hunger
 - SDG 3: Good health
 - SDG 5: Gender equality
 - SDG 8: Decent work and economic growth
 - SDG 9: Industry, innovation and infrastructure
 - SDG 10: Reduced inequalities



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Project 5 : Does Fintech 3.0 and 4.0 lead to better alternative financing and sustainable real estate markets while also enabling better policy framework through reforms.



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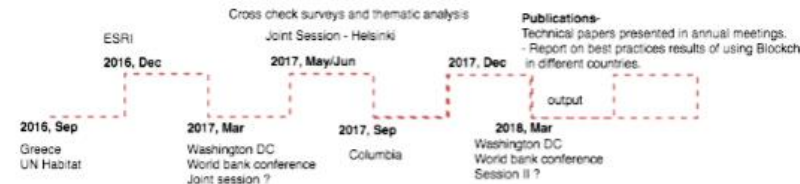
Outcome and Timeline

Publications :

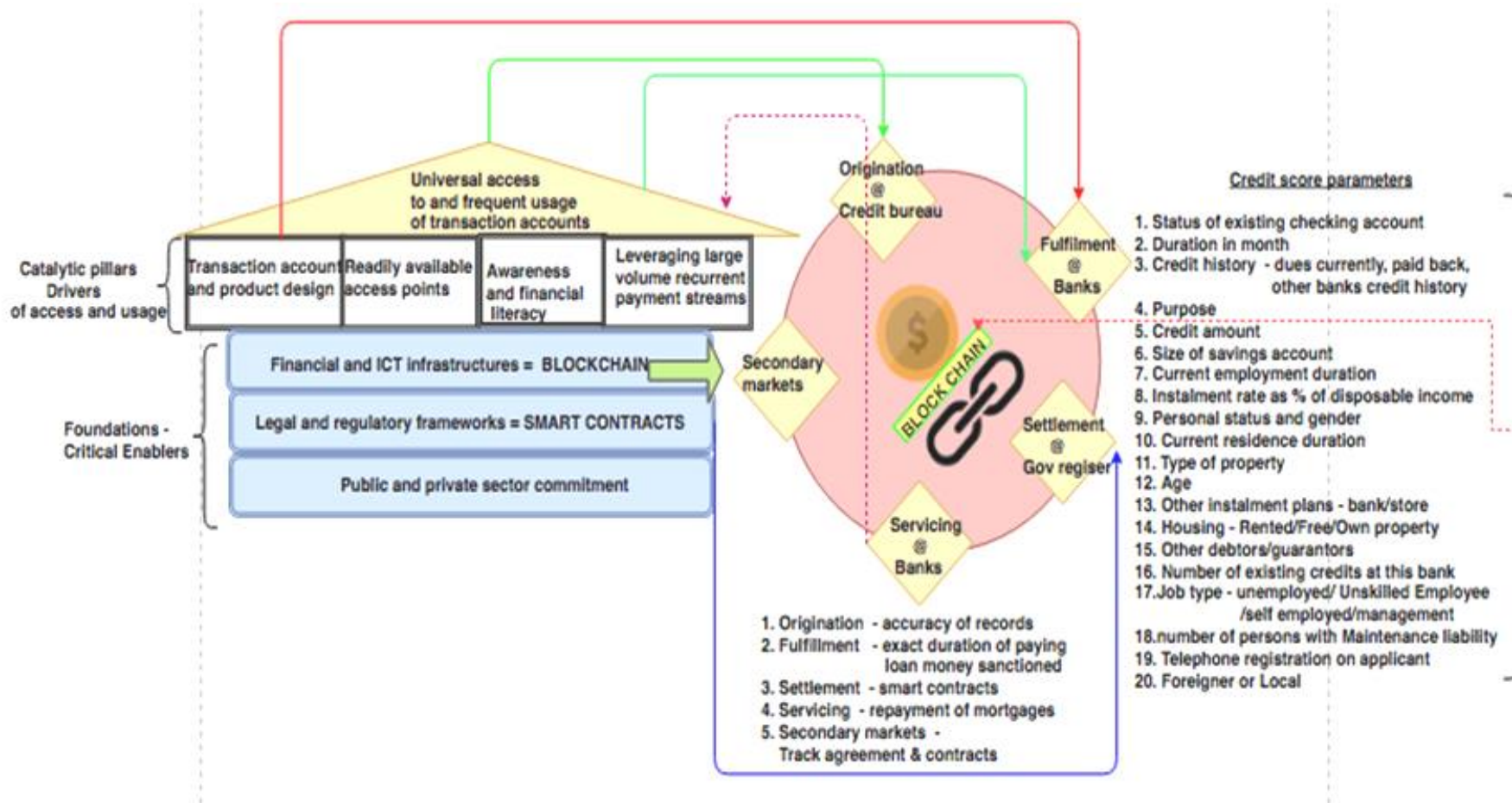
- Technical papers presented in annual meetings.
- Report on best practices results of using Blockchain in different

Timetable:

- 2016-2018: research papers for Technical Sessions.
- 2018: Final Report at FIG Congress.



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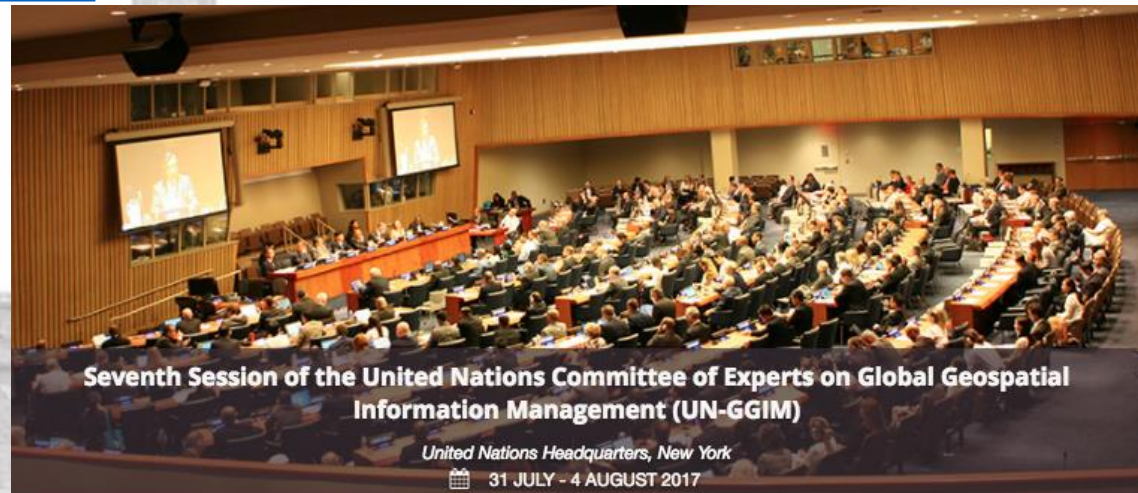


Working Group 9.2 - Jul-Aug 2017

7th session of UN Economic and Social Council, Dave Lovell, chair of the UNGGIM- geo spatial societies made the following statement -

“GGIM Geospatial Societies thanks the standards community for their vitally important work in developing standards and fully supports the use of existing international standards applicable to the creation, management and use of geospatial information, infrastructures and delivery arrangements. GGIM Geospatial Societies would like to highlight the importance of accelerating the process of developing new international standards given the rapid development of new technologies applicable to the achievement of the SDGs. In this regard we wish to draw attention to the importance of the work of ISO/TC 307 dealing with Blockchain and Electronic Distributed Ledger Technologies. A technology which has been hailed by custodians as being the future of the real estate management industry with potential to streamline processes such as land and property registration, valuation of property and many more digital actions.”

source : <http://ggim.un.org/meetings/GGIM-committee/7th-session/>



Seventh Session of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM)

United Nations Headquarters, New York

31 JULY - 4 AUGUST 2017



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Working Group 9.2 - Sep 2017

- Participated in <https://ec.europa.eu/digital-single-market/en/news/blockchain-and-distributed-ledger-technology-policy-and-standardisation-workshop>

The European Commission's DG Connect organised a workshop on September 12 and 13 on Blockchain and Distributed Ledger Technology policy and standardisation workshop. The first day gathered experts directly active in Blockchain/Distributed Ledger Technologies (DLT) standardisation while there was a broader audience for the second day, with representatives from governments, industry, NGOs, standards development organisations.



European Commission > Strategy > Digital Single Market > News >

Digital Single Market

EVENT REPORTS | 19 September 2017

Blockchain and Distributed Ledger Technology policy and standardisation workshop



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- Participated in Danish standards event (September 28, 2017)
- <https://www.ds.dk/da/kurser/seminarer-og-temadage/morgen-briefing/presentationer-og-materiale>.



About standards **Courses & events** Parti

COURSES & EVENTS

Morning Tribute to Blockchain Thursday, September 28, 2017

Blockchain - the road ahead v. Roman Beck, Professor, IT University

If you are interested in getting / see Roman's presentation, feel free to contact him at romb@itu.dk, where he has promised to share.

[Beyond Bitcoin - real-world Blockchain applications for community power](#)

Karim Jabbar, BLOC

Blockchain - international standards on the way

Astrid Bækby Knudsen, Danish Standard



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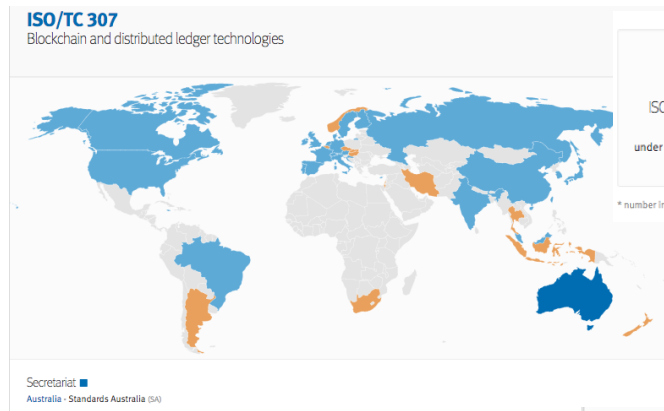
Working Group 9.2 - Nov 2017

- Participated in <https://www.unece.org/index.php?id=45404>
Details are available published in the aforesaid website
- Workshop on Integrating Geospatial and Statistical Standards 6 - 8 November 2017

The screenshot displays the UNECE website interface. At the top, there is a navigation menu with options: About UNECE, Our work, Themes, Where we work, Open UNECE, Events, Publications, and Media. Below the menu, a breadcrumb trail reads: UNECE > STATISTICS > MEETINGS AND EVENTS / MODERNISATION OF OFFICIAL STATISTICS > INTEGRATING GEOSPATIAL AND STATISTICAL STANDARDS. The main content area is titled 'Meetings & Events' and contains several filter dropdowns: PROGRAMME (All), AREA OF ACTIVITY (All), TYPE OF MEETING (All), and YEAR (All). A 'Go' button is located next to the Year filter. Below the filters, a search result is displayed for the 'Workshop on Integrating Geospatial and Statistical Standards' held from 6-8 November 2017. On the left side of the page, there is a sidebar with a 'Statistics' menu containing links for 'About us', 'Meetings and Events', 'Areas of Work' (with a sub-link for 'Conference of European Statisticians (CES)'), 'Economic statistics', 'Population, gender and society', and 'Sustainable development and...'. A search bar is visible in the top right corner of the website.

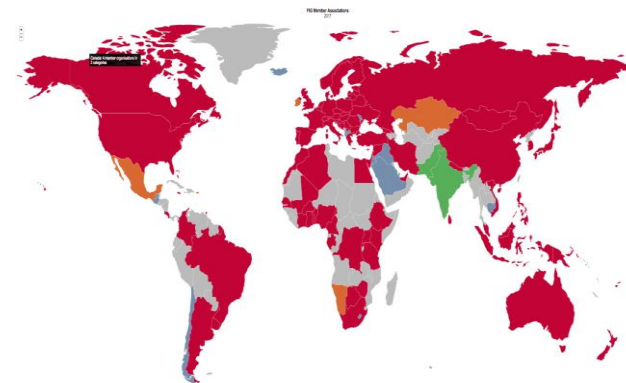
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Standards Australia : ISO - II plenary (Nov 2017)



27
Participating members

14
Observing members



Secretariat: Australia - Standards Australia (SA)

Participating Members (27) Observing Members (14)

Organizations in liaison (Category A and B)

Acronym	Title	Category
EC - European Commission	European Commission	A
FIG	International Federation of Surveyors	A
ITU	International Telecommunication Union	A
SWIFT	Society for Worldwide Interbank Financial Telecommunication	A
UNECE	United Nations Economic Commission for Europe	A

Ballot for establishment of a Category A liaison between ISO/TC 307 and FIG has passed - 15 (18 votes) - 3 (didn't vote)



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- 8 more countries as participating members (Brazil, Croatia, India, Ireland, Jamaica, Portugal, Sweden, and Switzerland) FIG is one of the 5 Liaison organisations. TC 307 is a liaison to 15 other standardization committees, and 13 other standardization committees are liaison to TC 307. There was a total of ~137 delegates at this second meeting of TC 307, up from ~89 at the first meeting.
- WG1 (Working Group 1) on Terminology - WG1 will be renamed to "Foundations" as 2 (NWIPs) from SG1 on "Reference architecture, Taxonomy and Ontology"
- NWIP ("Blockchain and distributed ledger technologies – Reference architecture") - (US) as the Project Leader. China, Korea and France) volunteered too.
- NWIP ("Blockchain and distributed ledger technologies – Taxonomy and Ontology) - China as the Project leader, France volunteered to participate.

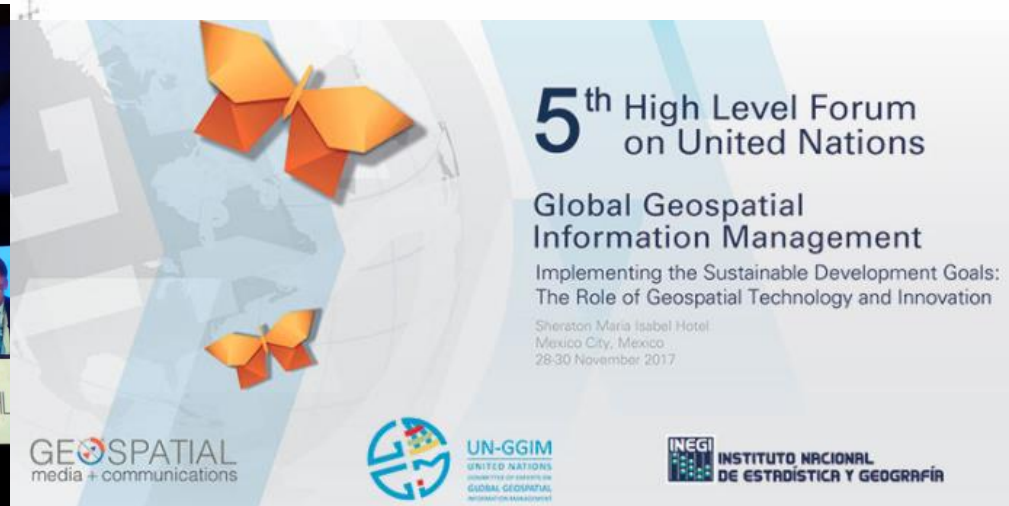


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- **SG2 (Study Group 2) on "Use Cases" showed only limited results, extended to the III meeting of TC 307 (in about six months).**
- **A new WG2 on "Security, privacy and identity" on the following Technical Reports: „Overview of privacy and PII protection“ – this will be led by UK , “Security risks and vulnerabilities“ – this will be led by Japan „Overview of identity“ N189 – this will be led by UK - (subject to ballot approvals)**
- **A new WG3 on "Smart contracts and their applications" (subject to a ballot) taking over from the previous SG4 on "Smart contracts". to begin "Overview of and interactions between Smart Contracts in blockchain and distributed ledger technology systems". NWIP ballot for a Technical Specification on "Legally binding smart contracts" . Australia as the Project Leader. If successful, a new WG (WG3) called „Smart contracts and their applications“ and Germany as Convenor.**
- **A new SG6 on “Governance of blockchain and distributed ledger technology systems” - Denmark.**
- **A new SG7 on “Interoperability of blockchain and distributed ledger technology systems” - Canada as Convenor**
- **III meeting- in London, May 14-18, 2018. IV meeting- May 2019 and V meeting : November 2019. The exact dates and locations of the fourth and fifth meetings will be decided within 4 weeks.**

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- Participated in <http://ggim.un.org/meetings/2017-Mexico>
- Details will soon be published in the aforesaid website



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Conclusion and further research

- **LandTech, Realtech, Fintech- Governance is relevant for FIG (surveyors role to good governance)**
- **We will cooperate with Commission 7 as well as the Task force on Real Estate Market Study, as well as other Commissions as appropriate. The WG will also work in close co-operation with UN-Habitat and the World Bank. The results will be presented in a joint seminar with UN-Habitat and the World Bank, perhaps in connection to the World Bank conference in Washington DC 2017-2018.**

“one blockchain may not fit all so does the policyholder’s existing program”

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References

- 1) <https://www.iso.org/committee/6266604.html>
- 2) http://www.fig.net/resources/proceedings/fig_proceedings/fig2015/papers/ts04j/TS04J_velpuri_pidugu_7668.pdf
- 3) https://www.fig.net/resources/proceedings/fig_proceedings/fig2009/papers/ts01a/ts01a_velpuri_stuedler_3436.pdf