FIG 3D Cadastres working group (joint commission 3 and 7 activity)

20-6-2017

Peter van Oosterom

FIG WW, 31 May 2017, Helsinki, Finland
Second half of the term 2014-2018
FIG 3D Cadastres Working Group

- 3D Cadastre is here to stay and #implementations increase
- ISO 19152, LADM conformance
- In 3D even more need to connect to other registrations via SDI: buildings, tunnels, cables/pipelines, terrain elevation, etc. (physical and legal 3D objects should be aligned)
- New topics: Experiences of operating; Mega-cities; Usability studies, web-dissemination and 3D cartography; 3D Cadastre as part full life cycle in 3D
Results / Plans 2014-2018

- 2014-18: Web-site and interest-group
  [www.gdmc.nl/3DCadastres](http://www.gdmc.nl/3DCadastres) (literature)
- 2014: second questionnaire 3D Cadastres
- 2014: 4th workshop on 3D Cadastres (9-11 Nov, Dubai)
- 2015-17: 3D Cadastres session at FIG working weeks
- 2016: 5th workshop on 3D Cadastres (18-20 Oct, Athens)
- 2017: special issue IJGI on 3D Cadastres
- 2017: 3D Australia Conference (24-27 Oct, Melbourne)
- 2017-18: FIG-publication on 3D Cadastres, 5 chapters
- 2018: third questionnaire 3D Cadastres
- 2018: presentation of the results FIG-congress
The 5th International FIG Workshop on 3D Cadastres will be organized in Athens Greece, 18 (afternoon) - 20 (morning) October 2016. Together with the 11th 3D Geoinfo Conference (20-21 October 2016), this is part of the Joint 3D Athens Conference 2016, Greece (http://www.3dathens2016.gr/).

The increasing complexity of infrastructures and densely built-up areas requires a proper registration of the legal status (private and public), which can only be provided to a limited extent by the existing 2D cadastral registrations. The registration of the legal status in complex 3D situations will be investigated under the header of 3D Cadastres. The 5th International Workshop on 3D Cadastres addresses the developments in the following areas:

- 3D Cadastre operational experiences (analysis, LADM based, learn from each other, discover gaps)
- 3D Cadastre cost effective work flow for new/updated 3D parcels = 4D (part of whole chain: from planning/design/permit in 3D, to registration/use in 3D)
- 3D Cadastre web-based dissemination (usability, man-machine interfaces, including mobile/AR)
- Legal aspects for 3D Cadastre, best legal practises in various legislation systems
- Focus on large cities, including developing countries
Some more details

- OGC Technical Committee Meeting, 20 – 23 June 2016, Dublin, Ireland, a new Domain Working Group on Land Administration was proposed: Land Admin DWG, incl. 3D Cadastres
- 6th Land Administration Domain Model (LADM 2017) workshop organized in Delft, the Netherlands, 16-17 March 2017 with focus on preparation on second edition
- 3D Australia Conference 2017 (24-27 October), which also includes 3D Cadastres symposium and training (24 October); http://3dgeoinfo2017.com/
- Work in progress: the FIG publication '3D Cadastre Best Practices: Legal Aspects, Initial Registration, 3D Information Modelling, 3D Data Management, and Visualization' is planned to have 5 chapters, and a foreword by FIG President Chryssy Potsiou.
Special Issue "Research and Development Progress in 3D Cadastral Systems"

- Special Issue Editors
- Special Issue Information
- Keywords
- Published Papers
- Planned Papers

A special issue of ISPRS International Journal of Geo-Information (ISSN 2220-9964).

Deadline for manuscript submissions: 31 August 2017

Special Issue Editors

Guest Editor
Prof. Dr. Ir. Peter van Oosterom
Section GIS technology, Department OTB Faculty of Architecture and the Built Environment, Delft University of Technology, Julianalaan 134, 2628 BL Delft, The Netherlands
Website | E-Mail

Interests: spatial databases (3D, performance, constraints, temporal, ...); GIS architectures; spatial analysis; generalization; vario-scale; 5D modeling; querying and presentation; internet/interoperable GIS and (3D) cadastral applications

Guest Editor
Assoc. Prof. Ef. Dimopoulou
School of Rural and Surveying Engineering, National Technical University of Athens, Iiron
Possible LADM Valuation extension, 3D
http://isoladm.org/ValuationQuestionnaire

Respondents
1. Argentina (D. A. Erba, C. A. Basilio)
2. Bolivia (J. G. A. Flores)
3. Brazil (E. Silva)
4. Colombia (D. R. Gutiérrez)
5. Costa Rica (J. M. Díaz)
6. Croatia (H. Tomić)
7. Cyprus (A. Aristidou)
8. Denmark (E. Stubkjaer)
9. Denmark (M. Velpuri)
10. Ecuador (F. R. Bueno)
11. Greece (Ch. Potsiou)
12. India (M. Velpuri)
13. Latvia (R. Pētersone)
14. Macedonia (V. Miskovski)
15. The Netherlands (R. Kathmann)
16. Poland (P. Parzych, J. Bydłosz)
17. Singapore (M. Velpuri)
18. Slovenia (D. Mitrović)
19. South Africa (M. Velpuri)
20. South Korea (L. Young-ho, K. Bong-Jun)
21. Spain (A. Velasco)
22. Turkey (V. Çağdaş, A. Kara)
23. UK (B. Elder)
24. UK (P. Wyatt)
Thanks!

- More info on [http://www.gdmc.nl/3DCadastres/](http://www.gdmc.nl/3DCadastres/)

- Not yet member of the WG?
  → send email to [P.J.M.vanOosterom@tudelft.nl](mailto:P.J.M.vanOosterom@tudelft.nl)