

# **Seventh Session of the United Nations Committee of Experts on Global Geospatial Information Management**

## **Report of the UN-GGIM Academic Network Forum**

Secure Land Rights and Smart Cities - Making It Work for  
Sustainable Development

31 July 2017  
Conference Room 11  
UN Headquarters, New York



## I. OVERVIEW

On 31 July 2017, the UN-GGIM Academic Network, in close collaboration with and the support of UN-Expert Group on Land Administration and Management, UN-GGIM Private Sector Network, and UN-GGIM Geospatial Societies, held a Forum at the United Nations Headquarters in New York. The Forum focused on the theme “Secure Land Rights and Smart Cities – Making It Work for Sustainable Development” as part of the Seventh Session of the United Nations Committee of Experts on Global Geospatial Information Management.

The Forum brought together over 100 delegates, geospatial experts, and academics from over 50 Member States, academic institutions, and the private sector. The participants discussed three major themes: i) the challenges and shortcomings of land rights in the context of rapid and transformative urbanization; ii) the technical and social requirements of developing smart cities for all; ii) the direct link between land rights, smart cities for all, and the SDGs and potential pathways towards the achievement of the SDGs.

The outcomes of the presentations and panels further emphasized the need for and significance of developing a roadmap to effectively secure land rights, achieve the SDGs and build smart cities for all, in which geospatial information will play a critical role. The Forum facilitated multi-disciplinary dialogue and created a platform for exchanging ideas while addressing challenges and future opportunities.

## II. OBJECTIVES

As the strategic knowledge, research, and training arm of the UN-GGIM, the Academic Network organized the Forum with the following objectives:

- a) Present the current status of land tenure, land rights and discuss research and practice in smart cities;
- b) Establish a dialogue and exchange ideas around land rights and explore the relationships between that and smart cities to address the challenges and opportunities;
- c) To identify relevant challenges and opportunities for the development of effective strategies to secure land rights and smart cities for sustainable development and build and strengthen capability concerning geospatial information and their use, particularly in developing countries;
- d) To develop a roadmap that promotes the development of policies, methods, standards and mechanisms to overcome the challenges and create a better linkage between land tenure, land rights and smart cities for all; and
- e) Develop a future work plan and research agenda to assist UN-GGIM and member states to respond to the SDGs.



### III. BACKGROUND

The Academic Network contributes to strengthening global geospatial information management and is committed to the achievement of the 17 SDGs. The development of future smart cities will require access to inclusive services, technologies, and infrastructures. The “leaving no one behind” principle of the SDGs intends to ensure that efforts towards a sustainable and smart future will develop a better future for all communities. Goals 1, 2, and 5 of the SDGs have designated targets and indicators linked to land tenure rights which signifies the fundamental role of land administration in building sustainable and smart cities for all. The UN-GGIM 2017-2021 Strategic Framework acknowledges the necessity of integrating geospatial information in the process of achieving the SDGs and developing future cities. Strengthening local, national, and global cooperation to foster the integration of legal and organizational frameworks including the SDGs, UN-GGIM 2017-2021 Strategic Framework, Sendai Framework, and Habitat III Urban Agenda will notably impact disaster management, development of adequate policies and regulations, climate action, efficient urban planning, and good institutional governance.

As United Nations Member States work towards a sustainable future, land tenure security is one of the greatest challenges identified in the UN-GGIM 2017-2021 Strategic Framework that requires the comprehensive management of geospatial information and resources to ensure social inclusion, economic growth, and environmental protection. The availability of effective and efficient land administration remains a problem worldwide, especially in developing countries where mature land information systems (LIS) and formal land registration systems are not available. Therefore, spatial inclusion, secure land rights, and sustainable land use are all major challenges resulting from rapid urbanization that public and private sectors need to address in the development of future smart cities. The UN-GGIM Academic Network recognizes the importance of promoting and sharing geospatial data and integration approaches, developing of legal and policy instruments, implementation of institutional management models, providing technical solution and standards, enhancing interoperability of systems and geospatial data, and improving access to quality and timely data. As a result, the Academic Network aims to work in the direction of resolution 2016/27 of the Economic and Social Council (ECOSOC) by promoting the sharing of geospatial data, enhancing capacity building, and inter-institutional cooperation for sustainable development, disaster risk reduction, and policymaking.

The Forum emphasized on issues pertinent to the development, implementation, and use of land administration systems in the global context of the SDGs and smart cities for all. The presentations and panel highlighted how the Academic Network and other UN-GGIM entities are contributing to the development of a roadmap of solutions that overcome land tenure challenges, facilitate the development of technologies and standards, and spatial data acquisition necessary to monitor and measure land indicators for the SDGs and development of smart cities.



## IV. OUTCOMES

The presentations concentrated on the need for closer and multi-disciplinary collaboration, linked and shared data, development of an infrastructure for SDG indicator registry. The following points highlight the major outcomes of the forum:

- a) Data is the glue that can keep together the 2030 Agenda: the development of a global data ecosystem is necessary
- b) Securing and rights require: data, standards, guidelines, tools, infrastructures, targets, indicators, creation and maintenance of digital land records, and global insight—partnerships, awareness and leadership and finance.
- c) The achievement of the SDGs will require: private, governmental, and academic partnerships
- d) Smart cities will be feasible if good governance is in place: performance, responsibility, and transparency
- e) Citizen Science is a key method of data collection: better and more relevant information
- f) Legal and policy requirements: protect people against excessive or unfair private power
- e) Identified the need to develop:
  - Capacity building activities
  - SDGs Research Registry Platform
  - Indicator Registry Infrastructure
  - Joint WG with PSN to address the gap between training and industry expectations
  - Joint WG with UN Geospatial Information Section to support UN Strategic Operation

## V. CONTACT INFORMATION

For more information, please contact:

Professor Abbas Rajabifard  
Chair, UN-GGIM Academic Network  
Director, Centre for SDIs and Land Administration  
Melbourne School of Engineering, The University of Melbourne  
T: +61 3 8344 0234  
E: [abbas.r@unimelb.edu.au](mailto:abbas.r@unimelb.edu.au)

Or visit:

<http://unggim.academicnetwork.org/>



## APPENDIX I

The Forum agenda was as follows:

TIME	DETAILS
<b>OPENING SESSION</b>	
	<b>Welcome and Opening Remarks: Setting the Scene</b>
<b>10:00-</b>	Mr. Stefan Schweinfest (Director, United Nations Statistics Division)
<b>10:20</b>	Prof. Abbas Rajabifard (Chair, UN-GGIM Academic Network; Director, Centre for SDIs and Land Administration, The University of Melbourne)
<b>SESSION 1 Moderator: Prof. Abbas Rajabifard</b>	
<b>SUSTAINABLE DEVELOPMENT GOALS: MAJOR DRIVERS, OPPORTUNITIES AND CHALLENGES</b>	
	<b>UN-GGIM Perspective</b> Mr. Greg Scott (United Nations Inter-Regional Advisor, UN-GGIM)
	<b>UN-GGIM EG-LAM Perspective</b> Mr. Kees de Zeeuw (Chair, UN-EG-LAM; Director, Kadaster International)
<b>10:20-</b>	<b>UN-GGIM Americas Perspective</b> Mr. Rolando Ocampo (Co-Chair, UN-GGIM; Chair, UN-GGIM Regional Committee for the Americas)
<b>11:20</b>	<b>Private Sector Network Observation</b> Ms. Denise McKenzie (UN-GGIM Private Sector Network; Executive Director, Communications and Outreach OGC)
	<b>The Role of Surveyors and Spatial Professionals</b> Dr. Chryssy Potsiou (President, FIG)
<b>SESSION 2 Moderator: Prof. Huayi Wu</b>	
<b>LAND TENURE AND SMART FUTURE CITIES</b>	
	<b>Land Tenure: Current Situation</b> Mr. Kees de Zeeuw (Chair, UN-EG-LAM ; Director, Kadaster International)
	<b>Smart Cities for All</b> Ms. Maryam Rabiee (Visiting Research Associate, Centre for SDIs and Land Administration, The University of Melbourne)
<b>11:20-</b>	<b>Good Governance for a Smart World</b> Prof. Joep Crompvoets (Advisory Board Member, UN-GGIM Academic Network; Secretary General, EuroSDR)
<b>12:30</b>	<b>Smart Citizen</b> Prof. Maria Brovelli (Deputy Chair, UN-GGIM Academic Network; Chair, SPRS WG IV/4)
	<b>Technologies and Standards</b> Ms. Denise McKenzie (UN-GGIM Private Sector Network; Executive Director, Communications and Outreach OGC)



12:30-13:30	<b>LUNCH</b>
<b>SESSION 3 Moderator: Prof. Joep Crompvoets</b>	
<b>SPATIAL ENABLEMENT AND REQUIREMENTS</b>	
	<p><b>Data Availability and Gaps</b> Dr. Kumar Navalur (President, DigitalGlobe Foundation)</p> <hr/> <p><b>Legal and Policy Requirement</b> Prof. Harlan Onsrud (Advisory Board Member, UN-GGIM Academic Network; University of Maine, USA)</p> <hr/> <p><b>The Geospatial Capacity Building Ecosystem</b> Prof. Josef Strobl (Advisory Board Member, UN-GGIM Academic Network; University of Salzburg, Austria)</p> <hr/> <p><b>UADI: Indicators Registration Platform</b> Prof. Abbas Rajabifard (Chair, UN-GGIM Academic Network; Director, Centre for SDIs and Land Administration, The University of Melbourne)</p> <hr/> <p><b>Next Generation Spatial Knowledge Infrastructure</b> Dr. Lesley Arnold (Cooperative Research Centre for Spatial Information, Australia)</p>
13:30-14:40	
<b>SESSION 4 Moderator: Prof. Harlan Onsrud</b>	
<b>PANEL DISCUSSION: POTENTIAL STRATEGY AND WORKPLAN/WAY FORWARD</b>	
	<p><b>UN-GGIM</b> Dr. Li Pengde (Co-Chair, UN-GGIM; Secretary General, UN-GGIM-AP)</p> <hr/> <p><b>Legal and Policy Frameworks</b> Mr. Kevin Pomfret (Centre for Spatial Law and Policy, USA)</p> <hr/> <p><b>UN-GGIM Geospatial Societies</b> Mr. Dave Lovell (Chair, UN-GGIM Geospatial Societies; President, Global Spatial Data Infrastructure-GSDI Association)</p> <hr/> <p><b>UN-GGIM Private Sector Network</b> Mr. Sanjay Kumar (Chair, UN-GGIM Private Sector Network; President, Association of Geospatial Industries)</p> <hr/> <p><b>UN-GGIM Academic Network</b> Prof. Menno-Jan Kraak (Advisory Board Member, UN-GGIM Academic Network; President, International Cartographic Association-ICA)</p>
14:40-15:40	
<b>CLOSING SESSION</b>	
<b>WRAP UP – FUTURE PLAN AND WAY FORWARD</b>	
15:40-16:00	<p><b>Closing Remarks: Way Forward</b> Prof. Abbas Rajabifard (Chair, UN-GGIM Academic Network, Director, Centre for SDIs and Land Administration, The University of Melbourne)</p>

