
FIG Commission 8

Spatial Planning and Development

Work Plan 2023–2026

1. Title

Responsible Knowledge Transfer and Innovation in Spatial Planning and Governance

2. Terms of Reference

- Responsible knowledge transfer and innovation
- Spatial and development planning policy, implementation, monitoring, and evaluation
- Land and spatial policy instruments
- Land and spatial governance
- Digitization of spatial planning processes
- Responsible transfer of spatial planning
- Valuation in spatial planning and land use
- Sustainable Development

3. Mission statement

Globalisation, in tandem with limited natural resources, has placed spatial planning and land management activities at the core of overcoming the global challenges of the day. The mission of commission 8 is to explore new approaches to spatial planning and governance, in order to balance the interests of stakeholder in pursuit of sustainable development in the short-, medium-, and long-term.

4. General

Food insecurity, changing social and economic demands, rural-urban divides, changing patterns of urbanisation, digitisation and disruptive technologies and the need for responsible approaches, among others, have posed new global challenges, as well as exerting pressure on land use as well as spatial governance. Spatial planning, development, and governance are intricately related to land tenure, and land value. Hence, activities, policies and innovations undertaken in the context of spatial planning and governance, will influence, or will be influenced by land tenure and land value, the land rights holders, as well as the users. From this angle, Commission 8 will seek to connect scientists, professionals and practitioners from the

various surveying disciplines and beyond, towards the responsible development and transfer of spatial planning tools, towards sustainable development.

These global challenges facing the society at different levels – local, regional, national, and supra-national, though may be characterised similarly, however, manifest differently, with differing effects at each level. Hence the solutions proffered for these problems also have to be shaped based on the local situation. This means inter-regional knowledge transfer needs to consider the political, social, economic, environmental context in both areas. Recent approaches to reaching the 2030 agenda have seen the transfer of, among others, spatial planning tools and instruments. The commission aims to provide the forum for scientists, policy developers, and practitioners in the spatial planning arena to reflect, review, orient, learn, and look ahead towards to achievement of the 2030 Agenda. These will be hooked onto the established guidelines and principles relating to sustainable development as well as spatial and land governance such as the sustainable development Goals (SDGs), the Voluntary Guidelines on the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT), Fit for Purpose Land Administration (FFP), and the participatory and Inclusive Land Readjustment (PILaR), as well as other FIG, World Bank and FAO publications.

The push of technological and digital innovations has created the need for new policy recommendations towards spatial development, as well as their implementation to meet the increasing global challenges identified. Central to these innovations is the participatory approaches that create the meeting point of local knowledge and professional and technical competencies through dialogues that give a voice to the key stakeholders, including the local people, professionals, scientists, and government. This will create the avenue for the responsible implementation of spatial planning instruments and policies such as land consolidation, land readjustment, compulsory land acquisition, land banking, pre-emptive rights, among others that have an effect on land rights towards spatial development. Participation is an important component of the spatial planning and development to achieve the buy in of all the major stakeholders.

To reach the goals of the 2023-2026 term, the following will form the focus of the Commission:

- Exploration of the short-, medium-, and long-term strategies for responsible knowledge transfer and innovation in the spatial planning sphere, with respect to the development of spatial planning tools.
- Discuss the processes of land and spatial policy conception, development, and implementation to support knowledge transfer and innovation.
- Explore rural-(peri-)urban dependencies and relations and raise awareness of planning issues for responsible solutions.

-
- Discuss and extend the impacts of digital transformation in the area of spatial planning and land management (in collaboration with Commission 7).
 - Investigate the role of valuation of informal and rural settlements in the development of spatial planning instruments and policies (in collaboration with Commission 9).
 - Investigation of the spatial planning on global challenges and well as the role of the former in the mitigation of the later.
 - Raise awareness of the need for responsible, participatory, and smart spatial planning decisions towards supporting sustainable social, economic, and environmental development.

5. Working Groups

6. Working Group 8.1 – Urban-rural land linkages

Urban and rural development, in terms of land issues, affects people in many ways. In busy cities and markets, people depend on the backward-forward exchange of agricultural goods to and from rural areas. Transport networks (including rivers) are crucial for rural residents who want to travel to the city and for urban residents who want to travel to rural areas. Agricultural activities, usually found in rural areas, provide leisure and food security for urban residents. These urban-rural (and their intersecting peri-urban) functions are intrinsically linked. They are hindered by different, as well as common, land challenges (Figure 1).

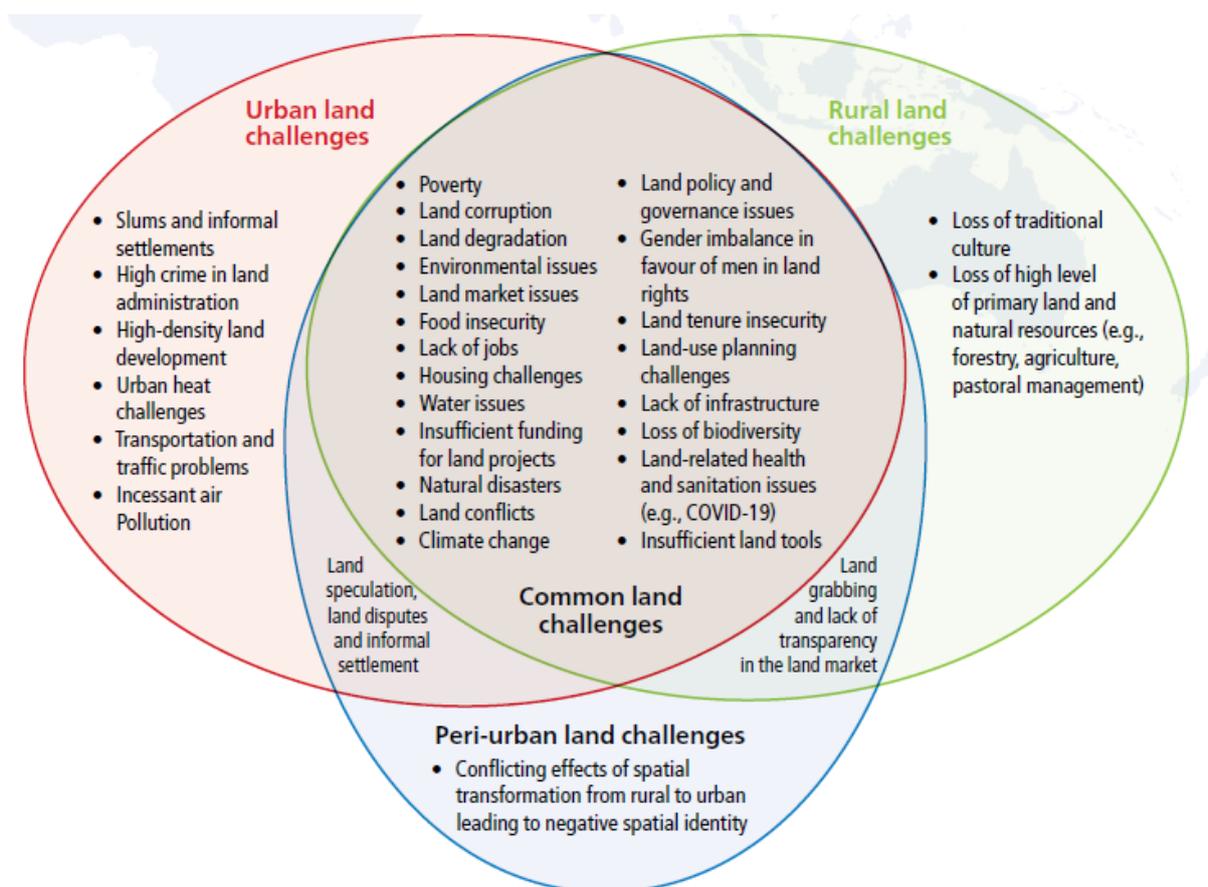


Figure 1: Examples of land problems in urban (including peri-urban) and rural areas

Efforts to improve their management must ensure that the land they occur on is secure and that the rights of those who use the land are protected. Tackling these land-related problems (and leveraging their interdependencies) requires better coordination of urban-rural land linkages to achieve balanced urban-rural spatial development. The concept of urban-rural land linkages (URLLs) and its framework for action emerged in response to land problems that affect urban and rural areas. It follows the work of other international institutions, particularly the UN-Habitat, on bringing together strategies that equally support urban and rural development.

Policy Issues

- Investigate how urban policies can consider the values of neighbouring rural areas for balanced urban-rural development.
- Probe how to develop and adapt continuum policies against poverty (through URLLs framework) can provide solutions that work simultaneously for urban, peri-urban and rural areas.
- Assess how urban, peri-urban and rural areas can learn from each other’s spatial planning (and development) experiences.

Chair: Uchendu Eugene Chigbu – Namibia University of Science and Technology, Namibia.

Email: echigbu@nust.na

Co-Chairs

Michael Klaus – Hanns Seidel Foundation, Germany.

Email: klaus@hss.de

Jennilee Kohima – Namibia University of Science and Technology, Namibia.

Email: jkohima@nust.na

Specific project(s): Create URLIs awareness for balanced spatial development and identify options for attaining equivalent living conditions in urban and rural areas.

Workshop(s): Special session at GLTN (UN-Habitat) events and FIG working week to discuss experiences on urban-rural linkages.

Publication(s): “Urban-Rural Land Linkages: A Concept and Framework for Action” (UN-Habitat, GLTN, NUST and FIG collaborations). Available: <https://gltn.net/2021/06/22/urban-rural-land-linkages-a-concept-and-framework-for-action/>

Timetable: 2024 Deliver a paper on urban-rural land linkages applications (in collaboration with GLTN, NUST and Hanns-Seidel-Foundation).

Beneficiaries: United Nations (GLTN), World Bank, FIG Professional Associations (and member organizations), Land Administrators, Planners, Civil Society Organizations, NGOs, governments, and Researchers.

7. Working Group 8.2 – Unregistered Land and large-scale acquisition/compensation (Joint Working Group with Commission 9)

Unregistered land rights are estimated to account for more than 70% of land rights in developing countries. Billions of investment dollars for large scale infrastructure projects are being held up due to a variety of problems. While international financial institutions such as the World Bank require compensation payments for recognizable rightsholders, many projects face difficulties to pay compensation to stakeholders (deemed legitimate or otherwise) because of complex and unclear regulatory environments that often surround unregistered lands and technical difficulties to properly value such lands. The problem is further compounded if the land is customarily used due to unclear boundaries, overlapping claims and political economy issues. Many projects need to find a way creatively by navigating through national legal systems to find some space, while also applying pressure on account of noncompliance. The UN GLTN Valuation of Unregistered Land—A Practice Manual – Global Land Tool Network (gltn.net) is the first global and cross profession operational manual to try to help valuers, land professionals, clients, policy makers and acquiring authorities get to grips with this complex subject.

Policy Issues

- Expansion of the Manual for the Valuation of Unregistered Lands with case studies.
- Identification of the effects and influence of non-market values in compulsory land acquisition and compensation.
- Transparency of rural and informal land markets

Chair – James Kavanagh, Director Land and Resources, RICS, UK

Email: jkavanagh@rics.org

Co-Chairs:

Mike McDermott, International Land Policy, Legal, Institutional and Valuation consultant, Australia

Email: mikemackd@hotmail.com

Peter Wyatt, Department of Real Estate and Planning, Henley Business School, University of Reading, UK

Email: p.wyatt@henley.reading.ac.uk

Ben Elder, Director Valuation, RICS, IVSC, UK

Email: belder@rics.org

Key Players :

Peter Ache and Commission 9.

Specific project(s)–

- Non-market value and its effect on compulsory acquisition and compensation

Workshop(s)

- Joint comm 8 & 9 (I'd also suggest comm 7) at all forthcoming FIG working weeks
- Possible separate seminar with UN GLTN and/or World Bank

Publication(s)

- Possible FIG publication on unregistered land valuation, and also an update of the seminal comm 8/9 publication [No. 54 \(fig.net\)](#)

Timetable

- Milestones linked directly to FIG working weeks with final workshop/output Cape Town 2026

Beneficiaries

- National land agencies, FIG members, professional surveyors and valuers, public

8. Working Group 8.3 – Spatial Planning Instruments and Climate Change (Joint Working Group with the FIG Young Surveyors Network)

The role of spatial planning in climate action has been widely recognized. The challenges resulting from climate change affect as well the mechanisms of spatial planning, as its tools. Spatial planning addresses land-related issues either in a normative (land use regulation) or strategic way (creation of a framework that provides policy guidelines for territorial development).

Mitigation and adaptation to climate change require a reconsideration of the role and scope of both (land use planning and strategic spatial planning).

The responsible implementation of spatial planning instruments such as land consolidation, land readjustment, compulsory land acquisition and land banking, among others, can support 'mainstreaming' of climate change actions.

WG 8.3 will seek to connect scientists, professionals, and practitioners towards the transfer of experiences in implementing adaptive spatial planning tools, that focus on minimizing potential damage, coping with the consequences of impacts, and taking advantage of new opportunities.

Policy Issues

- Exchange of knowledge and experiences among experts (policy developers, practitioners and academia) in adaptive spatial planning tools
- Assess how countries and regions can learn from each other's spatial planning tools and experiences
- Reflections on the optimal contributions and impacts of spatial planning instruments to promote sustainable practices and positive climate change impacts.

Chair – Adrianna Czarnecka, Department of Spatial Planning and Environmental Sciences, Faculty of Geodesy and Cartography, Warsaw University of Technology, Poland

Email: adrianna.czarnecka@pw.edu.pl

Wioleta Krupowicz, Department of Spatial Planning and Environmental Sciences, Faculty of Geodesy and Cartography, Warsaw University of Technology, Poland

Email: wioleta.krupowicz@pw.edu.pl

Charles Etonam Atakora, Geodetic Engineer- Vermessungsbüro Sommerhoff (Dortmund, Germany)

Email: charlieatakora@yahoo.co.uk

Specific project(s)

Workshop(s)

- Webinar on spatial planning instruments and climate change to exchange knowledge and experiences among experts from different countries and regions
- Special sessions at FIG working weeks/congress to present and discuss experiences on implementing adaptive spatial planning tools

Publication(s)

- Possible FIG publication on the role of spatial planning instruments in climate change mitigation and adaptation

Timetable

- 2024 – organize a webinar on spatial planning instruments and climate change
- 2026 – organize a special session at FIG Congress at Cape Town

Beneficiaries

- Government agencies with remote or direct interests, FAO, Planning firms and agencies, general public (to create and inform awareness of spatial planning instruments and their impact on climate change)

9. Working Group 8.4 – Digital Transformation for Land Management and Spatial Governance (Joint Working Group with Commission 7)

Digitisation, digitalisation and digital transformation are gaining prominence in policy efforts in many land-related areas around the world, as outlined in the recent FIG Publication No. 80. In addition to the benefits of efficiency and cost reduction of intra-sectoral processes, it also creates opportunities for cross-sectoral synergies that have hardly been exploited so far. This working group wants to expose best practices from cross-sectoral digital transformation efforts bridging land administration, land management, land use planning and spatial governance. It wants to highlight merits and synergies such as optimal data integration or interoperability but also explores challenges such as cybersecurity, capacity issues or alike. As digital developments have different impacts depending on the region, activities in this working group will pay attention to the diversity of regions highlighting particularities and ensuring that the same approach or evaluation scheme should not be applied everywhere.

Policy Issues

-
- Digitisation, digitalisation and digital transformation
 - Data Integration and interoperability
 - Regional digital disparities

Chairs:

Claudia Stöcker, University of Münster, Germany (Commission 7)
E-mail: claudia.stoecker@uni-muenster.de

Walter Timo de Vries, Technical University of Munich, Germany (Commission 8)
E-mail: wt.de-vries@tum.de

Key Players and Collaborators: Rohan Bennett and Commission 7

Specific project(s)

- Science-Policy-Practitioner dialogue discussing topics related to digital transformation for land management and spatial governance, possibly webinars focusing on specific regions.
- Possibly collaborate with cadastral template working group to see “advancements” and efforts of digital transformation at country level.

Workshop(s)

- Dedicated sessions at commission meetings and annual FIG working weeks and congress 2023, 2024, 2025 and the XVIII Congress 2026

Publication(s)

- Joint (intermediate) articles and presentations during FIG events with speakers and experts
- Publication (book) with inputs from the various working group activities (e.g. webinars, sessions, dialogues)

Beneficiaries

- FIG Member Associations as well as other related bodies

10. Working Group 8.5 – Spatial Plan and Valuation Information in LADM Context

In 2018, it was decided to review LADM and to extent the scope of LADM (Lemmen et al., 2021). Even if the Edition I of the standard had a broad vision, the emphasis was mainly on land registration processes and parcels of real property. The marine georegulation, valuation information and spatial plan information were purposely left aside of the scope of the standard. LADM Edition II is being designed as a multipart standard, and each part as a

standalone standard. Valuation and spatial plan information are included in Part 4 and 5, respectively ([URL](#)).

LADM Part 4 – Valuation Information is designed using the existing standard to represent all stages of administrative property valuation, namely representation of parties involved in valuations, identification of properties, assessment of properties through single or mass appraisal procedures, recording transaction prices, generation and representation of sales statistics, and dealing with appeals. It is expected that the proposed model in this standard may provide public bodies a common basis for the development of local and/or national information models and databases, enabling the integration of valuation databases with land administration databases, and can act as a guide for the private sector.

LADM Part 5 – Spatial Plan Information aims to provide the general reference model, as an extension of core LADM (both ISO 19152-1 and 19152-2), for all objects of spatial planning those covering land/water and below/on/above surfaces. It provides a conceptual model that represents and documents the complete view of RRRs from land administration and the spatial planning processes.

WG 8.5 will seek to connect scientists, professionals, and practitioners for:

- (a) supporting the development of LADM Part 4 and Part 5,
- (b) investigating the relationships between spatial plan and valuation information,
- (c) searching a way for the possible integration of Social Tenure Domain Model (STDM) with spatial plan and valuation information and so on.

Policy Issues

- Supporting the development of LADM Part 5 – Spatial Plan Information and also Part 4 – Valuation Information.
- Investigating the relationships between spatial plan and valuation information.
- Searching how to integrate STDM with spatial plan and valuation information.
- Supporting the implementation SDGs: LADM allows the implementation of relevant parts of international guiding documents such as the New Urban Agenda (UN, 2017), the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (FAO, 2012), the Continuum of Land Rights (UN-Habitat, 2008), the Fit-for-purpose land administration: guiding principles for country implementation (FIG/World Bank, 2014) and the Framework for Effective Land Administration (UN GGIM, 2020). All those fit well into the context of implementation of the Sustainable Developments Goals (SDGs).
- Exploring an active collaboration among the members of the WG, especially with the joint working group (Com. 3 and Com. 7) on ‘LADM and 3D LA’, and Com. 9.

Chair:

Abdullah Kara, TU Delft, The Netherlands

Email: a.kara@tudelft.nl

Co-Chairs:

Prof Peter van Oosterom, TU Delft, The Netherlands

Email: p.j.m.vanoosterom@tudelft.nl

Prof Christiaan Lemmen, ITC, Twente University, The Netherlands

Email: c.h.j.lemmen@utwente.nl

Specific project(s)

1. Revision of the ISO19152: 2012 Land Administration Domain Model (LADM) together with ISO TC211, and LADM/3D LA joint working group (Com. 3 + Com. 7)
2. Several PhD research projects on-going at the various involved universities.

Workshop(s)

1. 9th International FIG Workshop on 3D Land Administration and LADM, 11-13 October 2023, Gavle, Sweden (together with LADM/3D LA joint working group).
2. 10th International FIG Workshop on LADM and 3D LA, Fall 2024, Kuching city, Sarawak state, Malaysia (together with LADM/3D LA joint working group).
3. During FIG WW/ Congress 2024 & 2025 maybe specific sessions together with LADM/3D LA - tbd

For all workshops and publications the proceedings and papers are uploaded and maintained into 2 repositories, where also the archives of the literature on 3D and LADM is maintained (maybe those repositories will be merged into one -tbd):

<http://www.gdmc.nl/3dcadastres/literature/>

& <https://wiki.tudelft.nl/bin/view/Research/ISO19152/LadmPublications>.

Publication(s)

The planned publications for the next four years, resulting from the activities of WG 8.5, are the following:

1. Expected to be published in 2023: Special Issue '*Broadening 3D Land Administration*', Land Use Policy (LUP). Peter van Oosterom, Alias Abduhl Rahman, Eftychia Kalogianni, Mila Koeva (Editors),
2. Expected to be published in 2024-2025: Second Special Issue on LADM revision and initial experiences at a peer-reviewed journal.

Timetable

1. The timetable for the various part of LADM is:
 - a. Parts 1 (Generic Conceptual Model) and 3 (Marine Georegulation) are expected to become an international standard by the end of 2023.
 - b. Parts 2 (Land Registration), 4 (Valuation Information) and 5 (Spatial Plan Information) are expected to become an international standard by the middle / end of 2024.
 - c. Part 6 (Implementation) has yet to be started with lead role for OGC and industry (and input from FIG) with a New Work Item proposal middle 2023, hopefully resulting in an international standard by the end 2025/start 2026.
2. The timetable for the workshops and specific LADM/3D LA sessions at FIG WW/ Congress 2023, 2024, 2025 and 2026 is indicated above.

Beneficiaries

1. Governmental organisations responsible for land administration and cadastral registration, spatial planning, property valuation at various levels in government, ranging from national level to municipalities and all may be even levels above (UN, EU, Worldbank) or below (towns, neighbourhoods).
2. Industry developing and supporting land administration (components: tools, software, data, services) in areas such as surveying, planning, valuing, mapping, data management, updating/editing, dissemination, and visualization.
3. Academia (universities and research Institutions), industry, organisations (FIG, World Bank, RICS, International Academic Association on Planning, Law, and Property Rights (PLPR), Association of European Schools of Planning (AESOP), International Society of City and Regional Planners (ISOCARP)) and professionals with research interest, education program and activities in the fields of:
 - a. Land Administration and Cadastre
 - b. Spatial planning
 - c. Taxation and valuation
 - d. Standardisation activities in those fields at international (ISO19152 LADM, ISO16950, ISO 16739-1 IFC, etc.), European (CEN-CENELEC-ETSI SF-SSCC, etc.), national level
 - e. SDGs and land administration.

II. Co-operation with Other Commissions and organisations

The Commission intends cooperating with Commissions 7 and 9 as well as the Young Surveyors Network. Each commission in the partnership will contribute to the topic from the perspectives, knowledge, and expertise. Commission 8 will contribute to these topics from the spatial planning perspective. The joint working groups will also be jointly chaired by the respective commissions. In line with Commission 8's active support to active involvement of the FIG Young Surveyors into commission work, a joint working group (WG 8.3) has been formed with the network.

12. Co-operation with United Nation Organisations, Sister Associations and other Partners

Commission 8 will use opportunities to work together with relevant organisations and networks in the field of spatial planning. Relevant networks, such as AESOP (Association of European Schools of Planning), and in particular their thematic group Planning Law and Property Rights (PLPR), Food and Agriculture Organisation (FAO), LANDac, GLTN or UN-Habitat will be engaged in the roll out of the commission's activities. Activities may relate to publications, projects, or otherwise.

13. Commission Officers

Commission Chair

Dr. Kwabena Obeng Asiama
Kwame Nkrumah University of Science and Technology (KNUST),
Kumasi, Ghana.
Tel. +233-24-274-6415
Email: kwabena.asiama@knust.edu.gh; commission8@fig.net

Vice Chair of Administration

TBC

Chair of Working Group X.1

Prof. Uchendu Eugene Chigbu,
Namibia University of Science and Technology,
Namibia.
Email: echigbu@nust.na

Chair of Working Group X.2

James Kavanagh,
Director Land and Resources,
RICS, UK
Email: jkavanagh@rics.org

Chair of Working Group X.3

Adrianna Czarnecka,
Department of Spatial Planning and Environmental Sciences,
Faculty of Geodesy and Cartography,
Warsaw University of Technology, Poland
Email: adrianna.czarnecka@pw.edu.pl

Chair of Working Group X.4

Prof. Dr. Ir. Walter Timo de Vries,
Technical University of Munich,

Munich, Germany.

E-mail: wt.de-vries@tum.de

Chair of Working Group 5.5

Abdullah Kara, MSc.

Technical University of Delft,
Delft, The Netherlands,

Email: a.kara@tudelft.nl

Kwabena Obeng Asiama

Chair, FIG Commission 8

www.fig.net/commission8

Email: commission8@fig.net

xx.yy.2022/2023