

Commission 7

Report to the 43rd General Assembly

FIG Working Week 2020, Amsterdam, the Netherland

Introduction

As chair of Commission 7, I am pleased to present our Commission 7 annual report for the year 2019. We had an outstanding year with great participation of all working group chairs, delegates and friends of the commission. In this, the highlight was our 2019 annual meeting in Korea. LX was an outstanding host and, during the meeting, we work hard in meeting our targets in the work plan while ensuring a stronger than ever Commission 7 Network.

Work Plan progress

Our Commission 7 Work Plan for 2019-2023 was designed during our 2018 annual meeting in Bergen (Norway). The Commission's work plan is based on the pressing issues challenging developed and developing countries. Commission 7 focus for the next four years are:

- The role of the private sector in land tenure systems
- Tracking land-related SDGs indicators
- Digital twin and new technologies
- The role of the cadastre surveyor
- Urban challenges (with Commissions 8 and 9)

Thanks to the great work of Commission 7's working group chairs, delegates, friends and other colleagues, the Commission has made progress in all of its topics and in 2020 we are responding rapidly to the needs during the pandemic. Below is a report on each of the Working groups

Private sector role in land tenure

The role of the private sector in land tenure has been a key topic for many years in the international community. Commission 7 is taking on a leading role in supporting developing and developed countries on understanding this role. In this, we have joint efforts with UNECE Working Party in Land Administration (WPLA) in providing updated principles to use public-private partnerships (PPPs) as an instrument to engage the private sector in land reform projects. Kirsikka Riekkinen, Deputy Chair of WPLA is leading the taskforce in charge of this with outstanding colleagues that have volunteer for this review including Gerda Schennach from Austria, former chair of Commission 7.

The taskforce has already developed a questionnaire to be distributed among UNECE members and those participating in UNGGIM. Even though we are currently affected by the COVID19 Pandemic, we are expected to complete the work of the taskforce by first semester of 2021.

Tracking SDGs

FIG has been committed for a long time to support the UN and many other international organizations in achieving the SDGs globally. SDGs are not just for developing countries, many developed nations have committed to them as they have an important role to play in the climate crisis.

Since 2002 Commission 7 has been helping countries in benchmarking their land administration systems. During the time of Ian Williamson as Chair of the Commission, www.CadastreTemplate.org was created by Daniel Steudler from the Swiss Cadastre in 2002 (almost 20 years ago!). After all these years, Commission 7 has continued with this effort and it is now working with Professor Abbas Rajabifard from Melbourne University in new indicators and systems to track land-related SDGs in the context of community resilience.

Commission 7 has already developed a workplan with professor Rajabifard and we expect testing of some of the new developments during 2020 for deployment in the cadastretemplate platform in 2021.

Digital twin and future land technologies

All the new technological trends occurring in our daily life - such as mobile devices, automation and cloud systems - are also influencing how land information systems, both in the private and public sector, are developed. In 2019, [Korea LX](#) (their national cadastre institution) hosted an outstanding Commission 7 meeting in where countries around the world showcased their development, challenges and opportunities. Korean are leading the way on the digital twin followed closely by important developments in Australia and UK.

The contributions of all participating in the Annual meeting have been put in a summary video by Dr Rohan Bennet (see this link: <https://www.youtube.com/watch?v=6NgNgUHnYRs&t>)

For this Working group we are planning a white paper on the digital twin in 2021.

Urban environment and land tenure

Traditionally, Commission 7 has been focusing on rural tenure issues. Now, there is an increased pressure in cities to improve land administration systems and ensure urban and rural development are linked.

In this, and thanks to the fantastic leadership of GLTN, Commission 7 currently leads the Urban-Rural Land linkage Framework development. This work is being supported by the GLTN Professional Cluster.

This framework, expected to be released early in 2021, would support countries to better understand the interrelationship between urban and rural land issues and opportunities for synergies in their development projects, policies and regulations.

FIG Annual meeting 2019

The Annual Meeting of FIG Commission 7 was held in Seoul, Korea, for 5 days from August 5th to 9th. More than 100 people from 23 countries participated in the event sharing their knowledge and experience in the field of cadaster, land administration and geospatial information.

LX, the Korean public entity affiliated with the Ministry of Land, Infrastructure and Transport (MoLIT), organized the 2018 Commission's Annual Meeting in Bergen (Norway). LX's main functions include land surveying, and administration of geospatial information, global projects, research and education.



The Annual Meeting was impeccably organized, and every need of participants was met with the generous and warm hosting spirit of the Koreans. The result was an outstanding annual meeting with high-quality technical presentations, great friendly discussions and a lot of camaraderie among Commission 7 delegates.

During the meeting, we had the honour of the active participation of high-level members of LX, and also Mr Oumar Sylla (GLTN Unit Leader at the United Nations), Dr Orhan Ercan

(Vice president of FIG) and Ms Evamaria Uribe (National Director of the Cadastre and Mapping Agency of Colombia, IGAC).



[An active program full of productive discussions](#)

The Annual Meeting was composed of 2 days of seminars, 1 day to visit the Smart Geospatial Expo, 1 day for the annual meeting and the last day with a technical tour.

Day 1 started with the welcoming speeches from FIG Commission 7 Chair Daniel Paez, FIG Vice President Orhan Ercan, Director General of MoLIT Woo-Jun Sohn, CEO of LX Changhak Choi, and UN-GLTN leader Oumar Sylla. Then came an introduction of Korean Cadaster followed by the sharing of surveyor experiences from Korea, Australia, Netherlands, Canada, New Zealand, Sweden, Russia, among others. To finish the first day, there was a welcoming dinner with a Korean percussion performance, NANTA.



Day 2 was the main seminar with 17 presentations distributed in 3 sessions: (*Session 1*) *Smart City and Digital Twin*, (*Session 2*) *Cadaster and Land Administration*, and (*Session 3*) *Cadaster 4.0*. Through the seminar, we shared current contexts, challenges and methodologies in the sector of Smart Cities, Digital Twin, Land Administration, Land Information, Land Registration, Fit-for-Purpose, and PPP, among others.



In **Day 3**, all the FIG participants moved to the Smart Geospatial Expo 2019 at COEX, Seoul, to see the current technologies Korea is promoting to improve and develop the geospatial industry and create an environment where all countries can share their knowledge and experience for future cooperation and projects. The participation of FIG members to the Expo was a good opportunity to share the role of the FIG and surveyors more generally with other countries, and to emphasize the importance of cadaster and land management.

Day 4 involved country reports from Turkey, Colombia, Netherlands, New Zealand, Thailand, Germany and so on, to enhance understanding of local situations in specific countries and how they compare to one another.



On the last day the participants had a technical tour to the DMZ (Demilitarized Zone) to experience the history and the current situation of the divided two Koreas.



Take-home messages

During the Annual Meeting in Korea, a very informative seminar was held on key challenges and opportunities in land administration with vivid discussions during reports presented by countries. This was possible thanks to the passion and support of FIG members and all event participants.

Urbanization is accelerating and expanding around the world; it is important to improve technology to manage geospatial information, so our "smart cities" are platforms that include policies, institutions, technology and services that improve productivity and living standards for all. Ideally geospatial technologies will increase service access and productivity in rural areas. In urban areas, geospatial technologies such as Digital Twin can protect local environmental and aesthetic values.



During the meeting, I was pleased to see Korean LX taking a leadership role in developing and implementing the concept of a Digital Twin involving both digital and physical infrastructure to improve livability in rural and urban areas.

As Commission Chair, I am pleased that we are maintaining our role as a discussion

platform for ideas, technologies, trends and challenges. SDGs are the Commission's compass and key concepts of interest to the Commission are Fit-for-Purpose land administration, and Public-Private Partnership (PPP) combined with up-to-date technologies.

Our message that land tenure improvement is needed and these improvements are a powerful vehicle to achieve many SDGs is getting to decision-makers around the world. However, FIG Commission 7 cannot slow down. We need to keep finding solutions to land problems and accelerate their implementation. We cannot ignore that millions of people living in poverty and affected by the impacts of the climate crisis need our help.

Response to COVID 19 pandemic and recovery

In the immediate future, FIG Commission 7, The University of Melbourne and ESRI Colombia has joint on an effort to produce a rapid paper geospatial mobile technologies used as tools to respond to the pandemic. We are planning to present the document by June 2020.

No matter where you are in the world, recovering from COVID19 is likely to be underpinned by the country's land resources. Without good administration of them, recovery will be long and not meet the needs of the people. More than ever our world is in need of better land tenure systems to improve productivity so governments can fix their finances and, hopefully, local and regional conflict are reduced or avoided.

We envisage that at Commission 7 will be busier than ever in the next 5 years. For our Working Week in 2021 in the Netherlands, we all need to bring our best ideas and analysis to support economic and social recovery from this tragedy of the pandemic. In this, we cannot forget our commitment to our natural environment and we – surveyors - need to be part of key discussions to ensure pandemic recovery solutions are not just to fix immediate problems, but part of an overall sustainable development path in where solving climate change is in the centre of it.