Slide 1

Dr Diane Dumashie, RICS
FIG President

FIG Vision Toward 2030:
Partnership in Geospatial working

2024 Geospatial Intelligence Software Technology Conference:
Geospatial Intelligence,
Driving Quality Development

25-26 June 2024 Beijing, China

1

Slide 2

Geospatial is Everywhere

Co Pilot June 2024

2

Slide 3

Geospatial is Everywhere

You
Generate and image of 'geospatial is everywhere'

Copilot
I'll try to create that.

As we look to the future,
it will become increasingly apparent that the payoffs from data (smart / geo) infrastructure,
will be even more dependent on
the intelligence of our decision making today…..,
Rather than on the application and technologies we deploy

Qoute: R Talwar CEO, Fast Futures London RICS Sept 2018 Modus

We are navigating in a changing & challenging world

3

Slide 4

Our Profession:
Serving People and Planet

2030 AGENDA
FOR SUSTAINABLE DEVELOPMENT

It is all about People!
- **The 2030 Agenda:** agreed and united global policy to transform t**he** social, economic and environmental **dimensions of humanity and our planet**

- **Context of considerable global challenges**
- **Geospatial Intelligence: Driving Quality Development**

- **Why Partnerships matter**

4

Slide 5

Overview

1. FIG: Who What and Why

2. Shaping the Future: How

3. Partnerships: What and Who

4. Final Words

5

Slide 6

Overview

1. FIG: Who What and Why

2. Shaping the Future: How

3. Partnerships: What and Who

4. Final Words

6

1

Slide 7

1. Who and What:
International Federation of Surveyors

FIG:
- Members organisation, (115 + countries incl **China**; Ministry L&R+ CSGPC, CIREA, CLSS + Academic + Corp SuperMap
- FIG Contribution: knowledge generation, outreach and capacity building
  - **Professional: Standards**
  - **Institutional: Build capacity**
  - **Global Development: Regional/ International**

7

Slide 8

How: Depth of experience
Survey and Geospatial

Activity and outputs with Commissions:
1. Professional **standards & practice**
2. Professional **Education**
3. **Spatial information management**
4. **Hydrography**
5. **Positioning and measurement**
6. **Engineering** surveys
7. **Land management & cadastre**
8. **Spatial planning** and economic development
9. Valuation and **real estate**
10. **Construction** economics

and, **FIG** Networks, Permanent Inst

8

Slide 9

Addressing a Profession in Geospatial

A Focus on Data with:
- **Commission 3** - Spatial Information Management
- **Commission 9** - Valuation & Management of Real Estate
- Geospatial data technologies
  - part of the current wave of digital developments, (4th industrial revolution),
  - alongside the internet of things and emerging applications
  - grouped loosely together as artificial intelligence (AI).

Dr. **Sagi Dalyot**, Israel

Mr. **Peter R. Ache**, Germany

- Commissions develop <u>capacity</u> to ensure that as individuals and a federation of members we remain <u>relevant and capable of benefiting people and the planet</u>

9

Slide 10

How: Depth of experience

How we tackle the global challenges FIG Members, led by
- Council & Task Forces
- Commissions (including cadaster, 3, 4, 8,9, 10)
- Networks (incl Standards)
- Permanent institutions

- Engagement, Collaboration, Activity and outputs
  - in our collective hands:…..
    - In partnership

10

Slide 11

'Tackling the Global Challenges'
FIG action orientated theme

LYNDA GRATTON
THE SHIFT
The future of work is already here

Prof Gratton:
wwwlyndagratton.com

Five Forces:
- **Climate action** and the needs of a low carbon economy / also Energy and resources
- Rapid advances in **Technology and digital revolution**
- **Globalisation** and **communication**
- **(Settlements and (Rapid) urbanisation)**

Society's needs (and benefits):
- Transformational **societal** changes and expectations
- Profound changes in longevity and **demography**

11

Slide 12

The Next Decade: Act on the Trends

The SDGs
were the crowning
global achievement of 2015 and 2030 is close;

but survey professionals deal in global and local realities.

Are we still relevant?

Yes, with **Purposeful** and **Continuing intent;**
In Survey and Geospatial………

12

Slide 13

Overview

1. **FIG: Who What and Why**

2. **FIG Shaping the Future: How**

3. **Partnerships: What and Who**

4. **Final Words**

13

Slide 14

2. How: The Future We want to shape

Graphic: UN HABITAT

Our work plan aims to deliver and Demonstrate our resolve

Vision:
- **Serving Society, benefitting people and the planet**

Theme:
- **Tackling the Global Challenges** (Trends and crisis)
- Continue to develop <u>capacity</u> and grow to ensure that as individuals and a federation of members we remain <u>relevant and capable of benefiting people and the planet</u>

14

Slide 15

Work Plan Aims and Pillars

FIG Aims:
- Planet
- People
- Partnership
- Governance and Communication

Sustainability runs throughout our work
- Task Forces are our <u>Pillars</u> and focussed to unpack our Relevance & Societal benefit
- FIG Commissions and FIG community working together achieves our <u>Theme</u>

Above all,

FIG works in <u>Partnership</u>

15

Slide 16

Pillar i: Planet

Sustainability aim is making sure:
- We make the best use of land and marine resources, and
- 0ur cities and settlements are resilient and adaptive
- Play a more prominent role in the climate agenda

- **TF: 2030 Agenda & SDG's,**
  Chair: Paula Dijkstra (Holland)
- **TF: Climate Compass,**
  Co-Chairs: Roshni Sharma & Clarissa Augustinus (South Africa)

16

Slide 17

Pillar ii: People

- Sustainability is about making sure we demonstrate Equity, Diversity & Inclusion, leaving no one behind in our profession…..
- And build and maintaining our professional competence to ensure societal relevance

- **TF: Role in Trends and Geospatial Information Ecosystems**
  Chair: Prof Abbas Rajabfard (Australia)

- TF: Diversity and inclusion in the Surveying Profession
- Chair: Stephen Djaba (Ghana)

17

Slide 18

FIG Working Weeks; Pillars & Member Partners

Build on Pillars

- 2023 Orlando – Sustainability & Climate
  – Protecting our world Conquering New Frontiers
- 2024 Accra – Planet & Resources
  – Building resilient environment
- **2025 Brisbane – Geospatial/ People**
  – **Collaboration, Innovation and Resilience: Championing a Digital Generation**
- 2026 Cape Town - Congress

AND: **FIG Katmandu, Nepal 12th November**
https:www.fig.net/nepal2024

18

3

Overview

1. FIG: Who What and Why

2. Shaping the Future: How

3. Partnerships: What and Who

4. Final Words

19

---

3. Pillar iii: Partnerships

Sustainability is about making sure that both internal and external partnerships are working effectively and cultivating stronger engagement

Our relationships;
- Effective **(All) member engagement**
- **You:** M L&R+ CSGPC, CIREA, CLSS + Academic + SuperMap and more?
- Building and working for mutual benefit with external partners, and
- Providing Institutional capacity development

And, **with UN ..... But note....**

20

Data Connectivity and Land Management

pixabay.com/illustrations/system-web-network-connection-3699542/ Gerald

Critical questions
- Collaborating to address challenges
- Considering land management & Geo

And
- Commission working

21

Connectivity - Critical Questions

- **Connected society;** yet our connectivity is lacking? with a trillion plus connected objects; a continuous stream of data, how to handle all that information?
- E.g car journeys: gathered by automobile manufacturers
- **Governments and business:** To: attract, retain and grow means it is an imperative to have globally competitive broadband speeds...........
- **Data poverty:** Un even access to internet across the world
- **Ethics:** Frameworks and standards in Geo spatial data

22

Addressing (some) global challenges
### Commission 3 spatial data and 9 Appraisal

- WG 3.1: **Geospatial data: professionalism, technology, and services**
- WG 3.2: **Urban challenges in developing countries** (joint WG with Commission 9
- WG3.3: **GIS for sustainable (geo-)spatial planning** (joint WG with Commission 8
- WG3.4: **LADM and 3D LA** (Joint WG with Commission 7)
- WG3.5: **Geospatial next** (joint with the Young Surveyors Network)

- **Definition of Transparency on Real Estate Markets** (WG 9.1)
- **Best practice Cases on Transparent Real estate Markets** (WG 9.2)
- **Automated Valuation Modelling (AVM) with machine learning and artificial intelligence** (WG 9.3)

- **Connectivity:** We require better thought-out and more transparent solutions
- Who has access to our data? how will it be used? how secure is the IoT?

- Technology is racing to make possibilities, but there is a <u>need to take decisions based</u> on factors we could never considered or even captured before

23

Land management (LM) activities reflect drivers of globalization and technology.
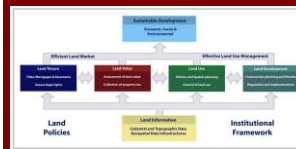
- Land governance: policies, processes and institutions key to achieve agenda 2030
- The **Land management paradigm**: LA functions (land tenure, value, use + development)

Importantly,
- LM activities establish multifunctional information systems, incorporating our technical diversity and other useful data.

In turn:
- **Sustainable development, demands comprehensive data information** about environmental, social, economic, and governance conditions along with other land related data.

24

4

The cadaster as an engine of LAS –
the virtual "butterfly" diagram
Williamson, Enemark, Wallace, Rajabifard, 2010).
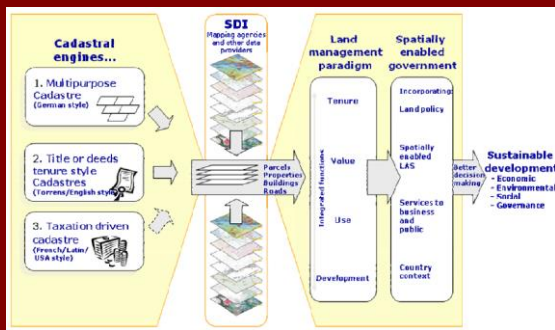
25

Spatial Data Infrastructure – Comm 3
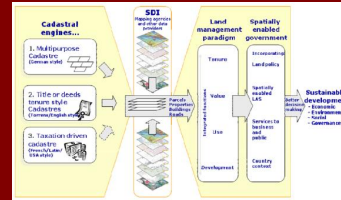
- **The cadaster as an engine of LAS** – the virtual "butterfly" diagram (Williamson, Enemark, Wallace, Rajabifard, 2010).
- Represented by one wing the cadastral processes, and the other the outcome of using the processes to implement the land management paradigm.
- **Once the cadastral data are integrated within the SDI (body of the butterfly), the full multipurpose benefit of the LAS/LM, so essential for sustainability, can be achieved**.

26

FIG and UN Partnership

Sister organisations they see the FIG benefits
UN Habitat/ GLTN and World Bank
- Informal land markets and valuation of Unregistered Lands (FIG lead Member RICS)

UN GGIM
- Observer status, Geospatial Societies
- Working Groups (LAM, Geodesy, DM + Hydro)
- Regional working (Africa, Asia Pacific & Americas)
And…….
- Partner UN GGIM Subcommittees, on Land Management & on Geodesy (FIG Chair Ryan Keenan)

- And……..

27

UNGGIM Centres of Excellence

Geospatial intelligence
- **Deqing, China:**
- Established the UN Global Geospatial Knowledge and Innovation Centre (UN-GGKIC)
- to provide opportunities to develop and expand global geospatial capacity, competence

- **Bonn, Germany**: Global Geodetic Center of excellence
- **Riyadh, Saudi Arabia**: Global Geospatial Ecosystem Centre of Excellence

28

Collaboration with UN Habitat

Engagement promoting housing & sustainable urbanization**:**
- **World Urban Forums** attendance
  - Presenting and Habitat Professionals Forum
  - 2024 Egypt WUF. Note **Nanjing 2008** - harmonious urbanization and balanced territorial development.
- **Who & What:**
  - FIG/ GLTN Urban & Rural interface
  - **UN-Habitat China office** has collaborations with national agencies and cities in China, on urban planning and design/ regeneration, heritage, smart cities, urban/ rural revitalization and other topics.
  - **Chinese partners** on the spatial challenges of metropolitan cities and neighborhoods and promotes participatory planning and design tools.

29

Overview

1. FIG: Who What and Why

2. Shaping the Future: How

3. Partnerships: What and Who

4. Final Words

30

4. Tackling the Global Challenges

It is all about People!

Relevance requires a **Purposeful** and continuing intent to implement and to drive quality development

- Looking to societal contributions
- Looking to our people and profession

- Can only be done in P**artnerships**……

31

Serving People and Planet 2030 and Beyond

Tackling the Global Challenges

Faced with the magnitude of change in our World, on our Planet:

- We can strengthen our skills in the use of geospatial information in all its forms

If

- We do the very best we can over the coming decades

Our professional relevance to society, is in our collective, partnership hands

32

Our Journey is far reaching!

33

Thank You

- WWW.fig.net

- President
- FIG: Dr D Dumashie
- ddd@dumashie.co.uk

34