



UN-GGIM
UNITED NATIONS
COMMITTEE OF EXPERTS ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT



UNWGIC 2022 - 10-14 Oktober 2022 – Hyderabad (India)

10 Things you should know about



Rudolf Staiger

President of the
International Federation of Surveyors (FIG)

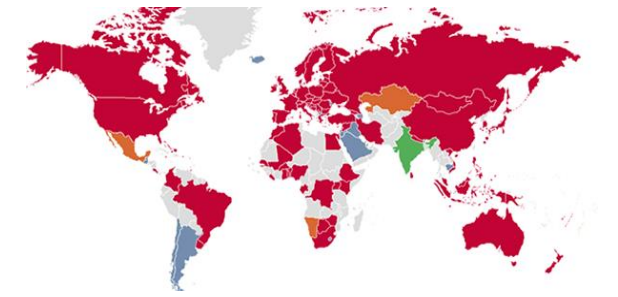
1- what is **FIG** ?

It is ...



- a United Nations and World Bank recognized non-governmental organization (NGO)

- covering the whole range of professional fields within the global surveying community, hereunder



Surveying

Cadaster

Mapping

Geodesy

**Quantity
Surveying**

Valuation

**Topographic
Surveying**

**Construction
Surveying**

**Engineer
Surveying**

**Land
Management**

**Hydro-
graphy**

**Geo-
information**

UN-GGIM - Geospatial Societies (UN-GGIM GS) - is one of the three networks formally recognized by the UN Committee of Experts on Global Geospatial Information Management (UN-GGIM). UN-GGIM GS is a coalition of

2020-2022 **FIG** is chairing the UN-GGIM - Geospatial Societies

- **IEEE** - Geoscience and Remote Sensing Society (IEEE-GRSS)
- **IAG**- International Association of Geodesy
- **ICA** - International Cartographic Association
- **FIG** - International Federation of Surveyors
- **IGU** - International Geographical Union
- **IMIA** - International Map Industry Association
- **ISDE** - International Society for Digital Earth (ISDE)
- **ISPRS** - International Society of Photogrammetry and Remote Sensing



2- FIG activities

One major activity is

Every year a **working week**

Every 4 years a **Congress**

Year	Event	Country	City
2028	ww	France	Paris
2027			
2026	Congress	South Africa	Cape Town
2025	ww	Australia	Brisbane
2024	ww	Ghana	Accra
2023	ww	USA	Orlando
2022	Congress	Poland	Warsaw
2021	e-ww	NL	Appeldoorn
2020	ww	NL	Amsterdam

cancelled



2- FIG activities

Another major activity is publishing

No 80 **Digital transformation and land administration – Sustainable practices from the unece region and beyond**
FAO, UNECE AND FIG
FIG Guide 2022

No 79 **Land Consolidation – The Fundamentals to Guide Practice**
FIG Commission 8 - Spatial Planning and Development,
FIG Report 2022

No 78 **Geospatial Data in the 2020s - Transformative Power Pathways to Sustainability**
FIG Commission 3 – Spatial Information Management
FIG Report 2022

7 volumes covering Three Milleniums of Measurement Earth

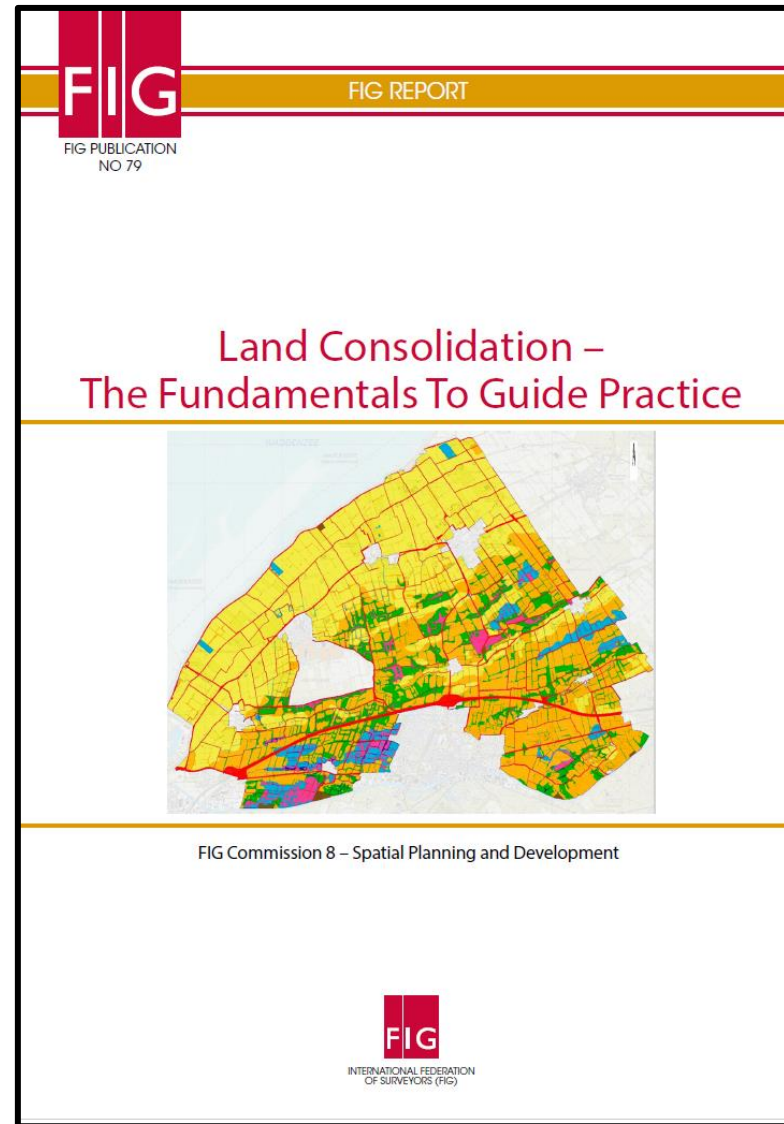
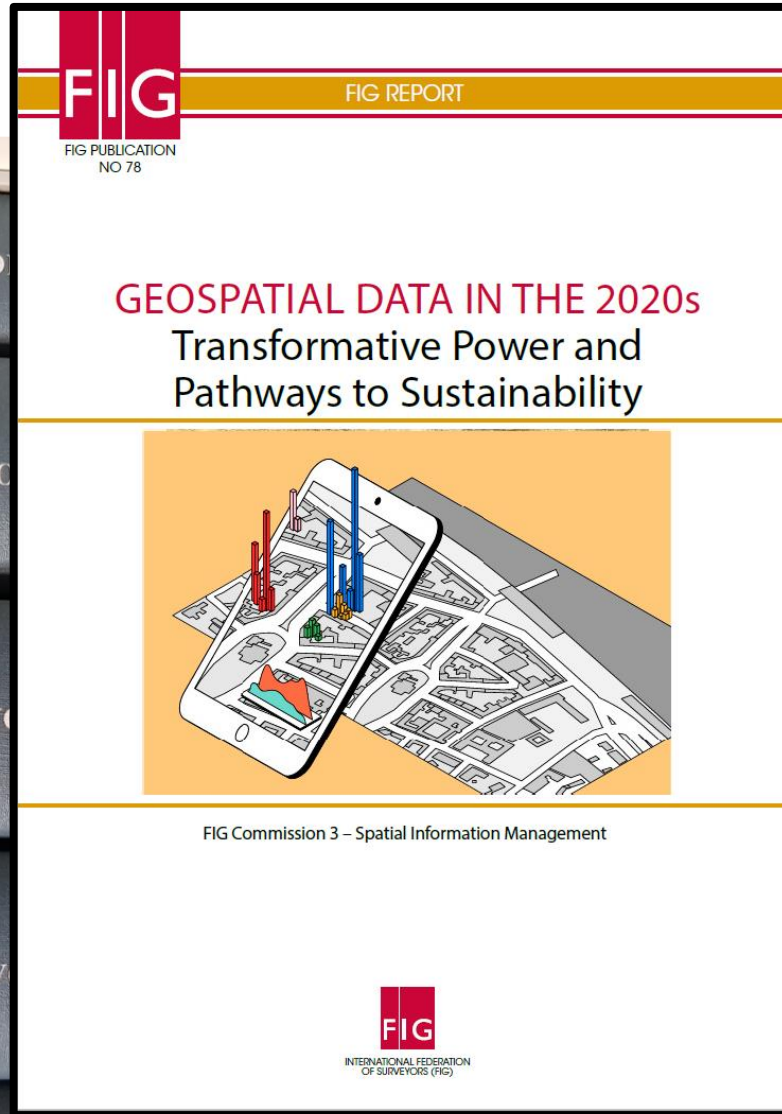
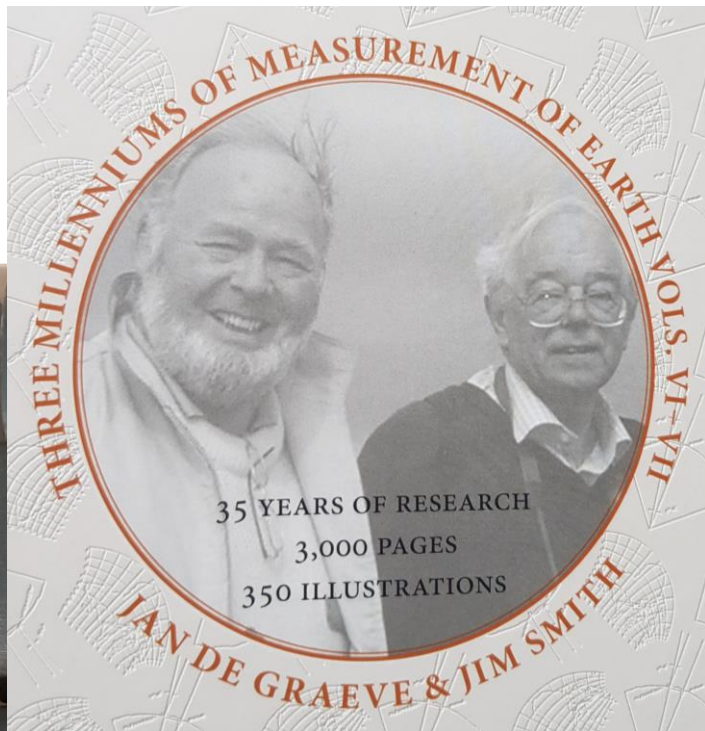
FIG FIG GUIDE
FIG PUBLICATION
NO 60

The authors
Stig Enemark Keith Clifford Bell
Christiaan Lemmen Robin McLaren
Fit-For-Purpose Land Administration

JOINT FIG / WORLD BANK PUBLICATION

FIG INTERNATIONAL FEDERATION OF SURVEYORS (FIG)
WORLD BANK

Our latest publications



THE SIZE AND SHAPE OF THE EARTH • VOLUME I

3- what means exactly ?

FIG is an *acronym* and stands for

Fédération Internationale des Géomètres

International Federation of Surveyors	(English)
Fédération Internationale des Géomètres	(French)
Internationale Vereinigung der Vermessungsingenieure	(German)

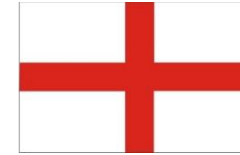
Very important: do not say “**fig**” say “**eff_aiii_dschi**” instead

4- when was founded ?

FIG was founded
1878 in **Paris** (France) by 7 national
Surveying Associations from



Belgium



England



France



Germany



Italy

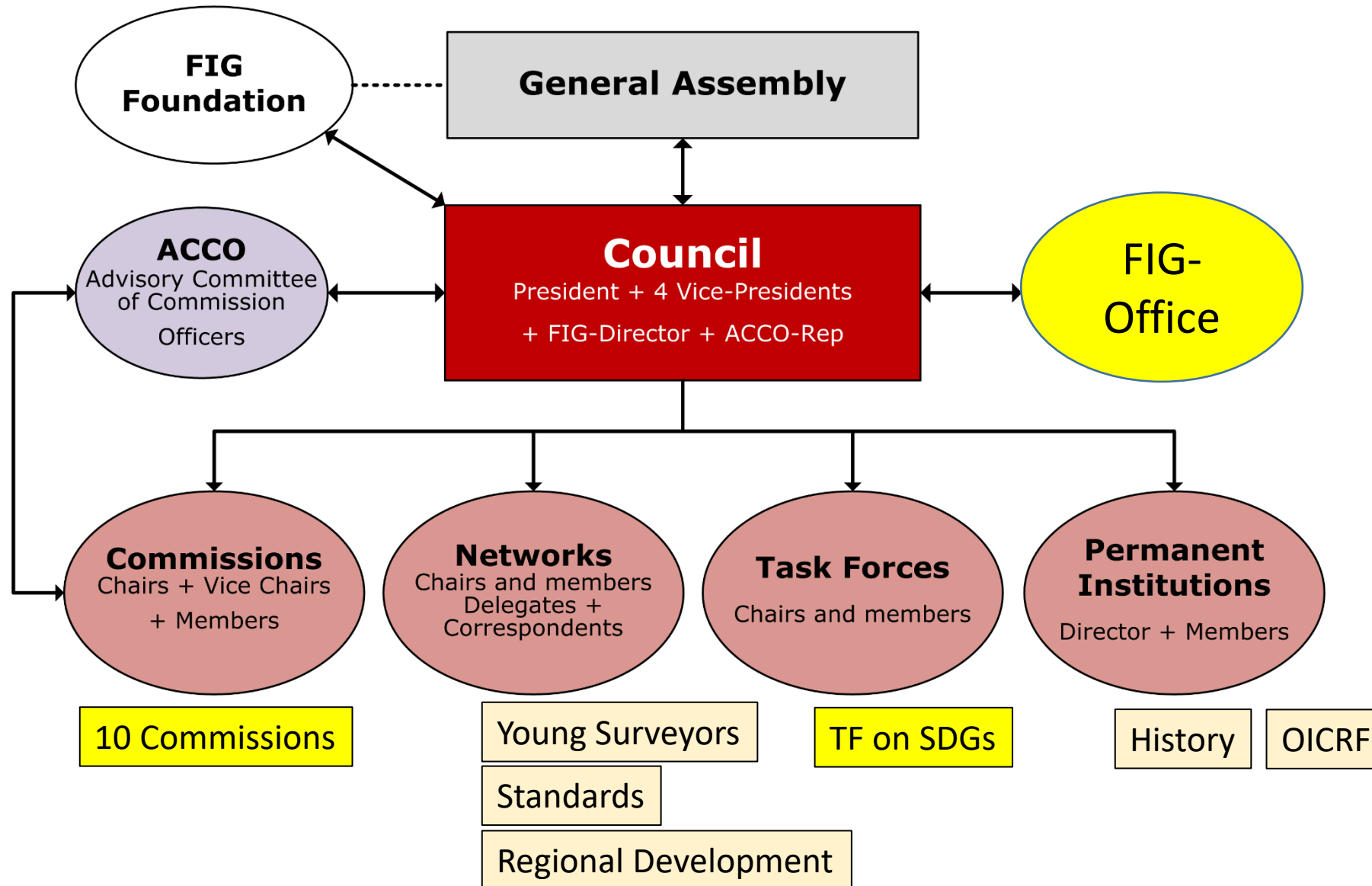


Spain



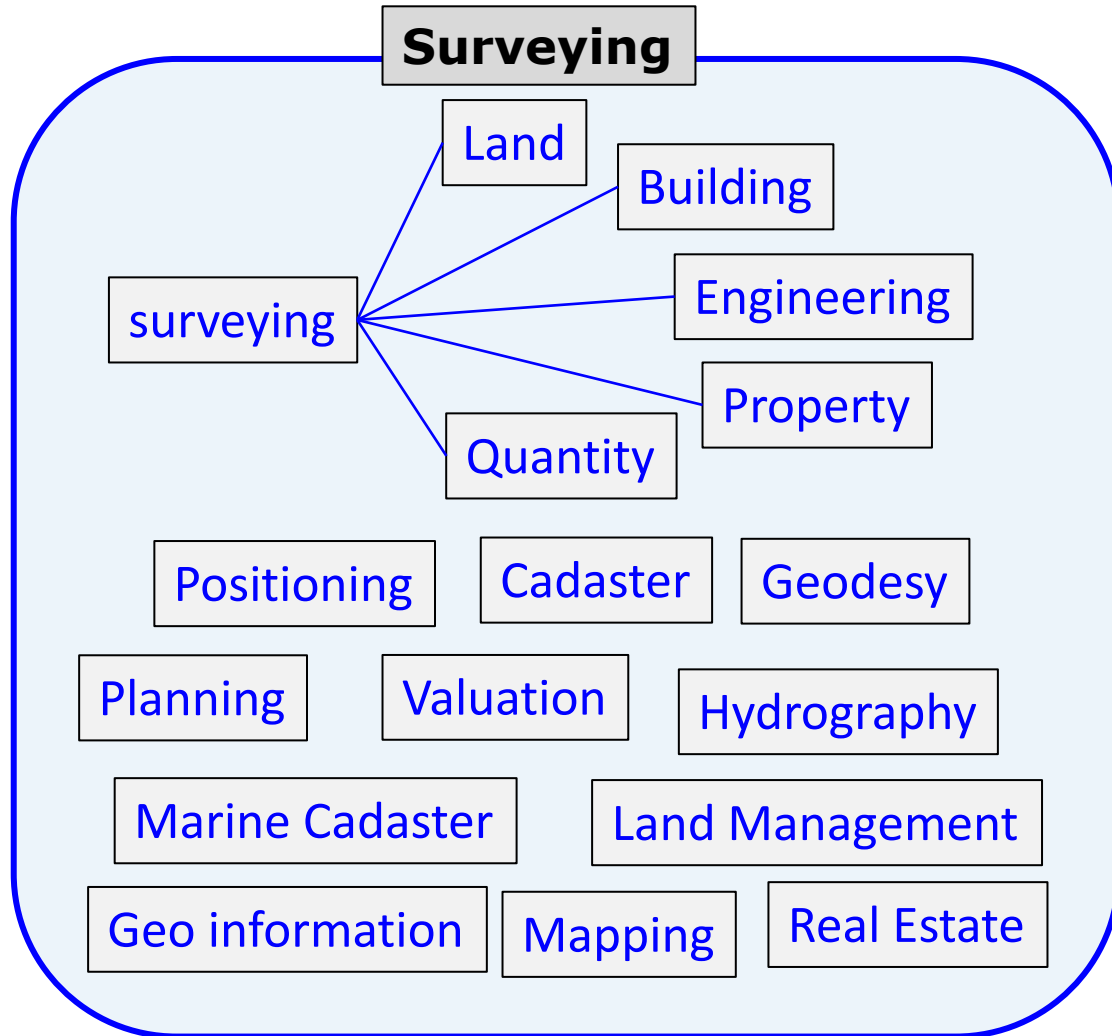
Switzerland

5 - How is **FIG** organized ?



6 - How is FIG using "Surveying"?

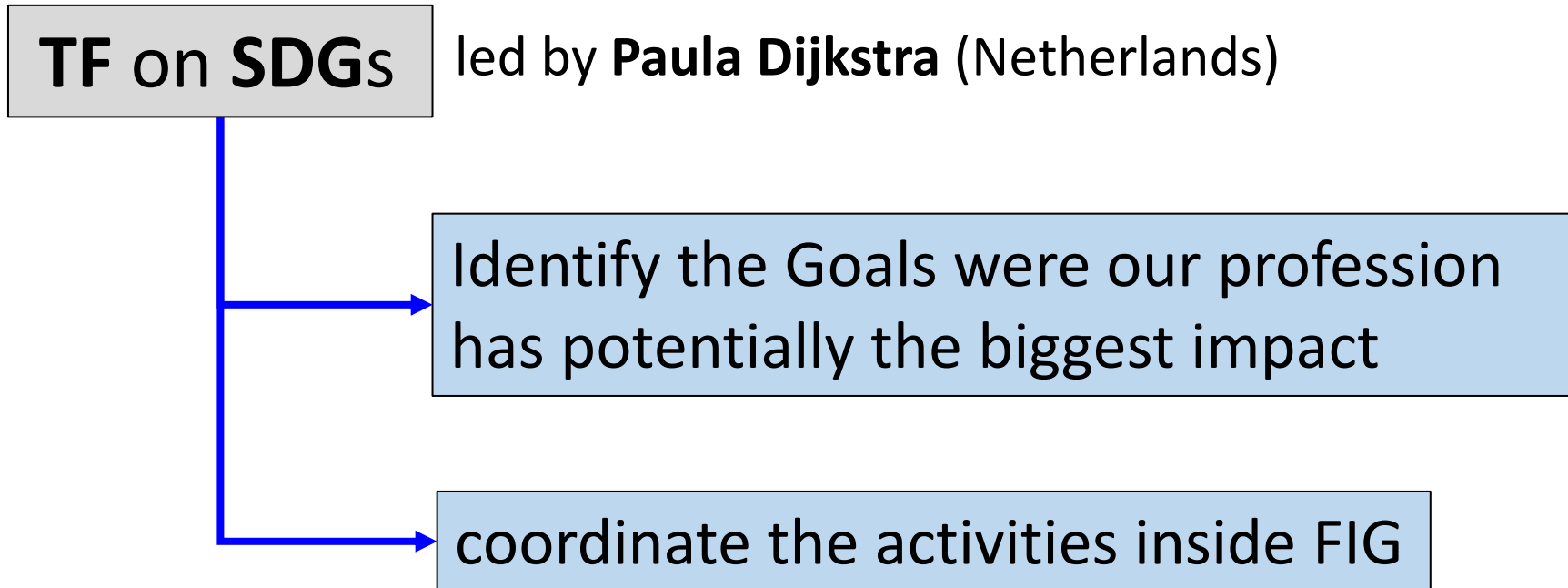
We use *SURVEYING* / *SURVEYOR* as a generic term



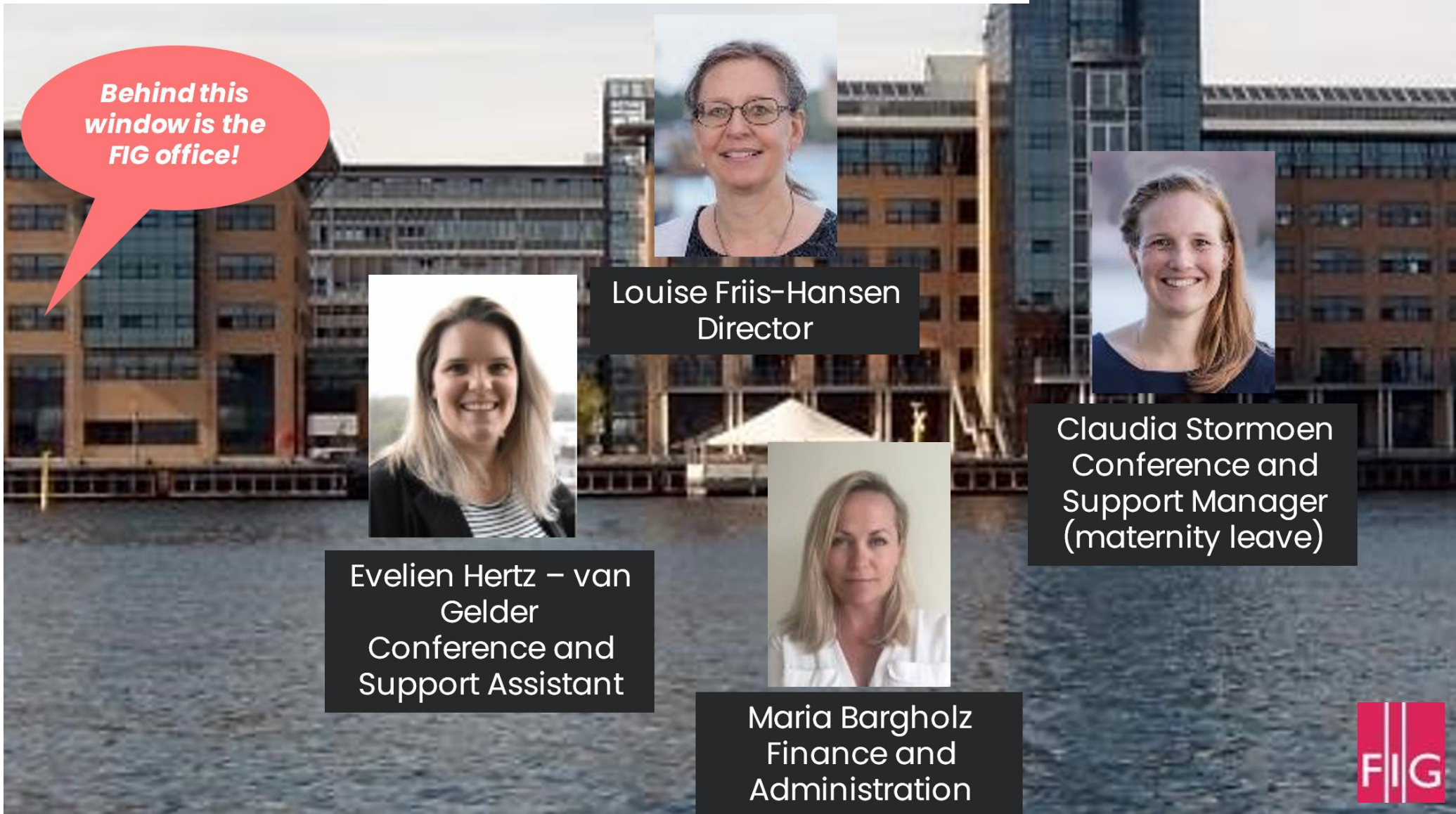
Commission Structure of FIG

- 1 – Professional Standards and Practice
- 2 – Professional Education
- 3 - Spatial Information Management
- 4 - Hydrography
- 5 - Positioning + Measurement
- 6 - Engineering Surveys
- 7 - Cadaster + Land Management**
- 8 - Spatial Planning + Development
- 9 - Valuation + the Management of Real Estate
- 10 - Construction Economics + Management

7 – Task Force on Sustainable Development Goals (SDGs)



8- The FIG – Office in Copenhagen ?



Behind this window is the FIG office!



Louise Friis-Hansen
Director



Claudia Stormoen
Conference and Support Manager
(maternity leave)



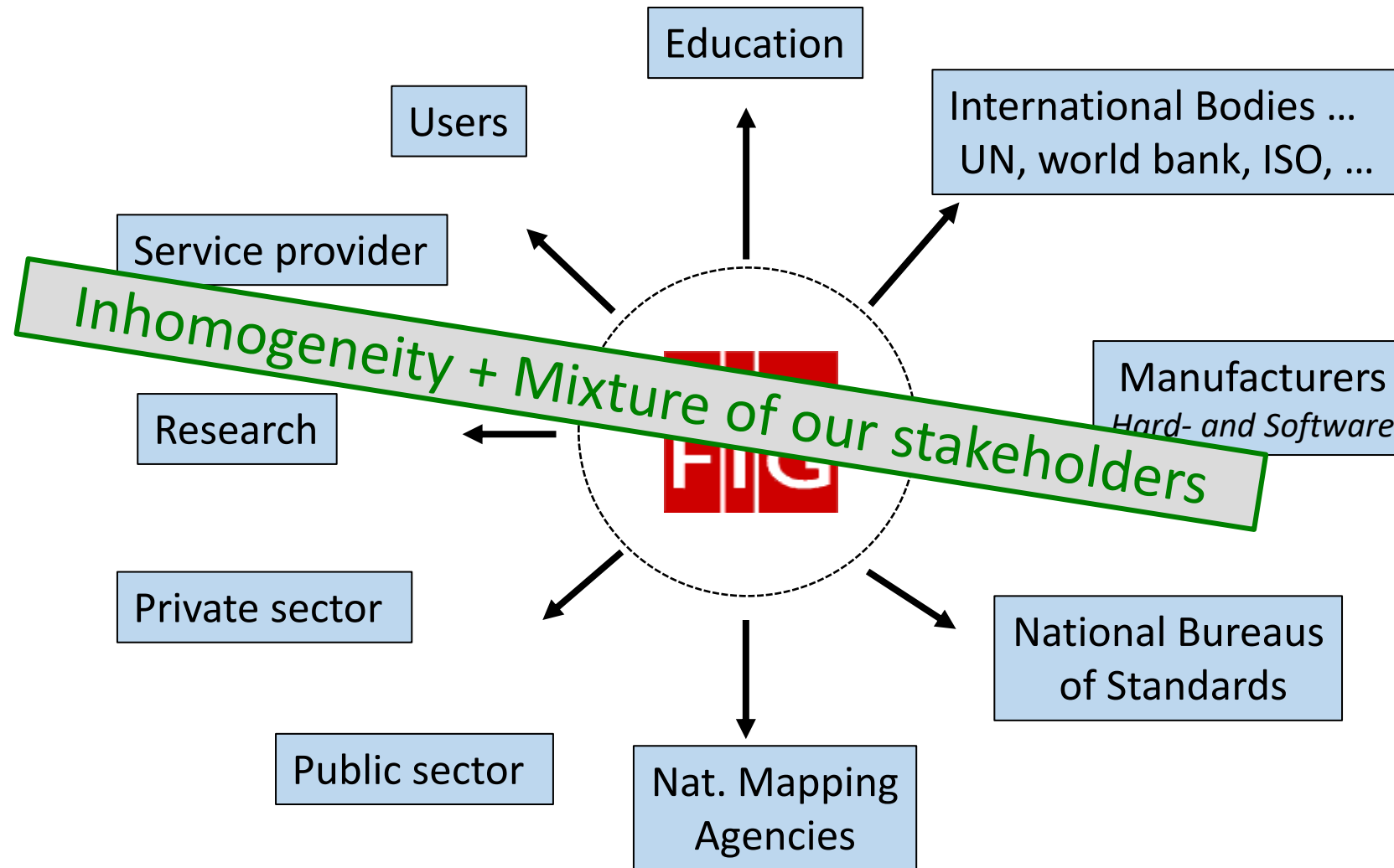
Evelien Hertz – van Gelder
Conference and Support Assistant



Maria Bargholz
Finance and Administration



9 – the USP of FIG = Unique Selling Proposition



10 - Motto of



Office 2019-2022

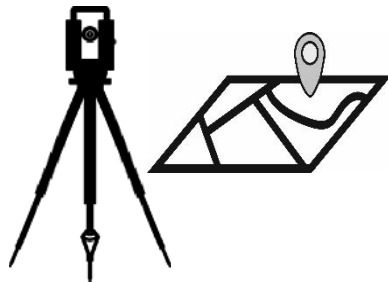
Volunteering for the Future

... of our Federation



is at the same time beneficial for our ...

Profession



Society



Planet



Thank you very much for your attention



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Why is **secure Land Tenure** so important?

Rudolf Staiger

President of the International Federation of Surveyors (FIG)



Introduction

Definition of “Cadastre”

A **Cadastre** or **Cadaster** is normally a parcel based, and up-to-date land information system containing a record of interests in land (e.g. rights, restrictions and responsibilities).

It usually includes a geometric description of land parcels linked to other records describing the nature of the interests, the ownership or control of those interests, and often the value of the parcel and its improvements..

Source: FIG (1995) "The FIG Statement on the Cadastre",
FIG Policy Statement, The International Federation of Surveyors (FIG)
FIG PUBLICATION No 11, 1995

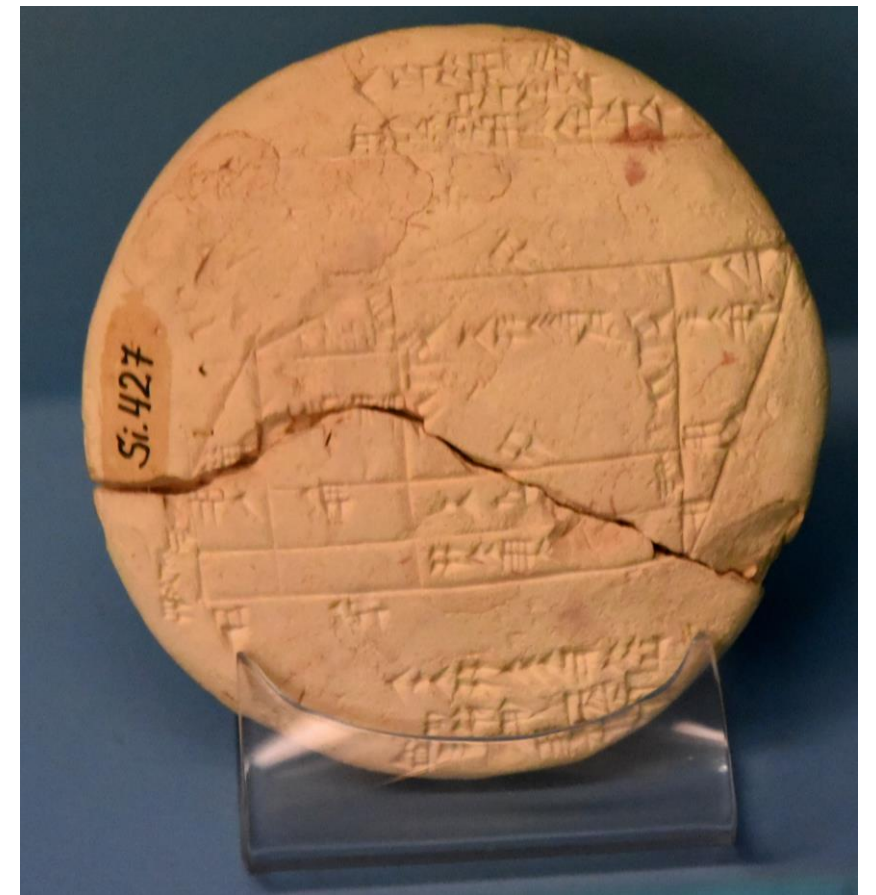
History

Some of the earliest cadastres were ordered by Roman Emperors

1790 in France the privileges of the Church and the aristocracy were abolished

Cadastral was introduced by law for an objective **taxation**

A lot of European countries followed



A cadastral text written in Akkadian on a terracotta tablet. From the 18th century BC in Sippar, Iraq, and held by the Ancient Orient Museum, Istanbul

By Osama Shukir Muhammed Amin FRCP(Glasg) - Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=70045357>

Definition of “Land Tenure Security”

Security of tenure is the certainty that a person’s rights to land will be recognized by others and protected in cases of specific challenges.

People with **insecure tenure** face the risk that their rights to land will be threatened by competing claims, and even lost as a result of eviction.

Without **security of tenure**, households are significantly impaired in their ability to secure sufficient food and to enjoy sustainable rural livelihoods. Security of tenure cannot be measured directly, and, to a large extent, it is what people perceive it to be.

Source: Food and Agriculture Organization of the United Nations 2002: 18-19,
cited by IEG PPAR—Second Land Titling Project (Lao PDR)

What is needed for a functioning
Secure Land Tenure System ?



Legislation

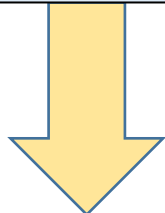
A **Cadaster-System**
recognized and
protected by law

Authorities establishing
and maintaining the
cadaster



In case of **PPP** → Control?

Traditional cadastre includes **demarcation** on site



Describing

- The parcel (location, size, rights and obligations)
- The owner(s) of the parcel

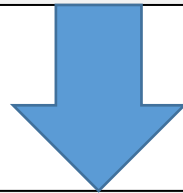
In well-developed countries, especially in Europe,
we find registration systems with a history of 100 years and more!

So why are we here for this topic?

Estimations by the world bank say that on a global scale
only 30% of all parcels are registered¹!

¹Registered = meaning here officially recorded

Why is it useful to increase the ratio of registered land parcels?



What are the benefits of registered land?

Current challenges

Food Security

Climate change

Pandemic(s)

Sea level rise

Rapid urbanisation

Land rights of indigenous people

...

Land is essential
and needed for



Agriculture / food



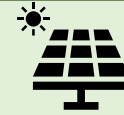
Housing/ living



Transport



Energy



Natural resources



infrastructure



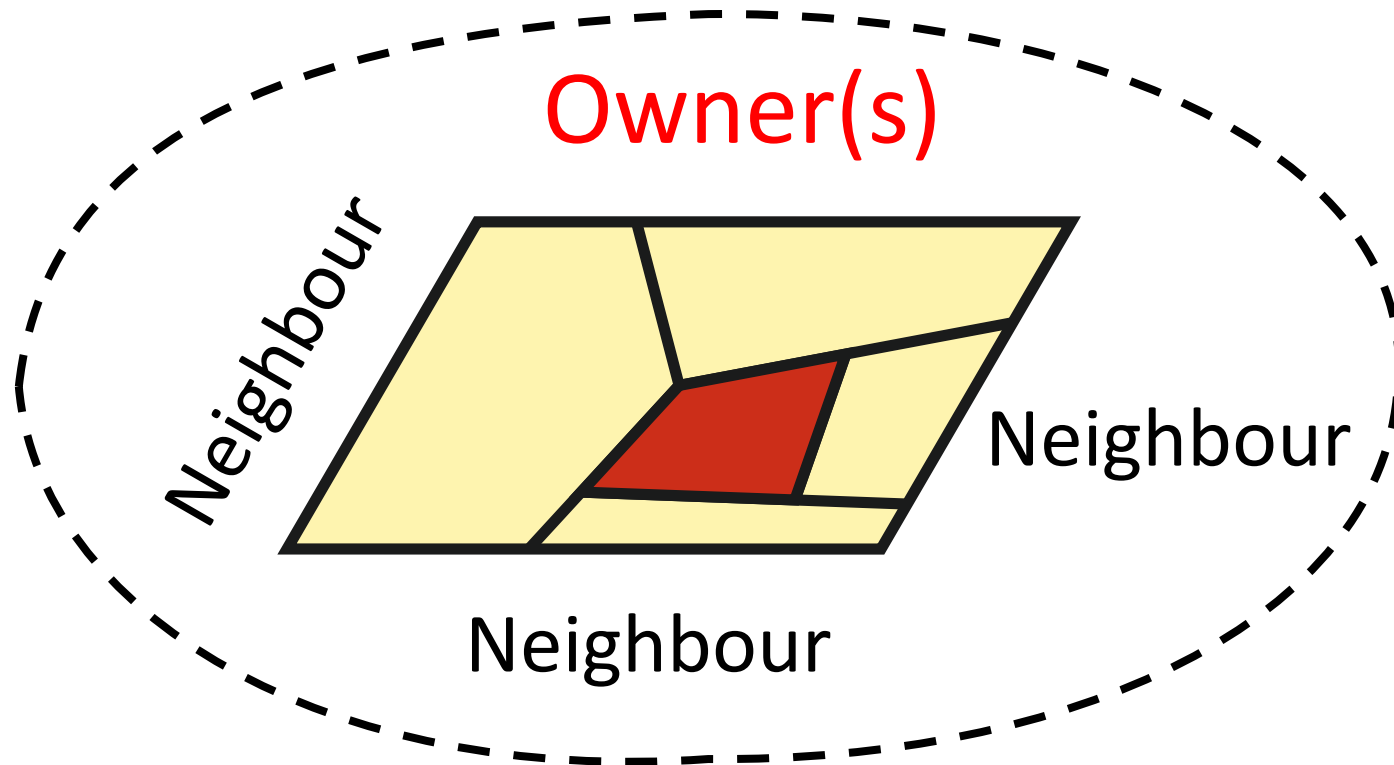
Who are the stakeholders?

investors

(local/ national/international)

Authorities

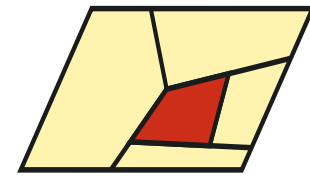
(local/ regional/national)



Public services

(local/ regional)

What are the benefits of secure land tenure? -1



Owner(s)

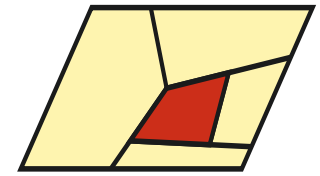
- Security of being the owner accepted by society!
- Legal possibilities to defend the property!
- Higher motivation to invest in the land
concrete / labour / farming/
- The property becomes an economic value - loan from the bank!

+ Neighbour

“Peaceful together”

No unfair discussion or fighting about the boundaries

What are the benefits of secure land tenure? -2



Authorities

Public services

investors

Detailed knowledge about the parcels
and the ownership

++ for planning !!

Land administration as contribution to the SDGs

Stig Enemark
Keith Clifford Bell
Christiaan Lemmen
Robin McLaren

FIG-Publication 60, 2014

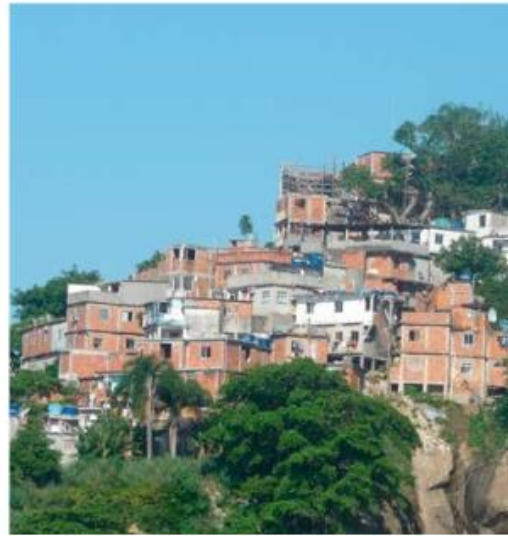


INTERNATIONAL FEDERATION
OF SURVEYORS (FIG)



WORLD BANK

Fit-For-Purpose Land Administration



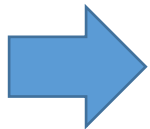
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Land administration as contribution to the SDGs

Land registration Ambitious target until 2030 ... increase of + 30%

ok, Is there enough time / money for the implementation of a classical cadastre??

NO

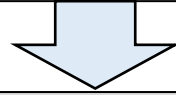


FFP is an interesting **general approach**, which needs to be adapted to each single case !!

In order to find exactly out what **FFP** is standing for and what not ...

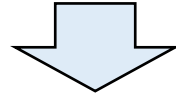
The role of the surveyor in „FFP-approach“ ?

YES, classical cadastre is too expensive and not fast enough



Faster solutions adapted to the specific needs

For example: based on the FFP-Approach (Enemark et al. 2014)



But this does not mean that the realisation is always easy and without problems!!

Expectations are sometimes too high!!
Time +++ ***costs*** +++ ***maintenance*** +++ ***updates*** +++

!! also **reservations** regarding **FFP** in our own community !!

FFP does not replace classical cadastre

... it is rather an extension !!!

FFP is not a ready-to use-solution!

FFP we need best-practice examples and textbooks!!

Rumours

.... Surveyors who do not act ethically correct
.... Lawyers who do not act ethically correct
.... Notaries who do not

**Include ethical
codex and training**

Thank you very much for your attention