

GNSS: Today and Preparing for the Future

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International Federation of Surveyors: Liaison FIG – UNOOSA

United Nations Global Geodetic Reference Frame: Member of WG

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The International Federation of Surveyors (FIG)

Founded in Paris in 1878;

Federation of national associations;

Represents all surveying disciplines;

UN-recognised non-government organisation (NGO);

Its aim is to ensure that the disciplines of surveying
and all who practise them meet the needs of the markets
and communities that they serve;

It provides an international forum for discussion and
development aiming to promote professional practice and
standards



The FIG Profile
and the benefits of being a member

2007 - 2010

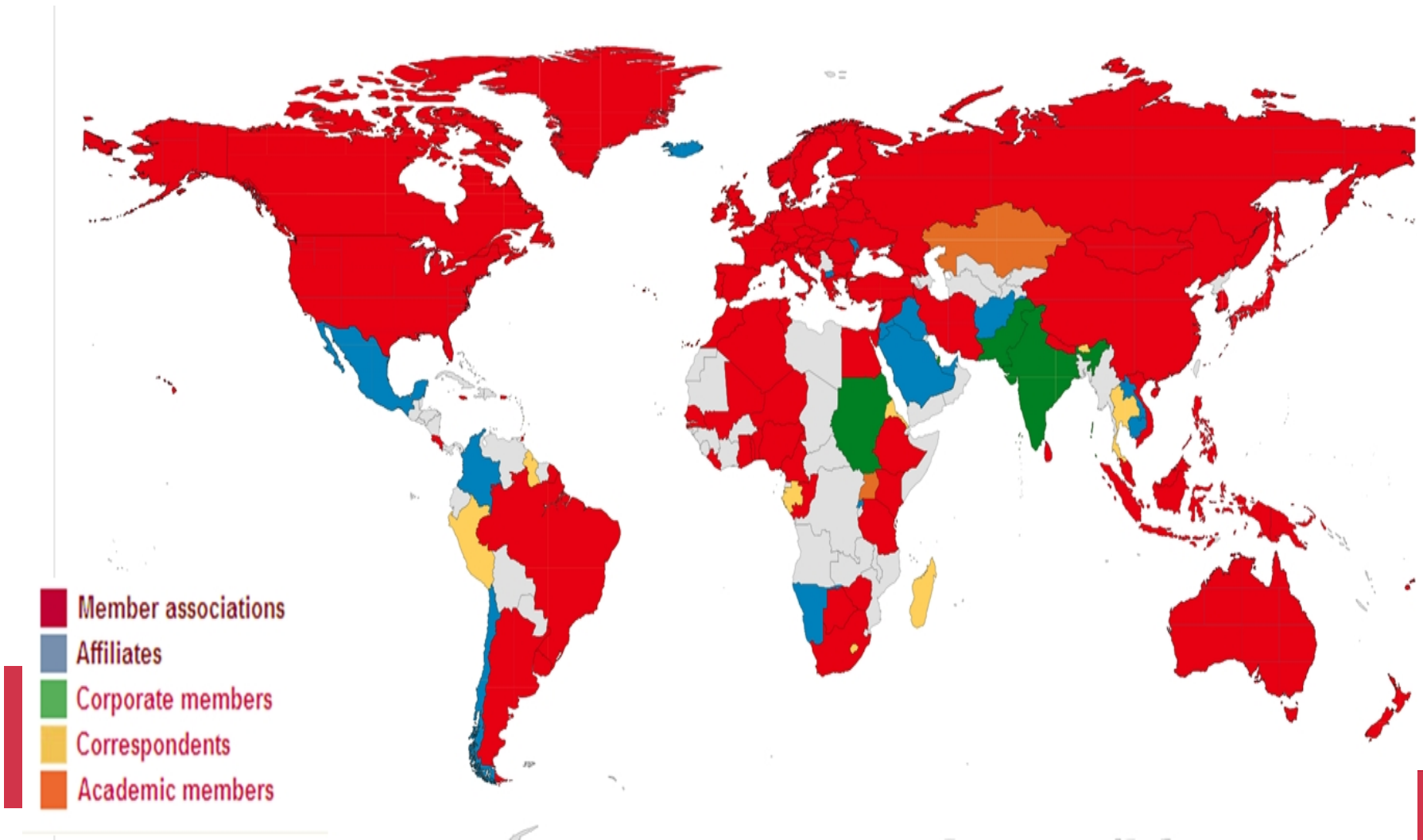


The International Federation of Surveyors is an international, non-government organisation whose purpose is to support international collaboration for the progress of surveying in all fields and applications



103 FIG member associations from 87 countries

45 affiliates, 23 corporate, 1 correspondents, 92 academic members



Organisational Structure

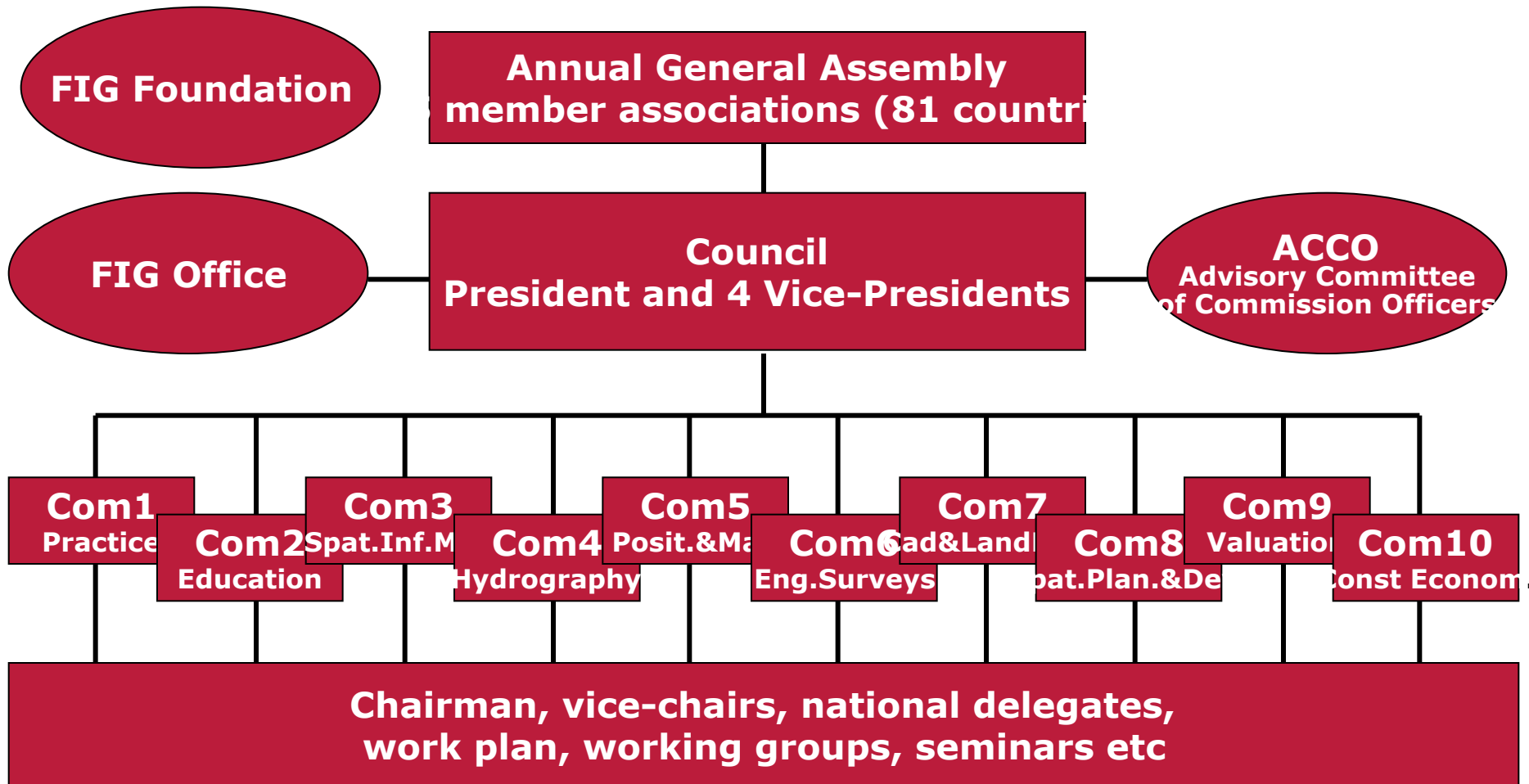


FIG International Cooperation

With **United Nations agencies**

e.g. UN Office for Outer Space Affairs (UN OOSA);
in particular the ICG – International Committee on GNSS
and UN Global Geospatial Information Management (UN GGIM)
in particular UN GGIM AP Working Group 1 (Geodetic Reference Framework for Sustainable Development)

With **international professional organisations** in surveying disciplines as:

International Association of Geodesy (IAG);

International Society for Photogrammetry and Remote Sensing (ISPRS) and

The Institution of Navigation (ION)

First geospatial UN resolution: "A Global Geodetic Reference Frame for Sustainable Development"

Recognizing the importance of a globally-coordinated approach to geodesy.



First to avoid misunderstanding

The UN Resolution to implement a global reference frame is NOT the same as the ITRF (International Terrestrial Reference Frame) and does not replace ITRF.

It provides you with the framework for an effective positioning and measurement regardless if you work globally or locally.

ITRF is an important part of the framework. The Resolution supports the long term commitment to countries and organisations to maintain and develop global geodesy

GGRF UN Resolution: Key objectives

- Develop a global geodetic roadmap for the UN GGRF
- Global cooperation in providing technical assistance in geodesy for those countries in need to ensure the development, sustainability and advancement of a GGRF
- Implement open geodetic data sharing
- Improve and maintain national geodetic infrastructure
- Enhanced multilateral cooperation that addresses infrastructure gaps and duplications globally
- Improved Outreach to make the GGRF more visible and understandable to society

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The response from a GGRF survey earlier 2015 showed that Global cooperation is a key factor

A joint international governance effort is needed in order to meet the objectives of the GGRF resolution



The value/cost savings from using GNSS are enormous. Applications can be found in e.g. precision agriculture, shipping, trucking and surveying and mapping.

Modern society today would hardly function without GNSS. The dependency will be even higher in the future.

FIG represents the surveyor and that includes much more than "just" GNSS.

But GNSS has become important for the whole FIG

Regarding GNSS we mainly focus on

- Reference frame (globally, regional, local)
- Surveying and Mapping applications

But FIG needs also to more clearly and strategic discuss GNSS and its role in society

Preparing for the future

From the discussion on road map for the UN Resolution we notice;

Key elements to achieving and develop a sustainable GGRF

- Governmental and country commitment and funding
- Common standards
- International obligations and coordinated policies
- Maintain and build infrastructure
- Open data sharing

Multi-GNSS is one key factor for the future and is vital for the ITRF and for all the numerous applications.

Multi-GNSS is the key into the future. ICG has a responsibility to address and secure this