FIG Task Force on Commission Structure

Report for discussion

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1. Executive summary

The Task Force suggests the following changes to the structure for FIG;

Consolidate the number of commissions to FOUR;

- Commission on Spatial Information Data Management and Systems
- Commission on Cadastre
- Commission on Positioning, Measurement and Reference Systems
- Commission on Spatial Planning, Land, and Marine Management:

Implement FOUR FIG Networks;

- Education, Professional development and Ethics
- Standards
- Young Surveyors
- Regional Capacity Development

Improve the use of professional Task Forces within FIG

The Task Force also suggests that a decision is taken at the FWW Christchurch to ensure that the new structure could be implemented at the latest the 1st of January, 2019. Call for commission chairs should be sent out for voting at the FWW 2017 in Helsinki.

2. Background

Since FIG's inception in 1878, FIG has grown to be the premier international organization representing the interests of surveyors worldwide. It now consists of a federation of over 100 national member associations and provides a forum for discussions and professional development. Today, FIG members strive to be a modern and sustainable surveying profession in support of society, environment and economy by providing innovative, reliable and best practice solutions to our rapidly changing and complex world, acting with integrity and confidence about the usefulness of surveying, and translating these words into action.

To assist with accomplishing this vision, a Task Force was established at the FIG 2015 Working Week in Sofia to review the Commission Structure, and this was initiated by several requests from member associations. The Task Force was assigned to make recommendations and also consider the following significant challenges for the FIG surveying and spatial community:

- Positioning FIG to address core topics as well as mega-trends in the geospatial sphere
- Advocate the effectiveness of the FIG

- Effectively communicate FIG activities to members and partners
- Grow the number of FIG contributors and promote the productiveness of Commissions
- Ensure equitable and adequate participation at FIG meetings and within the Commissions
- Enhance the representation of member associations, the private sector and young surveyors
- Obtain positive economical results where choice of venue of FIG Working Week is of most importance.
- Identify how the FIG will be a long term active partner in the developing world.

As a consequence of submissions to the General Assembly, the remit of the Task Force was to initially review:

- the current structure of the FIG,
- the FIG's terms of reference,
- the mission of the FIG Commissions
- the current processes involved with assessing and selecting qualified candidates to Commission Chairs
- make recommendations regarding the above, as well as provide a definition of the challenge, the level of adaptation/change required, and suggest ideas on how to improve the capability of FIG and the Commissions to accomplish the work plans.

3. Drivers for Change

The role and contribution of the surveyors has transformed heavily if we consider societal, economic, environmental and technological changes over time. FIG has tried to adapt to these changes however the rate at which change has occurred has been more rapid over the last few decades. During this period, surveyors have truly undergone a massive progression, and FIG as an organisation must progress alongside the profession.

Technologically, the profession has been impacted in both the way we work, and the way we communicate and organise. Social media influences the rapidity with which knowledge spreads, and the reach of the audience. Similar technological advancements have enabled the survey profession to change the way information is collected, stored, integrated and distributed. Information is now gathered in huge quantities, is becoming more accessible, exchangeable, and on platforms or via media that were not even considered when the current Commission structure was decided. It is important that we manage and acknowledge these advancements and their impact on FIG's modes of operation.

Growing from the growth and accessibility of technology, FIG is further seeing an increasing role to play in advising on the social, environmental and economic challenges faced by decision makers from both developed and emerging countries. For examples addressing global issues and emerging "mega trends" related to gender equity for women's access to land and education; poverty, sustainable land development; climate change; and urbanisation. These mega trends are in part driving the linkages FIG is forging with multinational organisations such as the United Nations, the scientific and academic community and the operational professional surveyor.

To manage these social, economic and technological advances, changes and challenges, FIG must be a more efficient and effective organisation in the future. FIG must be proactive in identifying the mega trends that

society is presently facing and likely to face in the future, and thus decide how FIG should be challenging these mega trends. FIG needs to be aware of its role on the international stage, whilst still supporting the core of the profession. Questions on the responsibilities of the FIG should be considered not only by the FIG Council but also to the Commissions themselves and our member associations:

- Can these roles and others be actively dealt with relation to the internal and Commission structure of FIG?
- What role does FIG want to play in the future?
- What is our vision?

These questions go to the heart of the structure of the Commissions, which provide the structure to enable the FIG to face future changes and challenges. They go above and beyond the role of this Task Force, but provide an important foundation. Therefore, this Task Force examines the internal structure of the organisation and suggest changes if there is a need to restructure the Commissions to support our surveyors.

4. Working Method

As previously mentioned, the Task Force was officially formed at the General Assembly convened in Sofia, May 2015 during the FIG Working Week. Since then, the Task Force has held physical meetings, internet based ones (e.g. through Skype) and also many email discussions. From these interactions, the Task Force has determined that it will be responsible for:

- Recommending changes to the Commission structure which may also include the number, type, composition and work of Commissions.
- Suggesting alterations with Commissions with respect to the allocation of work, FIG leadership, member association participation and general achievement.
- Identifying possible strategies to optimize FIG Council, Commission Chair and member activities without significant change to FIG processes.
- Providing a broad range of recommendations for further review

At this stage the Task Force has decided that it will not address:

- Changes to the Definition of the Functions of the Surveyor
- Review of official strategies or documents

We consider that, although the Vision and Work Plan of the FIG / FIG Council could be more specific and provide direction to and harmonization across the Commissions, in their current forms they are flexible enough to provide guidance but to ultimately allow Commission Chairs the necessary freedom to develop their own work plans. We suggest a future review could consider the FIG Vision in the context of this review and identified challenges, and/or the needs of the Commission Chairs and FIG members with relation to the FIG Vision and Council Work Plan.

Hence, the Task Force will not suggest changes to the present FIG Vision, role, function and definition of the Surveyor, however if deemed necessary alterations to these statements will be recommended to support any structural modifications to the Commissions. In the same manner the Task Force will not discuss current FIG strategies or work plan documents, unless they affect structural change.

The Task Force members are as follows: Mikael Lilje (chair), Brian Coutts (New Zealand), Stephen Djaba (Ghana), Henning Elmström (Denmark), Kate Fairlie (Australia), Brent Jones (USA), Jürg Kaufmann (Switzerland), Hansjörg Kutterer (Germany), Robert Sarib (Australia), Winnie Shiu (China), Rudolf Staiger (Germany), Karl-Friedrich Thöne (Germany). The Task Force will also utilize other selected FIG members as a reference group to gather invaluable feedback and critical analysis.

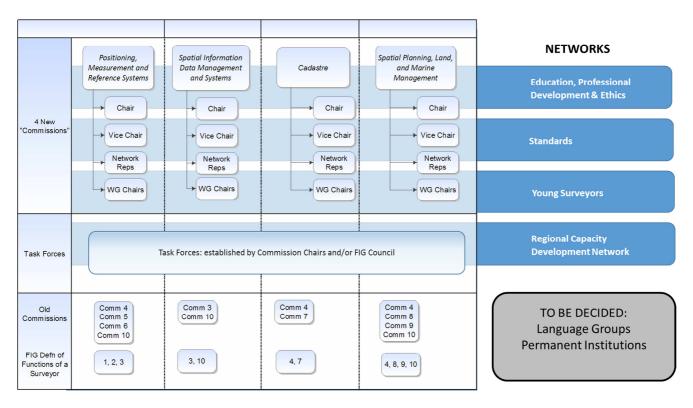
5. Summary of the Review of FIG Commission structure

The Task Force has reviewed the current situation and has formulated the following matrix. It some cases the analysis covers more than just Commissions structure due to the nature of Commission work and its roles in the FIG organisation. Consequently, to have an efficient Commission demands that the environment under which they operate justifies this.

Area of challenge	Problem	Recommendation
Commission	 Lack of interaction between Commissions Varying size of Commissions Achievement levels of Commissions 	 Streamline Commissions Create more flexible Task Force structure (enable 2- and 4- year engagements?) Election changes, deter- mined by Commissions ACCO rep to come from VP instead of Commissions?
Communication	 Social media Overlap/communication with other fields/organisations 	 Develop communication strategy for FIG Review databases (re- sources)
Member Associa- tions	 Justifying membership Promoting visibility of surveying (declining membership) 	 Identify value adds in addi- tion to meetings
Private sector	- Struggles to see value in FIG	 Strategy to directly address private sector Closer ties between private sector and Commissions Single cooperate sponsor payment, rather than per event
Events	 Cost of attending Inclusion of Asia Pacif- ic/Africa/Americas Catering to existing vs. 'poten- tial' members 	-
Engagement vs. participation	 Eg. FIG YSN has reached 5000+ BUT struggles with participa- tion, how to make this easy? Focus on voting for individuals vs. agenda 	_

6. Proposal for new Commission Structure including Task Forces and Networks

Given the possibility to suggest changes and given the discussions the Task Force has had regarding the number of current commissions and the mega trends we suggest rationalising the number of Commissions and encourage FIG to be more flexible regarding Task Forces as well as raise the awareness and profile of Networks. We believe by doing this, FIG would become more suitably organised to address the major challenges that we are noticing, improve the internal communication and be a more flexible and effective organisation. We believe also that it would be easier to recruit officers to the positions since there is a fewer number, and more importantly facilitate innovation through a mixed team environment.



The suggestion from the Task Force is to organise the structure in the following four (4) commissions;

- Commission on *Spatial Information Data Management and Systems* (Basically Commission 3 and Commission 10 but needs to be more focused than current Commission 3)
- Commission on *Cadastre*: Legal basics of land and water, property, administration, valuation and management (Basically current commission 7 but also Commission 4)
- Commission on *Positioning, Measurement and Reference Systems*: Location techniques and instruments for all sorts of spatial objects (Basically Commission 5 and 6 but also part of Commission 4 and 10)
- Commission on *Spatial Planning, Land and Marine Management*: (Basically Commission 4, 8, 9 and 10)

We have also noted the importance that our FIG Networks do have and suggest that their role and importance are highlighted within the FIG organisation. We also noted that the current Commission 1 and 2 are dealing with our profession and that they do cover more or less all current commissions. In our view, they are an established Network rather than a focused Commission. We suggest the following four FIG Networks be implemented;

- Education, Professional development and Ethics
- Standards
- Young Surveyors
- Regional Capacity Development

Professional Task Forces are to deal with contemporary and interesting issues established by the Council at the request of the ACCO. Professional Task Forces take care of emerging issues of the societies, e.g.:

- Energy transition
- Climate change
- Land grabbing
- Rapid urbanisation
- Poverty reduction
- Regional Development
- Other

With this arrangement, the Commissions can focus on the development of the core skills of the profession and ensure that the associated behaviour and the necessary education is concentrated on a good and sound professional expertise. Commission Chairs are no longer compelled to take superficial or otherwise ambiguous topics into their work plan, but to rather provide advice to the Council and the members to prepare the professional surveyor for the future.

The Professional Task Forces shall carry out fundamental studies about emerging issues and should exist for a limited time. The outcomes determined by these Task Forces can deliver their findings to the Commissions who can then assess the impacts on the professional expertise and the professional development. Greater emphasis on the TF will best enable cross-Commission work, will help to build a solid base of expertise for future FIG leadership and will enable more flexible approaches to mega trends. Critically, they will address a current gap in FIG, which is the lack of short-term and mid-level leadership positions which particularly limit young surveyor contributions.

The profile of the Networks should be larger within FIG and they should work across the Commission structure. There should also be a direct link through personal resources between the Networks and the Commissions. Again, this acknowledged partnership should foster additional mid-level leadership roles to promote a pathway to greater engagement within FIG.

The formal process of recruiting Commission chairs and officers will be less onerous under the above approach. It is our suggestion that the Steering Committee of each Commission should include (at least) the Chair, the Vice Chair of Administration, the Working Group Chairs as well as one young surveyor, to ensure that the large workload of the FIG does not simply fall on fewer shoulders – and further work will be necessary to address this. Fewer Commissions will additionally contribute to a small reduction in FIG running FIG Task Force on Structural Improvements Draft Report for Discussion 9 March 2016

costs. The risk to have inappropriate Commission officers is reduced. Risk of overlapping work plan issues is minimized. However, FIG must still be aware of these issues and work accordingly to avoid implications in the future.

Improve the selection process for Commission Chairs

Regarding the process of identifying new Commission Chairs, the internal rules 11.4 state that "a nominee shall preferably have played an active part in the activities of the commission for which he or she is being nominated as chair, and shall have demonstrated possession of the personal and professional capabilities needed to lead the work of the commission. In addition, the Council shall assure itself as to the nominees' practical availability for service and that they have sufficient financial and administrative support."

The Task Force suggests that for the Commission Chairs Elect, the existing Commission officers should also be involved in the assessment of the candidate. The Commission has the possibility to actively suggest candidates as Commission Chairs but the candidate's Member Association must always support the nomination. The Commission (and Member Associations) should also evaluate the candidates to make sure that she/he is able to fulfill the job, and has the required experience of FIG to understand the position. The Commissions are one of the key "bodies" that have sufficient knowledge of their members and who are able to judge their FIG eligibility, subsequently Commissions should have the ability to also negotiate with the Member Association of the candidate they wish to nominate. The Task Force also suggests that more than one Commission should not be chaired by two representatives from the same Member Association.

The Task Force, also recommend that when there is more than one candidate for the position of Commission Chair, then a "selection panel" may be established (comprising of ACCO and / or the Council representatives and Commission Chairs) and be given the option and opportunity to indicate to the General Assembly who may be a more suitable Commission Chair.

7. In Depth Analysis and Evaluation of FIG Commission Structure

7.1 Vision, Role, Theme and Organisation of FIG

According to website (www.fig.net), the FIG Vision is as follows;

A modern and sustainable surveying profession in support of society, environment and economy by providing innovative, reliable and best practice solutions to our rapidly changing and complex world, acting with integrity and confidence about the usefulness of surveying, and translating these words into action.

During the deliberations of the Task Force it became apparent that the FIG Vision does not suggest or foresee what the future composition of the Commissions should be. After consideration, this finding has both a positive and a negative side. The positive aspect is that the present vision does not mention "internal structural requirements" thus this provides flexibility for FIG to create an internal structure to achieve the vision and objectives. The negative side however is that the vision does not accommodate "mega trends" and specifically the role that surveyors can play.

In other words - The Task Force recommends consideration be given to altering the FIG Vision to include words relating to "mega trends" and that surveyors have a role to play.

According to the webpage the present role and theme of FIG is;

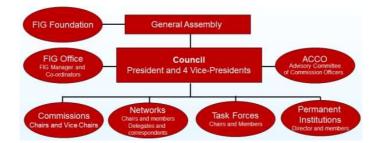
FIG's activities are governed by a work plan, which is approved by the General Assembly and reviewed by Council as its tenure progresses. The current work plan with the motto "Ensuring the Rapid Response to Change Ensuring the Surveyor of Tomorrow" guides Council, Commissions, Networks and Task Force in their activities.

FIG supports the role of a prosperous and sustainable profession of surveyors to provide solution functionality, reliably, affordably for a complex and rapidly changing world that cannot wait, and to translate a sustainable development agenda into action. FIG supports international collaboration among its members for the progress of surveying in all its fields and applications. FIG has a close cooperation with United Nations relevant bodies, World Bank, and its sister associations and has been globally recognized as the leading international non-governmental organization on geospatial information and the management of "land", the "sea" and the "built" environment. It is within the surveyors' task to determine the size and shape of the earth, to map its surface and to manage it in a sustainable way.

This statement about the role of FIG is appropriate. To be successful in the future, FIG must remain an active important player on the international scene, ready to interact, ready to collaborative, ready to deliver and ready to contribute.

7.2 Organization of FIG

The position of the Commissions within the FIG Organization is defined in the organizational chart published on the FIG homepage:



In view of Commissions the FIG homepage states:

FIG's technical work is led by ten Commissions. The responsibilities and work plans of Commissions are approved by the General Assembly during the FIG Congress. The work of each Commission is led by the Chairperson – elected for four-year term of office by the General Assembly at the Congress. The Chair is assisted by the Commission Vice-Chairpersons also appointed by the General Assembly. The Chair-Elect is elected by the General Assembly two years before the Congress. The Commission Chair is also assisted by a Vice-Chair of Administration who is in charge for the administration of the Commission. Every Commission has established at least three working groups on special topics. All member associations have the right to nominate a national delegate to each of the ten Commissions. The affiliates, academic members and corporate members have a right to nominate a correspondent to each Commission. The responsibilities and privileges of national delegates are published in the Internal Rules.

The statutory regulations create the organizational framework for the Commissions and their work. There are no official documents or rules that define or specify neither the number nor the Terms of Reference (ToR) of the Commissions. Decisions relating to such matters are approved by the General Assembly. It ap-

pears the only rule concerning the content of the Commission work is given in item 11.1 of the Internal Rules:

Commissions shall be established to further the technical and professional work of the Federation. Between them they shall cover all the activities listed in the definition of a surveyor.

Note - the FIG definition of the "surveyor" can be found in Appendix C.

In other words - The Task Force recommends that the FIG Council need to ensure that all activities (as listed in the definition of s surveyor) are addressed by the Commission work plans.

7.3 Internal Rules

Chapter 11 of the FIG Internal Rules deals with Commissions, and an extract of the relevant internal rules can be found in Appendix A.

7.4 The Relevance of Commissions

According to the Internal Rules, FIG establishes Commissions to further the technical and professional work of the Federation. It is also stated that their work plans shall be decided by a vote of the General Assembly. It is not stated, and should not be stated either, how FIG ensure that the Commissions anticipate and respond to market trends and client demands.

Overall there appears to be very little information on the webpage and within FIG documents on the benefits, relevance, and opportunities to the members regarding the Commissions and their work. For those who have been involved in FIG for many years use the Commissions as a forum to meet other persons working in the same field or discipline. This interaction allows the exchange of ideas, thoughts and best practice. It is also a vehicle to build and expand one's personal and professional network.

In other words - The Task Force recommend that FIG create an official statement regarding the benefits and results of active participation in Commissions to members and FIG respectively.

7.5 **Responsibilities of Commission Chairs**

The roles and responsibilities of Commission Chairs are described in a special document endorsed by the General Assembly in 2008. A copy can also be found in Appendix B. The Task Force agree with the listed roles and responsibilities; however it should be a requirement that new Commission Chairs engage with each other to discuss and review their proposed work plans. This means, time needs to be set aside so that the new Chairs can identify possible collaboration on related issues / challenges and outcomes, and the sharing of resources before they are endorsed by the General Assembly. This will also display to the General Assembly synergy and harmonisation between Commissions with respect to achieving the FIG Vision.

In other words - The Task Force recommends that new Commission Chairs must discuss and review their proposed plans with each other so as to identify possible collaboration on related issues / challenges and outcomes and demonstrate synergy amongst their work plans with respect to achieving the FIG Vision.

7.6 FIG Task Forces

Besides the Commissions, FIG maintains a series of Task Forces to carry out special tasks. Item 13 of the Internal Rules state: FIG Task Force on Structural Improvements Draft Report for Discussion 9 March 2016 Task Forces may be established by the Council to research and to advice on matters of an administrative or of a general policy nature. They will normally be of short duration and will be concluded on the presentation and acceptance of their reports by the Council and, where necessary, the General Assembly. Their composition, chairs, terms of reference and work plans shall be approved by the Council.

The advantage of using Task Forces is that it provides FIG the flexibility to focus on a specific subject for a limited amount of time regardless of the time in relation to the 4 year term, FIG Congresses, the timeline for Commission works, its work plans and coming work plans. The Task Force believe that FIG is not using this opportunity as much as it should. For example FIG should be considering the use of Task Forces to discuss challenges in the context of digitalisation, mega cities, urbanisation and more.

In other words - The Task Force recommends that FIG Council should consider the use of more Task Forces to address significant challenges.

7.7 Functions of the current Commissions

Regarding the **role of the commissions**, FIG states that "the commissions, under the guidance of their chairs, are responsible for pursuing FIG's professional and technical objectives, through the implementation of work plans that are adopted by the General Assembly following the FIG Congress and culminate with the delivery of technical programmes at the following congress."

It is up to General Assembly to decide and approve changes to the FIG Commission structure. Going through the terms of reference as well as missions of the current Commissions it is not easy to find any Commission that actively looks into the future of FIG. The Commissions are very much focused on the current four year period and this is understandable, but it is obvious FIG is missing mechanisms that will allow the FIG to address the modern challenges of "the mega trends" and for its internal structure to act accordingly. As a consequence, the Task Force propose that there should be "structured and formalised" cross-Commission work-shops during the period from when the Chair-Elects are elected (two years before a Congress) to when the new Commission work plans are approved (normally at the "first GA" after the new Commission Chairs are in place). These workshops should identify and monitor issues or topics relating to "mega trends", and then make amendments to their proposed Commission work plans, mission and objectives. This process should be overseen by FIG Council and / or ACCO and this will also ensure that FIG's vision or strategy is incorporated in Commission work plans.

Commissions 1 and 2 deal with the surveyor profession in general. The Task Force has called them Inter-Commissions since they are very much FIG internal and not having the outside-in focus. They are also interdisciplinary, as their mission or work should be influenced or based on the findings or outcomes from the more technical-oriented Commissions.

The other Commissions have topics of interest for a specific sector of the FIG members. For example - Commissions 3 to 5 treat mainly technical aspects and tools, Commissions 6, 7 and 8 are occupied with the application of these tools, and Commission 9 and 10 take care of the valuation and economic aspects of land and constructions. Generally, the Commissions have been stable for many years even though their terms of references and missions may have been developed. The Terms of References of some Commissions are heterogeneous and do not carry the same level of relevance. It is apparent that FIG needs to be more active in the preparation of Commission work plans so that objectives do not overlap or have a gap.

Commission	Name
1	Professional Standards and Practice
2	Professional Education
3	Spatial Information Management
4	Hydrography
5	Positioning and Measurement
6	Engineering Surveys
7	Cadastre and Land Management
8	Spatial planning and development
9	Valuation and the Management of Real Estate
10	Construction Economics and Management

Potential synergies in work plans can be seen from their denominations:

In other words - to avoid duplication of effort or to improve the use of resources, Commissions should harmonise their work plans. For example, Commission 1 and 2 should define their actions on developments outlined by the other Commissions and to formulate conclusions for the development of the profession and the education of the professionals.

7.8 Free choice of Commission topics

It appears the tradition within FIG is to give the Commission Chairs-elect the freedom to develop their own work plans. In most cases, they do their best but the drivers for the choice or content are often not well considered nor take into account the FIG Vision or Strategy. Normally, the work plan objectives are the result of the Commission Chair-elect's own focus areas and not the global professional surveyor challenges such as the "mega trends". The Commission Chair-elects tend to focus on 'burning issues' when preparing the work plans, and as a consequence the long term mission of FIG is not taken into account as much as it should. There should of course always be freedom for the Commissions to develop their own work plans but the FIG organisation should also have a stronger mechanism to ensure that work plans are homogenous and cover the entire FIG surveyor and are part of the Strategy and Vision.

FIG needs to have insights into the future developments of the profession as well as the mega trend. FIG needs to be focused and clear on the position that the organisation would like to have in the future. Because the work plans are not sufficiently future oriented, most results coming out of the work plans are dealing with short term problems. It is important that FIG ensure that the organisations visions and missions are also covered in the Commission work plans.

Besides the papers presented by members are mainly explaining the state of the art, the work plan results have the same quality. So FIG knows very well what is going on, but not what is important in the future. Normally the plenary speakers at our events are trying to look into the future for us but we need to ensure

that their thoughts and ideas are also taken care of in the technical program, in the FIG Vision and Mission and in the Commission works.

In other words – Commissions need to have results / outcomes that offer real solutions or have an impact and are visionary (look to the future) rather than just describe the current status or state of play?

7.9 Ensuring qualified Commission chairs

Regarding the process of identifying new Commission Chairs, the Internal Rule 11.4 state that "a nominee shall preferably have played an active part in the activities of the commission for which he or she is being nominated as chair, and shall have demonstrated possession of the personal and professional capabilities needed to lead the work of the commission. In addition, the Council shall assure itself as to the nominees' practical availability for service and that they have sufficient financial and administrative support."

Presently, the Member Association can propose a person who is not known to anybody else and such a person can be elected. As we know, to be a Commission Chair requires a long term commitment, as it generally entails, two years of "pre-selection" or "apprenticeship" and then four years of active participation as the Chair. As such the Task Force, strongly believe that the Commission Chair must be a well-known person within FIG, the Commission, and understand how FIG works before the election. Also, during this six year period much can happen and change, which can impact on their ability of the Commission Chair to be active. Therefore the process to encourage candidates, to evaluate candidates and to elect the Commission Chair is a very serious process that should be treated as such.

It is therefore very clear that the Council has an obligation to ensure that candidates meet the selection criteria's before the nomination is accepted and then put forward to the General Assembly. A way to improve the current situation would be to create a Chair Selection Review Team that is made up of the ACCO-rep, one or two Vice Presidents and possibly existing Commission officers. This selection panel would play a vital role if there are multiple candidates and the purpose of this Committee would be to validate the candidates before they are presented to the General Assembly. Also, if required, this Committee could address the General Assembly about the preferred candidates.

In other words - a Chair Selection Review Team or Panel needs to be established to evaluate and validate a candidate's capability against selection criteria for a Commission Chair.

7.10 Number of Commissions

The number of FIG Commissions has been growing over the time without changes to the structure. In parallel, the Council and General Assembly has the option to form Task Forces to deal with special issues at any time. Normally, a Task Force is created immediately after the new Council starts its work and lasts more or less over the four year period. As a consequence the increasing number of official FIG "bodies" results in the need for more human and operational resources. This problem could overburden FIG. In other words, FIG need to enforce or modify the present process to assess or evaluate the performance of Commissions and if required de-commission the non-performers.

The Task Force has evaluated the current FIG commission structure in terms of the number of commissions, their tasks, how they are linked to each other, size and more. The Task Force believed (early in the process) that we now have the chance to implement changes to the FIG Structure, and that if we do not do it now we

probably have to wait a long time for the next opportunity. The Task Force also believe that there are so many international initiatives, trends and changes going on that FIG needs to take action. Therefore to address these challenges the current number of Commissions needs to be rationalised. A summary of our discussion on reducing the number of Commissions can be found in the table below.

Pros	Cons
 Reset in terms of activity Reset in terms of subject/content Colocation of typically linked Commissions, e.g. 3/7, 4/5/6 Fewer active chairs to find, simpler recruitment Fewer competing events May improve communication and linages More likely to create a critical mass cactive people Could create space for more Task Fores, and better allocation of funding Could provide a mechanism to create more 'interim' positions (i.e.: greater structure) Clarity over network and commission hierarchy/structure 	 More work may fall on the shoulders of Commission Chairs, who may require more support Such a change may not necessarily lead to efficiency Such a structure may promote only managers, and not others Only a few positions which may limit the visible pool from which to draw leaders, such as FIG VP etc. Could mean less people are engaged and active Does not directly address Task Force

It was agreed in the Task Force that we should suggest to the General Assembly that the number of Commissions should be reduced and the Task Force has prepared a suggestion on a new structure, see page 5. It was understood that this would likely increase the workload of the Commission Chairs, but that new positions could be created to support this structure, including potentially formal young professional roles to each Commission. However, we do believe that the advantages in reducing the number are so strong that this is the way that FIG should proceed.

In other words – FIG Commissions should be rationalised to four (4).

8. Our thoughts on keeping the structure as is

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The Task Force has considered the "no-change" option to improve the efficiency and effectiveness of FIG operations. We believe that the current Commission structure was developed and adopted for the best intentions. However, considering were the profession is today and where it is going, the Task Force believe now is the right time for change, and we have the capability to ensure the proposed Commission structure FIG Task Force on Structural Improvements Draft Report for Discussion

will meet future challenges. The Task Force strongly urge that the FIG General Assembly carefully consider the proposed changes to our FIG Commission structure.

APPENDIX A: Internal rules and Commissions

11.0 COMMISSIONS

11.1 Commissions shall be established to further the technical and professional work of the Federation. Between them they shall cover all the activities listed in the definition of a surveyor. The terms of reference of the Commissions and the duration of their work shall be decided by a vote of the General Assembly so that together they shall be able to anticipate and respond to market trends and client demand.

11.2 A Commission shall be comprised of delegates appointed by the member associations and correspondents (non-voting delegates) appointed by other members. Each member association shall be entitled to appoint one delegate to each Commission, who will be expected to attend, as a minimum, at least one congress or a working week and, whenever possible, technical meetings organised by the Commission. It is, however, recognised that much of the work of a Commission will be conducted by correspondence.

11.3 Affiliates, corporate members and academic members shall be entitled to appoint one correspondent (non-voting delegate) to each Commission. Correspondents and other persons appointed by Commission chairs may contribute to the work of the Commissions but not to their administration.

11.4 Each Commission shall be presided over by a chair who shall take office at the start of the year following a congress and serve for a four year term. The election of chairs of Commissions shall be decided by a vote of the General Assembly. For each four year term, each member association may nominate one person for a position of a Commission Chair. Nominations shall normally be called for at least four months in advance of the General Assembly at which the elections are to be held to enable the Council to ensure that the nominees command the support of their member associations and the relevant Commissions. A nominee shall preferably have played an active part in the activities of the Commission for which he or she is being nominated as chair, and shall have demonstrated possession of the personal and professional capabilities needed to lead the work of the Commission. In addition, the Council shall assure itself as to the nominees' practical availability for service and that they have sufficient financial and administrative support. In the event of no nomination being received for the chair of a particular Commission, the Council shall take such action as may be needed to ensure that the position is filled. (Approved by General Assembly in Eilat 3 May 2009).

11.5 No one member association shall normally hold a chair of the same Commission for two consecutive terms.

11.6 Each Commission chair shall attend and submit a report to each meeting of the General Assembly, and may participate in debate but shall not have voting rights.

11.7 The Council shall promulgate guidance notes for Commission chairs.

11.8 The election of chair-elect shall be decided by a vote of the General Assembly at the meeting which takes place two years prior to the General Assembly at which chairs are elected. For each four year term, each member association may nominate one person for a position of chair-elect of a Commission. Nominations shall normally be called for at least four months in advance of the General Assembly at which the elections are to be held to enable the Council to ensure that the nominees command the support of their member associations and the relevant Commissions. A nominee shall preferably have played an active part in the activities of the Commission for which he or she is being nominated as chair, and shall have demonstrated possession of the personal and professional capabilities needed to lead the work of the Commission. In addition, the FIG Task Force on Structural Improvements Draft Report for Discussion 9 March 2016 Council shall assure itself as to the nominees' practical availability for service and that they have sufficient financial and administrative support. In the event of no nomination being received for the chair of a particular Commission, the Council shall take such action as may be needed to ensure that the position is filled. (Approved by General Assembly in Eilat 3 May 2009)

11.9 The General Assembly shall vote for each candidate of their choice. The first vote shall be between all candidates for the post in question. If no single candidate for that post gains an absolute majority of the votes cast, a second vote will be held between the two candidates that have the most votes. In the event of a tie on that vote, the final decision shall be made by selecting a name by blind ballot.

11.10 The Commission chair-elect will appoint a minimum of three chairs of Working Groups prior to the General Assembly in which he or she will take over the chairmanship of the Commission. These Working Group chairs will be given the status of a Commission Vice Chair. In addition the chair-elect may also appoint a person to provide administrative and communication support to the work of the Commission. This person will also be given the status of a Commission vice chair.

11.11 The chair of each Commission shall prepare a work plan setting out the various activities of the Commission together with inter-Commission activities proposed for the four year term. The work plan shall be prepared and submitted to Council between the time of the General Assembly when the chair is elected and commencement of the term of office.

11.12 In the event that a chair, chair-elect or a vice-chair is unable to fulfil the responsibilities of the office the Council shall make such arrangements as it deems necessary to ensure the continuity of that Commission's work, including the appointment of a new chair, new chair-elect or new vice-chair if necessary.

11.13 All persons appointed to, or nominated for, the posts of chair, chair-elect or vice-chair of a Commission or Inter-Commission activity must be a member of and have the formal support of their Member Association.

APPENDIX B: RESPONSIBILITIES OF COMMISSION CHAIRS

Endorsed by the General Assembly 15 June 2008.

The particular responsibilities of each chair are as follows:

- lead the Commission in seeking to achieve the overall objectives of the Federation
- prepare a work plan that helps to take forward FIG's strategic plan and advance the overall objectives of the Federation, appointing working groups as appropriate
- modify the work plan if asked to do so by the Council in order to meet the overall objectives of the Federation
- direct the affairs of the Commission so that it achieves the goals outlined in its current work plan
- consult with and involve the delegates, correspondents (non-voting delegates) and others involved in the work of the Commission in order to achieve these goals
- work with other Commission officers and chairs of Commission working groups (Commission vice chairs) in all matters relating to strategy and planning
- submit annual written reports to the General Assembly on progress in implementing the work plan
- attend all meetings of the Advisory Committee of Commission Officers
- *if required, appoint a Commission secretary (Vice Chair of Administration) to assist with the work of the Commission*
- organise seminars, workshops and Commission delegate meetings during congresses, FIG working weeks and regional conferences, if possible, or otherwise, on an annual basis
- seek opportunities for advancing the work of the Commission through the co-sponsorship of events with relevant outside bodies, member associations, etc
- participate as requested by the Council and the General Assembly in cross-Commission project activity as a means of advancing the overall objectives of the Federation and its current work plan
- prepare, in collaboration with the FIG Office and the congress director, a detailed programme for the congress, working weeks and regional conferences and call for papers
- select the required number of papers for discussion in the technical sessions (papers having an international relevance and a high professional, technical or scientific standard), leaving as poster session papers those of immediate relevance or those more appropriate for that form of presentation
- chair sessions at FIG events or select chairs and brief them to ensure that creative and informative discussions take place
- appoint rapporteurs for summarising discussions at technical sessions and for subsequent publication in appropriate Federation media
- maintain a Commission web page on the World Wide Web.

Appendix C: FIG Definition of the Functions of the Surveyor

Summary

A surveyor is a professional person with the academic qualifications and technical expertise to conduct one, or more, of the following activities;

- to determine, measure and represent land, three-dimensional objects, point-fields and trajectories;
- to assemble and interpret land and geographically related information,
- to use that information for the planning and efficient administration of the land, the sea and any structures thereon; and,
- to conduct research into the above practices and to develop them.

Detailed Functions

The surveyor's professional tasks may involve one or more of the following activities which may occur either on, above or below the surface of the land or the sea and may be carried out in association with other professionals.

1. The determination of the size and shape of the earth and the measurement of all data needed to define the size, position, shape and contour of any part of the earth and monitoring any change therein.

2. The positioning of objects in space and time as well as the positioning and monitoring of physical features, structures and engineering works on, above or below the surface of the earth.

3. The development, testing and calibration of sensors, instruments and systems for the above-mentioned purposes and for other surveying purposes.

4. The acquisition and use of spatial information from close range, aerial and satellite imagery and the automation of these processes.

5. The determination of the position of the boundaries of public or private land, including national and international boundaries, and the registration of those lands with the appropriate authorities.

6. The design, establishment and administration of geographic information systems (GIS) and the collection, storage, analysis, management, display and dissemination of data.

7. The analysis, interpretation and integration of spatial objects and phenomena in GIS, including the visualisation and communication of such data in maps, models and mobile digital devices.

8. The study of the natural and social environment, the measurement of land and marine resources and the use of such data in the planning of development in urban, rural and regional areas.

9. The planning, development and redevelopment of property, whether urban or rural and whether land or buildings.

10. The assessment of value and the management of property, whether urban or rural and whether land or buildings.

11. The planning, measurement and management of construction works, including the estimation of costs. In the application of the foregoing activities, surveyors take into account the relevant legal, economic, environmental and social aspects affecting each project.