Background

Following the discussions and comments received from participants at FIG during the past years, the existing peer-review process for papers sent to FIG’s annual conventions (working weeks and congresses) has not yet produced the desired results. First, although the peer-review process started as far back as 2008, this process does not benefit members of the academia when it comes to assessing their achievements (towards academic appointments, promotions, etc.) since their accepted publications under FIG are not indexed in citation databases of peer-reviewed literature (e.g., ISI). Second, the level of peer-review is not consistent, particularly in light of claims that some reviewers are not strict enough about the level of review, and that papers of inferior standard pass the filtering process and are accepted.

Establishing the Task Force

The Task Force has been established at the GA during 2015 FIGWW in Sofia, Bulgaria. The Task Force has been asked to examine the possibility of initiating a new peer-reviewed scientific journal within the framework of FIG. During discussions among its members since then, it was agreed that two main options should be considered:

1. Establishing a new scientific FIG journal with all its implications - editorial board and editor-in-chief / associate-editors, initiating a printing system - mechanism (in case of a hard-copy version of the journal), get the approval of leading citation databases to index our journal, etc.

2. Initiating activities on the matter on a lower scale, at least for the next 5-10 years, by collaborating with several existing geomatics journals or publishers to publish our papers in their journals.

A new Scientific FIG Journal

Establishing a new scientific FIG journal is concerned with two main aspects – organizational and professional. Without minimizing the significance of the
organizational aspects, the main challenges in establishing a new journal are with the professional aspects. Within the professional requirements, the main issue is to achieve recognition by the Citation Databases. The requirements of the main citation databases, which can vary, are:

1. Issues should be published at set times and at regular intervals throughout the year (although “Web of Science” is willing to consider including a periodical procedure).

2. A number of volumes should be published before considering whether a journal should be included in a citation database. The specific required number is not provided. We assume that initially there will not be more than 3-4 issues per year, and therefore the process towards inclusion in the databases can only start 1-1.5 years after the journal is first published, and would last several months thereafter (completing the process in ~2 years).

3. There are no restrictions on including an open sourced e-journal (vs. a printed journal) in a citation database.

4. Appointing an editor-in-chief (and associate-editors), as well as an editorial (advisory) board, all of which are internationally diverse, and are leading academic/research personnel.

5. A broad international diversity of the authors/co-authors of papers.

6. A comprehensive (high standard) and objective peer-review process.

There are a few additional - less significant - requirements, such as having an ISSN number, identifying the authors of the papers by their addresses, publishing concise resumes for authors, and more.

**Arguments against a new Scientific FIG Journal**

During the meeting at the special session on the matter (FIGWW’2016) and discussions among the members of the Task Force, various arguments against establishing a new scientific FIG journal have been argued:

- The financial aspects should be considered and its effect on FIG budget should be taken into account.

- FIG covers too many topics to be included in one journal.

- A scientific (FIG) journal, which is not focusing on a specific topic, might prevent potential readers to use it.

- The Impact Factor of a journal is dependent on its number of readers (number of citations of its papers) and accordingly without focusing might be not high.
A regular journal with 3-4 issues a year requires at least ~ 40-50 accepted papers per year.

Based on the current number of submitted (and accepted) papers in the full-peer-review channel to our annual events – this might be a non-reachable target.

The implications of the alternative solution

As abovementioned, the alternative solution is by collaborating with existing geomatics journals or publishers to publish our papers in their journals. To achieve this, the following steps should be implemented:

- Establishing a consistent and structured peer-review mechanism, which will be composed of an editor-in-chief and 3-4 associate-editors.
- Establishing an editorial (advisory) board composed of 20-25 reviewers.
- Be in touch with several exiting journals to reach pre-defined agreements to publish our accepted papers.
- The peer-review process, which will be carried out by the editors and the editorial board, will be rigorous with high scientific and/or professional standards (the current level of review process of the full-peer-review papers within the annual working weeks does not reach the desired standards).

Previous experience of journal publishing within FIG framework

FIG commission 3 (Spatial Information Management) has established more than 12 years ago a full-peer-review-process at its annual workshops.

Based on a rigorous peer-review process, the review results were adopted by several journals, and their editors have agreed to publish the accepted papers in their journals without requiring an additional review process. These journals are:

- Survey Review;
- Surveying and Land Information Science;
- Nordic Journal of Surveying and Real Estate Research;

At FIG commission 3 annual workshops about 20-25% of submissions were via the full-peer-review process, and only 40-50% of these submissions were accepted after the peer-review process (for comparison, leading journals
mention a 25-50% acceptance rates for publication). These figures might give us an initial estimation regarding the acceptance rate of papers during our working weeks and congresses.

**Collaboration with existing Journals**

To examine the possibilities and potential to collaborate with existing journals we were in touch with editors, editors-in-chief or co-editors of more than 20 leading journals covering different aspects of our profession. Correspondences suggest the following principles of collaboration:

1. FIG will establish an international editorial board, which will include leading figures (academic professors as well as high-level professionals).

2. The peer-review process, which will be carried out by the editorial board, will be rigorous with high scientific and/or professional standards.

3. The peer-review process will be transparent (including parameters, criteria etc.) to the editors of these journals.

4. These journals will accept (adopt) our peer-review-process without applying their additional peer-review process.

5. The accepted papers will be published in these journals (as special issues or within their regular issues).

These journals (in alphabetical order are):

- Applied Geomatics
- Cartographica -- The International Journal for Geographic Information and Geovisualization
- Cartography and Geographic Information Science (CaGIS)
- Computers, Environment and Urban Systems
- Computers & Geosciences
- Geoinformatica
- Geomatica
- Geo-spatial Information Science
- International Journal of Applied Earth Observation and Geoinformation (JAG)
- International Journal of Digital Earth (IJDE)
- ISPRS International Journal of Geo-Information (IJGI)
- Journal of Applied Geodesy
- Journal of Land Use Science
- Journal of Spatial Science (TJSS)
- Journal of Surveying Engineering
- Land Use Policy
- Marine Geodesy
- Surveying and Land Information Science (SaLIS)
- Survey Review (SR)
- The Cartographic Journal
- Transactions in GIS
- URISA Journal

So far (end of February 2017) we have received only one negative reply refusing to publish our accepted papers (they rely only on their internal reviewing process), and five positive replies, which agreed in principle to collaborate with FIG and publish our accepted papers in their journals.

Two comments on this matter:

- Our assumption is that until the working week in Helsinki we will have more responses (hopefully many of them positive).
- Even the positive responses still require negotiations with the journals to reach agreements on the form of collaboration between us.

**Recommendations**

The recommendations of the Task Force to the council and to the GA are:

1. Adopting the solution of publishing the accepted papers during our annual working weeks and congresses in existing geomatics journals for a period of 5-10 years (e.g., special issues).

2. Establishing a consistent and structured peer-review mechanism, which will be nominated by the council and will be approved by the GA. The nomination of the editor-in-chief and the 3-4 associate-editors will be for a term of 4 years, and will have a status that is equivalent to a permanent “Task Force”.

3. The editor-in-chief and the associate-editors will be responsible to nominate 20-25 reviewers as an editorial (advisory) board.

4. The editorial staff (editors and editorial board) will be acting as an independent body for all purposes.
5. This editorial staff will abide by the rules of leading journals in the field, and will handle the review process of papers sent for publication during FIG annual working weeks and congresses (and perhaps also during the commissions' workshops – if the commissions are willing).

6. The current channels [(a) full-peer-review; and (b) abstract-review] for submitting papers to our annual working weeks and congresses will be kept as is (where authors will be asked to present their research during the working weeks and congresses). However, papers submitted to the full-peer-review channel will be classified into 3 groups (levels):

   a. Fully accepted – to be published in the international scientific journals

   b. Partial accepted – to be published as accepted full papers in FIG website (as it is done for the last 8-9 years with the full-peer-review accepted papers)

   c. Rejected papers – will be reviewed again in the non-peer-review (abstract review) channel.

7. All FIG commissions will have the option to join this process and submit papers from their annual workshops to be published (if accepted) in the journals. In this case, the peer-review process will be handled independently by the editorial board - and not by the commissions.

8. Postponing the decision of establishing a FIG Scientific Journal to a later date, perhaps for 5-10 years (to be discussed by the council during the term 2023-2026).

9. If the recommendations are adopted by the Council and the GA, authorize the editor-in-chief and the associate-editors to reach an agreement with 5-7 journals, and determine the framework for common future activities.

10. The administrative activity of the editorial staff will be handled by FIG office (in a similar process to what was done until now toward working weeks and congresses).

Planned timetable

The planned timetable is as follows:

29.5.2017    General Assembly (first meeting) – the activity of the Task Force and its recommendations will be presented (it will be reported earlier to the council in Helsinki).

31.7.2017    Council nominates an editor-in-chief and 3-4 associate-editors
(if the GA approves the recommendations of the Task Force). The GA at the 2018 congress in Istanbul should approve the nominations.

31.10.2017 The editor-in-chief and associate-editors will nominate 20-25 reviewers as an editorial (advisory) board.

31.10.2017 The editor-in-chief and associate-editors will finalize MOUs (agreements) with 5-7 journals for mutual collaboration.

Nov. 2017 FIG office will inform (toward the 2018 congress) all its members about the new structure of the peer-review process, the names of the editor-in-chief, the associate-editors and the editorial board (reviewers), as well as the names of the journals that will be publishing the accepted papers.

May 2018 A report by the editor-in-chief and associate-editors will be submitted to the GA during the congress in Istanbul.

Yerach Doytsher, Chair
March 2017