

Participation of Member Associations of FIG in the General Assemblies

Analysis made by the Portuguese member of FIG, the “Colégio de Engenharia Geográfica da Ordem dos Engenheiros”.

1. INTRODUCTION

The General Assembly meeting of FIG member associations governs the Federation. The General Assembly, with the format followed nowadays, was established in the 62nd Permanent Committee meeting, held in Berlin in 1995. In this meeting it was decided to combine the functions of the “Permanent Committee” and the “General Assembly” in a “General Assembly” that would meet annually, during the FIG Congress/Working Week. This important change, as well as the rule “one association one vote”, was adopted during the General Assembly of Brighton Congress, in 1998.

According to “FIG Statutes, Internal Rules and Guidelines” the voting rule is one vote per member association: “Each member association shall nominate an individual member who shall be authorised to cast that member association’s vote at any meeting or extraordinary meeting of the General Assembly”¹ and “The number of votes which may be cast by a member association is one”². It shall meet once each calendar year, except in the case of an extraordinary meeting.

Since the 1998 General Assembly, there are no restrictions on the number of national associations per country. The General Assembly can be “divided” into several sessions and the Council³ advises on the exact number and duration of the sessions⁴. The General Assembly has been divided into two sessions, the first one on the first day of the Congress/Working Week, the second on its last day.

Concerning the votes and decisions, “All decisions of the General Assembly shall be taken by simple majority vote. Only member associations which have paid their fees for the previous calendar year and have no other arrears and which are represented at the meeting by an individual member shall be entitled to vote”¹. “For a General Assembly to be constitutionally valid there must be present at least one individual member of at least one third of the member associations”⁵.

In FIG General Assembly of 2011, that took place in Marrakesh, a discussion took place on changing the rule “The number of votes which may be cast by a member association is one”. The system under discussion is: “should associations with more members have more votes?”.

In this report, an analysis of the participation of member associations in the General Assemblies is made. The data used in this analysis is the one available in the FIG website: the list of member associations that participated in the General Assemblies of 2000 to 2011, and the number of members of each association (data concerning the year of 2010). Each Assembly has had two sessions, which leads to two roll calls. Sometimes some associations participate only in one of the sessions. To simplify the analysis here presented the following rule will apply: where an association participates in only one of the sessions in that year, it will be counted in this document as a full participation. Also, in this document “General Assembly” will be called solely “Assembly”.

¹ From paragraph 6.5 of FIG Statutes.

² From paragraph 6.6 of FIG Statutes.

³ The Council is composed of the president of the Federation and four vice presidents. Additional ex-officio (non-voting) members of the Council may be appointed by the General Assembly. These will include the Director of the Office, an ACCO representative and the Director of the next Congress. The responsibilities of the Council members are the leadership and executive management; promotion of profession; member support; event development; global development.

⁴ From paragraphs 2 of FIG Guidelines on Organising Congresses and FIG Guidelines on Organising Working Weeks.

⁵ From paragraph 6.4 of FIG Statutes.

2. MEMBER ASSOCIATIONS OF FIG. CHARACTERISTICS

The distribution of FIG members can be seen in Figure 1 (data from 2011 June). The number of members of FIG is increasing, as seen in Figure 2. In this Figure, and in some of the following ones, the years of the Congresses (2002, 2006 and 2010), are identified with a letter C before the year.

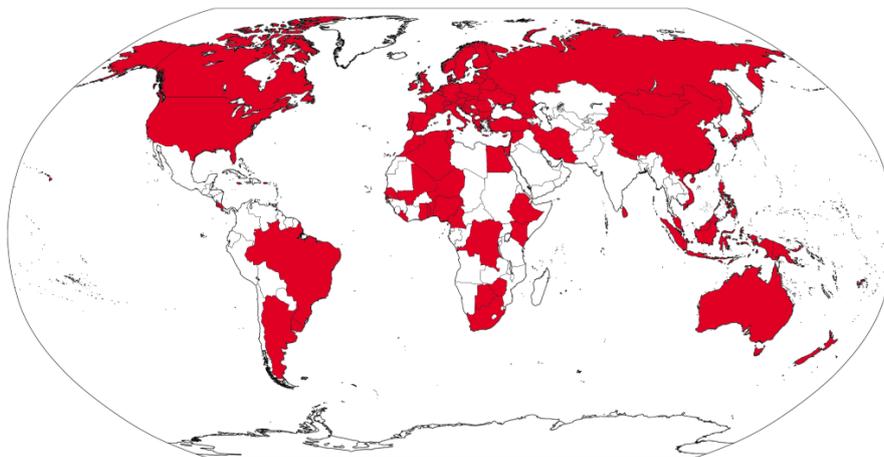


Figure 1 – Countries with a national association member of FIG

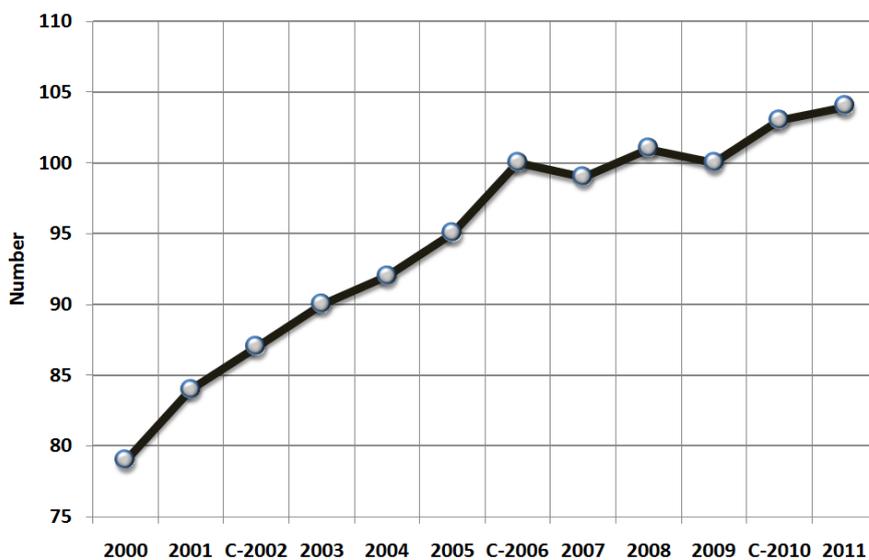


Figure 2 – Variation of the number of associations

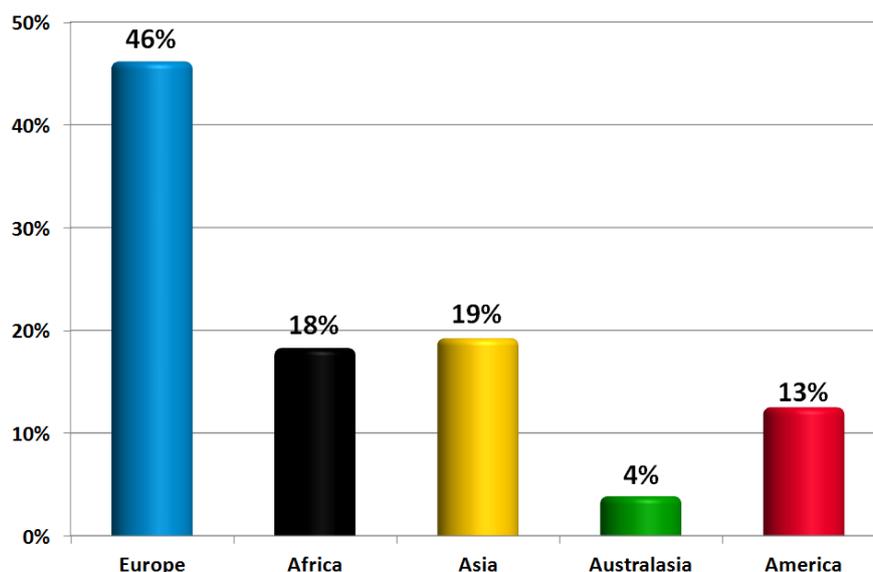


Figure 3 – Distribution of the member associations by continent (2010)

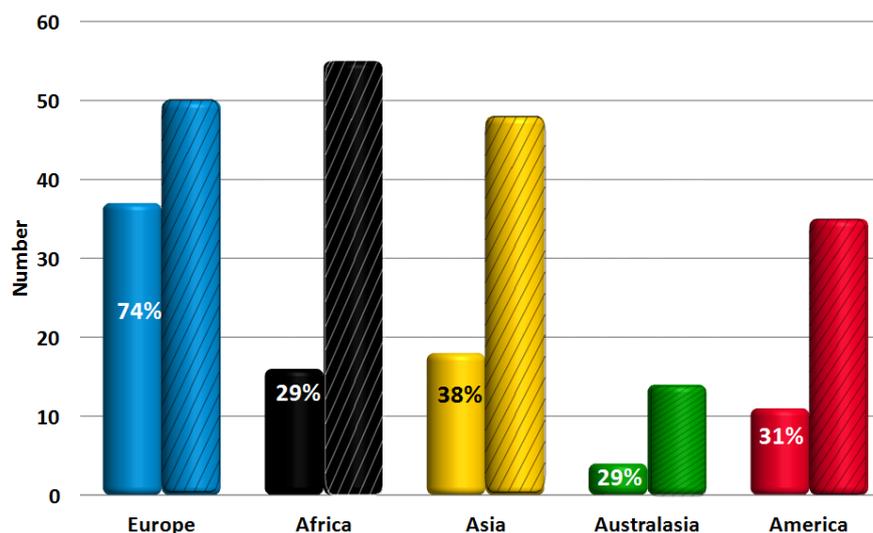


Figure 4 – Number of countries with at least one association at FIG (2010).

The majority of the associations are European (Figure 3). In Figure 4 is presented, in number and percentage, the countries that have at least one association member of FIG. For instance, 74% of the European countries have associations that are members of FIG.

In the last 11 years Africa is the continent with the larger number of new associations at FIG (see Figure 5). The opposite situation is happening with American associations: after an increasing number in the period 2000-2006, that number is diminishing over the last few years. Australasia has maintained its number of members. In percentage, the results are presented in Figure 6. The numbers of admissions, expungements and resignations since 1999 are presented in Figure 7.

Getting the coordinates of the cities where the associations have their offices, is easy to establish, by year, the “centre” of FIG on the surface of the world, a simple average of the coordinates. The “centre” has been “moving” near the border of Egypt and Libya, as seen in Figure 8. It is difficult to explain the direction of the displacement of the points, since it depends of the location of the members admitted and expelled in each year. Perhaps the situation less difficult to explain is the displacement in the “North” direction in 2001: about 50% of the displacement in the north direction is due to the entrance of a new member from a northern region: Finland.

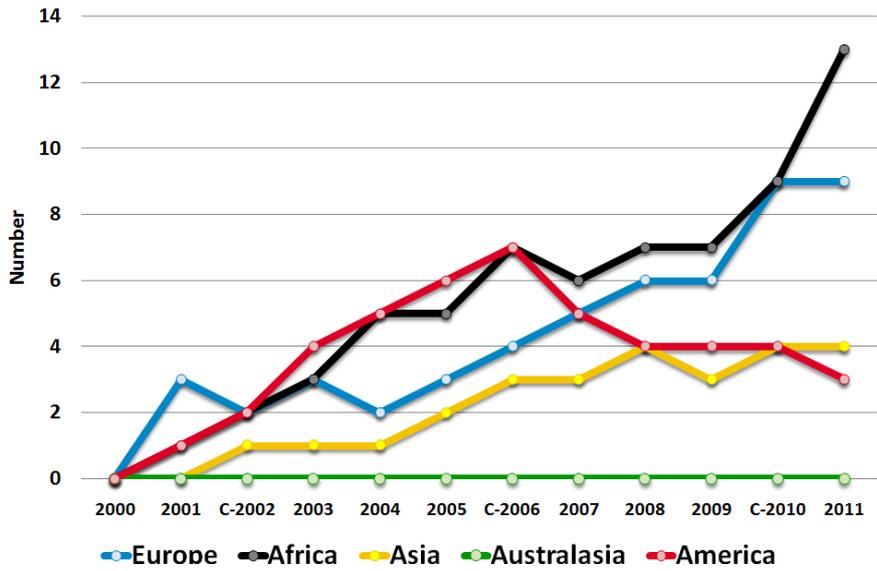


Figure 5 – Variation of the number of associations members since 2000

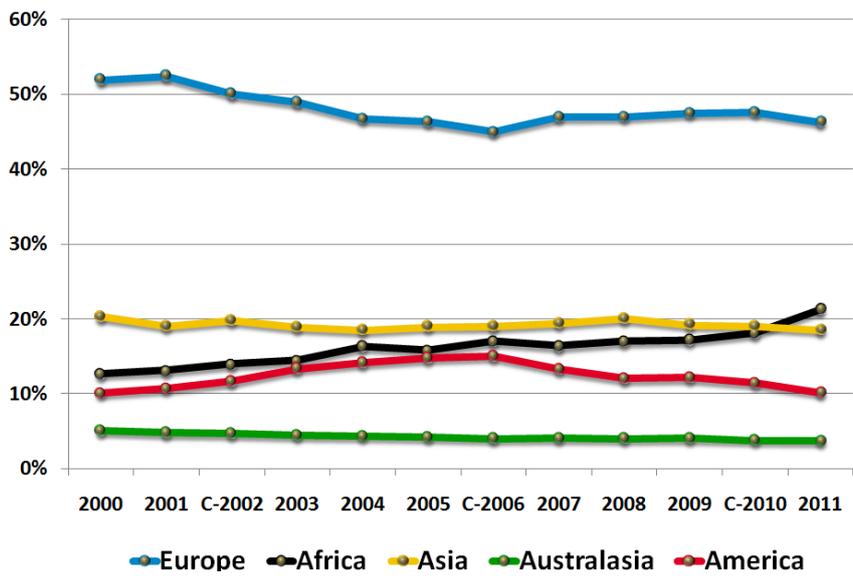


Figure 6 – "Weight" of the continents inside FIG

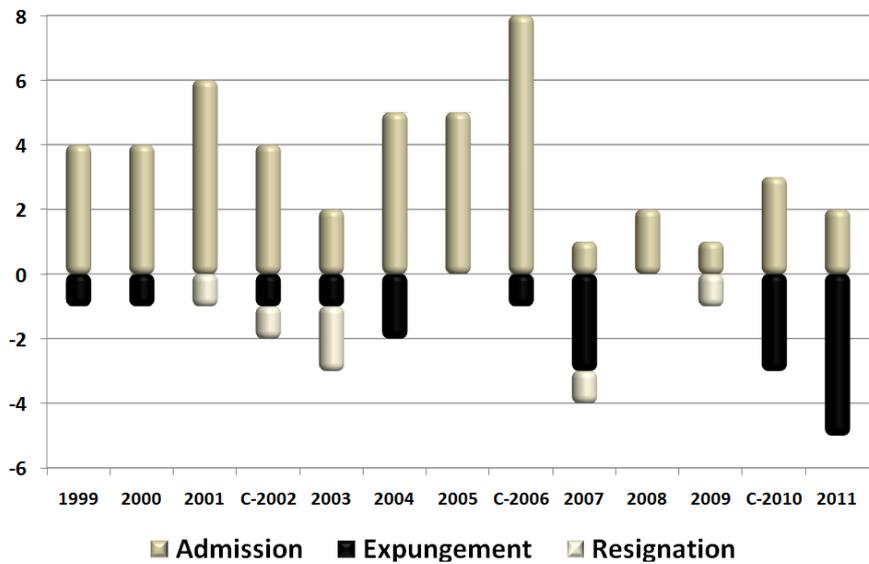


Figure 7 – Number of admissions, expungements and resignations



Figure 8 – The “centre” of FIG

The majority of the associations have a small number of members. Distributing the associations by classes according with the number of members of each association, the majority (80%) of the associations have less than 1000 members (see Figure 9, members of the year 2010; in parentheses the number of members). In 2010 the association with the least number of members was the *Botswana Surveying and Mapping Association* (23 members); the associations with a larger number of members, more than 10000, were the *Consiglio Nazionale Geometri e Geometri Laureati* (Italy) and *The Royal Institution of Chartered Surveyors* (United Kingdom). The number 5500 (frontier between classes E and F) was chosen because all the associations with more than 5500 members pay the same fee (the maximum fee).

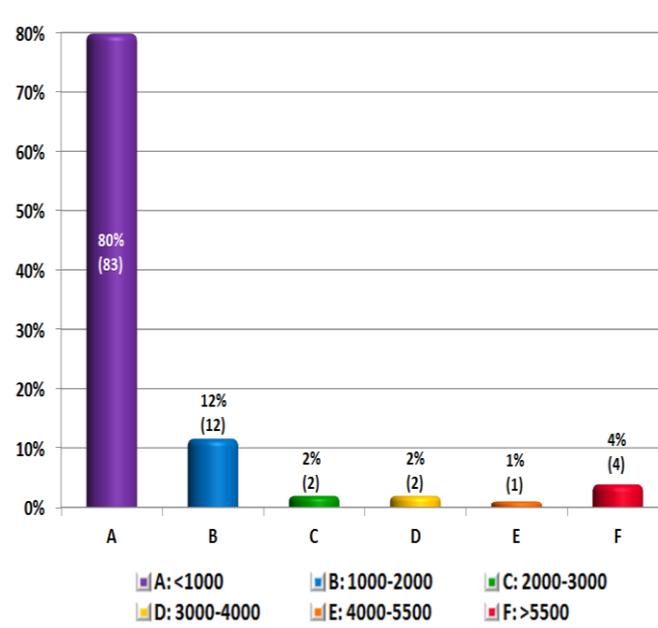


Figure 9 – Percentage of associations in each of the classes A to F

3. THE PARTICIPATION IN ASSEMBLIES

The number of associations that participate in the Assemblies is variable (see Figure 10), and it is noticeable that the Assemblies of the years of the Congresses (this is the Assemblies of 2002, 2006 and 2010), gather more associations.

As stated in the introduction, each Assembly has two sessions. For this reason there are two roll calls. In every Assembly some associations participate in only one of the sessions. The number of associations that participate only in one session varies from year to year, as seen in Figure 11.

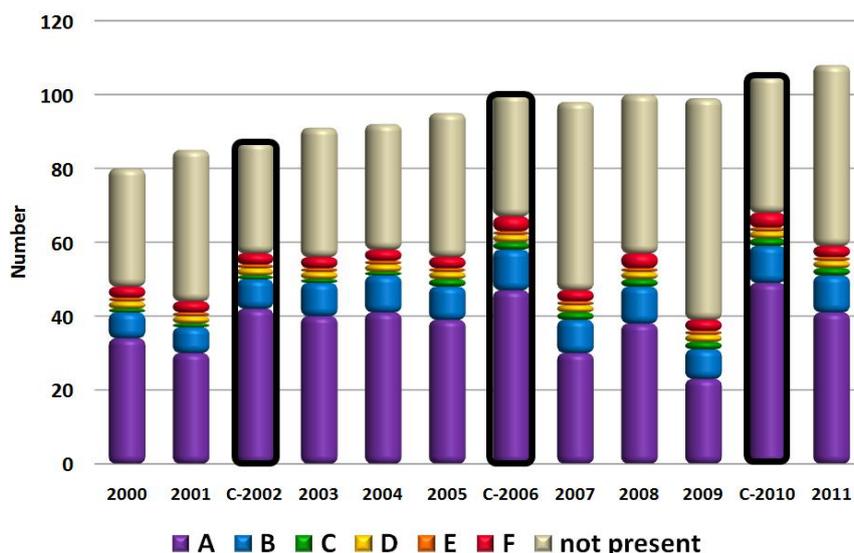


Figure 10 – Number of associations present in each Assembly

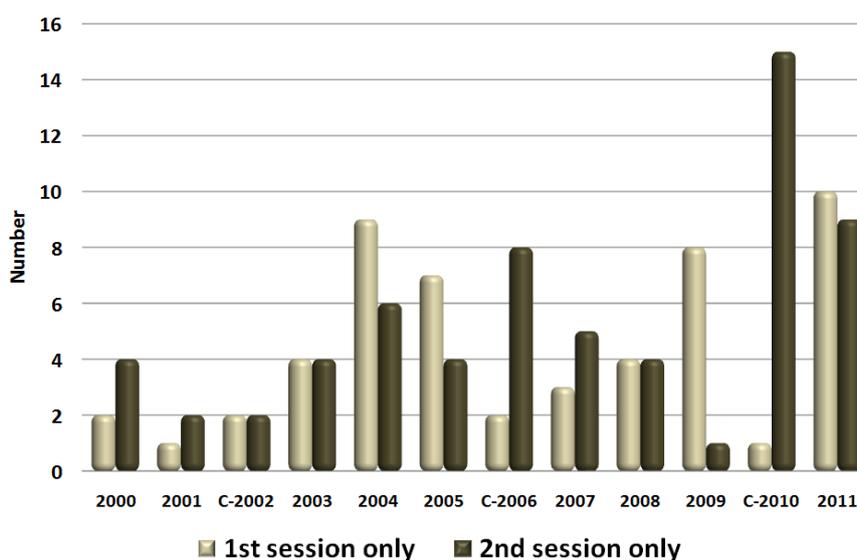


Figure 11 – Number of associations that participate in only one session

4. VOTING

According to FIG rules each association member has the right to one vote. Other members of FIG – affiliates, corporate members, academic members, correspondents and honorary presidents – cannot vote. It is under discussion the possibility of: i) associations with more members to have more votes; and ii) giving a vote for the group “Corporate Members”⁶.

In this analysis six different voting rules will be considered:

1. Rule 1. $A+B+C+D+E+F$: Each association has one vote. This is the rule established in 1998 and still in use;
2. Rule 2. $A+2*(B+C+D+E)+3*F$: Each association of group A would have one vote, each association of groups B to E would have two votes and each association of group F would have three votes;
3. Rule 3. $A+B+2*(C+D+E)+3*F$: Each association of group A and B would have one vote, each association of groups C to E would have two votes and each association of group F would have three votes;
4. Rule 4. $A+2*(B+C+D)+3*(E+F)$: Each association of group A, would have one vote, each association of groups B to D would have two votes and each association of group E and F would have three votes.
5. Rule 5. $A+B+C+D+E+F + CM(1)$: Equal to Rule 1 plus one vote to the corporate members.
6. Rule 6. $A+B+2*(C+D+E)+3*F + CM(1)$: Equal to Rule 3 plus one vote to the corporate members.

The six groups here referred – A to F – presented before (see Figure 9), reflect the number of members of each association (Table 1).

Table 1 – Number of members by each group

Group	N.º members (limits)	Group	N.º members (limits)
A	25 - 999	D	3000 - 3999
B	1000 - 1999	E	4000 - 5499
C	2000 - 2999	F	>= 5500

In the next paragraphs are shown, graphically, the percentage of votes of the groups in the Assemblies, from 2000 until 2011, according with different voting rules and the presence of the associations in the sessions of the Assemblies. Rule 1 also expresses the percentage of participation of each group in each Assembly. In the analysis it was considered that each association present in each session could vote⁷.

The graphs presented in the following pages are divided into three groups. In the first group (paragraph 4.1) the associations are gathered according to the number of members of each association, following the rule presented in Table 1. In the second group (paragraph 4.2) the associations are gathered by continent, where the number of members of the associations is also considered. In the third group of graphs (paragraph 4.3) the associations are gathered by income, whereby the number of members is also taken into account. In groups two and three is only presented the application of rule 1 and rule 3.

⁶ Corporate member: an organisation, institution or agency which provides commercial services related to the profession of surveyor. FIG Statutes: Point 3.1.

⁷ In fact, according to the paragraph 6.5 of FIG statutes, “only member associations which have paid their fees for the previous calendar year and have no other arrears and which are represented at the meeting by an individual member shall be entitled to vote”. Since 2009 the list of member associations that are not allowed to vote is appended to the Assemblies agendas and is published on FIG website some time before the conferences.

4.1 Effects of changing the voting rules

In the next Figures are presented several graphs that show the “weight” of each of the six groups in each session of each assembly of the period under analysis. The column to the right of each graph represents the average of the values that would be calculated if all of the association members participated in the Assemblies.

Figure 12
Rule 1
 $A+B+C+D+E+F$

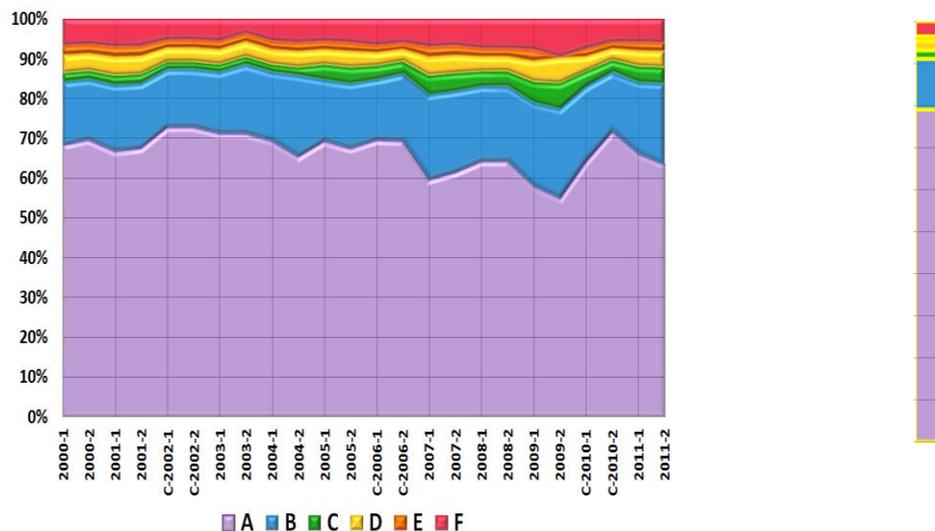
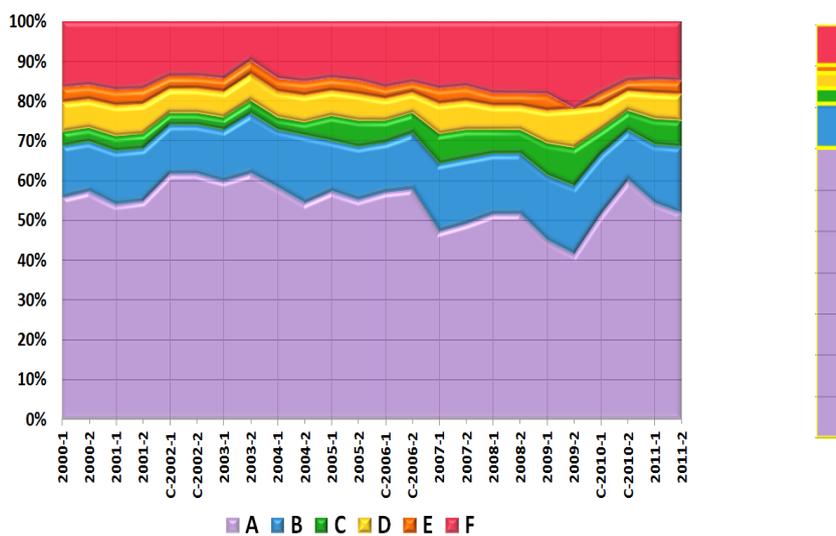
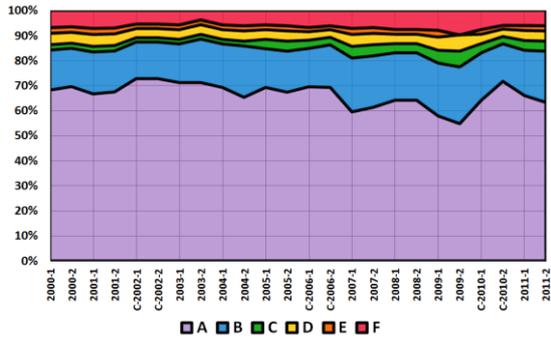


Figure 13
Rule 3
 $A+B+2*(C+D+E)+3*F$

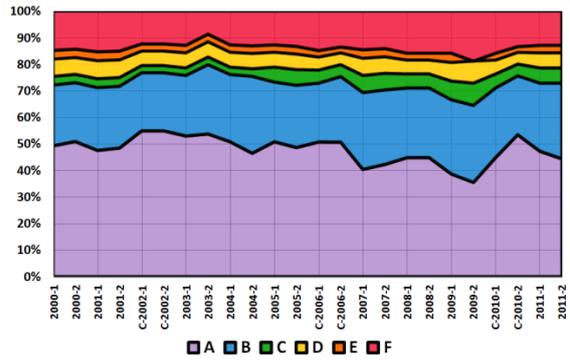


In Figure 14 are included the graphs of the six rules referred.

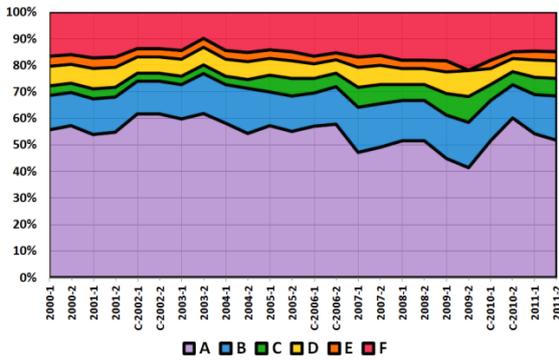
A comparative analysis of Rules 1 and 3 are presented in Figure 15: the black lines are the results of applying Rule 3; the background area presents Rule 1. Rule 3 diminishes the “importance” of group A associations.



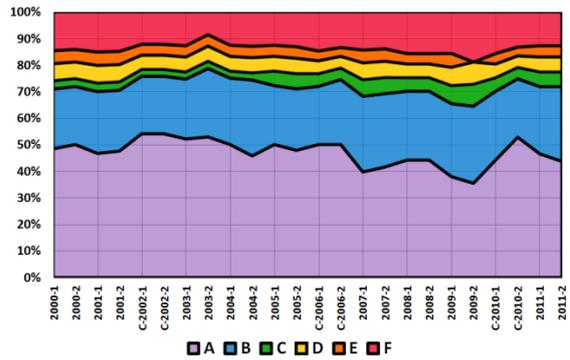
Rule 1: $A+B+C+D+E+F$



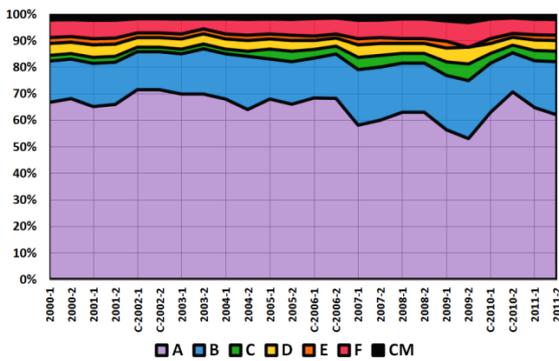
Rule 2: $A+2*(B+C+D+E)+3*F$



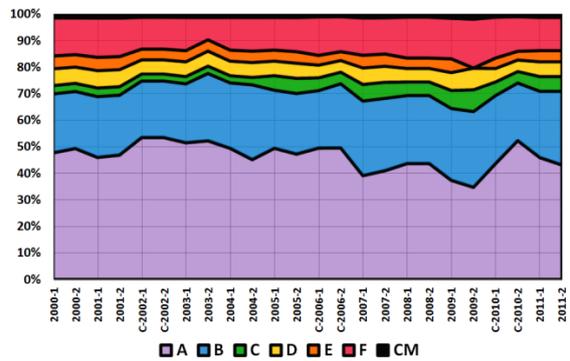
Rule 3: $A+B+2*(C+D+E)+3*F$



Rule 4: $A+2*(B+C+D)+3*(E+F)$



Rule 5: $A+B+C+D+E+F + CM(1)$



Rule 6: $A+B+2*(C+D+E)+3*F + CM(1)$

Figure 14 – Graphs of the six rules

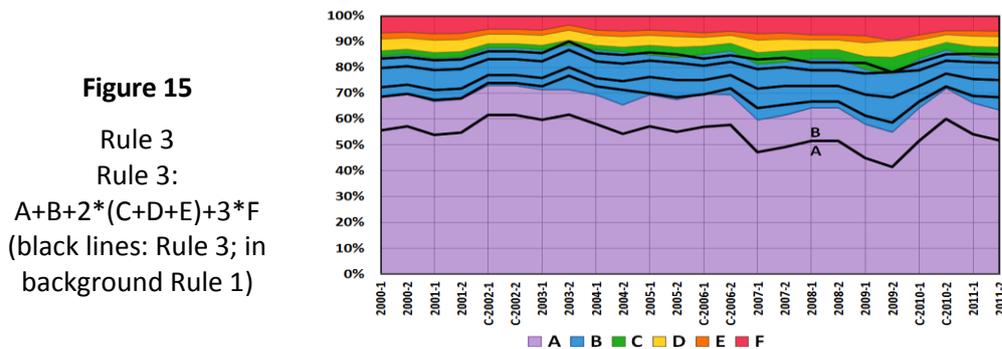


Figure 15

Rule 3
 Rule 3:
 $A+B+2*(C+D+E)+3*F$
 (black lines: Rule 3; in
 background Rule 1)

4.2 Members and Continents

The majority of FIG associations have a low number of members, as seen in Figure 16 (data from 2010). Presented are the results of applying “Rule 1” and “Rule 3”: the application of Rule 3 has almost no influence in the results, considering the continents (see Figures 17 and 18).

Figure 16 – Number of associations in each class in relation to the continents (2010)

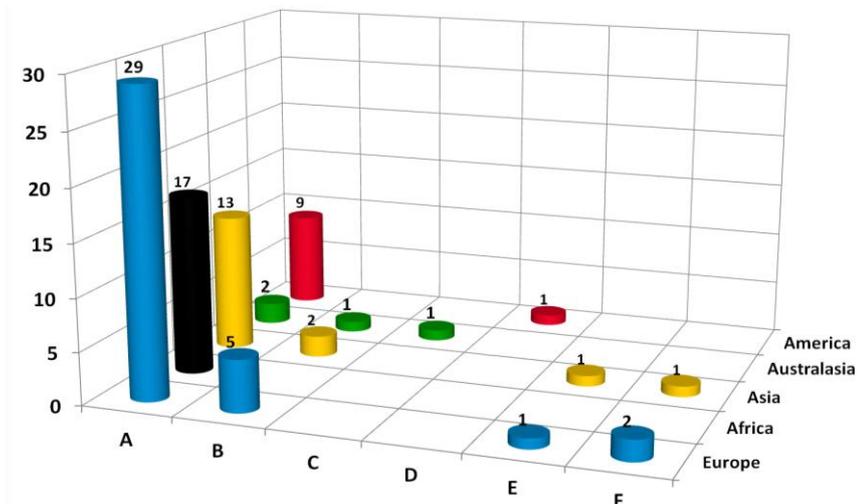


Figure 17
Rule 1
 $A+B+C+D+E+F$

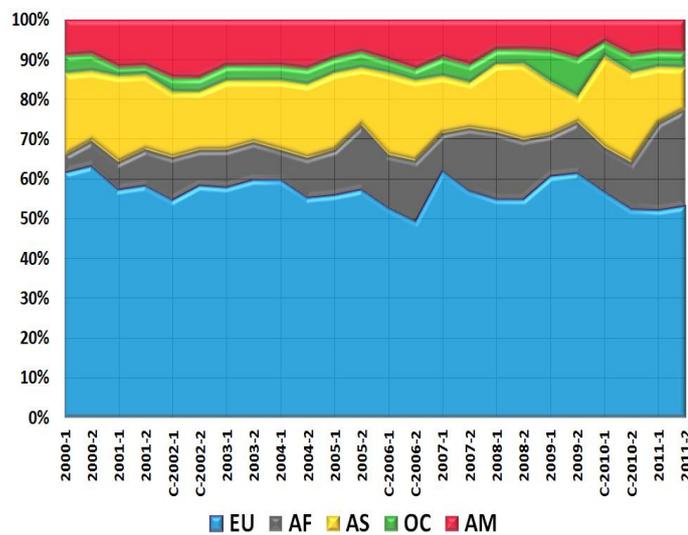
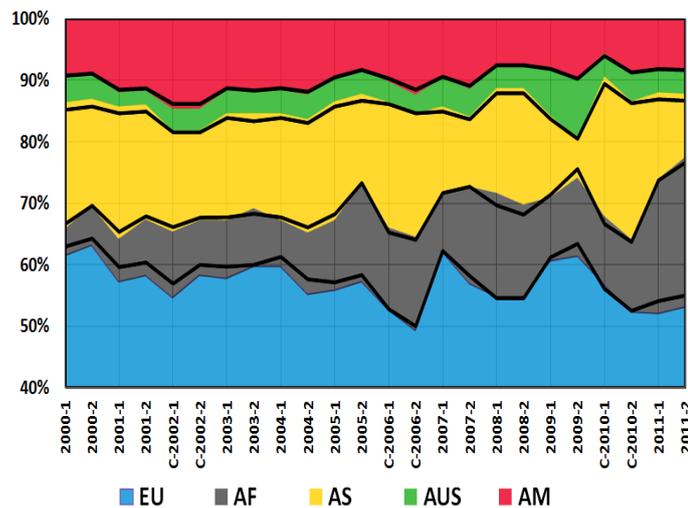


Figure 18
Rule 3
Rule 3:
 $A+B+2*(C+D+E)+3*F$
(black lines: Rule 3; in background Rule 1)



4.3 Members and Income

The majority of FIG associations have upper-middle or high income, as seen in Figure 19 (data from 2010). The analysis is repeated except that only the results of “Rule 1” and “Rule 3” are presented (Figure 20 and 21). The application of Rule 3 increases the importance of the associations from countries with high income.

Figure 19 – Number of associations in each class according with the income (2010)

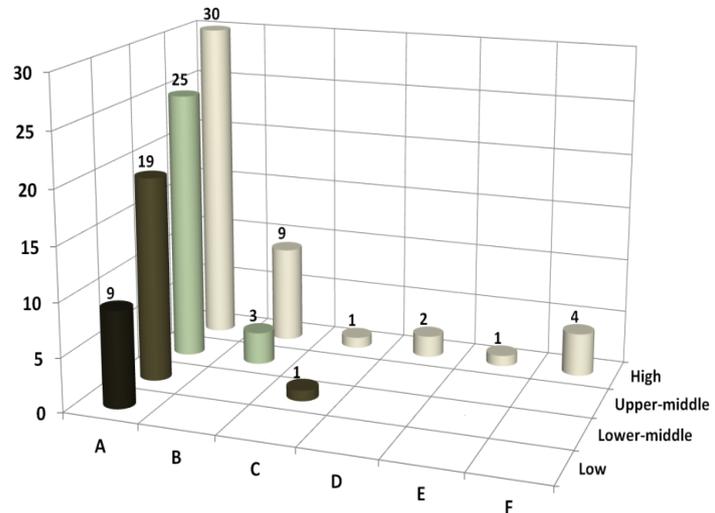


Figure 20
Rule 1
 $A+B+C+D+E+F$

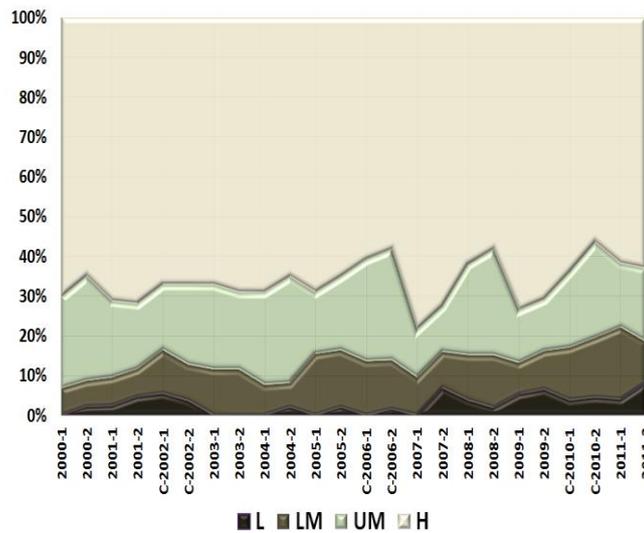
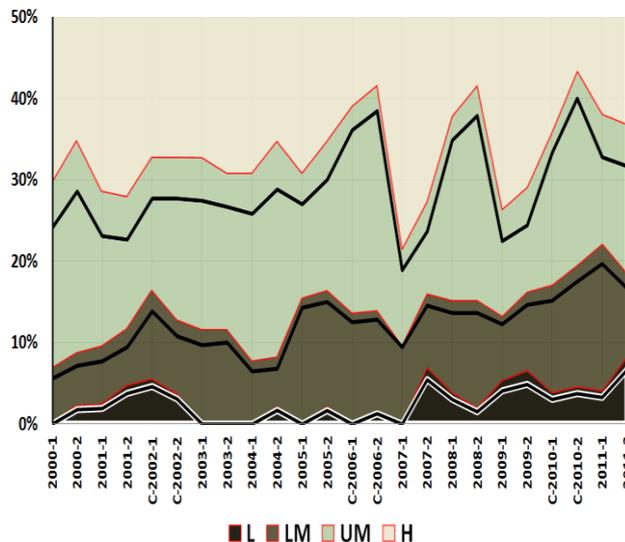


Figure 21
Rule 3
Rule 3:
 $A+B+2*(C+D+E)+3*F$
(black lines: Rule 3; in background (the limits are the red lines) is presented Rule 1)



5. UNDERSTANDING GRAPH VARIATIONS

If all associations participated in each Assembly, the effect of changing the voting rules would be smaller. But not all the associations have a delegate present in the Assemblies. Let's take as an example the second session of the Assemblies of 2006 and 2009, the sessions with the relative highest and lowest participation in the period 2000 – 2011.

In Figure 22 are presented, for each session, the percentage of member associations and the effect of applying four voting rules (Rule 5 and 6 were not considered). Concerning the distribution of the associations in the six classes (A to F) there is no major difference between 2006 and 2009 (columns "Member" in Figure 22): in 2009 there were two more associations in group A; the other five groups have the same number of associations. But the participation of the associations was quite different. "Rule 1" expresses that difference since that, by percentage, the majority of the associations that were not present in the Assembly of 2009 were from group A, as seen in Figure 24: it can be noticed that in 2009's Assembly, 80% of the associations of group A were not present. 100% of associations of groups C to F were present in 2006 Assembly.

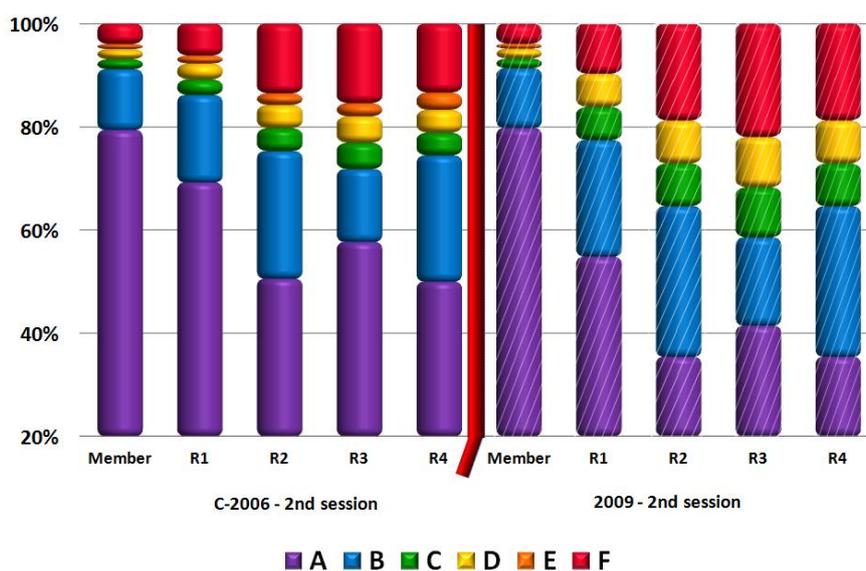


Figure 22 – Members participation and effect of voting rules

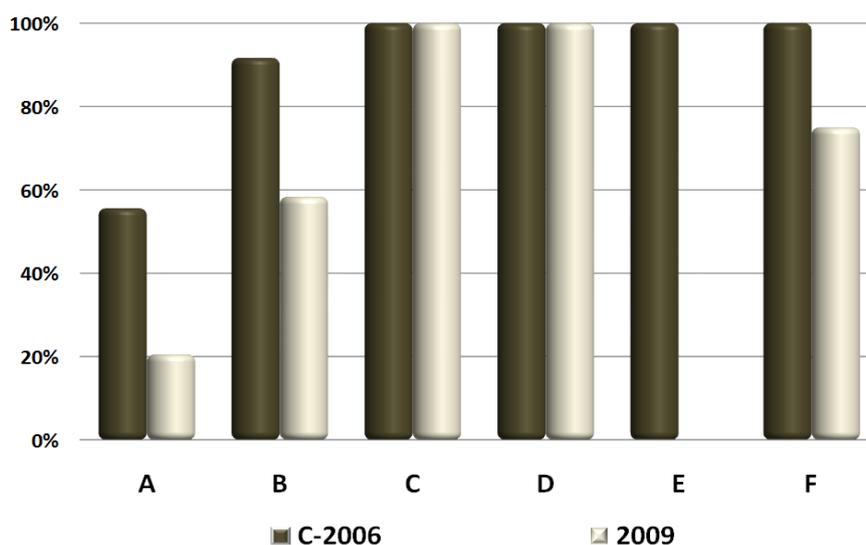


Figure 23 – Participation of the associations in the Assemblies of 2006 and 2009

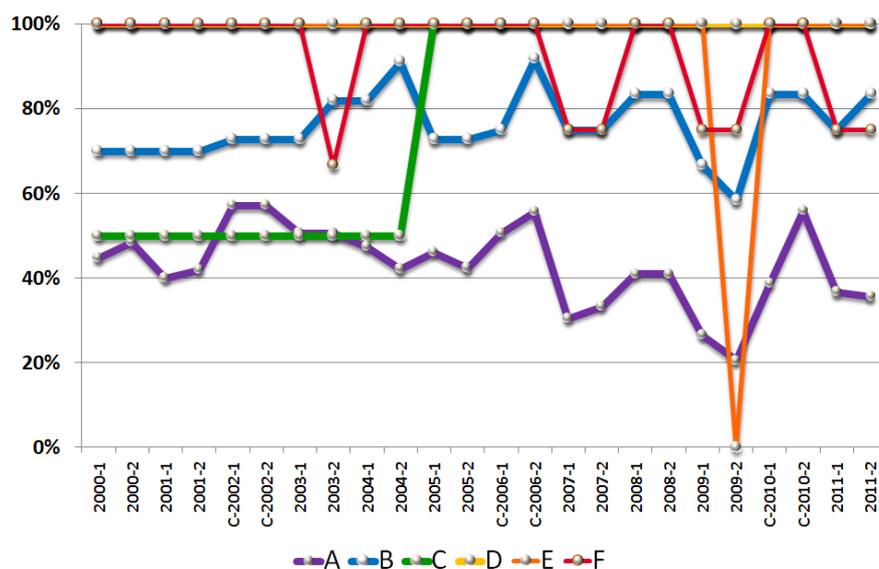


Figure 24 – Participation of the associations in General Assemblies by group

The variations of the results of different voting rules are a consequence of the variation of the participation of the associations in the Assemblies (Figure 24). In average 43% of the associations of group A participate in the Assemblies, being that the Congresses attract more delegates of this group. The others groups have a high level of participation, on average greater than 75%, indicating that the Congresses seem to have no influence on their participation. The location of the Assemblies (Table 2) might have some importance, either the because of the distance (longer and more expensive travels), the accommodation (“expensive cities”) and, in very few cases, political issues.

Table 2 – Cities of the conferences

Year	City	Year	City
2000	Prague	2006	Munich
2001	Seoul	2007	Hong Kong
2002	Washington	2008	Stockholm
2003	Paris	2009	Eilat
2004	Athens	2010	Sidney
2005	Cairo	2011	Marrakech

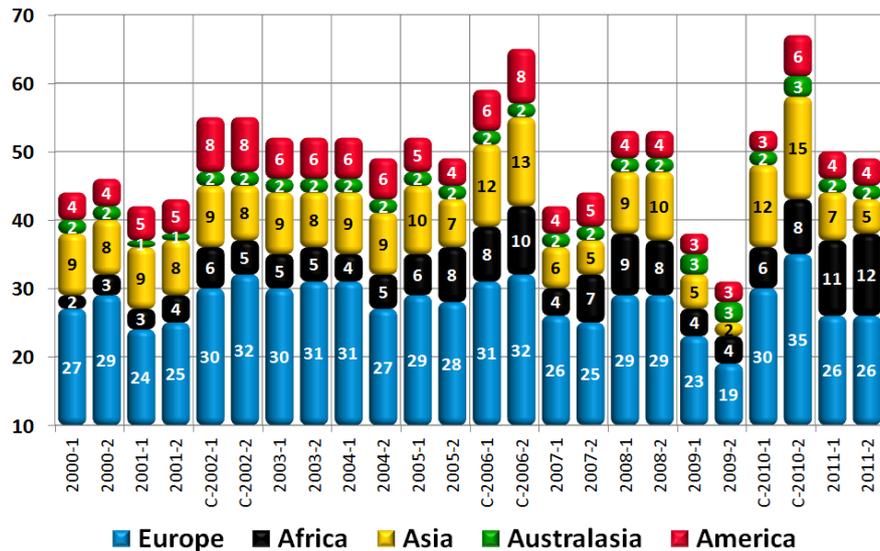


Figure 25 – Participation of the associations in the Assemblies by continent

One may speculate about the “attraction” of the second session of the Assemblies in the years of the congresses (see Figure 25): in 2006 the second session had 6 more delegates; in 2010 more 14 delegates. The reason is probably related with the election of the president of FIG, which happens during those sessions⁸.

Before 2006, the president of FIG was appointed by the association that organised the congress. The first congress where a president was elected directly by the members was in 2006. That year there were three candidates (from Canada, China and Denmark), and the president was elected during the first round since he got the majority (35, 16 and 10: number of votes for the three candidates). In the congress of 2010 there were also three candidates (from Australia, Malaysia and United Kingdom) and the president was elected during the second (and final) round by the difference of one vote (33 against 32).

6. CONCLUSION

The level of participation of FIG association members is medium, in average 53% of the members participate in the Assemblies.

All decisions of the General Assembly are taken by simple majority vote. If all decisions taken during the Assemblies got a unanimous consent or a large majority of the votes, the effect of changing the voting rules would have no effect. But this is not the case.

⁸ In the minutes of the Assembly of 2010 is written, in paragraph n.º 20 ELECTION OF FIG PRESIDENT: “the General Assembly ... decides to make the election at the second session of the General Assembly according to FIG statutes and internal rules”. The author of this text hasn’t found in the statutes and internal rules any reference to the session where this election should take place. Casting the votes during the second session is a good rule because it leaves some time for the delegates to decide, since the candidates introduce themselves and their agenda during the first session.

7. DOCUMENTS CONSULTED

The documents were consulted from 2011 July until 2011 October

FIG. **FIG General Assembly Minutes**

<http://www.fig.net/admin/adminindex.htm>

FIG. **FIG Statutes, Internal Rules and Guidelines.** FIG Publication n.º 26

<http://www.fig.net/pub/figpub/pub26/figpub26.htm>

FIG. **The FIG Annual Review 1999**

http://www.fig.net/annual_review/anrew99/Annual%20Review%201999.pdf

FIG (2011). **General PowerPoint Presentation of FIG.**

http://www.fig.net/admin/images/fig_oct_2011.ppt

FIG. **Commission 2: Reports to FIG General Assembly.**

<http://www.fig.net/commission2/reports/reports.htm>

FIG Task Force on the Future Governance of FIG (2000). **The Future Governance and Management of FIG.** 23rd FIG General Assembly.

<http://www.fig.net/admin/ga/2000/pdf-files/governance.pdf>

ADLER, Ron (2009). **Opening Greeting.** 2009 Working Week.

http://www.fig.net/pub/fig2009/papers/opening/opening_adler.pdf

BECKER, Jean-Marie (1998). **Commission 5: Report from Brighton.**

http://www.fig.net/commission5/reports/brighton_1998.htm

DAVIS, Lesley (1998). **General Assembly takes crucial decisions.** Editorial comment. FIG Bulletin, September 1998.

<http://www.fig.net/bulletin/sept98.htm>

GRAEVE, Jan de and Jim Smith. **History of Surveying.** FIG Publication n.º 50

<http://www.fig.net/pub/figpub/pub50/figpub50.pdf>

KATZARSKY, Ivan (2006). **Participation of Bulgarian Surveyors in the life of FIG.** Paper presented to the XXIII FIG Congress.

http://www.fig.net/pub/fig2006/papers/ts77/tS77_04_katzarsky_0196.pdf

TALVITIE, Juha (2010). **The evolution of FIG during the last 20 years.** Paper presented to the FIG Handover Ceremony.

http://www.fig.net/pub/monthly_articles/january_2011/january_2011_talvitie.html

TEO, CheeHai (2011). **34th FIG General Assembly. Agenda Item 22: Membership Issues (Voting Rights).**

http://www.fig.net/admin/ga/2011/minutes/app_22_voting_right_teo.pdf

The World Bank. **Country and Lending Groups.**

<http://data.worldbank.org/about/country-classifications/country-and-lending-groups>

Document prepared by Maria João Henriques, member of the “Colégio de Engenharia Geográfica da Ordem dos Engenheiros” and Portuguese delegate to FIG.
Lisbon, 12 January of 2012

