



International Organizing Committee

Young Physicists' Tournament



## EC meeting Minutes

**November 26<sup>th</sup> – 28<sup>th</sup> 2010, Teheran**

Present: Martin Plesch, Dina Izadi, John Balcombe, Georg Hofferek, Timotheus Hell

Absent: Alan Allinson, Chuan Li, Zdenek Kluiber

### **1. IYPT 2011 Iran**

The actual place has to be confirmed within next weeks. Two universities have offered to organize the event, one in Teheran, one in Tafresh. Each university is ready to cover all basic costs i.e. food, accommodation and transportation. They will also provide the competition rooms.

Both places were visited by some of the EC members. Both are acceptable to organize the event. The universities work closely together and representatives of both agree on Tafresh as the better option. DI, TH and GH agree on this opinion, because Tafresh is more suited with respect to transportation, traffic, air and water, climate, location (closer to the cities we will visit). Also DI thinks that the chances to get sponsors are higher in Tafresh. The dormitories could be visited by GH, TH, and DI and were found to be adequate. Girls and boys may stay in the same building (on different floors) and all fight-rooms are in one building.

EC could not visit the dormitories in Teheran due to the fact that these are female dormitories and we were not allowed to enter. As a condition, boys and girls would stay in different buildings and could not visit each other. As the accommodation in Teheran is organized in suites, EC concluded that if anyhow possible, the number of students in one room shall not exceed 4, the number of leaders and IOC members 2. EC members shall be provided a single room upon request, if possible.

The dormitories are new, however the lavatories are not western-style. EC concluded that some western style toilets in common places (such as lavatories in the lobby) would be nice, but it is not necessary to invest money to change the lavatories in all rooms.

As it will not be possible for team members to meet in rooms in the case of mixed genders, university will provide rooms (competition rooms and further, smaller

rooms) for meeting of team members. Internet will be provided via Wi-Fi in selected areas and via a computer room with standard equipment. Printing and scanning shall be possible upon request.

Some sponsor money has already been raised without much publicity. To increase the chances to get more sponsor money posters, logo, website and a short advertising video have been prepared. The website is hosted in the USA, some countries report slow download (Slovakia) and some even limited access (Taipei). More detailed overview on the customs in Iran on the official website will be prepared, e.g. acceptable behavior between boys and girls (couples), clothing etc. Some information is already available on the site.

Most countries will need visas to enter Iran. The registration deadline will be the end of May. Countries will therefore be allowed to apply for visas for team leaders and up to 8 students to have the opportunity to continue with the selection process until mid-June. The visa application process was recently changed, but DI is now well informed on the new procedure, as tested on EC members.

If the budget allows it, scarfs will be handed out to all girls at the airport as a present.

## **2. FP7 project for IYPT**

The project was not successful. There was not enough support for submitting a proposal for the next call. Submitting the same proposal again would unlikely be successful. MP suggested waiting for a better call that is more suited for IYPT.

Further discussion was held about the need for seeking for sponsors for IYPT as such. It seems that no one from the EC or IOC members is really active in this field. Still, it seems that the IYPT trademark might have some value for companies. It was suggested that a professional fund-raising company might be consulted in this respect. No one from the present EC members accepted this duty so far.

## **3. Finances of IYPT, support for the EC meeting, refund of web page hosting costs**

Austria has yet to pay the 10% of the registration fees to the IYPT i.e. € 1840,-.

The balance of the IYPT account currently is € 5373,33. The web page hosting was refunded recently. JB, GH and TH will be refunded € 200,- each for the plane ticket to Teheran. DI will be refunded € 600,- for the costs of the meeting. This refund will be indirect, by lowering the IYPT 2011 10% fee due by € 600,-.

## **4. IOC members definition in statutes**

## **5. Observer condition for participation of new countries in IYPT**

Two points were discussed as a single issue. There are several major reasons to consider an amendment of the statutes. They include the fact that the definition of the IOC members is far from being clear. Also the position of three extra co-opted IOC members (President, Secretary General and Treasurer) is not clear. Last year showed also that the rule for participation of new countries is not really wise

formulated – a new-coming country can insist on invitation even when the delegation has no connection with the observer, which took part on IYPT in recent years. On the other hand, a new country may not enter IYPT with a team, even when guided by an experienced former IYPT participant/team leader.

GH will prepare an amended version of statutes (and regulations, to move the rules of participation to statutes) with these major changes:

- Country will be allowed to take part in IYPT, if the IOC delegate for that country took part on IYPT in the past as a team member, team leader or an observer. This condition is fulfilled even if he or she represented a different country.
- Every new country has to be represented by an organization responsible for IYPT in the country. This might be a national IYPT organization, university, research institute, high school or any other legal entity. The organization is responsible for delegation of the IOC member. Current IOC members shall provide information about the national organization coordinating IYPT in their countries latest before the IYPT 2014.
- IOC will consist of voting delegates from member countries and EC members without voting right. The president will decide in case of draws.

If IOC agrees for the change in the statutes, a French translation shall be prepared. MP will contact the secretariat of EPS and ask for advice, how to proceed to change the statutes officially.

#### **6. IYPT tool kit, further reading material for IYPT, publication policy**

After careful consideration the EC has decided that there will be a list of links on the official [www.iypt.org](http://www.iypt.org) website to further reading material, e.g. the kit provided by Ilya Martchenko or lecture notes from lecturers on preparatory seminars of different national IYPT organizations. Proposals for new links can be sent to the EC. On the page, there will be a clear disclaimer, stating that no information linked from this page is in any way to be considered authoritative.

#### **7. Jurors in IYPT:**

##### **Statistics**

The statistics of all jury grades of IYPT2010 (mean marks, standard deviation) have been discussed. EC notes that there are a few jurors who clearly deviate from the average behavior during last two years. MP will personally speak to such jurors and suggest to them to try to adjust their grading, mainly their setting of mean grade, to fit to the competition standard. In case of continuation of the problem the frequency of deploying of these jurors to juries might be decreased.

Furthermore the EC declares that all jury grades (connected with corresponding names) is public information and can (and shall) be published (e.g. online) at any time without prior notice. If technically possible, download of complete statistics shall be possible to allow data mining for team leaders.

##### **Nomination**

GH will create a computer program that creates a Jury schedule based on the following constraints:

- Strict: Nations of jurors and teams do not match
- Strict: Jurors do not see same teams more than twice
- Strict: Number of jurors is fixed
- Weighted: No team shall have the same chairperson more than once
- Weighted: Balance between teachers and other jurors (e.g. researchers)
- Weighted: Balance between nations in the jury
- Weighted: Balance of the frequency of appearance of every juror

Search for suitable schemes will be provided via Monte-Carlo or similar algorithm, which includes an element of randomness.

This program will be tested and tuned with data from IYPT 2010. A first live test will be performed in the IYPT 2011. Juries for the whole competition will be (in case of using this program) published before the FP1. Later changes in the juries will be performed only in well justified cases, such as

- Mistake in the program
- Impossibility for the juror to take part on the relevant FP
- Upon the decision of EC based on serious complains about a juror, justified by relevant facts.

The average appearance for jurors on PF shall be about 4, allowing every juror to have a free FP if possible.

### **Qualification**

Jurors have to send a CV, which will be published on the LOC website. They are required to have a master's degree in physics or education of physics (or equivalent or higher qualification).

### **Preparation**

Though the idea of a jury preparation is good, the implementation seen in Austria or China was far from perfect.

AA shall give a short presentation (up to 30min) to all jurors stressing how the EC would like them to grade. Jurors that would like more information or have questions are asked to stay with the EC members for discussion. Presentation (slides) shall be consulted with EC members at least two months before the tournament. The presentation slides will also be available in advance (a few weeks) on the website.

### **Feedback**

EC and LOC will try to go for positive motivation. There will be an award for the top 5 jurors of selective fights. Jurors can be nominated by other jurors or teams (captains, team leaders). The nomination has to include a short statement why the nominee is an exceptionally good juror. The decision will be made by the EC. If EC members are nominated they can decide either to refuse the nomination or not to take part in the whole decision process.

### **Partial Grades**

As decided by IOC, by explaining the lowest and the highest grade the jurors are asked to include their partial grades into the explanation. GH will prepare a form to

record all partial grades of one fight on a single sheet of paper. These sheets will be scanned after the tournament and made available as a pdf on the website. They will not be processed directly by LOC or EC.

#### **8. Update of grading sheets**

Even if the grading sheets are good guidelines especially for new jurors, in some cases it is hard to use them. Especially this is the case if the presentation is nice, but the physics is wrong. After discussing many alternatives, MP, TH and JB each volunteered to prepare a proposal for updated guidelines which will be circulated among EC members for a final decision during spring 2011.

#### **9. Questionnaire IYPT 2010 and plans for IYPT 2011**

The questionnaire done at the IYPT 2010 did not meet the EC's expectations. Moreover, the EC does not have any results from the questionnaire. GH will prepare a simpler and better suited questionnaire that will be available to the participants on the LOC's website, to fill in after the tournament. The content of the questionnaire will be consulted with the EC during the spring or early summer.

#### **10. Visitors and guests at the tournament, policy**

The question was raised due to the fact that some teams complained that other teams bring visitors which visit different fight rooms and gather information about solutions of other teams. However, EC sees the IYPT as an open competition. Although we discourage any unfair behavior, we shall not restrict the attendance of anyone in fight rooms due to reasons other than space constraints.

The EC also decided to relax the conditions for filming and taking photographs during the FP: Each team participating on the PF shall have the opportunity to take pictures and film the whole fight. This is important to allow the teams to gather material for presentation of their appearance on IYPT in a complete way, i.e. having the whole fight filmed.

Distribution of such material among other teams is not wished during the selective fights of IYPT.

#### **11. IYPT archive**

The EC fully supports Ilya Martchenko's efforts to create and maintain an archive of IYPT history. In the long run this should be integrated into the official website ([archive.iypt.org](http://archive.iypt.org)). A preliminary version will be made available to all IOC members for careful review and criticism.

EC shall take efforts to record relevant facts about the tournament (results, participating countries, etc.) for future reference. These result shall be recorded centrally and not rely on the local IYPT (LOC) web pages and data sources.

#### **12. IYPT journal**

Prof. Chia Chih-Ta from Taipei came with an idea of IYPT journal. He wishes to create a journal, consisting of three parts: Solutions of students, comments by professors and an analysis by teachers about the possibility of usage of the problems for teaching in high schools. In order to motivate people to submit to the journal,

money will be paid for accepted submissions, € 100,- per student are planned. MP shall be also responsible partially for the project, financed mainly by the Taiwanese side as a cooperation project with Slovakia. Other IOC members will be invited to the pilot stage and all IOC members and countries after the full start of the project.

EC declared full support for the project. MP will prepare a support letter for Prof. Chia Chih-Ta.

DI referred that her initiative to publish results from IYPT 2010 had limited impact as only a few students did submit their solutions. This might be of a significant risk also for the abovementioned project.

### **13. Web page**

Hosting is and will be provided and paid for by the IYPT, the costs are about € 150,- yearly.

TH and GH met Hassan Bagheri Valoujerdi, the IT expert and webmaster of the [iypt.ir](http://iypt.ir) website, who is interested in helping with a new website. The software for the fight administration was discussed, some possible bugs were pointed out. TH and GH provided HBV with the source code of their registration system for the IYPT 2010 as a starting point. Since there is still a lot of work to do for HBV in testing, improving and adapting the currently available software, it was agreed that HBV will concentrate on the IT for the IYPT 2011, while TH and GH will start work on [iypt.org](http://iypt.org) webpage.

After the IYPT 2011, when HBV again has more resources, he, TH and GH will start to work on further IYPT-related software together. GH and TH will provide a detailed concept for a future web-based registration and fight administration database system for future LOCs to use. In the future, registration process, scoring and fight management, badges preparation, data for certificates etc. shall be provided for LOCs by a single system under the maintenance of IYPT as such. Implementation will be done jointly with HBV. If external help is needed this might involve higher costs, but will save significant amount of money to future organizers. Moreover, the correctness of results, fight schemes etc. will be guaranteed directly by the IYPT and will not relay on LOC, with sometimes lacking experience.

### **14. Any other business**

GH asked about the confidentiality of things discussed in the EC meeting. The EC concludes that all information discussed in the EC meeting is public, unless explicitly stated otherwise in the minutes. Opinions of EC members expressed during the meetings not recorded in minutes are considered as their private opinions and not as the view of the whole EC.

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