

International Olympiad in Informatics  
**International Committee**  
March 19-22, Mérida, Mexico

## Minutes

### **Attendants:**

Ricardo Anido, Spyros Bakogiannis, Arturo Cepeda, Krzysztof Diks, Zide Du, Richard Forster, Yasser A. Ghany, Krassimir Manev, Don Piele, Wolfgang Pohl, Ivo Separovic

## **1 Welcome and Apologies**

Zide Du, President of IOI, welcomed IC members to their meeting in Mérida. There were no apologies to be announced except that Yasser A. Ghany would arrive one day late.

## **2 Condolences**

With a moment of silence, IC honored Lionel Hartmann, the previous Executive Director of IOI, who had passed away in February.

## **3 Confirmation of Minutes**

The minutes of the meeting at IOI 2005 had already been confirmed at the Web Meeting in November 2005. The minutes of that meeting are not complete; Wolfgang had been asked to do the minutes after the meeting only. However, no requests for completion were made. The chairman asked IC members to see whether they could suggest completions. The confirmation of the minutes were therefore postponed to the next meeting.

## **4 Matters Arising from the Minutes**

### **4.1 IOI training material**

Krzysztof reported that together with Gordon Cormack, Gyula Horvath, and Tom Verhoeff he wrote a proposal of an IOI syllabus, following discussions at the workshop in Germany. Such a syllabus would be the foundation of all IOI activities concerning education. He recommends to accept that syllabus, extend it with a small bibliography of books that are appropriate for potential IOI contestants, construct a Wiki-like web site with training material, and introduce an IOI portal for contestants with task archive and online judge. IC decided (after the ISC report) to present the syllabus as proposal to the GA together with the competition rules and ask for further suggestions. *Action: Wolfgang*

Richard suggested that the syllabus be compared to the handbook for task development written by the Turkish organizers of IOI 1999. He further proposed a book with past IOI problems (and model solutions). He would prepare this issue for the next meeting for further discussion. *Action: Richard*

Krzysztof would start an attempt to collect all tasks of previous IOIs. IC approved that the IOI budget could be used to hire a student assistant to help in that effort. *Action: Krzysztof*

## 4.2 Development Workshop

Wolfgang gave a brief report on the workshop on computer science competitions he had organized. The workshop took place in January in Dagstuhl, Germany. It had 25 participants from a wide range of countries. Most of them had submitted and presented a paper, but also some guests had been invited like Zide Du (President of IOI), Miguel Revilla (ACM ICPC steering committee), and Igor Urbiha (SC of IOI 2007). All papers and presentations can be found on the workshop web page<sup>1</sup>. After presentation and discussion of papers, three working groups had produced extensive proposals that can be found on the workshop Wiki<sup>2</sup>.

All workshop participants felt the workshop had been highly effective. IC agreed that such an activity could be repeated, if there were a need to do so.

Zide highly appreciated Wolfgang for his great efforts and outstanding contributions to the workshop.

## 4.3 IOI Handbook

Krzysztof presented his initiative to design a IOI management system (for IOI organizers). Wolfgang recommended to synchronize this effort with the ongoing work on the IOI information system. Richard remarked that such a system should not impose too many restrictions. Spyros stressed that a management system could not replace a handbook, which would contain organizational knowledge about details of the competition environment, passport and visa requirements, medical issues, etc.

Wolfgang suggested to set up a Wiki where previous IOI chairmen would enter and structure the issues they found to be crucial in organizing an IOI. The deadline for a first version was set to May 31. *Action: Wolfgang, Spyros, Krzysztof, Don, other previous chairmen.*

## 4.4 Sponsoring

RA reports that contacting Google Inc. had not been successful so far. However, Google sponsored ACM-ICPC finalists on a team basis, and there seems to be an interest in sponsoring.

Richard complains about the lack of a goal for sponsoring. He further recommended to look for sponsors outside the computing industry. Spyros would prefer to employ a professional fund raiser. Also, a difference between general and local sponsors must be made. Arturo stated that it were necessary to make IOI a legal entity that could issue tax-deductible statements in order to attract sponsors. Don and Wolfgang agreed to investigate possibilities in US and Germany/Europe, resp. Wolfgang will further issue a request to the IOI community to name former contestants who are known to work for potential sponsors; a request for sponsoring could then be accompanied by a corresponding list of IOI participants. *Action: Don, Wolfgang*

## 4.5 Web Meetings

Don had successfully organized the November 2005 web meeting. However, there were individual problems with access to the meeting. The OED was asked to look into systems that could be used on an ongoing basis as cooperation platforms. VoIP services like Skype might be used for the voice part of a tele-conference. *Action: Wolfgang*

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<sup>1</sup><http://www.bwinf.de/competition-workshop/>

<sup>2</sup><http://www.bwinf.de/competition-workshop/wiki/>

## **4.6 Internal Communication**

Krassimir presented his proposal of an IOI communication system. The crucial feature of such a system would be to manage information about the IOI qualification system and the permanent IOI contact persons and organizations of all participating countries.

Krzysztof presented an extensive form to be filled by participating countries, also requesting information about details of national contests. Spyros asked to include a question about gender proportions in national activities. In a first step, participating countries of IOI 2006 would be required to give essential information in a very reduced form. Arturo promised to have this form integrated into the pre-registration for IOI 2006.

*Action: Arturo, Krassimir*

## **4.7 Budget Approval**

IC decided to work out a proposal to change the regulations such that the IOI budget must be approved by the GA.

## **5 Evaluation of IOI 2005**

Krzysztof reported that IOI 2005 saw 660 participants and required a budget of approximately 600,000 US\$. He identified strengths (scientific part, guides, an organization “team of friends”) and weaknesses (accommodation separated, only two persons for decision-making). IC congratulated Krzysztof on a very successful IOI. Communication within delegations during the confinement phases was not an issue.

## **6 Reports**

### **6.1 Report of the President**

Zide presented the proposals contained in his document “The Reformation of IOI” that had been distributed to IC. Discussion was postponed to agenda item 7.

### **6.2 Report by the Executive Director**

Wolfgang reported about his activities since taking over the ED position on January 1, 2006. He had received electronic documents and an E-mail archive from his predecessor. However, this material did not contain all information needed. The financial situation could not completely be deduced, there was no country contact data base, and previous participation of countries could not always be clarified. Wolfgang explained the financial situation, and presented the proposals concerning IOI structure that had been developed in the Dagstuhl workshop.

Wolfgang declared he would not take the budgeted ED retainer. However, he would perhaps need to hire assistant staff on a regular basis (within the limits of the retainer budget) and on a project basis, if needed. This could be a model for the future of the OED.

Zide stressed that, although Wolfgang will not take the retainer (appreciated), hiring a (or a half) full time person is necessary for the OED, so as to keep IOI regular business going. The salary of such person can be determined by his/her work amount and salary standard of the country. He also suggested Wolfgang to draft a budget and get approved by the IC on next IC meeting.

### 6.3 Report by ISC

Tom Verhoeff gave an extensive presentation of several issues, many of which had been discussed at the Dagstuhl workshop already:

- A contact to the Computer Science Teachers Association (CSTA) was established. It was suggested to invite a representative of CSTA to IOI.
- A proposal on an IOI syllabus was submitted to a refereed journal. From now on, steps could be taken to incorporate the syllabus into IOI regulations.
- Analyses by Tom and Gordon Cormack showed that IOI scores often do not give a good indication of a solution's correctness. The "50% rule" has not really helped. As an amendment, Gordon proposed a generalized approach: to have subsets of test data prepared for well-defined and given criteria. Within a subset, one or more test case batches would be used to identify whether a solution fulfilled the criterion or not.
- The workshop proposed to give contestants more feedback about their achievements during the contest. Like with the previous issue, concrete steps will be decided until publication of competition rules for IOI 2006.
- At the workshop, Michal Forisek (Slovakia) had proposed a medal allocation algorithm, to avoid GA discussion about medal allocation in the future. Such an algorithm could be used by the host SC to prepare their proposal on medal allocation to the GA (according to IOI statute S6.12).
- There is currently no effort to develop a unique IOI grading system. However, ISC will specify requirements; a grading systems to be used at an IOI will have to be approved according to these requirements.
- ISC will also specify requirements on what a host will be required to report about an IOI contest. IC might want to add further requirements wrt to organizational information.
- Following (in part) proposals from China and USA / Great Britain, ISC will approve final task formulations in the future. However, in order to really make a sure a task has no flaws, also other task material like test cases and model solutions would have to be approved. For this purpose, a later ISC meeting solely dedicated to task reviewing would be preferable than a meeting synchronized with the IC mid-term meeting.
- Surveying of leaders and contestants should in the future be done by ISC and IC together.

### 6.4 Report by ITWG

Jyrki Nummenmaa reported about the following issues:

**Practice Disk** A new version will be produced soon, but cannot be adapted to IOI hardware, which is not known yet.

**Java** Despite helpful activities from the IOI community, there are still significant problems with the integration of Java. IOI 2006 will not see Java as an official programming language.

**Information System** IC members could take a first look at an early version of the information system. The system is currently being developed by a student project group. In summer, a student will be hired to polish and finalize the implementation. As to the functionality of the system, IC members asked whether it should be possible for leaders to block contestants from changing their registration data. Country data that will arise from the internal communication activities (see 4.6) could on principle be added to the system. However, such an effort would probably lead to a further project.

**Publicity** Several ideas by Jyrki and Rob Kolstad on how to improve the publicity of the IOI contest had already been discussed by ISC and were now presented to IC. Many of them require a real-time publication of scores (to the public, not to the contestants). A change to the regulations would be necessary if scores of all contestants were to be published. Jyrki will proceed with this ideas and, together with Rob Kolstad, produce a plan of what ideas could be implemented for IOI 2006 already, and how.

Jyrki will not be able to continue as head of the ITWG. IC is required to look for potential successors. However, Jyrki is willing to continue his work as supervisor of the development of the information system.

## 7 Development of IOI

This item of the agenda was dedicated to discuss proposals made by the President in his document (cf. item 6.1) and arising from the Dagstuhl workshop recommendations.

### 7.1 Structure of the IOI Organization

**IC membership** IC will propose to the GA to increase the proportion of elected members: There will be five host representatives, each being member from IOI  $n-3$  to IOI  $n+1$  (vote: 8 of 11), and five elected members with 3-year-term (vote: 9 of 11). In the future, two IC members shall be elected each year, one of them being the President in the year the President's term ends. IC rejects the proposal to elect GA members as regional representatives. Krzysztof stresses the necessity to assign responsibilities to elected GA members and make them public; this is supported by the IC. The ED will develop a proposal of how to handle GA membership in the transition phase. *Action: Wolfgang*

**ISC membership** The proposal to have ISC members appointed by IC instead of elected by GA did not find support of ISC itself. Also, to assign responsibility of task development completely to ISC is not supported. The role of the host SC in task development is said to be an important factor in the decision of countries to apply for future host. IC does not want to rule against ISC opinion. IC will act according to the regulations and put together its own list of ISC candidates, to which the GA can add further candidates. Increasing the number of ISC members would slow down ISC work, but increasing the proportion of elected members could be helpful.

**Appointment of ED** IC decided that the President have the right of a first nomination of a new ED candidate. If the President's candidate is rejected by IC, it will be the IC's duty to nominate further candidates. This procedure is within the current regulations. For the future, Arturo proposed to have a secretary in the Office of the President instead of an ED. Zide expressed his opinion that if one or half secretary is to be hired, IOI had better have relevant budget for that.

**President Advisors** Zide will invite IOI experts to act as personal advisors.

## 7.2 Awards

Zide suggested to better acknowledge and appreciate the efforts that many members of the IOI community make. While Richard warned not to give too many awards, Wolfgang proposed to distinguish between levels of appreciation (e.g.: award, expression of thanks, diploma). IC agreed that previous chairman should receive specific acknowledgement, like mentioning them on the IOI web site and dedicating a specific symbol of appreciation to them; Wolfgang would work out a specific proposal. Krzysztof would ask an artist to develop an IOI symbolism that could be used on all levels of appreciation. *Action: Wolfgang, Krzysztof*

The chairman of IOI *n* should be honored by the President at the closing ceremony of that IOI.

The suggestion to introduce *country awards* was not supported.

## 7.3 Requirements to participating countries

IC agreed that participating countries should have an open process installed for selecting their IOI teams. Richard is willing to formulate a set of requirements that should be applied to new countries. Later on, it should be assured that all countries meet those requirements. *Action: Richard*

## 7.4 Host Country Selection

IC decided almost unanimously to leave the decision about future hosts within IC. The GA will not have the time to examine candidate applications thoroughly, so that a GA decision on that crucial matter would probably not be made on solid grounds.

## 7.5 IOI web site

The responsibility for the IOI web site will be passed on to the OED. The site shall be relaunched or even re-designed, according to suggestions by IC (April meeting 2005) and from the Dagstuhl workshop. Necessary investments will be taken into account in the next budget. Zide thanked Don for his contributions to maintaining the IOI web site during the past four years.

## 7.6 Registration Fees

The proposal to increase registration fees significantly led to an intensive and controversial discussion. While previous and future IOI chairmen stated that partial funding from registration fees might be helpful, it was also clear that only a small part of any IOI budget could be covered by registration fees. If there appeared to be a problem finding new IOI hosts, other measures might be more effective. To find out more about this, all IC members were requested to actively contact potential host countries. is suggested to limit the number of participating countries, which would require a qualification round.

## 7.7 GA chairman selection

There were several proposals, but no decision on changing the procedure to select the GA chairman. IC agreed that a GA chair should have experience with IOI. Arturo said that Mexico has approached a candidate, who was IOI delegation member in the years 1993 and 1994 but had not yet confirmed his participation. Arturo was asked to inform Zide about a decision as soon as possible. In case of denial, the President would ask previous IOI chairmen, first Ries Kock (Netherlands), and, if still necessary, Jari Koivisto (Finland). *Action: Arturo, Zide*

## **8 Host Country Reports**

### **8.1 Mexico, IOI 2006**

Arturo reported about the preparations for IOI 2006. Finances of IOI 2006 are completely settled. Several improvements to the schedule were suggested and accepted. The ED was asked to schedule IC meetings within this framework. The first excursion day could be used for IC meetings. *Action: Wolfgang*

Arturo was asked to set an early deadline for the pre-registration. He also should reconsider the visa problem and try to improve the situation based on the experiences made with the traveling of IC and ISC members to the current meeting. *Action: Arturo*

Together with ISC, IC visited the competition site (conference center Siglo XXI). All workplaces would be arranged in the large exhibition hall, which was said to have sufficient electricity and air conditioning facilities. The presented furniture was found to be insufficient; the chairs were very low and the distance between chair and table too high. It was strongly recommended to use chairs that were more appropriate. *Action: Arturo*

Zide proposed to ask for a message of the Mexican President and to involve the media in the events so as to promote the IOI.

### **8.2 Croatia, IOI 2007**

is reported about the preparations for IOI 2007. As announced before, IOI will take place at the University of Zagreb. Student dormitories will be used for accommodation, other university facilities like gyms and playgrounds will be reserved for IOI participants. The financial situation is improving: The Min. of Ed. will pay for accommodation and computers, the City of Zagreb will cover the cost of IC and ISC meetings, Croatian Telecom will sponsor the event. Croatian President Stepan Mesic will be present at the Opening Ceremony.

The date of IOI 2007 is currently set to August 17-24, IC and ISC meetings are scheduled for March 20-26.

*Note: The ISC has stated that a later meeting for task review is much preferable to a common meeting with the IC.*

### **8.3 Egypt, IOI 2008**

YG reported about the progress towards IOI 2008. As announced, IOI 2008 will take place in Alexandria at the Arab Academy of Science and Technology (AAST). President Mubarak has confirmed to be patron of IOI 2008. For accommodation and transport, facilities of AAST will be available. Currently, the only open issue is to get enough computers. IOI 2008 will take place in the 3rd or 4th week of August.

### **8.4 Bulgaria, IOI 2009**

Krassimir gave a brief report. Bulgaria will probably be a member of EU in 2009; in this case, visa will be a non-issue. Currently, there is excellent support for IOI in the Bulgarian Ministry of Education; hopefully, this situation will last until IOI 2009. A logo for IOI 2009 is going to be created in a student contest.

## **9 Potential Future Hosts**

Canada had expressed the intention to apply for IOI 2010. There should be a call for further applications, with a deadline set. Arturo suggested that the President should actively approach appropriate countries to find more potential future hosts; this suggestion was supported by IC *Action: Zide*

## **10 Regulations**

Only few issues decided during the meeting lead to changes to the regulations:

1. GA budget approval (see item 4.7)
2. changes in IC membership (see item 7.1)

Furthermore, several ISC proposals (see item 6.3) touch the regulations: A medal allocation algorithm, if approved, could be added as an appendix to the regulations, while early publication of results would only be possible after eliminating statute S6.11. Those issues are subject to further IC discussion, as well as requirements for participating countries (see item 7.3).

The format of the regulations were briefly discussed. Richard would do some work on preparing an alternative formatting of the regulations, and circulate an example version (of a specific section) for comment. *Action: Richard*

## **11 Issues for IOI 2006**

### **11.1 Memorial and Award to Lionel Hartmann**

Wolfgang proposed that at IOI 2006, a single Distinguished Service Award should be given post mortem to Lionel Hartmann. This proposal was accepted unanimously. The IC decided to invite Mr Hartmann's widow Caryn to IOI 2006 to have her receive the award. The traveling expenses from and to the host country would be covered by the IOI. Moreover, the next IOI newsletter was to contain an article on Lionel Hartmann, based on the President's letter to the IOI community.

### **11.2 Date and Time of Next Meetings**

The next meetings would take place in Mérida, Mexico, between August 13 and 20. The ED was asked to propose a detailed schedule. The first excursion day of IOI 2006 could be used for IC meetings. An IC meeting on the arrival day of IOI 2006 would be possible only if arrival times of IC members allowed. Krzysztof announced he would arrive few days late, due to his son's wedding.

### **11.3 GA Meeting Agenda**

GA will have to decide on regulation issues. A separate meeting is to be scheduled to give time for discussing ISC proposals on feedback, scoring, medal allocation, etc., and other issues at stake.

### **11.4 Passing the IOI Flag**

IC agreed with Zide's proposal to involve the IOI President in passing the flag from current to next host.



## **12 General issues**

### **12.1 IOI research**

IOI-related papers will be published in the international journal “Informatics in Education” and presented at the ISSEP conference in Lithuania later this year. There was a proposal to find a way of publishing interesting IOI tasks; an electronic journal could be established on the IOI web site.

### **12.2 Communication: Newsletter, Web Meetings**

IC agreed that the IOI brochure was to be updated for fundraising use, but produced in small numbers only.  
*Action: Zide*

A country handbook was proposed, but considered unnecessary.

The newsletter will be produced by the ED. It can be kept simple, e.g. a single HTML file. *Action: Wolfgang*

A web meeting before IOI 2006 was considered unnecessary, unless relevant items came up.

### **12.3 IOI Records**

Krassimir is in touch with Prof. Sendov for documents about the founding of IOI. *Action: Krassimir*

Krzysztof confirmed that the data collected by Stanislaw Waligorski were still available in Poland. There should be an effort to integrate that data into the information system, when it is ready. Furthermore, Ha-Jine Kimn was said to have collected posters and other material.

## **13 Closure**

Zide Du, President of IOI and Chairman of IC, thanked all IC members and closed the meeting.