General Assembly

Minutes of the Meetings held in Almaty, Kazakhstan

26 July - 2 August, 2015

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1. Welcome

- Bakhyt Matkarimov welcomed the members of the GA to IOI-2015.
- Krassimir Manev welcomed members and described the work of the IC and the workshop during the year.
- Greg Lee presented the 5 year sponsorship offer from Acer.
- Gulnar Zagitova was presented to the GA as the chair for IOI-2015.

2. Apologies

No apologies were received.

3. Presentation and confirmation of GA agenda

The agenda for the GA meetings was approved.

An electronic voting system was suggested and the assembly voted to trial it (77 for, 0 against, 0 abstentions).

4. Appointment of scrutineers for voting during GA meetings

In accordance with the usual IOI procedure, it was proposed and approved that those past chairs of IOI who were present should act as scrutineers. (Arturo Cepeda, Krzystof Diks, Zide Du, Ries Kock, Troy Vasiga).

5. Competition procedures

The procedures were introduced by Michal Forišek.

The rules have been available on the website and printed versions are in pigeon holes.

Major change: As a result of the introduction of Java, the main modification has been to allow threads in all languages. The execution time of each thread will be added together and this is taken as the total time for a task.

Minor change: clarified the wording on feedback – full (provisional score for subtasks).

The competition procedures were accepted unanimously.

Martin Mareš added that if students wanted their own keyboard or mouse they should bring these to the practice session for approval.

6. Call for Nominations for IC and ISC

The following positions were due to be filled during the current IOI: Two IC positions and one ISC. The closing date for nominations for all three positions would be the end of the GA meeting before the second competition day.

7. Confirmation of the Minutes (IOI-2014)

The GA minutes from IOI-2014 were confirmed by the GA. (76 for, 1 against).

8. Conference

The GA was informed by Valentina Dagiene that the Olympiads in Informatics conference would take place in parallel with the two competition days, in the hotel where leaders and deputy leaders were being accommodated. Extra copies of the journal could be obtained by contacting Valentina. People wishing to help with editing should also contact her. Wolfgang Pohl (Germany) requested clarification of an earlier GA request for a change in direction for the conference. Valentina clarified that the second day is devoted more to workshops than formal presentations.

9. Electronic Voting

An experiment with the electronic voting system was trialled and although very fast, the concern of anonymity was raised. Krassimir Manev concluded more thought was required.

10. Issues Arising from Practice Session

Bakhyt Matkarimov confirmed water would be available during the contest and medicines, pencils and reasonable amounts of food would be allowed. Memory devices, torch, anything attached to laptops, bags and mobile devices were prohibited. Anything doubtful should be shown to volunteers.

Martin Mareš: some minor problems fixed or being fixed such as: the C++ documentation was incomplete and would be replaced by cppreference, the right-alt key mapping will be enabled/disabled by 2 icons on the desktop, error messages were in white, some browsers showed stale file names, announcements need to be in CMS as well as verbal, long evaluation times will be announced if they occur, some feedback was incorrect about the number of test cases. All submissions will be evaluated and the highest score chosen.

Clarifications and problems raised by the GA were explained or assured of a solutions such as:

- While the test data for the practice problems could be posted, tomorrow's competition was a higher priority,
- Mouse pads would be provided,
- The submission per minute count included non-compilations,

- Questions could asked via the CMS or paper,
- Evince run from Firefox lacked the menu bar and this would be checked,
- One function in the task interface had the same name as in the standard library and this
 would not happen for the contest,
- The editor should be able to print tomorrow but from Code Blocks, students should export to a pdf first,
- A link will be provided for the example grader,
- The scoreboard will work.

11. Presentation of Tasks for Competition Day 1

The three tasks selected for the first competition day (Boxes, Scales, Teams) were presented and an explanation of the network for translations was given.

No major objections were received and 8 minor. The grading formula for Scales was explained.

The GA voted overwhelmingly to accept the task set as a whole. There were no negative votes and one abstention.

12. Report on Competition Day 1 (chaired by Michal Forišek)

There were no official appeals.

The contest started on time, but one CMS server was misconfigured resulting in about one twelfth of contestants not being able to access the server for 5 minutes. As it was early, and they had paper, this was not seen as a problem.

At 9.40 a case of cheating was detected where a contestant abused the grader libraries. The grader was reconfigured but in the process for about 20 minutes the CMS had a bug. Once fixed, grading caught up in about 10 minutes.

2 students were affected by incorrect test data in Teams. Parts of a test case were removed and submissions regraded. One student was affected by 3 minutes and one by about 13 minutes.

Several computers froze, and at 12.33 there was a power problem which brought down the network. Students could still work on their computers but had to wait about 20 minutes for grading. This increased the average wait per task to about 5 minutes but this had returned to one minute on the last 8 minutes. The maximum wait was 25 minutes in the last 2.5 hours. One student was given an extra 5 minutes as their reboot was during the power problem. Volunteers will record such issues for day 2. (Report by Richard Peng, ISC)

Announcements made during the contest were presented (e.g.: at the beginning, "multiple souvenirs can be given when in a section" for Boxes and at 13.40 the bad test file in Teams would result in re-judging)

Contestants' questions: Technical questions were generally answered by showing how at the contestant's computer, most task related questions were answered with either "in the statement" or "invalid question", and questions about the rules were answered as accurately as possible. Translations of questions via email worked well.

There were 327 competitors in the rank list – 3 didn't show and one was there by mistake. The official number is 323 and this will show on Day 2.

The case of cheating: A disqualification decision was made by the IC and 0 points will be awarded both days – the student will stay in the rank list at number 323.

A request for a graph showing how long submissions took to be evaluated was made. In the first half of the contest the wait time was acceptable, in the second half it was close to 18 minutes. Students should be told that it isn't feasible to expect 2 to 3 minutes as there is full feedback. Compared to other IOIs with full feedback this day 1 was better than most and without the ability to scale the number of servers by 100 as Google does, some delay must be expected. The number of test cases can only be validly scaled down so much.

Other issues raised: mouse pads and food seemed to have inconsistent resolutions. Students will have the same computer on day 2 (photos on, keyboard distribution etc.) although this was questioned as possibly leading to lack of fairness and changing computers is less likely to result in some forms of cheating. Software will be re-installed for day 2.

Translation Session: The printers need to be opened for the second translation night as there was a printing bottleneck for day 1. Once a computer was disconnected from the network it couldn't be added again. Solutions: a print server will be set up and use the Olympiad network only for translation and the hotel Wi-Fi for all else.

All translations will be made available.

There was also a reminder that the off-site proposal will be voted for on Saturday and a further document with more detail on the options will be distributed later in the day.

13. Presentation of Tasks for Competition Day 2

(Nominations closed this session)

The three tasks (Sorting, Horses and Towns) selected for the second competition day were presented gradually due to power outages.

There were no major objections and whilst there were a number of minor objections, none were considered significant. The problem set was accepted unanimously.

14. Report on Competition Day 2 (chaired by Wolfgang Pohl)

Michal Forišek presented the latency graph asked for after Day 1 for both days 1 and 2. For day 2 the wait was less than one minute.

The re-judging of day 1 possibly affected 4 contestants and there were no appeals. For day 2 there were no appeals.

Statistics on language use: Java – 4, C – 3, Pascal – 4, C++ - 311.

Contestants Questions: in Horses there was a question about whether the modulo occurred before or after the maximum. The answer was in the task description. Another question was asked about N = 1 in subtask 3 in Sorting and it was answered privately. All other questions were unique and the responses were that it was in the task description or "no comment".

Issues that didn't influence results:

At 9.20 it was discovered the scoreboard was overwriting instead of adding. This bug and another were fixed within 20 minutes.

All software and hardware issues were immediately fixed. One student was causing CodeBlocks to freeze and was instructed what he should stop doing (using the Watch window and use debug print instead), but he repeated it, so no extra time was awarded.

The compiler crashed for one minute, but the affected student resubmitted in one minute. One student couldn't unzip files and this was fixed.

Announcements made: At 9.00am unclear text in a table header, the Grader for Towns was upgraded at 9.13, at 9.30 there were 2 copies of the grader and at 9.46 correct sample outputs

Official number of contestants: 322.

Required medal counts: ≥26.83 gold, ≥53.66 silver, ≤161 medals.

Actual medal counts: 27 gold, 55 silver (tie), 79 bronze.

Cut-offs after #27, #81+#82, #161. A single winner with a perfect score.

The results were confirmed unanimously.

15. Introduction of Regulation Changes:

The minor changes were outlined (Ben Burton) as were the more important ones such as anonymity for scores now being out of date because of a live scoreboard, that official solutions be required from hosts , that quarantine means "anyone who sees the tasks must not communicate them until after the competition has begun" , that large-scale problems in the competition are resolved by the ISC but may be overruled by 2/3 of the GA, and if there is a large tie for gold, then the same number of silver should be awarded. Ben asked that the GA read the email before Saturday's meeting.

16. Presentations: (chaired by Wolfgang Pohl)

The following candidates filed nominations prior to the deadline

ISC: Richard Peng (USA).

IC: Joan Alemany Flos (Spain), Mile Jovanov (Macedonia), Kresimir Malnar(Croatia).

All candidates had 2 minutes to introduce themselves to the GA.

Other business: Translations will be available tonight and task authors will be published.

Ben Burton chaired from item 17 onwards.

17. President's report (Krassimir Manev)

The IC has had many difficult issues to discuss and has done its best to find solutions. Most are in the form of proposals that the GA will vote on today. The President thanked the GA.

18. Executive Director's report (Margot Phillipps)

New country applications are being dealt with but presently there are none that have fully gone through the process. Four newsletters have been produced and the link to them will be in future Announce emails.

Normal other ED business such as agendas and minutes is continuing.

19. ISC report (Michal Forišek)

Overview of the ISC February meeting Discussions and conclusions:

An Off-site competition can be held fairly.

The technical requirements for clarifications being translated were discussed.

Java threads were discussed and the rules were adjusted.

Full feedback during the contest has to be presented in a suitably restricted way so that it is not possible to use the feedback to obtain a non-trivial amount of information about the secret test data.

Considered the ACM style of judging so that it stops on the first test case failure but ISC rejected this although it would speed up judging.

Tie breaks for multiple "winners": ISC recommends that time to break ties at the very top is not used.

ISC + ITC discussed the possibility of using a remote cluster for grading. No conclusions yet.

ISC has spent a significant amount of time proofreading statements before presenting them to the GA. Both translation sessions went smoothly.

Minor issues that occurred during contest day 1 have been recorded. The ISC will try to learn from them and to find ways to prevent similar issues in the future.

Syllabus for IOI 2016 is the version published in June 2015. Feedback from the community is always welcome.

Task Selection: 46 submissions, some duplicates and some withdrawals, led to 32 being considered. These were reduced to 9 (6 + 3 backups). The authors of those 9 were invited as guests.

ISC Survey will be sent after the IOI.

20. ITC report (Martin Mareš)

The ITC was established for one year in 2014. Due to a misunderstanding the committee did not meet in February.

Current members are: Bernard Blackham (Australia), Stefano Maggiolo (Italy), Martin Mareš (Czech Republic, chair), Fredrik Niemelä (Sweden), Ling-Jyh Chen (IOI 2014), Artem Iglikov (IOI 2015), Sergey Masyagin (IOI 2016), Kian Mirjalali (IOI 2017).

Cooperation with the host was excellent. Among other issues, the ITC was involved in: Introducing Java, debugging of network problems, setting up the scoreboard and catching the CMS bugs.

Software available at https://github.com/ioi/: Isolate and the Translation system There is more to come: screen locker, printing, remote management.

Technical checklist for future hosts: http://wiki.ioinformatics.org/wiki/HostingAnIOI

Working on a general format for task packages: Evolution of the format used at ACM ICPC, Import to CMS, Tools for development and testing of tasks and planning an archive of past IOI problems.

We also plan to look into running contests on cloud services.

The technical committee maintains the IOI Infrastructure. There have been no major changes since the previous IOI, only maintenance.

Mailing lists:

ioi-announce – low-volume, moderated (please subscribe), ioi-discuss – general discussion, ioi-ic, ioi-sc, ioi-tc – members of the committees, ioi-training – connecting organizers of regional training and possibly for camps with people interested in teaching.

http://lists.ioinformatics.org/

Others:

http://wiki.ioinformatics.org/ Secure drop-box for task submissions Internal ISC/ITC systems

21. ITC continuation for another year.

The question of future hosts being willing to host another committee was raised. Vladimir Kiryukhin (Russia) responded that Russia supports the ITC and will invite them.

A vote for experimentally continuing ITC for one more year was carried: 70 for, 0 against and 1 abstention.

The IC expects to propose a permanent solution at IOI 2016, based on the coming year's experience.

22. Financial statement for the preceding year

Eljakim Schrijvers, the treasurer, presented the financial statement.

The aim, as last year, was to maintain a balance of about $100,000 \in$ and this was achieved. The income exceeded the budget by $3,406 \in$ and the expenditure was less by $10,597 \in$.

As agreed in previous years, this money for ISC and ITWG was shown as having been spent, and compensated for in the financial statement as sponsorships from the parent organizations of ISC and ITWG members. The President's office was zero cost but the Executive Director's travel was greater than budgeted for. The workshop development and Conference proceedings accounted for 3,920 € less than budgeted.

The financial statement was audited by a subcommittee of the GA headed by Ries Kock. The auditors certified the accuracy of the accounts and commended the Treasurer for his work.

23. Budget for forthcoming year and registration fee for IOI-2016

Eljakim Schrijvers presented the budget for the forthcoming year and is still budgeting to spend a little more than is received (8,700€). The interest rate is expected to decrease, lowering income.

- The budget for the Executive Director's office has been increased by 1,300 €, to reflect the actual cost of travel in 2015.
- The budget for Development has been decreased by 6,000 € as no workshop is planned in 2016. A suggestion was made that the IOI purchase a UPS for the Translation Server.

The budget was approved with 76 votes for, 0 against and 1 abstention.

The registration fee for IOI-2015 will be retained at 200 €.

The registration fee was approved by the GA. There were 77 votes for, 0 votes against and 1 abstention.

24. Election of ISC Member

Richard Peng was elected unopposed to the ISC.

25. Election of IC Members

The outcome of the election for the IC positions was as follows

- 40 delegations approved of Joan Alemany Flos,
- 47 delegations approved of Mile Jovanov,
- 44 delegations approved of Kresimir Malnar.

Mile Jovanov and Kresimir Malnar were elected to the IC for a period of 3 years.

26. Chair of ITC

Fredrik Niemelä was proposed as chair by the ISC. The IC accepted the recommendation. The GA was asked to ratify the selection.

There were 64 votes for, no votes against and 11 abstentions.

27. Recognition of Service

People leaving their roles on IC were thanked (Valentina Dagiene, Mārtiņš Opmanis and Greg Lee) as was Pang-Feng Liu for his role on ISC.

28. Closing ceremony

There should be no flags on stage but they are allowed in any unofficial photos. Tee shirts with flags on them are allowed.

29. Offsite Participation

In 2014 the IC was directed by the GA to establish rules which enable participation in upcoming IOIs for countries that do not have diplomatic relations with the host country.

Two related issues were discussed.

- 1. How the IC chooses future hosts
- 2. How Offsite participation is conducted

How the IC chooses future hosts

A proposal was made that: "The Present Host is obliged to empower the IC to invite national delegations, including every national delegation that has participated in one of the past three IOIs, and to acknowledge, on its website and official material, all member nations who have accepted this invitation. This includes acknowledging those nations who are unable to attend the IOI due to matters of international diplomacy or any other difficulties."

There was much discussion in the GA, with points raised including:

- that visa denial is harder for students than knowing up front a visa is impossible,
- the IC should consider practicalities such as security,
- that the regulations must be strengthened to insist all countries currently in the IOI are able to attend in future host countries,
- that the GA should have a role in choosing future hosts but that the IC must find a host which ensures all countries can be invited.

A vote was held on a motion to amend the text of the original. This was defeated – 14 votes for, 28 votes against and 36 abstentions.

It was clarified that the proposal does not apply to future hosts already chosen.

A vote was taken on "the spirit of the motion is considered by the IC so that the regulations can be amended". There were 46 votes for, 12 votes against and 17 abstentions.

How Offsite participation is conducted

Three proposals circulated were shown. These can be summarised as "0. Nothing is done, 1. The contest is held in the country denied access to the IOI, or 2. A larger number of competitors can attend from that country in the year after and/or the year prior".

Ries Kock (Netherlands) asked to add a 4th proposal.

"3. That a Mini Olympiad (MOI) be held in 2017 in the Netherlands for countries that cannot attend IOI 2017. IC will approve the countries that are allowed to attend. This MOI will be held at the same time as IOI 2017. The MOI will use tasks, test data and grading system of IOI 2017. Everything will be installed on local servers. A representative from IOI will ensure a fair contest according to IOI rules. After IOI 2017 the results of the participants of the MOI will be inserted into the score list that is published on the www.ioinformatics.org. In order to resemble the official circumstances as closely as possible a small number of countries will be invited to send their B-team to the MOI. The B-teams will not be included in any rankings.

This proposal has been discussed with the countries involved and no objections have been raised. The costs for every participating team will be 1000 euro (housing, food, transportation) and the costs to travel to The Netherlands. The Netherlands will do his best to find sponsorship for this event. A final financial proposal will be published at IOI 2016.

The Netherlands will ask for a financial contribution of the IOI community for transport of a representative of the ISC and ITC members that will have to be present. "

Ries added that the cost will be travel plus 100 € and that ISC/ITC travel should be paid for by IOI.

Discussion included:

- Both Israel and Iran thanked Ries for a generous offer.
- The host's scoreboard should not be contradicted by the new scoreboard where 4 extra students have been slotted in. Iran clarified its position that contestants from Israel will be omitted from the participation numbers.
- That this solves a specific problem but not the general one. By removing that the affected country (C) had to host the offsite competition, this allowed option 1 to incorporate option 3. Before voting, it was clarified that option (1) is in country C and the IOI has no financial responsibility and option (3) included more countries and the IOI has financial responsibility. There was further discussion as to whether to combine them or that it wasn't needed because of approval voting.

A vote was taken with the following results: Option 0: (Do nothing) 19 votes, Option "1 or 3": 58 votes, Option 2 (nearby years):1 vote.

Option "1 or 3" was carried.

Further discussion included:

- Amend "The Netherlands" to "anywhere" from option 3.
- It is not a scalable solution

A vote was taken with the following results: Option 1: 5 votes, Option 3: 60 votes.

Ben Burton undertook for the IC to consider how to make a general solution.

30. Acer Sponsorship

Greg Lee announced that Acer wishes to have 5 consecutive years of sponsorship and that at present the 2017 and 2018 hosts have accepted. Acer will supply laptops for the competition, graders, translation etc., servers for the CMS and Translation, tablets for leaders and committees, and networking equipment and assist in setting up the equipment for the contest. Acer will also work with the local Telco to provide broadband service. Technical support would be available during the IOI, marketing and PR for the IOI would be done through Acers channels and a Young Talent Program would be initiated. In return Acer asks for appropriate acknowledgement such as: on the IOI website, on the host website, logos displayed visibly at venues, on badges, certificates etc. during IOI, and at the opening and closing ceremonies as well as an Acer booth at the venue.

Vladimir Kiryuhkin added that for 2016 an arrangement with Acer is possible but not definite. The IC confirmed that the 2019 host has agreed. So the 2020 and 2021 hosts will have to agree if the proposal is accepted.

Agreements with hosts about logo integration will be by negotiation.

A vote was taken on whether to sign an agreement with Acer with the following results: 69 votes for, 0 against and 6 abstentions.

31. Regulation Changes

During the week an amended version of the regulations which the suggested changes highlighted had been circulated to leaders.

Many were relatively minor:

Spelling errors were fixed and definitions of "Participants" and "visitors" was added. "Participants" were then referred to in other contexts. Some wording was changed to reflect actual practice such as the GA confirming medal awards and the ED providing minutes within one month of meetings. "Diskettes" was replaced with "media".

S3.18 was added to allow the GA to establish committees other than those in the regulations.

E5.8 clarified the host's second team's status

S5.12 The host Country should supply official solutions to the Competition Tasks (in English and within 3 months after an IOI).

S6.7 was amended to ensure that anyone who has seen the tasks does not discuss them with others who have not seen them until after the competition has begun.

S6.13 was added: "If there are unforeseen large-scale problems during the Competition, the ISC is empowered to decide upon an appropriate resolution. The ISC must inform the IC and the GA of their decision. The GA may override the ISC's decision with a 2/3 majority vote".

E6.11 was amended to at least one quarter of all contestants receive a gold or silver medal.

S6.7 was amended again to allow the SC/ISC/ITC to communicate with contestants in their official capacity.

Discussion included that despite the minor amendment to E5.10, it must retain that countries are not ranked.

The entire set was accepted (with the amendments) - Votes for: 76, 0 against and 0 abstentions.

32. Proposals of GA members

The Philippines suggested a summary of the incentives offered to IOI medallists be produced. The presentation by MIT at this IOI could be broadened.

Ben Burton offered that the IC would compile such a list.

33. Future Hosts

Krassimir Manev explained that Bolivia had expressed interest in being a host but accepted more experience was required and that they were welcome to apply in the future. Previously 2 future hosts have been selected and the IC has chosen to do this.

For 2019: Azerbaijan For 2020: Singapore

Armenia expressed concern that even in 4 years' time its students may not be able to participate, because even in similar situations where students are invited they will not attend. Fuad Hajiyev assured the GA that there was Ministry of Education and Ministry of Foreign Affairs support and visa support and security would be provided for all IOI countries.

34. Thanks

Wolfgang Pohl proposed that the GA thank Kazakhstan for a wonderful IOI and the GA gave a standing ovation.

September 1, 2015 (10.30 pm NZST - GMT + 12)