

General Assembly

Minutes of the Meetings 7-15 August 2022
Yogyakarta, Indonesia and on Zoom

GA Meeting 1

Welcome and apologies

Brian Marshall welcomed everyone to IOI 2022. He welcomed onsite participants to Yogyakarta and Indonesia. A round of applause was received. Brian noted that students from all IOI member countries are participating of which 71 countries will be present in person at this year's IOI which is the first ever hybrid IOI.

Introduction of GA Chair

Ben Burton introduced himself as the IOI President and extended a welcome to everyone. Members of IC were asked to stand or wave to introduce themselves.

Ben then expressed his pleasure at introducing Gusti Hayu as this year's Chair of the GA. She followed with a brief hello, gave thanks for the opportunity, and issued a further welcome.

Presentation and confirmation of GA Agenda

J.P. Pretti introduced himself as the IOI Secretary and recalled the proposed agenda sent earlier by e-mail. Using a vote conducted on Matrix, the agenda was approved with 56 votes in favour, no votes against and no abstentions.

Call for nominations (IC: 2 positions, ISC: 1 position, ITC: 1 position)

J.P. reminded the GA of the four pending openings on IOI committees (2 on IC, 1 on ISC and 1 on ITC). Details were provided about the procedure and deadline with a note that this would also be included in a reminder email later in the day.

Announcement of IOI 2025 host

Ben reminded everyone that we did not receive any formal bids in 2021 to host IOI 2025. However, this year, he said he was delighted to declare that the IC recommends Bolivia as the IOI 2025 host. To allow a Bolivian representative to join IC meetings this week, he called for an immediate vote on this bid. The GA voted to ratify Bolivia as host of IOI 2025 with 69 votes for, no votes against and no abstentions. The IOI Bot was not functioning so this vote occurred using a show of hands in person and ad hoc reactions to a post on Matrix for online participants. A short video from the future Bolivian hosts was presented.

Approval of contest rules and procedures

Jonathan Irwin (ISC/HSC) outlined the proposed 2022 IOI contest rules and procedures (<https://ioi2022.id/competition-rules/>) highlighting changes and providing additional background and justification.

In response to a question from Canada, it was confirmed that printed task statements would be provided onsite and online participants may print task statements as well. Belgium followed up with a query about how other printing requests will be handled. Jonathan said these details will be announced later.

Brazil asked for an example of exceptional circumstances under which alternative submission procedures are allowed. The answer was that this is for truly exceptional situations such as if the CMS goes down.

There was a discussion of snacks following a question from Indonesia. Different types of snacks will be provided, but only bananas will be available if more snacks are requested.

Mexico inquired about the reason for the 50KB limit on file sizes. Ashar Fuadi (ITC/HTC) said this was to err on the side of caution because of how the networks are configured, but the limitation should not pose a problem.

The contest rules and procedures were approved by the GA with 71 votes in favour, no votes against, and no abstentions.

Note about IOI 2026

Ben inserted a quick announcement to say that no bids for IOI 2026 have been received. Any countries who have questions about bidding or hosting are encouraged to speak to any members of IC. He said this can be for IOI 2026, 2027, 2028 or further in the future.

Code of Conduct reminder

Yugo Isal reminded everyone of the importance of the Code of Conduct. Although many leaders may be familiar with it, the document will be new to many contestants. Guides have asked students to read the Code of Conduct found in pocket guides distributed today but Yugo encouraged to leaders to reiterate the importance of reading and understanding these expectations.

Chile asked when pocket guides were distributed. Brian Marshall said this is just underway and they will be distributed to leaders after prioritizing distribution to the contestants.

Logistics

Brian Marshall made some announcements about logistics for onsite participants. In particular, he outlined the plan for COVID-19 testing, and what happens upon a positive test. (There was one positive test yesterday.) Everyone was also reminded about the masking requirement.

GA Meeting 2

Issues arising from the Practice Session

Jonathan debriefed the GA on the practice session. He indicated that two issues with the translation system (discarding of early jobs, and use of “Finalize”) will be fixed. He said the procedures will remain unchanged and hopes the additional time will make the actual translation session clearer.

Jonathan made the following announcements:

- Keyboard layouts can be changed including those under the “Others” section.
- Complaints about laggy laptops and/or trackpads will be investigated and replaced if needed. A trackpad and mouse are both available so one can be used if the other fails or does not perform well.
- An issue with ioibackup was resolved.
- An issue with underscores and Geany can be addressed by changing the font family or font size.
- Many complaints were received about the cold temperature in the competition hall. The GA was polled to get a sense of the total number of such complaints received. There were many and so the hosts will discuss adjusting the temperature upwards slightly.
- The main purpose of the paper clarification request form is to handle non-Latin characters that the CMS cannot accommodate. When it is possible, contestants are urged to use the CMS for clarifications.
- Discussions are underway about procedures to handle the unlikely but possible delay of the start of the contest.
- There is no public scoreboard because of concern that it could be leaked to an online contestant. However, leaders expressed a strong desire for access, so this is under discussion.
- Leaders are reminded to be available on Matrix to translate clarification requests.

Belgium requested a clearer announcement that the contest has started.

Indonesia said one contestant was very distracted by the sound of mechanical keyboards. Jonathan said an inspection will be made of the neighbouring keyboards.

Slovenia said one of their participants is located at a particularly cool location in the hall. Jonathan said the seating map will be examined for solutions.

Luxembourg asked that napkins be given to contestants. Jonathan said they are supposed to be provided by the hotel and they will be reminded of this.

Norway said that the speaker was uncomfortably loud by the wall and asked that the volume be lowered. Jonathan said they will look and see if something can be done.

India asked when loud mechanical keyboards might be disallowed saying it could be unfair to do so at this point and earplugs may be a better solution. Jonathan said that submitted items will be inspected tonight and rejections communicated by Matrix by noon tomorrow. He said they will consult and deliberate. India said the noise of a keyboard is a function of both the keyboard and user so inspecting them will not be able to determine if they are a problem. Jonathan acknowledged this and said they will try them in a “normal” way.

Austria reported that the keyboard layouts don’t work for German which requires an extra key. They would like extra time to find some. Jonathan said this will be allowed until tomorrow at noon.

Greece said contestants reported that the mouse scrolling was laggy and asked that this be investigated. Jonathan said it will be.

Estonia reported that the clicking sound from the chandelier was more disturbing than the mechanical keyboard. Jonathan said they will be able to supply ear plugs.

Indonesia asked if keyboards can be submitted by noon tomorrow. They also asked about the clarification request form. Jonathan repeated the earlier assertion that keyboard submissions will be allowed until noon tomorrow, and the preference for using the CMS for clarifications.

Sri Lanka asked if they could bring their own snacks. They said their contestants asked during the practice session and received two different answers. Jonathan said that snacks are part of what may be submitted in advance for approval.

Indonesia asked for clarification about the provision of ear plugs. Jonathan replied to say that the details are to be determined. He noted that regardless, contestants can ask for them.

There was a final concern raised about the top bar in the VM. Jonathan said they are aware of this but do not know of an easy fix.

Call for proposals for Group Discussions

J.P. noted that group discussions are scheduled for Day 6 and asked the GA to send in suggestions for topics.

Stephanie Zbinden said a few words about the ongoing issue of female underrepresentation at IOI. She said there will be a workshop (with food and refreshments) on gender diversity following the group discussions. It will mostly involve discussions about ways to improve the situation. Ben added that this is something we have talked about for a long time and there is still a lot of work to do. He said that this year, more than 94% of contestants are male so less than 6% are female or non-binary. He indicated that it is about more than numbers. Culture is equally important.

Appointment of scrutineers for voting during GA meetings

With 65 votes for, no votes against and no abstentions, the GA approved the appointment of Troy Vasiga, Greg Lee, Mohammad Ali Abam and Seiichi Tani as 2022 IOI scrutineers.

Presentation of regulation changes

Gusti Hayu introduced Eduard Kalinichenko (IC) to present regulation changes and reminded everyone they are being presented for information. She said clarification questions can be asked but discussion and debate are scheduled for the final GA meeting.

Eduard pointed the GA to the proposed changes disseminated electronically in advance of IOI 2022 and briefly summarized the proposals from IC:

1. Flip around the boundaries of bronze medals & HMs to be inclusive rather than exclusive.
2. Promote formal medal allocation from Explications to Statutes.
3. Relegate textual medal allocation from Statutes to Notes.
4. Clarify that any GA vote seeking to override any Statutes of the Regulations requires 2/3 majority to pass.
5. Added Treasurer as a non-voting member of IC appointed for a minimum of three years.
6. Clarify how to handle abstentions in the IC voting procedure.
7. Reclassify second team as unranked but equivalent to any award in an individual capacity.
8. Decouple IOI President elections from IC/ISC/ITC election cycles.
9. Clarify homeschooling in Regulations with respect to eligibility.
10. Making the Code of Conduct part of Regulations.

Eduard indicated that there might be a desire to apply the first regulation change to IOI 2022. If so, the IC has a strong preference for this to be determined before any Day 1 results are known. He asked for a quick show of hands to determine if anyone is in support of this idea. Seeing hands up, Eduard indicated that a corresponding vote on this would happen at the start of GA 3.

Canada asked where/how GA is encouraged to discuss the regulation changes. Eduard and Ben said the hope is that much of this will happen on Matrix, but discussion will be permitted at GA 7 if necessary/desired.

GA Meeting 3

Regulation Change 1

At the next meeting, Eduard initiated the vote on Regulation Change 1. He indicated that the GA will be asked to vote on a combination of the permanent regulation change as well as making it effective for 2022. This means a 2/3 majority will be required. Eduard also presented a precise formulation of the change upon request. The Matrix voting system was not functional so, unfortunately, only delegations onsite could vote. The combined motion passed with 65 votes for, no votes against and one abstention.

Task selection for Competition Day 1

Jonathan described translation system logistics including updates on printing, minor versus major objections, access to the system, and the schedule. He also said there will not be a live scoreboard but a screen in the ballroom at the Hyatt will show the scoreboard which should not be shared. Sweden complained that this was far too harsh. ISC/HSC accepted the compromise of allowing GA members to send text descriptions of current scores to parents etc.

After distributing the tasks, minor objections were received but there were no major objections. The task set was accepted with a vote of 73 votes for, no votes against and no abstentions.

GA Meeting 4

Report on Competition Day 1

Michal Forišek (ISC) was happy to report that there were no major issues on Competition Day 1. He gave an overview of minor issues and provided some submission statistics: 6750 total submissions with a grading latency typically 40 to 100 seconds and approximately 3 minutes at the very end of the contest. The hosts received a round of applause for setting things up to yield these ideal numbers.

Michal noted that there were 348 active participants on Day 1 separate from the Indonesian second team. Because 5 registered participants did not show up, the number of contestants could increase on Day 2.

Jakub Łacki noted that one contestant refused to wear their mask despite being asked multiple times. ISC believes this was a violation of the Code of Conduct. On Day 2, they will escalate these cases to IC.

Appeals for Competition Day 1

Jakub discussed the official appeals:

1. A “towers” last submission was made 15 seconds before the end of the contest but is not shown in the system and points are not given. ISC rejected this appeal because there is a back-up submission system, and this behaviour (heavy network at end of contest) is expected.
2. A contestant submitted a new solution to Prison within two seconds of the end of the contest and the system did not react. ISC rejected this appeal noting that it is nearly identical to the only other appeal.

Someone asked about the 20 second buffer before verbally announcing the end of the contest. The reply was that this was intentional. The CMS clock is used to determine the end of the contest.

One team asked for extra time because of frustrating network issues at one online location. According to policy, although acknowledging how frustrating this can be, there is not much that can be done and so no action was taken. ISC noted that this request came 20 minutes after the end of the contest.

Finally, a submission was made two minutes before the end of the contest using the backup submission protocol. The submission was accepted and will be graded.

Canada asked if the leaders of the contestant who refused to wear a mask were notified. The response was that this will happen.

Austria asked about the time window for ioi-submit. The reply was that enter must be hit before the official end of the contest and this is explained in the notice. Eduard (IC) expressed concern about this because a failed last second submission does not allow time to use the back-up protocol. He said that because of this, he feels he would tell his contestants to always use the back-up system for the last 3 minutes. ISC said they do not have a way to check submission attempts on the client side. They prefer Eduard’s advice not be given but they don’t verify that issues were experienced. ISC will debate this. There are some dissenting opinions. Slovakia suggested that the final files left locally on the system could be automatically considered a final submission. Jakub feels there are a variety of issues with this.

Switzerland noted that the bathrooms for women during the contest were a floor away and this should not happen. Feminine hygiene products should also be available in the women’s washroom.

Eduard wanted to know if ISC has a snapshot of the VM at the end of the contest. Jakub said this was discussed and is also technically tricky. Martin Mareš (ITC) said we cannot rely on the local clocks of the VMs.

Fredrik Niemelä (ITC) announced that for Day 2, they will post a password protected scoreboard with the password given to leaders and deputy leaders. The rule will be that you cannot access the page in any room where a contestant could possibly be (including while walking to the bathroom). This received a loud round of applause.

Luxembourg asked if the livestream could be shown in the Rich hotel. Jonathan said they will investigate this.

Response to invasion of Ukraine

Ben reminded everyone that what follows is the beginning of a discussion that will not finish today. He then began with a history of IC’s decision around the invasion of Ukraine. He said that many IOI-like organizations reacted in a similar way. He highlighted that the IC is the only decision-making body in existence between IOIs. Their decision was that Russian and Belarussian students could only compete under the IOI flag and only online. Their decision

was only for 2022. IC would like the GA to decide on how to proceed moving forward (in 2023 and beyond). Ben also noted that the IC is now implementing a mechanism to informally poll “the GA” between IOIs.

Ben recognized that there are strong feelings on this issue and expressed appreciation for all the feedback received to date. To initiate the current discussion, he presented three possible options which the GA may amend or add to:

1. Do nothing. IC decision expires after this IOI and Russia and Belarus complete normally from 2023.
2. Continue the current decision, but on-site (because there are no plans for IOI 2023 to be hybrid). Russian and Belarusian students attend on-site from 2023. No country names/symbols - compete under the IOI flag.
3. Remove completely. Russian & Belarusian students do not compete from IOI 2023.

Ben said that any decision would not expire until/unless there is an overriding later decision. Today, he would like to begin with a decision on the confidentiality of votes on this issue and then continue the broader discussion. At GA 6, a summary of any amended or additional options will be presented to the GA. At GA 7, we will complete the discussion and vote.

Upon soliciting questions about the process, Ben answered Sweden to say that the regulations have been examined and IC believes a simple majority (50%) is needed for the votes on this issue. Ben answered France to say that concern about the expiring element of these options can be part of the discussion on the starting set of proposals.

Confidential voting was discussed. Norway questioned whether this needed to be decided now and asked for more time to deliberate on the issue. Canada said the votes should be confidential because of political pressure. Switzerland seconded this.

There was silence and then the voting began. Fredrik said it would be nice to have a discussion. There was confusion. France expressed concern about seeing the results of a vote as it happens and asked that intermediate results be hidden. Ben noted that watching people vote is not entirely unlike typical in-person GA votes involving a show of hands. While the vote continued, discussion continued.

Iceland expressed a desire for a public vote because of a preference for openness and that’s how previous GA votes have been conducted. Indonesia wanted the IC to explain its decision and Ben said that can be part of the later discussion.

India also asked to delay the confidentiality decision. Ben paused the vote and took a straw poll to ask GA if they would like to vote on confidentiality now or to delay. There were 43 votes in favour of voting now against 7 votes in favour of a delay.

Australia wanted to know if the vote will be completely confidential (i.e., perhaps scrutineers will know how votes were cast). Ben said we will work with the hosts to make it completely confidential. Serbia asked about the voting mechanism at GA 7. Ben said the three presented options only require a simple majority (50%) but other or amended options might require a 2/3 majority.

Someone asked if approval voting would be used. Ben said that is the standard procedure, but the proposal is to use a method for choosing among multiple options and then approving the candidate produced by this method.

Mile Jovanov (IC) said the first thing we should ask ourselves is whether the IOI should make political discussions. Ben responded to say we are still discussing confidentiality and Mile’s comments were on the main topic but also captured by option 1 (“do nothing”). Mile said he disagrees and apoliticality should be discussed first. India concurred. Ben disagreed, apologized but said we need to move on. The vote on confidentiality was restarted.

On the question of “Should the vote(s) on this issue in GA7 be confidential?”, the GA voted “yes” with 46 votes in favour of confidential votes, 8 votes against and 5 abstentions.

The main topic (options moving forward) began with the Chair reminding Ben of Indonesia’s earlier request for IC to describe its thought process when making a decision for 2022. Ben said IC had many lengthy and difficult discussions with strong views in opposing directions. The final decision was, in part, a compromise which involved

engaging with the Russian and Belarussian people but not the regimes. Indonesia questioned why the IOI felt the need to sanction the countries. Ben replied to say that this will come up in the opinions to be discussed and it is important to hear from the GA now more so than the IC.

Jakub (speaking for himself) said it would be great to be apolitical but for an international organization like this, it is impossible. For example, the IOI recognizes a fixed set of countries and chooses host countries. These discussions are difficult. We should minimize how often they occur but having this initiated by IC, we have to at least conclude the discussion.

Ukraine spoke at length proposing to ban Russia and Belarus indefinitely and attempted to persuade the GA to go this route. They said Russians are not responsible for what their government is doing, but opinion polls do suggest many people support their government's actions. One might not think banning Russia will stop the bombing, but this logic is faulty and like taking the view that a single vote on a matter does not make a difference. The Olympics, football and ice hockey took the approach of sanctioning Russia and Belarus. The more sanctions there are, the more powerful they will be. Ukraine emphasized the role propaganda is playing in the war and that the IOI will be used for future propaganda. In conclusion, Ukraine requested that the GA vote for a full ban describing Russian actions as terrorism, drawing parallels to World War II, and describing specific atrocities.

Estonia invited anyone not familiar with the issue to speak to delegations neighbouring Russia to hear more details. Ukraine should not carry this burden alone.

Araz Yusubov (IC) said there is a need for deeper and longer discussions. He is unsure about our ability to get an accurate sense of Russian people's opinions. It is a sad situation, and we all feel for the Ukrainian people. There are other conflicts. We may be forgetting about one important objective of IOI which is friendship between scientists and people. He cited examples of Israeli team leaders positively interacting with Palestine contestants in Baku, and Azerbaijan inviting Armenia in 2019. Araz has proposed a group discussion topic along these lines: to write down IOI values, which would help in contradicting situations. He said we need to be wary of other conflicts and need to be wary of bias (e.g. Russian invasion of Georgia in 2008). Should the IOI be a platform for these politics? Perhaps it is wiser to avoid doing so. Araz concluded by encouraging people to use their free time to have discussions, so everyone is as informed as possible at GA 7.

Poland spoke and said they are very happy to have their Ukrainian friends here at the IOI. They do not think this would be possible if Russia and Belarus are present. Poland might not have come if they were. We cannot avoid these issues. Doing nothing is political. Poland said they are very close to the situation and mentioned the statement from the rectors of most major Russian universities supporting the aggression. We cannot maintain any connections to these centres. Poland said this makes them sad because they know their Russian colleagues are regular people and are probably like-minded, but he does not see any alternative.

Latvia said that this started much earlier in Crimea, but we did not understand the situation well then. Perhaps if we reacted then, things would be different now.

Iceland asked if the decision on Sunday can be revisited 5 or 10 years later. Ben said it certainly can be and because the GA "owns" this event, speaking personally, we would need circumstances to be extremely exceptional for IC to act independently again.

Czechia made the comment that it is hard to distinguish between what we think is right and what is right for the IOI.

Ben thanked everyone for their input and indicated the discussion will continue.

GA Meeting 5

IOI Project Report on Improving the Task Preparation System

Kian Mirjalali informed the GA about the IOI Project on improving the task preparation system. He began by describing the complexity of the system and its many components. He described the project defined and accepted in 2021. Since then, more than 700 hours have put into the endeavour with good results: more tests, improved testing

infrastructure, improved integration with CMS, additional exporting capability, and new commands (stress and init). Kian is happy to hear from anyone about the TPS project.

Task selection for Competition Day 2

Jonathan outlined the rules about use and sharing of the scoreboard available to team leaders and deputy leaders. He also issued some announcements and reminders about the upcoming translation session.

The proposed task set for Day 2 was distributed. There were minor objections but no major objections. The GA voted to accept the proposed task set for Day 2 with 67 votes in favour, no votes against and no abstentions.

Group Discussion Topics

J.P. thanked people who proposed topics for group discussions. He and the proposers briefly spoke about the six topics scheduled for Day 6:

- Mental health at IOI
- Mechanism for inviting all countries
- Tool for leaders and other GA members to communicate between IOIs
- Keep the spirit of the IOI: Creating an explicit IOI values statement
- Ranking countries on <https://stats.ioinformatics.org/>
- Subtask scoring and perception of results

Points of Contact

J.P. said that it is important for the IC and OIOI to be able to reach the community between IOIs. Countries were asked to fill out a Google form listing administrative contacts for their country as well as contacts should an informal straw poll be needed between IOIs.

COVID Reminder

Ben issued a reminder of Indonesia's mask wearing requirement and the IOI 2022 rapid test taking protocol.

GA Meeting 6

Report on Competition Day 2

Zsolt Németh (ISC) summarized clarification requests received on the two days of the competition. There weren't any issues of great significance. He then provided an overview of the minor issues that arose during Contest Day 2. The two examples with more than three occurrences were requests for C++17 assistance and some minor VM-related issues.

Statistics on Contest Day 2 were presented: 8240 submissions with a grading latency similar to Day 1 (typically 25-70 seconds and up to approximately 3 minutes at the very end of the contest. The total number of contestants is 349 excluding the Indonesian second team (one more than Day 1).

Jakub made the GA aware of one proctoring exception granted by the ISC. Extra time was requested for a contestant due to ongoing clashes and protests in Palestine. The contestant started the contest one hour late and was allowed to finish one hour late but this extension did not end up being used. Jakub noted that time extensions are not granted often. For this to occur, four conditions need to be met and were in this case:

1. The loss of time was severe.
2. The contestant did not cause the issue.
3. The issue is established before the contest ends.
4. The exact duration can be determined independently. (In general, this is difficult to assess.)

Appeals for Competition Day 2

Jakub said there was one formal appeal from the second contest day. A laptop failure required a restart which took about 6 minutes. The contestant requested extra time. ISC denied this request because the delay was not long enough (less than 10 minutes). The contestant, who stayed at their machine when the contest ended, seemed to understand when notified of the decision by ISC. Subsequently, an appeal was filed. This is when ISC learned that the failure occurred twice, and the laptop was not replaced when perhaps it should have been. ISC feels badly and acknowledges this but after discussion believes the core issue lasted 6 minutes and so rejected the appeal.

Jakub said there was an inquiry (not an appeal) about an inability to run code for Thousand Islands. The issue was that the local environment used C++14 and not C++17 which was required for the invariant functionality. Assistance not provided because it originated from the contestant's code. Michal provided a few more details as this issue was experienced by approximately 10 contestants.

There was a round of applause for the completion of a very successful contest.

Presentations by candidates for IC, ISC and ITC

J.P. introduced the candidates up for election for IC and each gave a brief statement:

1. Luis Rodolfo Nájera Ramírez
2. Fredrik Niemelä
3. Stefanie Zbinden
4. Sun Teck Tan
5. Eduards Kaļiņičenko

Then the two candidates for ISC each gave a statement:

1. Johannes Kapfhammer
2. Agustín Santiago Gutiérrez

J.P. reminded the GA that for ITC, ISC proposes candidates from among those that express interest. This year, ISC is proposing one candidate: Amir Keivan Mohtashami. Amir was not in Yogyakarta and his colleague from Iran introduced him and his candidacy to the GA.

Vote on Status of Russia and Belarus

Ben provided an update on the issue of Russia and Belarus. IC received two additional proposals. The first, which was accepted, was to separate the vote on Russia from the vote on Belarus. The second request was to modify the second (middle) option to require Belarus and Russia to participate (individually) online rather than onsite. In the end, there was a mutual agreement to not include this variant because of the stress and requirements it would put on the host.

Consequently, Ben reiterated the original three options/proposals and took questions.

Estonia asked what happens if the GA decides to not include Belarus in the decision. Ben replied to say this would warrant further discussion. He does not want to prescribe what should happen in this scenario.

Romania said that while Hungary is aiming for an onsite offering, they wondered why online participation of Belarus and Russia would not be possible. Ben reiterated that this cannot be forced on the host because of the sheer amount of work.

Latvia asked for confirmation on the longevity of the third option. Ben replied to say that a vote would have to happen for the return of Russia and Belarus to the IOI. Ideally this would happen through the GA.

Michal (speaking for himself) asked if we are happy with the granularity of one year for decision making. He asked if we should empower IC to make decisions between IOIs.

Australia inquired about the second option asking if it implied Russia and Belarus would have a vote at the GA. Ben replied to say they would not. However, as in 2022, Russian and Belarussian leaders would attend to translate.

A question was asked about the third option. Would this mean the memberships of Russia and Belarus could lapse and they would be required to follow the usual protocol for rejoining. Ben replied to say that this has not been discussed yet, but his opinion/suggestion is “yes”. He hopes this implementation detail can be separated from tomorrow’s discussion.

Ben then presented the plan for conducting the vote. A straw poll (not a formal motion) will be conducted to decide which of the options to vote on. The Schultze method will be used for this as was used for the IOI previously and is used for many other major projects (e.g., Debian, Wikipedia, ACM and IEEE). Then a formal yes/no vote will be conducted on the winning option. Both the straw poll and vote will be confidential.

Estonia asked what happens if the formal yes/no vote does not pass. Ben replied that the plan would then be to open discussion on how to proceed. Estonia asked for assurance that this would not necessarily mean we end up with the first option. Ben was unable to give this assurance noting that the fallback position is that Russia and Belarus can participate normally in 2023. Put another way, if the GA is paralyzed, “do nothing” is the end result. Estonia asked that this be made very clear. Italy spoke to say that this did not seem fair and sending the issue back to the IC would be best in this situation. Ben said he will take this into account and should it happen, try to figure out what to do on the fly.

As a scrutineer, Troy asked about implementation details. Ben said these are to be determined and pointed out that confidential votes are significantly slower and so the number of them should be minimized.

On Zoom, someone asked if the straw poll was confidential. Ben reiterated that it will be.

Germany asked how long a confidential vote takes. Ben said we don’t know, perhaps 10 minutes.

Lithuania requested that if the third option for Russia is chosen, that a vote for Belarus include option 2. Ben said this will be taken into consideration

GA Meeting 7

Secretary's report

J.P. said there is not much to report. The OIOI conducted its typical business including handling membership inquiries from Afghanistan, Albania, Cameroon, Côte d'Ivoire, Kosovo, Madagascar, Nepal, Pakistan, and the United Arab Emirates. He issued reminders about the IOI mailing lists and points of contact Google form.

Call for projects

Mile (IC) reminded everyone about IOI projects and asked people to watch for call for proposals somewhere near the end of September with a deadline near the end of 2022.

Confirmation of minutes of IOI 2021 GA Meetings

Ben said that 2021 GA minutes have not been prepared yet. He is still catching up on Zoom recordings being recorded during the pandemic. Instead, he issued an apology and said he hopes to have draft minutes for 2021 available and distributed soon for approval in 2023. IC minutes are experiencing the same backlog but Ben thanks the University of Queensland for sponsoring administrative support towards completing these tasks.

IOI President's report

Ben began by describing what the president does: acting as a spokesperson, working with the community, and having lots of conversations (which he enjoys). He issued thanks to Margot and Greg for leaving the OIOI in great shape and thanked J.P. for volunteering to take on the role of Secretary.

One big issue was handling how we come out of the pandemic. This is happening differently and at different rates in different countries. This is a challenge and about more than travel restrictions. Countries online are evidence of this, but Ben is personally thrilled with number of countries here in person. Huge thanks to Singapore are again in order.

Another big issue was the invasion of Ukraine. He won't report more on this because lots has already been said and the issue will come up again later in the agenda.

Diversity and inclusion are a passion of Ben's. The IOI community is richer for our differences. Ben noted that diversity and inclusion are different issues. Related to this, he announced that two permanent items have been added to the IC agenda: (1) EDI and (2) Outreach to new countries.

Ben showed some statistics on diversity and inclusion. First, he displayed a graph that is a bit old but showed the IOI's massive gender gap. Then he displayed a geographic map that spoke for itself in terms of identifying regions of the world with low IOI participation. He showed a chart listing laws and practices that LGBTIQ participants faced and will face from 2015 to 2024. This was not meant to name and blame host countries or organizers. Many of them have been very welcoming. Ben's concern is not himself as a gay man with years of experience dealing with these issues but rather contestants and others without that perspective and length of lived experience.

Ben described some work in progress. A new IOI Ally programme is being developed which would provide first safe points of contact for IOI participants who are feeling uncomfortable or harassed. These allies would be trained but will not be counsellors. He is looking for help to compile materials which must cross cultures.

For outreach, Ben extended particular thanks to Eslam Wageed and Sun Teck Tan for ongoing work in this area.

Lastly, Ben said he is looking to voting reform. Arrow's theorem says things will always be messy when there are at least 3 options. Approval voting is easy but flawed. A good preferential system would be better. In particular, the Schulze method is a mathematical-based solution that requires technology. It was conducted manually in 2021. Thanks to Ricardo Anido a system that implements this method is being tested in IC. The ultimate aim is to use this method for future IC and GA meetings.

Report from the ITC

Fredrik listed the members of ITC and reminded the GA of its three main purposes: (1) assist the current host in the planning and implementation of IOI, (2) develop and maintain long term tools and systems (e.g., mailing list and task development tools), and (3) transfer knowledge and experience to future hosts acting as institutional memory obtained by observing three years of HTC and ITC.

At IOI 2022, the contest was mostly onsite meaning ITC's role was back to "normal". Cooperation with the host went very smoothly. Ashar and his team did a fabulous job. Fredrik asked for and received a hearty applause for Ashar and his team.

Fredrik listed the ITC resources (e.g., sandbox, translation system, task preparation system and more). He reminded the GA of the important IOI mailing lists.

Two quick straw polls were run without time for discussion. The first was to ask if ITC should set up a permanent forum for communication between IOIs. After 5 minutes, it received 62 thumbs-up and 2 thumbs-down. Given this, a poll was taken on what tool should be used. After 5 minutes, in order of most to least votes, the results were Discord (43), Slack (36), Matrix (20), Mattermost (18), Telegram (2) and Other (1).

Fredrik said his term on ITC has ended and he is thankful for the opportunity. He received a round of applause.

Report from the ISC (6th)

Jakub reminded the GA of ISC's duties (select tasks, oversee task preparation, ensuring continuity, maintaining syllabus, serving as judges) and listed the current ISC members. He outlined the syllabus changes:

- Inclusion of the decomposition of static trees (heavy-light decomposition and separator structures such as centroid decomposition).
- Clarified DS5 on graphs and trees; in particular, added basic combinatorial properties of graphs.
- Removed from inclusion (at least for the next few years): additional topics from number theory, string algorithms and data structures: the cluster of topics including but not limited to KMP, Rabin-Karp hashing, suffix arrays/trees, suffix automata, and Aho-Corasick.

Jakub then reminded the GA of an update on ISC policies previously shared on the ioi-announce mailing list which will be extended over time.

Latvia brought up diversity asking about new languages. Jakub said this was an excellent question and the issue will be included in this year's survey to try and understand the general sentiment. ISC is open to including other languages but needs help with testing. Previous requests for help with Python resulted in zero responses/offers.

Jakub said this was his last time to address the GA after 9 years on ISC. He thanked the community for the opportunity and a round of applause.

Jakub also extended congratulations to the HSC for a job well done. There was another round of applause.

Results and confirmation of medals

Jonathan announced that all task statements, translations, etc. are already online. He announced the task authors who received a round of applause:

- fish: Lim Rui Yuan (Singapore), NUS High School
- prison: Masataka Yoneda & Hirotaka Yoneda (Japan), The University of Tokyo
- towers: Kevin Luiz Ponte Pucci (Portugal), Oporto University
- circuit: Prabowo Djonatan (Indonesia), Garena Singapore
- insects: Hazem Issa (Egypt), Egyptian Olympiad in Informatics (EOI)
- islands: Félix Moreno Peñarrubia (Spain), Universitat Politècnica de Catalunya – BarcelonaTech

Jonathan then provided the cut-offs and counts noting everything was done consistent with the updated regulations and what is currently listed as preliminary on IOI Stats site. These results were confirmed with 70 votes in favour, no votes against and no abstentions.

Financial matters

Eljakim Schrijvers (Treasurer) described some accounting changes in the OIOI. We have moved from cash-based accounting to accrual-based accounting which gives a better long-term view of our finances and means we will have an actual balance sheet. An external bookkeeper prepares our statement. There also has been a change in our financial year. It used to begin on Day 1 of the IOI, but we will now use the calendar year. This means 2021 is a special short year without a budget and the balance sheet began on December 31, 2021.

With this context, Eljakim:

- displayed our balance of 138.495 Euros at the end of 2021,
- highlighted that for 2022, 60% of delegations paid electronically before IOI, running balances were kept for credit or debit situations arising from banking fees, and our Huawei sponsorship was substantial meaning various checks and balances were put in place, and
- proposed a budget for 2023 with a total income of 23.000 Euros (maintaining the current registration fee), and total expenses of 38.200 Euros including 4.700 Euros for the OIOI, 6.000 Euro for communication, 21.800 Euros for development and 5.000 Euros for miscellaneous items.

The GA voted to accept the 2023 budget with 64 votes for, no votes against and no abstentions.

Vote on regulation changes

Eduard provided a quick summary of the originally proposed regulation changes and ones received since they were presented.

Item 1 was approved at an earlier GA meeting.

Items 2,3,4,5,8,10 received no additional proposals. The GA voted to approve them with 60 votes in favour, no votes against and no abstentions.

Two additional proposals were received for Item 6 (voting in IC). The original proposal from IC said that for the vote to be valid, the total number of abstentions and absentees must be less than the number of non-abstaining votes. A new second proposal said that an IC vote should require a simple majority of non-abstaining votes cast, but at least 25% of the IC members (meaning at least 3 given 11 members on the committee) would need to vote in favour of the motion. A new third proposal simply said that a simple majority of non-abstaining votes should be cast.

Lithuania expressed concern with the original proposal. They noted, for example, that a vote of 4-3 could pass but a vote of 4-1 could fail. This could encourage members against a motion to strategically abstain instead of vote against the motion.

Fredrick supported the third proposal because he does not want to equate abstentions with voting no and feels abstentions should not affect a vote's result.

India asked for clarification about the status quo. Eduard replied that for a motion to be valid, there must be 6 votes in favour of the motion regardless of abstentions. This caused problems when some members felt they had to abstain. India replied to say they fear each of these proposals make it too easy to pass some potentially very difficult motions such as the exclusion of a country from the IOI.

Switzerland spoke in favour of the third proposal which they view as a simple system which minimizes strategic voting.

Lithuania spoke up against the third proposal saying they feel under the second proposal it is never better to abstain than vote no.

Fredrik acknowledged that Lithuania was right, but he still likes the third proposal. He agreed with India that there should be a bias to the status quo but is worried about situations where IC must make a decision but cannot. Mile spoke to say that he does not feel a motion should pass if it cannot garner a large number of votes. People supporting the motion should be able to inform and convince others that voting yes is the right thing to do.

Through a straw poll, the GA indicated a preference for the second proposal: 8 votes for the first (original) proposal, 31 votes for the second proposal and 26 votes for the third proposal. The GA then voted on the second proposal passing it with 62 votes in favour, 2 votes against and 1 abstention.

The original Item 7 (second team) was updated following a discussion with Canada to make it clearer that second team awards need to be clearly indicated as such during the awards ceremony. Another second proposal moved that awards are not presented to the second team at the awards ceremony. Estonia asked if this would apply to 2022. Eduard said it will not as the status quo applies which means the host can make this decision. When asked why Canada still favours the new second proposal, they said they fear that countries will still mischaracterize second team medals when presented at the awards ceremony through the media etc. After a bit more discussion about the specific language used in the regulations to reference the second team, the first (original) proposal passed with 64 votes four, no votes against and one abstention.

Election of IC, ISC and ITC members

Troy Vasiga as the lead scrutineer, outlined and initiated the approval election voting process. The results listed below were announced later:

For IC:

Luis Rodolfo Nájera Ramírez – 13 votes
Fredrik Niemelä – 32 votes
Stefanie Zbinden – 25 votes
Sun Teck Tan – 45 votes (elected)
Eduards Kaļiņičenko – 38 votes (elected)

For ISC:

Johannes Kapfhammer – 25 votes
Agustín Santiago Gutiérrez – 42 votes (elected)

The GA unanimously voted to confirm ISC's selection of Amir Keivan Mohtashami for membership on ITC.

Announcement of future host(s)

J.P. announced that we have not received any bids to host 2026. The GA was asked to consider making bids over the coming months with the hope that IC will be able to consider candidates at its 2023 winter meetings. People are encouraged to approach any member of IC with any questions about this.

Russia and Belarus

Gusti Hayu opened the discussion on Russia and Belarus acknowledging that this is a sensitive topic about which many people are passionate. It is important to hear from as many people as possible so she may have to cut people off if they speak for too long.

Brazil spoke to those voting to not include contestants saying they do not wish to leave competitors behind. There may be other things we can do for them without boosting their country. They also spoke to people voting to do nothing mentioning that other events (e.g., the Olympics) which also support peace and unity have sanctioned Russia and Belarus. This is something worth thinking about.

Poland indicated that anything short of a full ban plays to the Russian propaganda machine. They cited examples from other Olympiads.

Lithuania said they understand that the IOI consists of intellectual people, and it is very hard to exclude people. They understand Araz's talk and sentiments from yesterday. However, when an aggressor comes to your home, you are not in a conversation. This only happens when they leave. Lithuania will not come to IOI if Russia is there with their flag.

Estonia spoke to make two points. Russia's official stance is that there is no such thing as Ukraine. If they had won the war, Ukraine might not be here at IOI 2022. Recent statements threatened the existence of Estonia and therefore also Latvia, Lithuania and perhaps Poland. This is not the last war. This is an existential issue. Secondly, this is not about the students, but this is about applying pressure (e.g., as happened with apartheid in South Africa) Estonia then added three more points. First, Option 2 is milder than what happened this year. Secondly, Estonia has received a clear indication that they cannot participate in competitions that Russia participates at. Lastly, they hope all countries here who feel Ukraine should participate will help them financially.

The deputy leader from Spain spoke introducing himself as Belarussian. He said he is against the war and notes that one of his best friends is Ukrainian. Speaking to the second option, he said that the IOI can be one of the most important events in a contestant's life. These kids cannot just leave their country and compete elsewhere like some athletes can. In Belarus, many people are against the war. In his community, it is hard to find someone who supports it. Many of his Belarussian friends support Ukraine in different ways. In summary, he says the IOI is for the kids and we should consider them first.

The United Kingdom asked if the proposals affect the Russians and Belarussians on IOI committees. Ben replied to say they do not because people on ISC and ITC do not represent their country. This is in the regulations. IC is different.

Tajikistan said that excluding students will make them think their government's propaganda is right.

Belgium asked if Russians and Belarussians in the delegations of other countries would be affected by a vote for the third option. Ben replied to say they would not be affected. The proposals only affect the delegations of Russia and Belarus.

Italy said there is some concern about the third option because other countries will worry it could apply to them. However, they say this is not the same. This is different and at a much larger scale involving other countries in many ways. Doing nothing is not doing nothing; it involves excluding others. There is not a real option to do nothing.

Mile spoke to say that the IOI should be about inclusion and building bridges. He worries about consistency because other conflicts have been ignored in the past. He also worries about the impact on the future of the IOI and the damage this type of discussion might cause. It could become common and time-consuming. As evidence that we should do nothing, he notes how difficult it would be to develop a rule to cover this situation.

India indicated they more or less agree with everything Mile said. When you look at the scale of the conflict, saying that this is different is a very Euro-centric view. The war in Iraq was cited as an example. Looking at recent history, what we have here is a cultural bias. These are school kids, and we want them to meet other kids. India also expressed serious concern about IC's actions. They acted very quickly doing something when, for example, it took more than two years to address an issue with Israel. We should focus on running a good competition, not on politics.

Estonia responded to say this is not a comparable conflict. It involves one country trying to destroy another which is unprecedented since IOI started.

Egypt said that if Russia is banned, this will only be the start. For example, many Arab countries may then move to ban Israel for attacks on Palestinians.

Responding to Mile, Italy rejected the notion that we need a template to handle future situations. They say we need to react now and chances of this kind of scenario being repeated are considerably small. Italy also feels we should consider the probability that a nuclear attack could occur.

Germany expressed interest in knowing how many countries would not join if the first option is chosen. By a show of hands in the room, four countries indicated this is the situation they would be faced with.

Ben spoke to say that the IC wrestled with exactly the issue raised by India. Iraq is a good example. Australia's involvement there was shameful to him and feels it would have been okay to ban Australia at that time. He feels we do not need to be bound by what was not done then. Also, doing nothing is a statement itself especially in the context where so many global bodies are doing something. Going back to 1939, it is risky to draw comparisons, but there are parallels. We don't know what is coming next. It is worthwhile asking if it was 1939, would we be choosing to engage with the Nazi regime? And looking back, would you regret that decision looking back now?

India replied to say that the Nazi Germany argument comes up often and of course we would need to act. But they disagree with the comparison. Instead, they feel this conflict is closer to many conflicts occurring since the start of IOI. The difference is where it is happening. It is a Euro-centric view of the rule. This is not the forum to sort this out. If other bodies are doing this, they are making a mistake and we should not do the same.

Mexico spoke noting that they are situated far from the conflict. While the war cannot be defended, we need to think about the future and how we will look back. They understand the desire for a general solution/approach, but conflicts will continue to occur.

Egypt asked if Hungary has issues hosting Russia or Belarus in 2023. Agnes responded to say they are planning fully onsite contest. This question is very political and one year away and she does not have direct responsibility. It is too hard to say and depends on the decision of the GA and what happens over next year. Unofficially, her personal opinion is that Hungary can invite everyone, and they will all be welcome at IOI 2023.

Iceland agreed that there were past conflicts for which this type of discussion did not occur, but this is a different time. We can set an example. Our decision here does matter.

Troy made some voting specific announcements and opened the straw poll on Russia's participation. While voting occurred, the GA continued. Troy later announced that the Schultze method resulting in the selection of the second option, and now a formal yes/no vote on this option needs to happen.

Estonia asked what would happen if the motion does not pass. Troy said this is not defined. Italy said that we should know. Ben spoke to say the current evidence suggests that only Option 2 can pass. Thus, we are parallelized if it does not pass. The default is that Russia and Belarus will be able to come back and participate. Estonia followed up to emphasize that we are effectively voting between the first two options. Indonesia asked for another option. Troy said we will not be changing the voting procedure at this point.

The GA voted in favour of applying option 2 (participate as individuals) to Russia with 55 votes for, 13 votes against and 4 abstentions.

Discussion was opened on the issue of Belarus. There were no comments so the vote on applying option 2 to Belarus was conducted.

The GA voted in favour of applying option 2 to Belarus with 56 votes for, 11 votes against and 3 abstentions.

Proposals from GA members

Andrea (Italy) spoke briefly about the beginnings of a proposal to provide mental health counselling for contestants at future IOIs.

No proposals from GA members were received from the floor.

Notice on the proper usage of large objects in closing ceremony

J.P. reminded everyone of Statute S5.14 which says that during the awards presentation at the closing ceremony, contestants must not bring objects onto the stage that may obstruct other people.

Other business

Sun Teck thanked the GA for their support and asked that he be contacted if anyone knows a country looking to set up a national Olympiad and who would appreciate some support.

Eduard announced that long-term service awards will be introduced in 2023. Certificates will be distributed for non-contestant participation of 7, 15 or 25 years.

Agnès invited everyone to IOI 2023 in Szeged, Hungary. They hope it will be a fully onsite event which coincides with the 120th anniversary of the birth of John von Neumann

Brian (Chair of IOI 2022) made some logistical onsite announcements. He then thanked Ben and presented him with the IOI song. He also expressed gratitude to Gusti Hayu for chairing the GA. There was a round of applause.

There was no other other business. The GA concluded with thanks from Ben. He emphasized the extra difficulty in hosting a hybrid IOI. Our hosts did a magnificent job. The GA burst into a long and loud round of applause. Ben then also thanked the GA noting that while it included lots of difficult discussion, it is wonderful that it was conducted with respect.