



IJSO Statutes

2004.12.5 in Indonesia

1st Amendment 2007.12.2 in Taipei

2nd Amendment 2009.12.8 in Azerbaijan

3rd Amendment 2013.12.9 in India

4th Amendment 2016.12.9 in Bali

IJSO Guidelines Approved in Bali, December 2016

I. How to become the future host country of an IJSO

A. A country, which has been participating in the IJSO, must state within a reasonable time after its acceptance as member of the IJSO its intention to host an IJSO in a certain year. This official statement must be sent to the IJSO Administration Centre or President at least two years before the intended year to host the IJSO.

B. The approval of a host country is made at the IB meeting at least two years in advance.

C. Criteria for accepting a future IJSO host are:

- ✓ Official letter of Ministry of Education or similar governmental body confirming the willingness of the country to host an IJSO
- ✓ naming the organizations and involved bodies (e.g. universities) with their main tasks
- ✓ naming the institution, that guarantees the availability of the required finance necessary to carry out the IJSO,
- ✓ deciding the year, prospective site and fee.

D. Future organizers accepted as IJSO hosts will inform the IJSO Coordinator Centre regularly about the state of preparation and report about important deadlines and milestones.

E. Future host countries will attend at least two EC meetings before the actual IJSO and are encouraged to distribute everything that is relevant and interesting on paper during IB(International Board). The presentation itself should be brief and focus only on IJSO relevant issues.

II. The role of the host concerned administration

A. The Ministry of Education (or an analogous institution) represents the official authority of the host country.

B. It appoints an organizing committee and sends the official invitation letters, including information about possible financial conditions and other duties related to the IJSO membership.

C. It also assigns an organizing institution and the IJSO competition site. The committee is responsible for the preparation and the activities of the IJSO.

III. The main responsibilities of the organizing committee

The organizing committee has the following responsibilities:

A. Sending information about the IJSO to IJSO member countries and observers by Jan. 1 at the IJSO year, including conditions like paying the fee, etc.

B. The official language of the IJSO is English. The discussion during all meetings and activities will only be in English.

C. A Logo of the IJSO is used in all banners, documents, etc. Sufficient banners should be posted around the competition sites, such as: hotels for leaders and students, ceremony halls.

D. Preparing the tasks in correct English, to be checked by a native speaker who is a science teacher.

E. Organizing the IJSO, which includes:

- ✓ opening and closing ceremonies;
- ✓ problem discussion, problem translation, moderation, award decision;
- ✓ conducting the competition;
- ✓ excursions;
- ✓ assurance of conditions for work of the team leaders;
- ✓ International Board;
- ✓ preparation of medals for the winners; preparation of certificates for all participating members;

✓ winners of gold, silver and bronze medals should have some indication about their medal on their certificate of attendance. Non-medalists should get a participation certificate.

F. Providing for food, accommodation, excursion and transportation to and from the Airport and/or the Railway Station for all participating members and observers.

G. Securing optimum health and safety requirements of the students in relation to travel, communication, lodging, food supply, fulfilling experiments and practical examinations, recreation activities etc.

H. Appointing a Chairperson of Scientific Committee to chair all the meetings, including problem discussion, problem translation, and moderation and so on.

I. Arranging facilities, such as photocopying, photo and/or video documentation, computer processing of achieved results.

J. Distributing a new updated version of the addresses list including email of all coordinators and team leaders.

K. Providing the Administration Centre after the competition with a copy of the files of the complete English final version of the tests and answers.

L. A daily News Letter or leaflet of the event is published and provided.

M. Providing each country not only with a copy of the filled out answers sheets of their students before moderation meeting, but also with the ranking and final scores after the closing ceremony.

N. Preparing a "Programme Book" with details about the current IJSO. The following list is a sample of the contents of Programme Book.

Programme Book of IJSO20XX

Welcome Messages

Members of IJSO Organising Committee

Members of Scientific Committee

Daily Schedules

Venues of Competition and Accommodation

Tour Information

Words and Phrases of Local Language

Cultural Information

Additional Events

Participating Countries and Participants

Statutes of IJSO, Guidelines and Syllabus

History of IJSO

IJSO Executive Committee

Useful Information (addresses and phone numbers)

O. Preparing a final report within one year after the competition. In general the following items should be included in an IJSO report.

IJSO Report

Foreword

IJSO in a nutshell

Organization: organizing, scientific, and other assisting committees: their tasks, and how they were recruited

Program with some focus upon social and cultural activities

Result + medals

Statistical considerations: average + max + min score per question and mean + SD

Evaluation and reflection, including recommendations concerning important milestones and deadlines for future organizers

List of participating countries,

- members of Local Task Committee
- IJSO Scientific Experts, participants, observers and student guides
- Address (speeches) of special VIP's
- Test One + answers
- Test Two + answers
- Test Three + answers
- List of sponsors

P. In order to establishing friendly relations among young people from different countries, the host country is recommended to offer facilities for students to socialize.

IV. The financial responsibility of a host country

A. The host country must pay for all activities of the hosted IJSO during the specified week, except for the travel expenses of the participating members and the observers to and from the city or town where the IJSO takes place.

B. The host country may request each participating country to pay a fee and also determines the fee for the observers to the host country, must inform them in advance of this fee.

V. Preparation of the IJSO tasks

General

A. The host country must appoint a committee of authors responsible for the construction of the IJSO tests, the design of the proposed tasks and how each question is to be evaluated (marking procedure). The members of this committee should be specialists in biology/chemistry/physics and science in junior high school.

B. The committee must study and understand the concept of IJSO, previous IJSO test questions, Syllabus of IJSO and recommendations and principles in relation to the design of valid and reliable tasks.

C. In the current year of the IJSO the group responsible for training the national team of the host country for the IJSO should be strictly separated from the expert committee responsible for design of IJSO tasks.

Check list

A. Scientific committee of host country should

- ✓ design the tests/questions in accordance with IJSO Syllabus.
- ✓ define the rules for conducting the Jury sessions, voting on questions and tasks, conducting the exams/tasks, moderation and all other academic activities.
- ✓ design the answer sheets
- ✓ decide about the scoring procedure and marking
- ✓ present in all meetings about scientific issues, including problem discussion, problem translation, moderation
- ✓ present the scores/results
- ✓ calculate the awards

B. The design of the questions should enable objectively marking and scoring. The answer written in the student's own language should be avoided. The type of questions in Test Two can be as

- ✓ matching a set of aspects
- ✓ filling out a number, letter or code, which may be chosen from a provided list with terms
- ✓ judging true/false a set of statements about a science problem or phenomenon
- ✓ sequencing a set of aspects or events

C. In order to facilitate the translation process, tests should be as concise as possible. The host country will do the best to avoid unnecessary words.

- D. Regarding the exams layout it is recommend using the “styles” feature available in every document processing software (Microsoft Word or equivalent...): basically a pre-defined combination of font name and size.
- E. Tests should be presented in graphic form as much as possible: graphs, diagrams, drawings.
- F. The questions could be pretested with an appropriate target group different from IJSO students, but still representative
- G. Tasks should be designed in such a way that the answers are precise and can be objectively evaluated. The host country will mention the marking scheme and evaluation procedure for each question. This must be approved by the team leaders during the problem discussion and translation meeting.
- H. The number of points for each question should be indicated on the exam papers.
- I. Difficult questions should have more points than simple questions in Test Two and Three.
- J. A range of scores should be allowed for answers reflecting a different range of ability. In the case of questions consisting of several sub-questions a subdivision should be applied in the marking (no all-or-nothing principle).
- K. So-called piling up questions leading to possible cascade mistakes should be marked in a way that is fair to the students (avoiding consequential errors).
- L. If knowledge of a special term or explanation is required, students should not be asked to write this in their own language. They should have to choose the correct number from a list of numbered terms or explanations. Throughout the tests students have to mark specific answers in applying just one consistent “tick” system.
- M. In order to facilitate the translation procedure and make it possible to write translations in between the lines, tasks will be word-processed with double spacing. The host country should be aware that plenty of copying facilities are required in order to avoid queuing up during the night after finishing the translations.
- N. In order to secure anonymous marking code numbers will be used instead of names for each participant. An explanation of the coding procedure will be included in the written instruction on the front page of the tasks in native languages. No oral instruction at the start or during of test sessions should be given.
- O. Calculators to be used in the tasks will be provided with simple statistical functions and distributed among students at their arrival at the competition site. Students will be informed that they have to bring and use these calculators during the tasks. Using own calculators is not allowed and will lead to subtraction of points.
- P. During tests refreshments will be available for students.
- Q. Taking video shots during the practical tasks is allowed as long as it will not interfere with the students. Students participating in IJSO should be informed on forehand by their coordinators that they should agree to be filmed/photographed during IJSO for non-commercial purposes.
- R. The Host country needs provide official time keeping during the examinations. The exam start and end times and suitable clocks should be displayed so that they are visible to all the students in the examination venue.

VI. Problem Discussion, translation and testing procedure

- A. The meetings of Problem Discussion (*ad-hoc* Scientific Committee and plenary meetings) are chaired by a Chairperson appointed by the host country. This person is the one and only person directing the sessions of Problem Discussion (PD). He/she should be familiar with all IJSO regulations and procedures, so he/she should attend a former IJSO. This Chairperson is supervising the process and taking care that discussions are going smoothly. Defending questions is not his/her task.
- B. The host country will invite the President (or his appointed nominee) to review the examinations at least three working days prior to the IJSO week.

C. In cooperation with representatives from the host country the IJSO Scientific Experts will review the examinations, focusing on the quality of the questions in terms of scientific correctness and conceptual formulation. They will additionally check the marking allocation plus rationale for marks and the balance of topics of the examination according to the IJSO Syllabus. Practical materials should be made available to the IJSO Scientific Experts. Examination papers should not leave the meeting room of the *ad-hoc* Scientific Committee.

D. Native English speakers will check the correctness of all questions from the assessment point of view and check the correctness of the answer key.

E. Experts and interpreters involved in the translation of tasks, taking care of the (word) processing corrections during Problem Discussion and processing the statistical evaluation of the results should have a scientific background.

F. Countries willing to use computer for translation of the tasks should bring their own equipment. IJSO encourages all countries to type their translations as much as possible.

G. While translating every delegation will check the answer sheets and mark schemes provided by the local-SC. The approval of the answer key and the discussion and translation of the tests will be in one session.

H. The local Scientific Committee responsible for the tasks should be present at Problem Discussion and be prepared to defend the questions and answer key properly. Authors of the tests are obliged to be present during the corresponding discussions. In this respect it is necessary that the questions should be provided explanations of the correct answers within a list.

I. In order to reduce possible confusion during voting about the number of votes it is advised that every country will be provided with special vote cards.(ex: green card-positive; red card- negative, yellow to give a neutral/don't care opinion)

J. A Problem Discussion vote regarding more than two options demands several voting rounds going step by step in a logic order. In the first step is the decision, if changes of the questions are needed or not.

K. The organizers have the duty to show during the first session the equipment and materials to be used by the students during the Test Three and give a presentation where the task is all about.

L. Students are not allowed to bring any bag in the test facilities. They must leave all papers in the exam rooms.

M. At the start of Test Three, students should be provided with fresh materials and proper functioning equipment. On the front page of the tasks, students will be told/ reminded to ask supervisors for substitution of inadequate materials or equipment and the organizers should have spare materials and equipment available.

N. In case of complaints about equipment and specimen students should indicate their objection on their paper (answer sheet) and have it signed and commented by a lab assistant. In case of an unjust complaint a student will lose all points for the experiment concerned.

O. During the tests, assistants can conveniently use a yellow card as a non-verbal warning to a suspect student. In case of proven or suspected cheating the Executive Committee will set up a specialized committee being in charge of processing the case.

✓ Student names shall never be revealed.

✓ As long as there is suspicion only, no country name shall be revealed.

✓ Once there is a verdict of guilty, the country names will become public.

✓ IJSO will then publish on its website, in the ranking list only, that "... students from country ... were disqualified."

P. To enable the leaders to translate the papers and the students to read them in time a maximum number of words per paper is recommended as follows:

Multiple Choice paper - 2000 to 3500 words

Theoretical paper – 2000 to 3500 words

Experimental paper – 2000 – 4000 words (not counting the operating instructions for the equipment)

Section VII – Marking

- A. The Scientific Committee should ensure that there are sufficient resources to mark the examination papers in the day following the examination and to photocopy the marked examination papers. The photocopied papers must be returned to the Team Leaders within 48 hours of the exam has been finished. The marked copies of the final exam should be returned to the Team Leaders at least 18 hours prior to the beginning of the moderation session.
- B. In each plenary review session the full IB must review the mark allocation and mark scheme for the paper – specifically including the breakdown of marks within a question and the application of the error carried forward principle.
- C. The marking should embrace the principle of no double penalties also known as the principal of error carried forward. For example in a theoretical question if the first part of the question produces an answer that is used in another part of the question, then errors in the first part of the question should only be penalised in the first part. If the student uses the incorrect answer from the first part in the correct way in calculating the second part then the student should be awarded the full marks for the second part. Similarly in the experimental paper the student should be graded on the range accuracy of the first measurement, but values determined from this measurement should earn the full marks if they are processed correctly even if the original measurement was outside the range approved.

Section VIII Moderation

- A. The Scientific Committee should publish a schedule of moderation times for each participating country in advance, allowing the country leaders to be sufficiently prepared for moderation.
- B. Each Country should be allocated a maximum of 20 minutes for moderation.
- C. The Scientific Committee should adhere to this schedule and not allow Countries to extend beyond the 20 minutes nor accommodate Countries who fail to attend their scheduled times.
- D. Moderation should be conducted by strict comparison with the mark scheme agreed with the IB in plenary discussion. No changes are allowed to be made to the version agreed in the plenary session, unless the IB agrees that changes are necessary. Adjustments to this mark scheme have to be discussed by the IB and can only be accepted by a vote of the IB. If at least six Country Coordinators have serious doubts about the marking procedure applied by the Scientific Committee they can plead for an extra IB meeting where this issue is settled BEFORE the moderation process begins. The majority vote of the IB is the final decision in such disputes.
- E. Members of the Scientific Committee who discussed the examination papers with the IB should attend the moderation sessions.
- F. The updated marks are to be shown country-wise to the IB members and signatures taken before the meeting of medal tally.
- G. It is also expected that IB members will adhere to time slots provided and sign on the updated marks agreed upon.
- H. In special cases more than 20 minutes can be granted if mutually agreed by Scientific committee and EC member present on the floor

IX. The usual protocol during the opening and closing ceremonies

Opening:

- A. Entry and presentation of the IJSO flag.
- B. Lining up of all participating teams with their national flags, in alphabetical order.
- C. Opening address and words of welcome by invited prominent Master of Ceremonies and other speakers alternated with cultural and/or musical performances.
- D. Oath by the competitors' representative while all competitors are standing and raising their right hand.

Oath: We, competitors of this International Junior Science Olympiad solemnly swear that we will answer the theoretical and practical competition questions in the most responsible way and we will compete honestly according to the principles of "Fair Play".

- E. Oath by a representative of the International Board while all delegation leaders are standing and raising their right hand.

Oath: We, the members of IJSO International Board, solemnly swear to judge the competition according to the valid Rules accepted for this Olympiad and according to the principles of "Fair Play".

Closing:

- A. Entry of all participating teams (flags are already on the stage).
- B. Address by the main author or president of the IJSO about the competition and other speakers.
- C. Announcement of awards and medal presentation in reverse order, with a clear distinction between Certificate of Merit, bronze, silver and gold. The overall winners ranked 3, 2 and 1 will receive special attention during the medal award ceremony.
- D. Interval with musical and/or cultural performances
- E. Distribution among each national team the certificates of attendance while lining up on the stage.
- F. Handing over the IJSO flag to the host country of the next year.
- G. Closing addresses.
- H. Directly after the closing ceremony plenty of copies of the final ranking and results will be available for team leaders, competitors and press.

Section X IJSO elections

- a. When a position within the IJSO becomes vacant or due for re-election the EC shall declare the position open for election and appoint a Returning Officer for the election.
- b. The Returning Officer shall establish a time period to receive nominations. These nominations shall be presented to the Returning Officer in writing showing the position, the acceptance by the candidate, the IB member nominating the candidate and the IB member seconding the candidate. The Returning Officer will ensure that elections are held within five days of the position being declared open for election provided this period occurs during an IJSO competition.
- c. Candidates who are not in attendance at the meeting may stand for election provided they provided completed nominations papers and appoint an agent from the IB members. Incumbents standing for re-election must secure nominations in the same manner as all other candidates.
- d. The Returning Officer shall set the date and time for the election or declare the candidate elected unopposed. In the event that no valid nominations are received the Returning

Officer shall advise the President who may appoint an IB member to act in position until the elections process can be held successfully.

- e. The Returning Officer shall manage the process of the elections. The Returning Officer shall ensure that the elections are valid by checking that more than two thirds of the IB members eligible to vote (attending the competition etc.) attend the election.
- f. During the election each IB member National Coordinator has one vote. Proxy votes may be considered provided they are presented in writing to the Returning Officer prior to the elections.
- g. Elections for Vice Presidents shall be conducted on an area basis so that the National Coordinators for America only will vote for the Vice President for Americas.
- h. Where there are more than two candidates for the position the Returning Officer shall establish at least two rounds of voting. The first round shall be used to reduce the number of candidates to two only.
- i. The President may declare a position open for election if:
 1. the incumbent officer has retired or resigned formally
 2. The incumbent fails to carry out his/ her duties in the opinion of the majority of the EC.
 3. The incumbent fails to attend IJSO meetings and competitions without causes deemed reasonable by the EC.
- i. The Returning Officer may secure the assistance of two IB members to help with the collection and counting of votes. The winner will be declared on the basis of the most votes. In the event of two candidates winning the same number of votes exactly the election will be run again.
- j. Elections must be held during IB meetings and all members should be notified at least one day in advance of the election.

