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Regulations on the International School in Informatics JUNIOR (ISIJ) and the Cup ISIJ

V7/2024

Introduction

The mission of the International School in Informatics "Junior" (ISIJ, in the text - School) is to create Olympiads in Informatics space (fundamental technology in C++) for a startup of all juniors in the world, to unite school teachers and innovative coaches in the field in informatics as a single international coaching community, and to create a collection of materials on the development of school informatics subject in the world for talented juniors.

ISIJ conducts classes dedicated to the main Olympiads: EJOI (basic level - B) and IOI (advanced level-A), as well as seminars (IT clubs) on the use of IT in various fields of science and technology. The ISIJ Distance Session is held in the summer during the autumn-winter months for ISIJ students.

The IT club is designed to form a space for the formation of profile interests at the intersection of science and information technologies. Yandex.Contest is the main partner of ISIJ for the School Cup.

ISIJ and IT clubs (seminars of IT partner companies and sponsors of ISIJ) become a crossroads of Olympiad training for juniors and the formation of relevant interests in the field of applied computer science among high school students from all over the world.

ISIJ is also an internship place for computer science mentors among computer science teachers and coaches from different countries. Countries can create InfoPark ISIJ as centers of coverage of ISIJ events for juniors in their country on a regular basis for open online access of children to educational information on Olympiads in Informatics and the fundamentals of algorithms and programming in C++

ISIJ Regulation

1. Organizational structure of the School

The International School of Informatics "Junior" (ISIJ or School) was initiated in 2018 by scientists of the National Olympiad in Informatics in Russia together with the organizer of IOI 2016 (Kazan Federal University - KFU, Russia) and the organizer of EJOI 2018 (Innopolis University, Russia), the organizer of the first IOI 1989 and EJOI 2017 (Bulgaria), the organizers of IOI 1995 (Netherlands) and IOI 2000 (China). ISIJ is organized to train national teams of junior schoolchildren, to participate in international computer science Olympiads and to exchange methodological experience between





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countries participating in the international Olympiad of the movement in computer science.

The venue for the ISIJ 2018-2019 was the Republic of Tatarstan (Kazan and Innopolis). ISIJ tours are being developed by Russia with the support of Russian universities and China.

The organizational structure of the ISIJ includes: the International Organizing Committee (IOC ISIJ, including Host Committee of country – venue of ISIJ), the Scientific and Technical Committee (STC), the Coaching Council (CC, includes a representative from each ISIJ participating country as a coach of the junior team), the Russian School Directorate (ISIJ Directorate).

- 1.1. The general management of the school, its development strategy and representative functions are carried out by the International Organizing Committee (IOC), which is represented by the co-organizing countries, the ISIJ Cup host country and the permanent participating countries. The IOC is headed by the President of the ISIJ (Russia), who approves the IOC decisions and coordinates work with the official representatives of the ISIJ Cup Venue Organizing Committee, presents the School concept, makes proposals to the IOC on the School development strategy, forms invitations for countries, organizes the IOC work, assists the ISIJ Venue Organizing Committee. The Director of the School (or ISIJ-Director) is the Deputy President and represents the Coaching Council of the School in the IOC. The Chairman of the IOC ISIJ is the head of the Organizing Committee of the host country the Venue for the ISIJ Cup in the year of the event.
 - **1.1.1** Russia and China are co-organizers of the ISIJ Cup with permanent representation in the ISIJ Committees.
- **1.2.** The ISIJ International Organizing Committee consists of 10 members: the President, the ISIJ Director, the Chairman of the IOC in the country of the ISIJ Cup, the Head of the Russian Directorate and the Secretary of the ISIJ Directorate, the head and Co-head of the ISIJ Scientific and Technical Committee (Russia), and 3 members of the International Group (elected for a term of 5 years). The IOC works on a voluntary basis and can involve public representatives of universities and lyceums as experts.
- **1.3.** The Director of the School oversees the program, the secretary of the directorate oversees the registration fee and financial support of the school.

2. Participants of the School

The school is held as an international educational forum for the national teams of the participating countries of the International Olympiad in Informatics (IOI, EJOI, ets). The schedule of ISIJ sessions includes three stages.

The winter session is held online as a training stage of the Cup.

The spring session is held face-to-face and remotely and can be used by the country as a national qualifying stage of the ISIJ Cup.

The Summer session is held in the form of the International Final Stage of the ISIJ Cup with full-time (by agreement) and online participation of teams every year at the same





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time during July 1-11.

- **2.1.** Each country can submit to the ISIJ Summer Cup no more than 3 teams for online participation according to the established registration fee from the participant (in total no more 18 juniors with registration fee).
 - **2.1.1.** Additionally 3 online teams of coaches/teachers for internships in accordance with the general registration fee (payment for each participant).
- **2.2.** Each country can submit *one national team* to the ISIJ Cup without registration fee and with online or onsite participation.
 - **2.2.1.** For the co-organizing countries and ISIJ Information Park partners, a quota has been set for two national teams without paying the registration fee from the country with the choice of the form of participation and up to 6 additional online teams with a registration fee for each participant.
- 2.3. The ISIJ Registration fee is determined by the ISIJ Directorate and the IOC. The organizational fee for Onsite (full-time) participation is determined by the venue of the Cup in agreement with the IOC
 - **2.3.1.** ISIJ Cup guests from the country participate in a special program and pay a guest's fee. The guest fee is determined by the ISIJ Directorate in accordance with the excursion program.
- **2.4.** Each team consists of 3 to 6 juniors and a coach (who is a member of the ISIJ Coaching Council).
 - 2.4.1. The age of participants is assumed to be 12/13 years old, but not older than 17 years by the end of Cup year. The student can choose the level of training: advanced (A advanced for ages 15-17 years) or basic (B base from 12/13 to 15 years). For each group, the tours contain their own set of tasks, taking into account the difficulty levels, as well as summing up and awarding according to separate ratings for groups A and B.
- **2.5.** Each participant must have a medical insurance for the period of their stay in Russia.
- **2.6.** Russia and China represents up to 6 official teams and 2 national teams with a choice of the form of participation online or onsite.
 - 2.6.1. Russia can attract up to 10 additional online teams in Cup ISIJ as host country.
 - **2.6.2.** 48 Russian juniors from all registered participants regional teams take part in the distribution of ISIJ Cup medals according to the unified rating of participants.
 - **2.6.3.** The regions of Russia declare participation in the ISIJ up to 2 regional teams without paying the registration fee to participate in the online qualifying stage and further in the ISIJ Cup and participate on a general basis, taking into account clause 2.6.2. The
 - IOC invites the best regional teams from Russia to participate in the Summer Cup in person (in the number according to clause 2.6) taking into account the experience of the participation of the region medalists of the cup last year (clause 6.6). The remaining registered teams participate online, taking into account clause 2.6.2.
- **2.7.** The ISIJ Cup host country can present up to 2 national teams and up 6 official teams for on site participation at the ISIJ Cup venue and no more than 10 additional (unofficial) ISIJ Cup teams with representation from different territories of the host country. 48 juniors of the ISIJ host country take part in the distribution of medals of the ISIJ Cup according to the unified rankings of participants.
 - **2.7.1.** Participants of 10 unofficial teams of the country hosting the Cup can be awarded diplomas of the National stage of the ISIJ Cup by rating in groups and a certificate of



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participation in the International ISIJ Cup.

3. Scientific and Technical Committee of the School (STC ISIJ)

The STC and its leaders develop Rules for training competitions and cup rounds, prepare contests, theoretical seminars and lectures on the IOI-oriented program for level A and on the EJOI-oriented program for level B, respectively.

- **3.1.** The Scientific and Technical Committee of the School consists of 10 members: two heads of the ISIJ STC, 4 members from Russia and 4 members from the countries of the STC (elected for a term of three years).
- **3.2.** Members of the STC and the Coaching Council (CC) participate in the election of 4 members from the countries.
- **3.3.** The STC is headed by two leaders one leader from Russia, and the second from the international group of STC. The heads are appointed by the IOC of the School.
- **3.4.** The structure of the Russian STC group was approved by the Russian head of the STC.
- **3.5.** The IOC coordinates the STC on the IOI-oriented program for Level A and on the EJOI-oriented program for level B, respectively.

The Program Director coordinates the work of the Coaching Council.

3.6. The STC includes one technical specialist of the Yandex Contest System - to support participants and the STC in the preparation of ISIJ tours.

4. The Program of the School

The School Cup is held in summer for 8 days (1 day - check-in, 1 day -training tour and opening, 5 competitive days, 1 day of closing and awarding, 1 day of departure), including excursions and leisure.

The ISIJ winter session is held from September to April and includes at least 5 rounds of repeated decision of the cup rounds for a full score and two control rounds (from March to May). The spring session includes two control rounds and can be used by the ISIJ Infopark in the country by the country as a national qualifying stage of the Cup. The program of the spring national selection in the country is coordinated by the IOC with a representative of the national organizing committee of the cup in the country (ISIJ InfoPark).

The School's winter shift program is being developed by the IOC in coordination with the STC on the basis of planned funding. Financial support for the school is provided by the School Administration on the basis of contributions from participants with the involvement of sponsorship funds.

- **4.1.** The official languages of the School are Russian and English. The coaches of the teams can translate the materials of the seminars into the native language for the participants 12 hours before the start of the tour with confidentiality.
- **4.2.** The texts of the tasks are provided to all participants in Russian and English in electronic form with the possibility of printing. The coach reserves the right to provide the participant with a translation of tasks into his native language.



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- **4.3.** The STC and the Coaching Council coordinate the groups of participants: A (Advanced) and B (Base).
 - 4.3.1. For additional teams of juniors 11-14 years old as beginners, at the request of the coaches, group E (Elementary) can be formed as unofficial team.
- **4.4.** The Director of the School coordinates with the STC and the Coaching Council the registration of ISIJ participants in groups A and B (see 2.1) in the Summer Cup (from April to June) and in the winter session (in September), oversees the Directorate for registration fees, develops session programs, organizes pedagogical workshops, additional courses and consultations in groups coaches.
- **4.5.** The Chairman of the ISIJ venue forms the program of the ISIJ Cup at the junior residence site, taking into account the placement of teams of participants, catering, transport for participants, educational and leisure activities with participants, preparation of classes for competitions on the site.
- **4.6.** The program of the ISIJ Cup includes a qualification round (training) and competition rounds in the C++ programming language (see the Rules of the Cup).
- **4.7.** The Cup program at the venue includes excursions.
- **4.8.** The ISIJ Cup program provides for additional Robot Tournament or robot competitions at the venue of Cup. Junior teams of ISIJ countries can take part in this competition (no more than 3 participants per team). The best teams receive
- **4.9.** The leisure program includes algorithmic classes (chess, origami, fractal graphics, 3D design) and master classes of IT companies, scientific and practical seminars, sports and entertainment events.
- **4.10.** According to the results of the ISIJ, countries can form a junior team to participate in the IATI (International Advanced tournament in Informatics, held since 2009, Bulgaria, Shumen).

5. The Coaching Council of the School (CC ISIJ)

Coaches from different countries are members of the international coaching council of the School: one coach from each national team. Coaches can be involved at the venue to be on duty in the classes of competitions.

- **5.1.** Every year, a coach from each country can submit 1-2 training tasks ready for use to the STC and 1 task in the ISIJ Cup (text in English, tests and testing programs in the C++ programming language).
- **5.2.** The Coaching Council selects representatives from its membership to the international STC group by direct vote. The term of representation in the international STC group is limited to 5 years.
- **5.3.** Members of the Coaching Council participate in working with juniors for their consultations after competitions, theoretical seminars and practical classes, translate tasks into the national language, hold thematic sessions of the Coaching Council.
- **5.4.** The Coaching Council, together with the STC, analyzes the results of juniors and determines awards (see 10.).
- **5.5.** The team coach oversees the registration of teams and provides the IOC with a





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presentation of the teams from the country in accordance with the recommendations on the registration form within the established registration deadlines. The coach of the team is responsible for the team's stay at the intramural site of the Cup, and also ensures timely informational interaction with the juniors of the team during the ISIJ work period on the basis of materials provided to him from the ISIJ STC

6. International Cup in Informatics for Juniors (Cup ISIJ)

All the teams of the ISIJ countries take part in the Cup in two categories: group A (advanced level) and group B (basic level). The medal diploma of the ISIJ Cup (separately according to the rankings for groups B and A) is awarded to all registered participants of the Cup according to the rankings for groups A and B with a non-zero result.

All coaches take part in the Cup in group C (coaches) as experience in Olympiad tasks.

- **6.1.** The ISIJ Cup is held in 5 rounds. The IOC and the STC form the jury of the cup.
- **6.2.** According to the results of the Cup, the participants who have taken three groups of places in accordance with the rating are determined: gold, silver and bronze medals separately for the B-level group and the A-level group.
- **6.3.** Distribution of *diplomas and medals of the Cup* between gold, silver and bronze medals for awarding: 33%, 33% and 34% according to the rating of the *official participants* of the ISIJ Cup without participants who showed 0 points.
- **6.4.** Distribution of *electronic diplomas of the Cup* between gold, silver and bronze diplomas:
- 25%, 25% and 50% of the rated group of *online participants of additional teams*, without participants who scored 0 points.
- **6.5.** Cup diplomas for teams are determined by the average score in the team: 1-Gold team, 2-Silver Team, 3-Bronze team.
- **6.6.** Gold and silver medalists of the Marathon of the ISIJ Cup last year (who did not graduate from school this year) can be invited to participate in the ISIJ Cup this year without a contribution as part of up to *one bonus team from a country* that is a *permanent participant of the ISIJ or INFOPARK of the country*, by special invitation of the IOC.

7. Training session of the School

STC prepares study tours using assignments from Russia, ISIJ countries, as well as assignments from national Olympiads of participating countries and tasks from EJOI, IOI of different years.

Tours are governed by ISIJ Rules (developed by STC). The tasks are formed by the STC in accordance with the ISIJ training program for advanced (A) and basic (B) levels. For Group E, there is a limited selection of tasks for tours. The duration of the tour does not exceed 4 hours.

7.1. The competition system for school Olympiads is provided by the Russian company Yandex.



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- **7.2.** All rounds of the current year are opened to ISIJ participants remotely as an Online Winter session of ISIJ (1, October 1, April) as well as in the on-site and remote spring session of the ISIJ control rounds, which can be used in the country as a National qualifying stage of the Cup (April-June by agreement).
- **7.3.** STC prepares all tours in an online form in the Yandex.Contest system (https://contest.yandex.ru/ISIJ/?lang=en).
- **7.4.** The rules of participation in ISIJ tours include two parts: the rules for on-site ISIJ and the rules for online ISIJ tours.
 - **7.4.1.** At the qualifying rounds, a set of programming languages for the selection participants is agreed upon by the InfoPark ISIJ in the country with the NTC. The national and official additional teams from the country at the final international stage of the ISIJ Cup include the best participants of the qualifying rounds who speak C++.

8. The school Directorate

The ISIJ Directorate is headed by the Head of the Directorate, who organizes the registration of contributions from the participating teams, and participates in the implementation of the school program in coordination with the IOC.

- **8.1.** The Head of the Directorate forms a working group of the Directorate. The Working Group organizes a newsletter, collects the organizational financial contribution of the participants, attracts experts and business partners to conduct additional ISIJ sessions.
- **8.2.** The ISIJ Directorate organizes events within the framework of the program and supports the maintenance of remote resources and the ISIJ website.
- **8.3.** The Head of the School Directorate, in agreement with the IOC, organizes cooperation with the Head of the Site for ISIJ sessions in Russia, coordinates the program for the implementation of ISIJ sessions, invites representatives of IT companies to conduct seminars with participants.
- **8.4.** The work of the STC and the IOC is carried out with the financial support of the ISIJ Directorate from the contributions of participants and sponsorship funds. 8.5. The ISIJ Directorate has the right to submit to the IOC for consideration a change in the registration fee with justification of the reasons for its change.
- **8.6.** The organizational fee for ISIJ on-site sessions in Host country (team internships, full-time participation in the Cup) includes accommodation, meals, transfers, excursions, while educational events, the use of computer classes and the Internet and equipment for the Robot Tournament are provided by the ISIJ platform.

The organizational fee (on-site) of the Cup participants is agreed by the ISIJ Cup host country for full-time participants. IOC and STC members do not pay a fee.

- **8.7.** Information about the dates of the School and fees is indicated in the letters of the IOC addressed to the coach of the team.
- **8.8.** The participant's registration fee is approved by the IOC and indicated annually in registration form of ISIJ. The organizational fee is indicated in the letter from the Venue of the face-to-face event
- **8.9.** There is a medical worker, teachers, educators at the venue of the full-time ISIJ, security measures are provided for underage participants. The place of residence of the





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School venue is located in a children's educational institution and has comfortable conditions for living and conducting classes, all rooms are equipped with computers and the Internet.

- **8.10.** The sponsoring companies contribute to the School Management for the development of the School, attracting coaches, providing grants to coaches for students to participate in international competitions. The minimum contribution of the sponsor to the School Directorate or guests is more 100,000 rubles. The IT company participates in the IT club as part of the school program events in the afternoon in agreement with the IOC.
- **8.11.** The School Directorate and the IOC are working on attracting sponsors to cover the expenses provided for in paragraph 8.10.

Each country can create its own *Directorate of the National Qualifying Stage of the ISIJ Cup as the ISIJ InfoPark* of the country with the placement of information on the ISIJ website (indicating the site of the InfoPark and the curator of the teams in the country) and receives the ISIJ InfoPark Diploma. The ISIJ InfoPark site in the country can be an ISIJ Cup venue or a school that is a permanent participant of the Cup with further work on the National Qualifying Stage of the Cup together with the ISIJ IOC, including ISIJ InfoPark events in the country:

- registration of the country's teams for the National qualifying stage of the ISIJ Cup, information support for juniors, awarding of the medalists of the qualifying stage,
- conducting and organizing distance intensive courses for schoolchildren on its platform and in partnership with STC ISIJ,
- online and face-to-face internships for computer science teachers and coaches of teams and juniors, including in ISIJ information parks of other countries by agreement,
- -conducting face-to-face training camps for selected teams in the country on their own site,
- provision of its site to selected teams in the country for face-to-face remote participation in the International Final Stage of the ISIJ Cup on July 1-7 (on the dates of its holding).

ISIJ Information support

9. The School website

Maintenance of the ISIJ website (www.isi-junior.com) is carried out by the Director of the IOC together with the School Directorate. The portal has Russian and English versions and contains an invitation, placement, class schedule, cup schedule, rules, School regulations, media, results and awards, history, contacts and a link to the website of the School Directorate for registration and a page with a description of the Full-time School Venue for registration of foreign participants and visa support.

- **9.1.** The website of the School Directorate has a special section: newsletter, registration of school participants, collection of organizational financial contribution of participants and information about visa support for foreign teams.
- **9.2.** The school website contains information, photos and contacts of members of the IOC, the STC, the Program Director, the Coaching Council, the list of participating countries and the number of participants, team presentations. The contact details of the juniors are not posted on the website.



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- **9.3.** The school website contains the final ratings of school tours. The ratings indicate: date, participant's nickname, country, points.
- **9.4.** The portal contains an archive of photos of open events and interviews of participants with the participation of their coach from School events.
- **9.5.** The school portal contains the schedule of tours, the program of sessions, school news and and information about InfoParks ISIJ in countries with contacts of curators for appeals of juniors and coaches.
- **9.6.** The STC places the archive of school competitions in a special section on the School website (the coaching page of the website) with distributed access for coaches, as well as access for registered juniors and coaches through the Yandex Content system for remote access to competitions.
- **9.7.** Registration of all participants in the Yandex Contest is mandatory and is provided by the NTC ISIJ based on the results of registration of the application for participation of teams, which is accepted only from the Team Leaders of the countries.
- **9.8.** The School website contains the School logo for use by countries in the design of T-shirts and other subject attributes of the School.
- **9.9.** On the School website there is a page of the history of the differences of the participants of the School for the media.

10. Certificates and diplomas of a participants

All participants of the School receive diplomas and ISIJ electronic certificates. Online participants receive electronic diplomas with the possibility of printing them.

All school coaches will receive an ISIJ internship certificate for 40 hours under the program "Methods of Olympiad training in computer science" for working in tours in group C (internship / coaches).

The best juniors of the School according to the sum of all rounds of the Cup receive a diploma and medals, information about them is posted on the School portal.

- **10.1.** Regular awards of the ISIJ Cup:
- 1-Diplomas of the ISIJ Cup rounds: Winners and prize-winners of the Mathematical Tour, the Coder Tour,
- 2 Diploma of the winners of the Marathon tour of the Cup in the individual competition (gold, silver and bronze, see 6.2)
- 3 Special Diploma and medal "ISIJ Cup Champion" the best participant of the Cup (all participants with the same highest result).
- 4- Diploma of the ISIJ Cup Team "Gold, Silver and Bronze Cup teams" (for groups A and B) following the results of the Relay round and the Robot Round.
- 5- ISIJ Diploma and gold medal of the best juniors of the year "10 best results of school students of the year" according to the results of all 6 days of the Cup rounds (Determined by the IOC and the STC according to the rating of participants: up to 10 students from group A and up to 10 students from group B).
- 6- ISIJ Special Award Diploma and big ISIJ Gold Medal one best junior of the year in Group A and in Group B





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10.2. ISIJ Special Awards:

- 1 Certificate "The youngest participant of the School" (the best among the youngest participants in all ISIJ tours),
- 2 Certificate "The most successful girl of school tours" (in all ISIJ tours).
- 3- Certificate Cup ISIJ Participant (for juniors without distinction or unofficial participants) **10.3.** ISIJ Certificates and Diplomas for trainers:
- 1 ISIJ Special Award Diploma: "The Best ISIJ coach "
- 2 ISIJ Coach Electronic Diploma (for participation in ISIJ),
- 3 ISIJ Certificate of international pedagogical internship in the amount of 40 hours for the summer and 40 hours for the winter session under the program "Methods of training gifted schoolchildren in Olympiad informatics".
- **10.4.** Information about the ISIJ Cup medalists is posted on the virtual distinction board on the school's website.
- **10.5.** Gold and silver medalists of the ISIJ Cup Marathon are included in the bonus quota of participation (see clause p.6.6)