



## Bulgaria - The Homeland of International Competitions in Informatics for School Students

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The roots of the Bulgarian experience in conducting Informatics competitions for school students go back to the late 70's of the last century. In those times such competitions were named „Programming Competitions“. As a rule, the solution to problems given at the contests required mainly „paper work“. The contestants were asked to write on a paper a program which, if executed on a computer, performed a specific task. Then the papers were checked and assessed by the Jury. If computer resources were available (for instance „computer time“ with a mainframe or a minicomputer), the programs of the students were executed on computer as well. The number of computers in the country in those years was very limited and the access to them for school students was rather restricted. With the advent of microcomputers the situation changed. More and more school students got access to computers and this made it possible to organize competitions which are similar to the ones practiced today - the execution of the code on a computer became an obligatory part of the assessment.

To compete means to compare your abilities and skills with the abilities and skills of others. The broader the base of comparison (larger participation in the competition), the better. This is in the base of the frequently observed trend when school competitions outgrow the frames of the school and become town competitions, the latter grow again to national competitions and, finally, students get involved in international competitions. In Bulgaria regular national competitions in Informatics for school students have been conducted since 1981. The nation-wide Olympiad in Informatics (with this name) started in May 1985. An international competition called „Open Competition on Programming“ took place in Sofia (May 17-19, 1987). It was organized just before (and in connection with) the Second International Conference and Exhibition „CHILDREN IN THE INFORMATION AGE“ (May 19 - 23, 1987) with the intention to make it a traditional event conducted every two years. There were 28 contestants (school students) from 6 countries: Bulgaria (BG), Czechoslovakia (CZ), Federal Republic of Germany (FRG), Hungary (H), Romania (R) and Soviet Union (SU). Bulgaria and Romania participated with two teams. The students were divided in three age groups (less than 14, less than 16 and less than 18 years). The International Jury chaired by Petar S. Kenderov (with Zdravko Vassilev as Deputy) gave two first prizes - to Markus Gutschke (FRG) and to Vulcho Vulchev (BG1). There were three second prizes: Dimitrij Evsjuhin (SU), Andrei Dobos (CZ) and Tomas Mueller (FRG). Vladimir Vesely (CZ), Michael Sperber (FRG) and Svetoslav Nestorov (BG2) got third prize. The competition was a success and sparked great interest and enthusiasm both among participants and organizers. At the 24th session of the General Conference of UNESCO held six months later in Paris, Professor Blagovest Sendov, a member of the Bulgarian delega-



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tion, suggested to include an International Olympiad in Informatics (IOI) in the Fifth Main Programme of the UNESCO Plan for 1988-89. The proposal was approved and by a contract with the UNESCO Division of Science, Technical and Environmental Education, Bulgaria took the obligation to organize the first IOI just before the third Conference and Exhibition „CHILDREN IN THE INFORMATION AGE“ (Sofia, May 20 - 23, 1989).

Additional experience in conducting international informatics competitions was gained in 1988 when a competition for school students from the so called technical schools was held in Bulgaria

(Varna, October 5 - 8). There were 18 students from six countries: Bulgaria (BG), Cuba (C), German Democratic Republic (GDR), Hungary (H), Poland (P) and Soviet Union (SU). The International Jury was guided by Pavel Azalov (Chairman) and Evgeni Genchev (Deputy Chairman). There were two first prizes which went to Georghii Rivov (BG) and Marchin Wojas (P). A second prize was given to Alexiel Matos (C) while the third prize went to Pavlin Kostov (BG).

The first IOI was conducted in Pravetz, Bulgaria, from 16th to 19th of May, 1989. It was modeled after the International Mathematical Olympiad (IMO) and this was explicitly mentioned in the written Regulations of IOI. For instance, the participating countries were obliged to send in advance to the local organizers sample problems from which the International Jury had to select the problems to be given at the competition. Only school students under a certain age (in this case 19 years) as of the beginning of the competition were admitted to participate. In the first half hour after the start of the competition the participants had the right to put questions to the International Jury (in written form) concerning the formulation of the problems. The student work was preliminarily checked and assessed by the respective team-leader and then finally marked by the „Coordinating Commission“. The final marking was with the International Jury which also decided how many first, second and third prizes are to be given to the most successful participants. All expenses related to the stay in Bulgaria of the teams and the team-leaders were covered by the organizers. There was an excursion to Sofia and an entertainment program for the participants in the competition. Professor Itscho Dimitrov, Minister of Education, gave a reception for IOI participants.

There were however significant deviations from the established routine of IMO. According to the rules of IOI, a team consisted of not more than three students accompanied by a team-leader.

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