



# Auriga's Newsletter

April 30, 2009

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### **Agile meets airborne software quality standards**

On March 31, Auriga's project manager Maxim Dorofeev presented his report "Agile in the Snobbery World" at AgileLabs'09. He spoke about using Agile methods to streamline airborne software development process while assuring the same high quality level, and also touched the subject of compatibility between Agile approaches and CMMI.

In the first part, Maxim summarized the management experience gained in successful development and qualification of airborne software,—an area regulated by a complicated RTCA/DO-178B standard, often seen as rigid and contradicting Agile methodologies. Based on this real-life experience, Auriga's PM demonstrated that, on the one hand, Agile approach conforms to the stringent DO-178B requirements and, on the other hand, core Agile principles lead to efficient DO-178B practice application.

Talking about Agile methodology in the context of the CMMI maturity model, Maxim pointed out that these entities can complement each other, and, moreover, sometimes Agile is the most efficient way to accomplish a project within CMMI framework. Comparing Agile and CMMI side by side, Maxim demonstrated that Agile development methodologies can be mapped to the CMMI specific goals and practices, or, alternatively, many CMMI process areas and practices can be seen as the foundation for Agile.

Maxim's statements on direct applicability of Agile methods to the projects demanding exceptional quality standards and performed according to mature development processes matches Auriga experience in this area. The presentation received very positive feedback from Agile professionals:

"An incredibly interesting presentation... It turns out that even in this critical business area Agile methodologies can be used with high success".

"A brilliant report by Maxim Dorofeev. What he showed us was 'true Agile'".

"Maxim's report ... took me to a whole new level of presentation".

To find out more and browse through Maxim's presentation slides, please follow this [link](#).

### **Russian students win international programming contest**

Once again, Russian teams won gold medals at the ACM International Collegiate Programming Contest (ACM-ICPC), held on April 18-22 2009 in Stockholm, Sweden.

The World Finals, hosted by KTH—The Royal Institute of Technology, was attended by 100 teams from over 200 regional sites. The St. Petersburg Institute of Fine Mechanics and Optics defended their championship title to win their third world championship. The teams of St. Petersburg State University and Saratov State University also received gold medals, which means that Russia won in total three out of four gold medals (the fourth went to Tsinghua University). One of the silver medals went to another Russian team—the team of Altai State Technical University.

This year, participation increased from 6,700 to 7,109 teams representing 1,838 universities from 88 countries on six continents, competing at 259 sites. From September to December 2008, one hundred teams worldwide advanced to the World Finals of the most prestigious programming contest in the world. At ACM-ICPC, these teams were brought together to solve eight to ten highly complex computer programming problems designed to test students' knowledge, programming talents and insight. These teams represent the best of the great universities on six continents—the cream of the crop.

The results of 2009 follow the trend set by the Russian colleges over the several previous years. For example, in 2008, the Russian teams won five out of twelve medals in



the ICPC World Finals. In 2000-2007, Russia became the world champion four times. Among the medalists for the last 3 years we see 8 different student teams from Moscow, St. Petersburg, Saratov, Izhevsk, Petrozavodsk, Altai, and Novosibirsk. We are especially pleased to see the Moscow State University, which we traditionally see as the main source of new engineering talent for our company, in this list for four years of the last five.

This year, in continuation of the good tradition of sponsoring Russian student programming teams, Auriga is honored to have co-sponsored, under the auspices of RUSSOFT, the Russian teams in the ICPC 2009 World Finals.

"I'm truly proud of the Russian student teams that year after year get an impressive share of ACM conquest medals," said Andrei Pronin, Auriga General Manager. "And I'm even more delighted to realize that we provide the world-top problem-solving force to our customers by engaging the graduates of the Russian universities on their projects."

Meanwhile, the finalists were selected in Moscow to attend another international technology competition—the Imagine Cup 2009 to be held in Cairo, Egypt in July. Primarily a software design competition, it enlists teams of four within the high school and collegiate levels to submit software solutions addressing a specifically provided theme; it attracted the best Russian student teams. The team that will represent Russia at the 2009 finals is Vital Lab from the University of Nizhny Novgorod, with the project ViVa, an epidemic protection system that tracks the epidemic distribution using special sensors and data processing algorithms. It includes Health Tracker, Pesthole Finder and an alert system to track and prevent possible epidemics. We hope for good luck for the ViVa team.

Head of Auriga Nizhny Novgorod Development Center Ildar Gabdullin comments: "I am excited that there are so many bright young people in this city that bring forward their ideas. As a Program Manager, I am especially pleased that this sector of labor market is diverse and rich in talent."

### Russian State IT initiatives

According to IDC, the Russian IT market volume in 2007 reached 22.2 billion USD, and the government, whose share in the used IT services is 18%, is the largest IT consumer in Russia. In 2008, IDC have estimated the total Russian IT market volume to grow up to 24.6 bil-

lion USD. In 2008, government bodies spent 2.96 billion on IT, whereas total government expenditures percentage, including administration (management), education and healthcare, remains at the same level.

Auriga welcomes these government initiatives. Over the recent years, Auriga has participated in several large-scale and state-wide projects related to education, law and transportation, such as a Control System for Ministry of Transport Affairs or an on-going project of Federal Service for Intellectual Property, Patents and Trademarks.

The experts note that although the IT expenditures structure in Russia remains conservative, with most of the budget spent on hardware and IT infrastructure, some positive shifts can be noted: for example the so-called "electronic government program" with specific focus on IT services. As Maxim Parshin, Vice President of the Department of State Regulation of the Economy at the Ministry of Economic Development, said, the government is outing considerable effort to build an integrated system that would provide fast and efficient public services to the citizens. Multiservice, telephone and information centers are already created throughout the country; recently, a unified web portal for public services has been launched. The launch of the Central State Information Center, that will provide the tax and customs services, along with social, identity and passport services, is planned for 2009.

To give other examples, one of the major and most significant government IT projects named "Justice" will be finished by 2011, connecting 80 thousand workplaces and 3000 courts country-wide. Videoconferencing units are a vital part of the project. The project was launched in 2005, and has already helped to save 1.5 billion rubles to the state budget. Another large-scale project is "Election". The system connects the central election committee with 83 regional and 2733 local election committees; the performance of the system has increased 45 times since it was upgraded in 2004.

### About Auriga:

Auriga ([www.auriga.com](http://www.auriga.com)) is a software R&D and IT outsourcing services provider incorporated in the U.S. and operating development centers in Russia since 1990. Auriga focuses on satisfying the specific needs of software and hardware high-tech companies as its driving strategy. Included in Global Services 100 since 2006, Global



Outsourcing 100 since 2008, and Top 10 Central/Eastern Europe Providers of the Black Book of Outsourcing, Auriga offers services covering all aspects of the product engineering area and expertise in a set of knowledge areas from embedded systems and OS internals to enterprise information systems and Web applications. Auriga's client list includes such industry majors and leaders in their segments as IBM, Draeger Medical, LynuxWorks, Dialogic, Actel, Verdasys, and many others.

#### About AgileLabs 2009

AgileLabs 2009 is the first conference of IT professionals in Eastern Europe dedicated to practices and innovations in XP, Scrum, AgileUP, DSDM and other Agile methods. The conference was held by the Luxoft Training Center and the Russian Higher School of Economics.

#### About Imagine Cup

Imagine Cup is an annual [competition](#) sponsored and hosted by [Microsoft Corp.](#) which brings together young [technologists](#) worldwide to help resolve some of the world's toughest challenges. Primarily a software design competition, it enlists teams of four within the [high school](#) and [collegiate](#) levels to submit software solutions addressing a specifically provided theme. Started in 2002, it has steadily

grown in size, where in 2008 210,000 competitors representing over 100 countries competed in the nine Imagine Cup categories.

#### About ACM-ICPC

[ACM International Collegiate Programming Contest](#) (abbreviated as ACM-ICPC or just ICPC) is an annual multi-tiered computer programming competition among the universities of the world. Headquartered at Baylor University, with autonomous regions on six continents, the ICPC is directed by Baylor Professor William B. Poucher, Executive Director, and operates under the auspices of the Association for Computing Machinery (ACM).

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