IEEE 802.16m Evaluation by Russian Evaluation Group

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Russian Evaluation Group

- Russian Evaluation Group (REG) was organized in N.I. Lobachevsky State University of Nizhny Novgorod, Russia to participate in the IMT-Advanced evaluation process.
- Chairman of the REG is Prof. Alexander Maltsev, head of the Wireless Competence Center of the University of Nizhny Novgorod.
- Three Russian companies have already joined the REG:
  - ***Yota*** – one of the world's largest WiMAX operators
  - ***Sitronics Labs*** – a leading Russian R&D organization in the wireless communications field
  - ***Intel Russia*** – a leading IT company in Russia

  Several other Russian organizations are in the process of the joining the REG.
- REG was registered in September 2009 and participated in the ITU workshops for Independent Evaluation Groups (IEGs) in October and in 3GPP coordination meeting in December 2009.

Planned Evaluation Activities

- REG considers both candidate technologies but puts more effort on the evaluation of the “IEEE technology” because its strong adoption in Russia and existing expertise of the REG in IEEE 802.16.
- All methods of the evaluation are used including analytical and inspection evaluation but a special focus is put on the simulations.
- REG has capabilities to provide a complete set of the required simulations results for the IEEE 802.16m technology including link level and system level results compliant to the IMT-Advanced evaluation guidelines.

IEEE Technology Evaluation

- REG participants have essential expertise in the IEEE 802.16m technology.
- For the IMT-Advanced evaluation, the REG plans to verify compliance of the IEEE 802.16m technology to all the requirements of IMT-Advanced.
- In addition, the REG is working on evaluation of the gains that are provided by the new technologies specific to the fourth generation mobile systems:
  - Deployment of relay stations;
  - Application of sophisticated space-time-frequency resources scheduling and adaptation algorithms;
  - Use of advanced multiple antenna techniques.

Collaboration with Other IEGs and Next Steps

- REG plans to prepare an initial set of the results for the IEEE technology evaluation by the February ITU-R WP5D meeting and complete the final report by the June meeting.
- REG is interested in collaboration with other IEGs and is open to any suggestions from IEGs representatives including joint work on the calibration of the simulation results.