

Outputs

Elaborated (1) Platform design for space and ground-based natural-technological systems (NTS) monitoring, (2) Methods for analysis and synthesis of monitoring & control systems, (3) IT technology development for synthesis of integrated real-time monitoring and control, (4) Techniques for adaptation of NTS space-ground based monitoring technologies for flood forecasting, oil pollution monitoring in water areas and prediction of forest fires, (5) Techniques for automatic analysis and synthesis of NTS monitoring programmes, (6) 7 software prototypes for NTS monitoring & control, (7) Infrastructure of the integrated distribution network

Performed 7 approbation studies & 2 real-time experiments, multiple modelling scenarios generated and simulated

Arranged 2 seminars, 2 trainings for 40 specialists in **7 municipalities** involved in Latvia and Russia

Published 1 project book, 66 scientific papers, 5 deliverables and 3 scientific reports on IT design and development, on software prototypes for NTS monitoring and control, and on approbation studies

Outputs presented in **3 project conferences, 3 International conferences and 11 conferences** outside Programme area

5 press-releases and 17 publications in mass-media, 7 posters and 14 booklets, **3 scientific journals, 3 press-conferences, 5 TV videos** produced

Information disseminated on www.infrom.ee (in 3 languages)



Project Final conference, Riga, February 2014



Project Final conference, Riga, February 2014



INFROM project took part in Researchers' Night 2013



RESULTS

In the Pskov Region (Russia) approbation of the developed techniques and software prototypes with satellite GeoEye-1 data is used **to identify the area of soil disturbance of agricultural activities, to identify forest classification and environmental damages on the local territories**

Along the Daugava River (Latvia) the real-time approbation provides **accurate forecast of water flow simulation** in cases of high and low water

New web-services are available with flood forecast software including hydrological data collection, modelling, results storing and converting, publishing on webpage and geoportal
<https://daugava.crowdmap.com/main>
<http://flood.aerospaceinfo.ru/>

Positive assessment reviews of the project results are supported **by municipalities involved** (Riga city, Daugavpils, Madona, Gulbene, Alūksne, Lubāna and Jaunpiebalga Municipalities (Latvia) and Pskov region, Razdolje Rural Settlement Self-government Administration (Russia))

Distributed hardware and software infrastructures in Riga Technical University (Riga, Latvia) and SPIIRAS (St. Petersburg, Russia) **for environmental monitoring and modelling** of natural and technological objects as well as for training of specialists

Joint initiatives with the Daugavpils City Council performed for operative flood forecasting and visualization with a social action "Daugavpils against floods" and "Flood room"

International research and educational institution network created including 10 institutions and 7 municipalities

