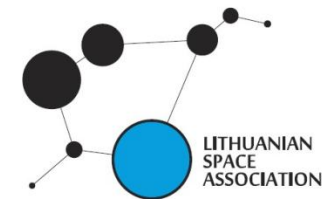


# 3<sup>d</sup> Baltic B3+ Space Cluster Roundtable

Vidmantas Tomkus, director

SEMW-2010, Vilnius  
October 8, 2010

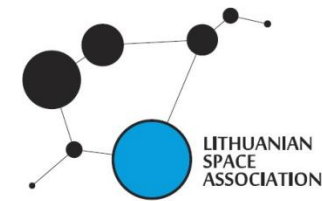
# 3<sup>rd</sup> Baltic B3+ Space Cluster Down stream services



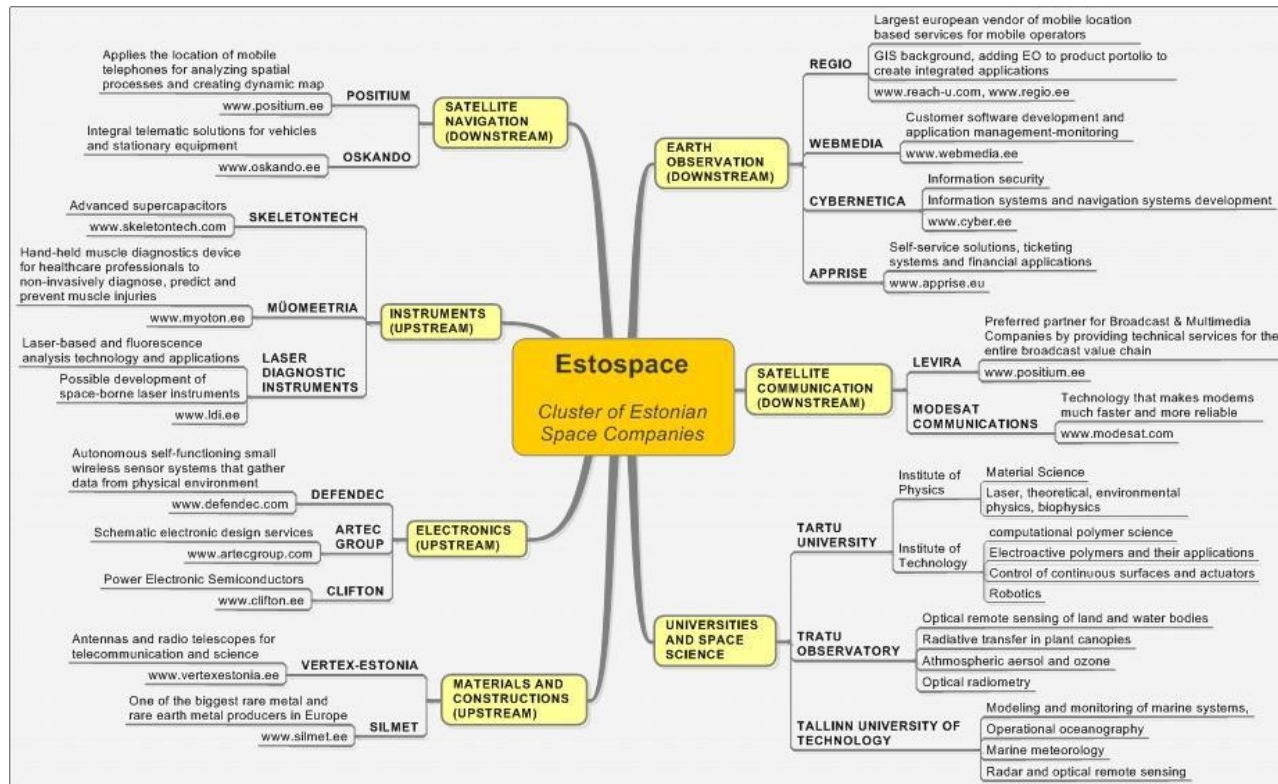
- 1) Baltic sea surveillance (vessel traffic, oil spill, pipeline, etc)
- 2) Forest fire and other disaster prevention and monitoring from satellites.
- 3) Nuclear power station monitoring
- 4) Schengen Border surveillance from satellites.



# 3<sup>rd</sup> Baltic B3+ Space Cluster Estonian Upstream Competencies

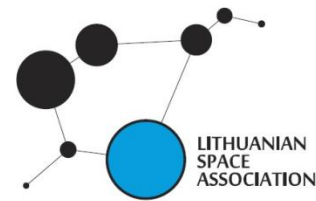


## Instruments, Electronics, Materials and constructions



## Software development, Space science

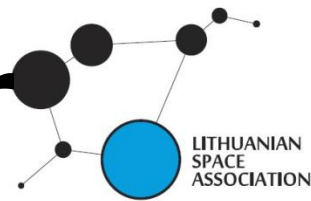
# 3<sup>rd</sup> Baltic B3+ Space Cluster Upstream Latvian competencies



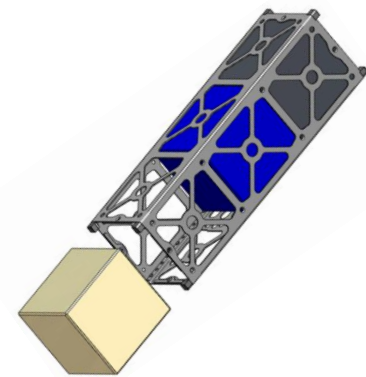
- Nano-dispersed pure ceramic, nano-sized powders
- Cryogenic insulation for launchers
- Experimental devices for biomedicine
- Laser Ranging Service
  
- Structural strength of aviation equipment
- EMC compliance testing
- Software development



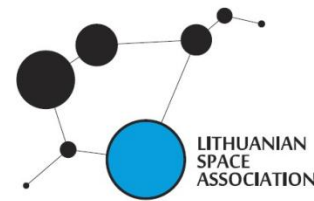
# 3<sup>d</sup> Baltic B3+ Space Cluster Lithuanian Upstream competencies



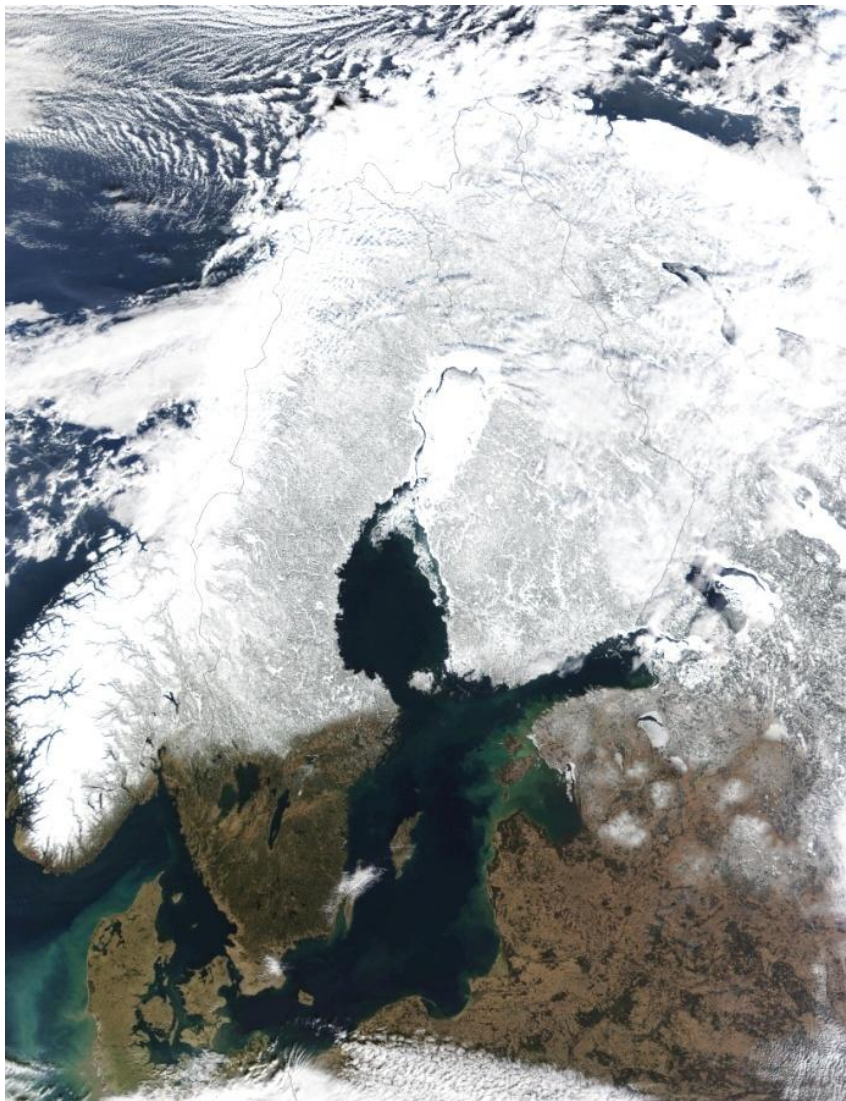
- Attitude Dynamics and Control Systems (ADCS) as microsensors and microactuators (MEMS, MEOMS);
- On board computer (OBC) hardware and software;
- Communication systems (COM) as SHF solid state antennas, adaptive broadband modulation;
- Electrical Power Systems (EPS) as micro fuel- and solar cells;
- Thermal control systems (THER) including tests of re-entry microcapsule;
- Space debris and innovative de-orbiting solutions like micro-thrusters, solar sails, tethers
- Scientific payload as space microbiology and microgravity experiments



# 3<sup>rd</sup> Baltic B3+ Space Cluster Action Plan



1. Establish Joint working group consisting of 2 persons per country.
2. Prepare long-term cooperation plan for joint development of space related technologies and public services of the Baltic origin.
3. Prepare a feasibility study and elaborate a common marketing plan of the Baltic space cluster.
4. Establish an international framework for the exchange of best space practices with further development of institutional and industrial user community in Baltic Sea region countries through cooperation of public and private sectors.
5. Finalize the draft documents until June 1, 2011.
6. Organize the 4th Baltic Space Roundtable in September 2011 in Riga.
7. Organize Final Nordicsat conference in November 3-4, 2011 in Tallinn.



# THANK YOU!

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