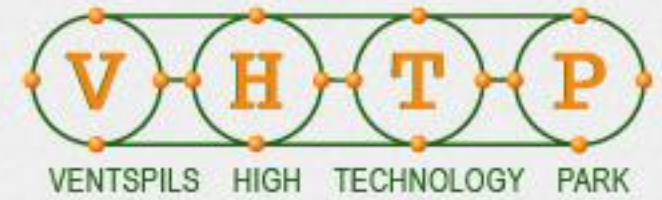


Latvian space activities

Satellite Venta-1

*Eva Daigina,
Ventspils High Technology Park, Latvia*

Ventspils High Technology Park



Date of registration: February, 2005

Legal status: Foundation (non-profit organisation)

Location:

Ventspils

Business incubator branch in Talsi

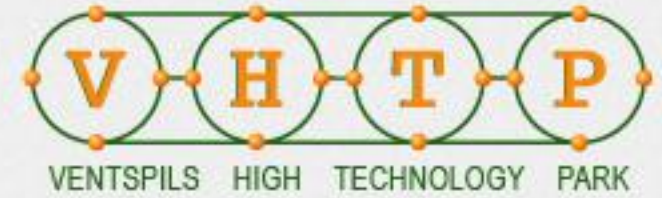
Joint venture “Kurzemes biznesa inkubators” Ltd. Location: Liepāja, Kuldīga, Saldus

Priority areas:

information technologies, telecommunications, electronics, engineering, industrial automation, computer aided design and space technologies.



VHTP structural units



**IT, TELECOMUCATION,
ELECTRONIC, ENGINEERING,
INDUSTRIAL AUTOMATION,
COMPUTER AIDED DESIGN, SPACE
TECHNOLOGIES**



PRE-INCUBATOR

**Ventspils University
College**

**Education and
preparation for
Business**



**BUSINESS
INCUBATOR**

**For start-ups
(the first 3 years)**

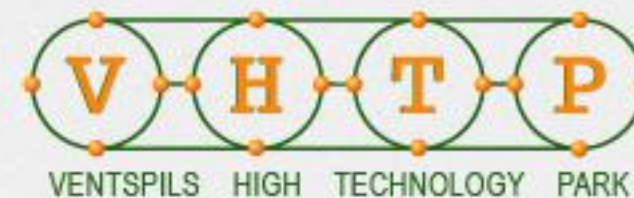


TECHNOLOGY PARK

**For expanding
companies and
research centers**



VHTP services



Business Incubator	Technology Park
1. Legal address and support to start a business in Latvia	1. Technical design and construction of premises
2. Infrastructure (premises, office equipment, access to laboratories)	2. Renting office and production premises
3. Front desk and secretariat	3. Access to laboratories/ projects with research institutions
4. Consultancy services:	4. Organisation of training programmes for engineers/ technicians
- Marketing services	5. Consultancy services:
- Capital attraction services	- Assistance with initial team building/ local headhunting
- Local headhunting	- Development projects
- Development and testing of the first technologies/ products	- Networking
- Other (incl. training, accounting and legal services, networking)	





PILOT ACTIVITIES NANO-SATELLITE DEVELOPMENT

- “VENTA-1” PILOT PROJECT
- AIS APPLICATIONS
- TRAINING OF STUDENTS AND ENGINEERS



INDUSTRY AND RESEARCH CENTRE

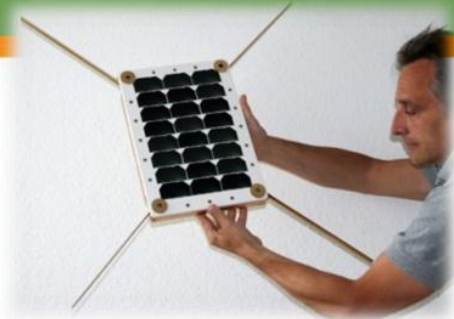
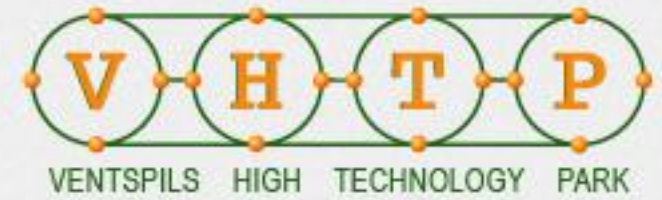
- INNOVATION CENTRE: INFRASTRUCTURE FOR FINE ELECTRONICS AND SMALL/MEDIUM SIZE SPACE PROJECTS
- THE COMPETENCY CENTRE FOR LATVIAN ELECTRICAL AND OPTICAL EQUIPMENT MANUFACTURING INDUSTRY, INCLUDING RESEARCH AND NEW PRODUCTS AND TECHNOLOGY DEVELOPMENT PROJECTS IN SATELLITE TECHNOLOGIES



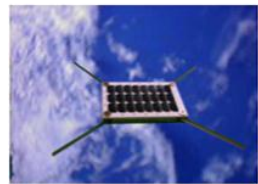
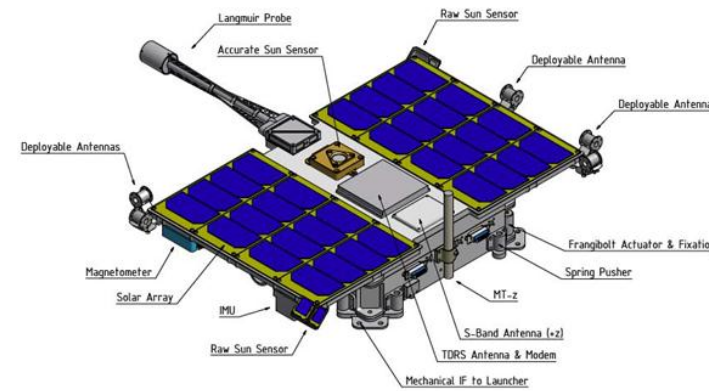
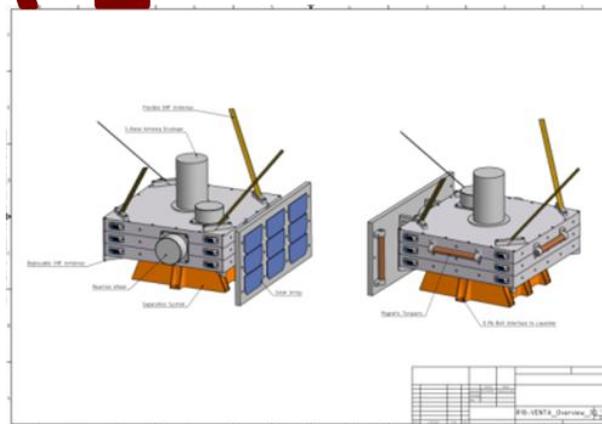
STRATEGY AND POLICY

- PARTICIPATION IN THE DEVELOPMENT OF NATIONAL SPACE STRATEGY
- PARTICIPATION IN SPACE WORKING GROUP, FOSTERING ESA COOPERATION AGREEMENT LATVIAS SPACE TECHNOLOGY CENTRE STRATEGY DEVELOPMENT
- SPACE CLUSTER INITIATIVE
- SPACE AWARENESS ACTIVITIES

PILOT ACTIVITIES SATELLITE DEVELOPMENT



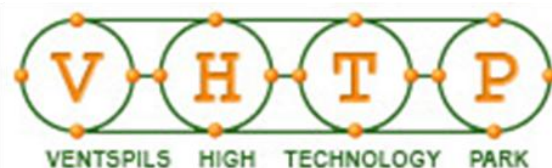
VENTA-1



Tests

Frequencies

2008	2009	2010	2011
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Institut für
Raumfahrtssysteme

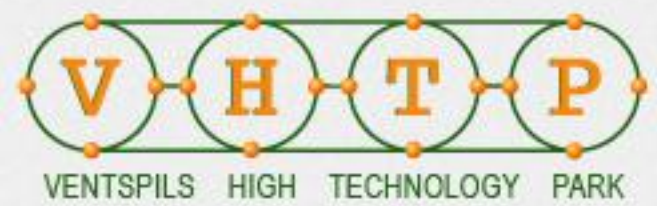


AISat

University Nanosatellite from
Bremen for Maritime Space and
AIS Technology Development AISat

INDUSTRY AND RESEARCH CENTRE

Project «SmartRegions – expert support to establishment of the Latvian Satellite Technology Centre»



Implementation period:
01.12.2008.-31.08.2009.

Activities

- Identification of space production and research area at VHTP
 - AIS micro satellite, AIS service development, Participation in AIS satellite system
- Development of technical specification for VHTP space production and research infrastructure.

Project experts

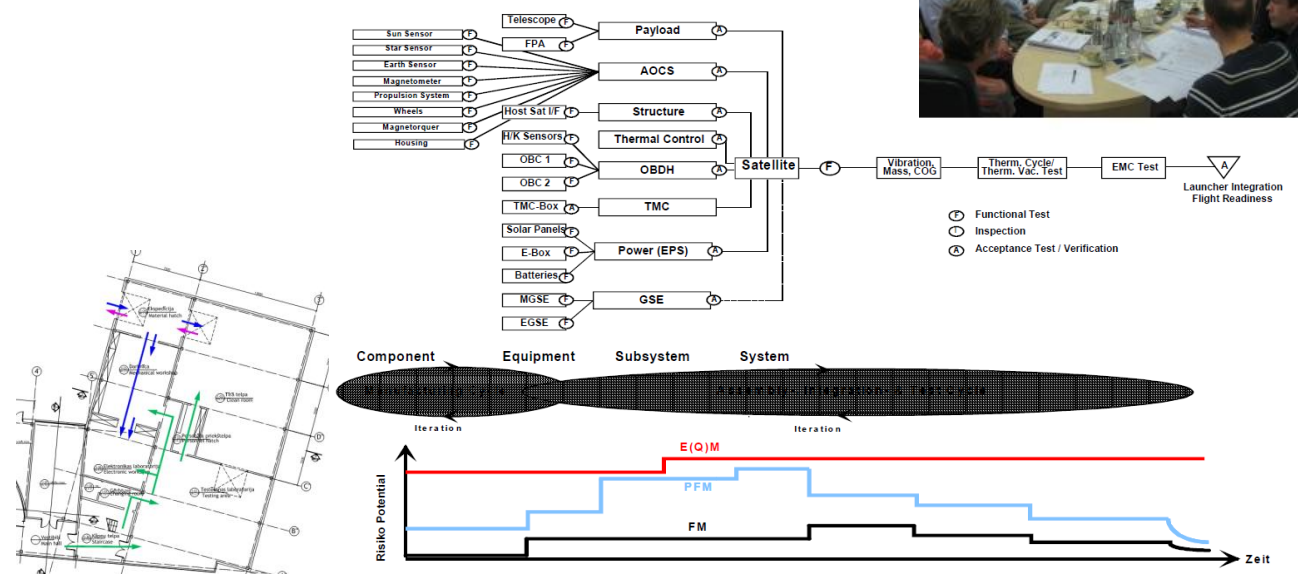
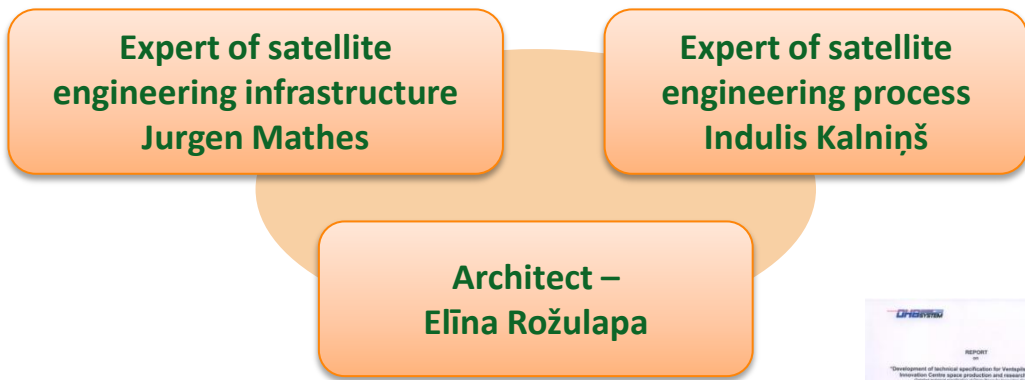
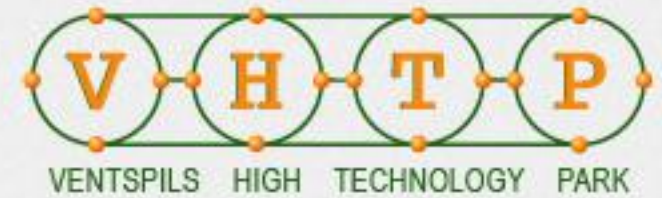


Figure 4-1: Generic Production Flow of Space Product from Unit Level to Satellite Level

INDUSTRY AND RESEARCH CENTRE

Project « Cooperation between Ventspils and Tartu in space technologies research and training»



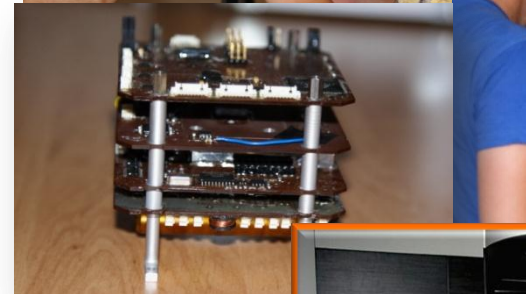
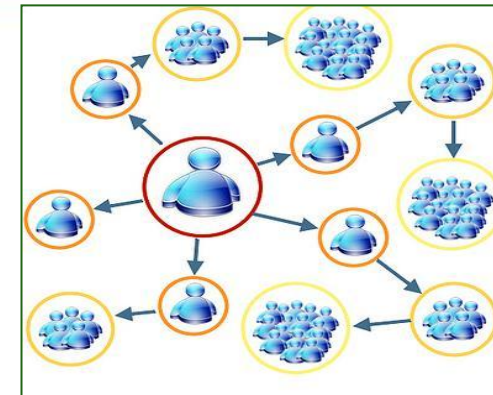
Implementation period:

01.08.2009. – 28.12.2010.

Activities, results:

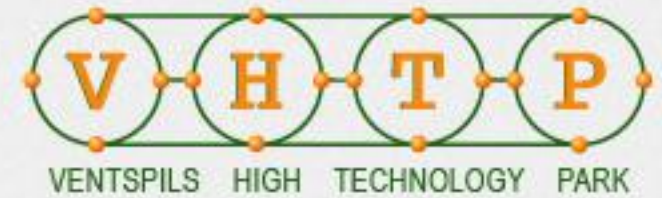
- ✓ Development of space technology infrastructure — the „Clean-room” (ISO7, 50m²)
- ✓ **First Satellite Technology Summer School** (August 2010, Ventspils)
- ✓ Partner involvement in **small satellite building**

7 students involved in “Venta-1” building,
Praxis organised in Bremen and in Ventspils



STRATEGY AND POLICY

VHTP –CO-ORDINATOR OF LATVIAN SPACE TECHNOLOGIES CLUSTER



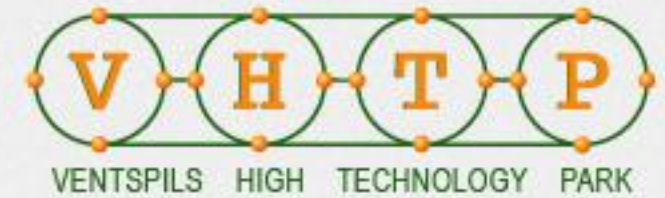
Since 2009 VHTP is a space technologies cluster coordinator in Latvia.

- 1) Cluster development projects financed by the Ministry of Economy and the Ministry of Education and Science of the Republic of Latvia;
- 2) Direct contacts with more than 40 companies, 20 research institutes, 4 NGOs and 13 state institutions involved in space industry in Latvia, partnership agreements for Cluster co-ordination activities with 25 institutions;
- 3) Involvement in the development of National Space Strategy.



STRATEGY AND POLICY

Project «NordicBaltSat»



Implementation period:

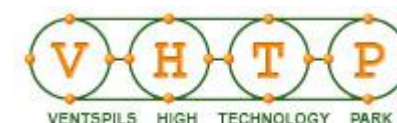
01.03.2010.-28.02.2012.

Activities:

- To identify space potential and create **joint technology programme**;
- To identify **technologies** that would be necessary for the **European market**;
- To build capacity and develop **cooperation** between emerging space countries and **ESA**;
- To shape **national space governance** systems in emerging space countries.

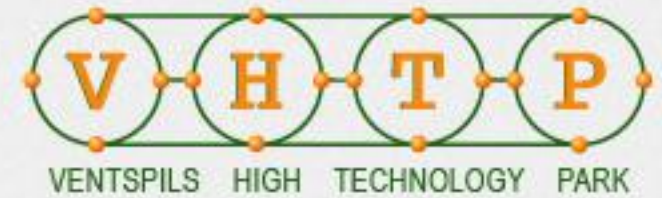


invent baltics
we make innovation happen!



SPACE AWARENESS ACTIVITIES

Project «Space Technologies – potential of education and economy»

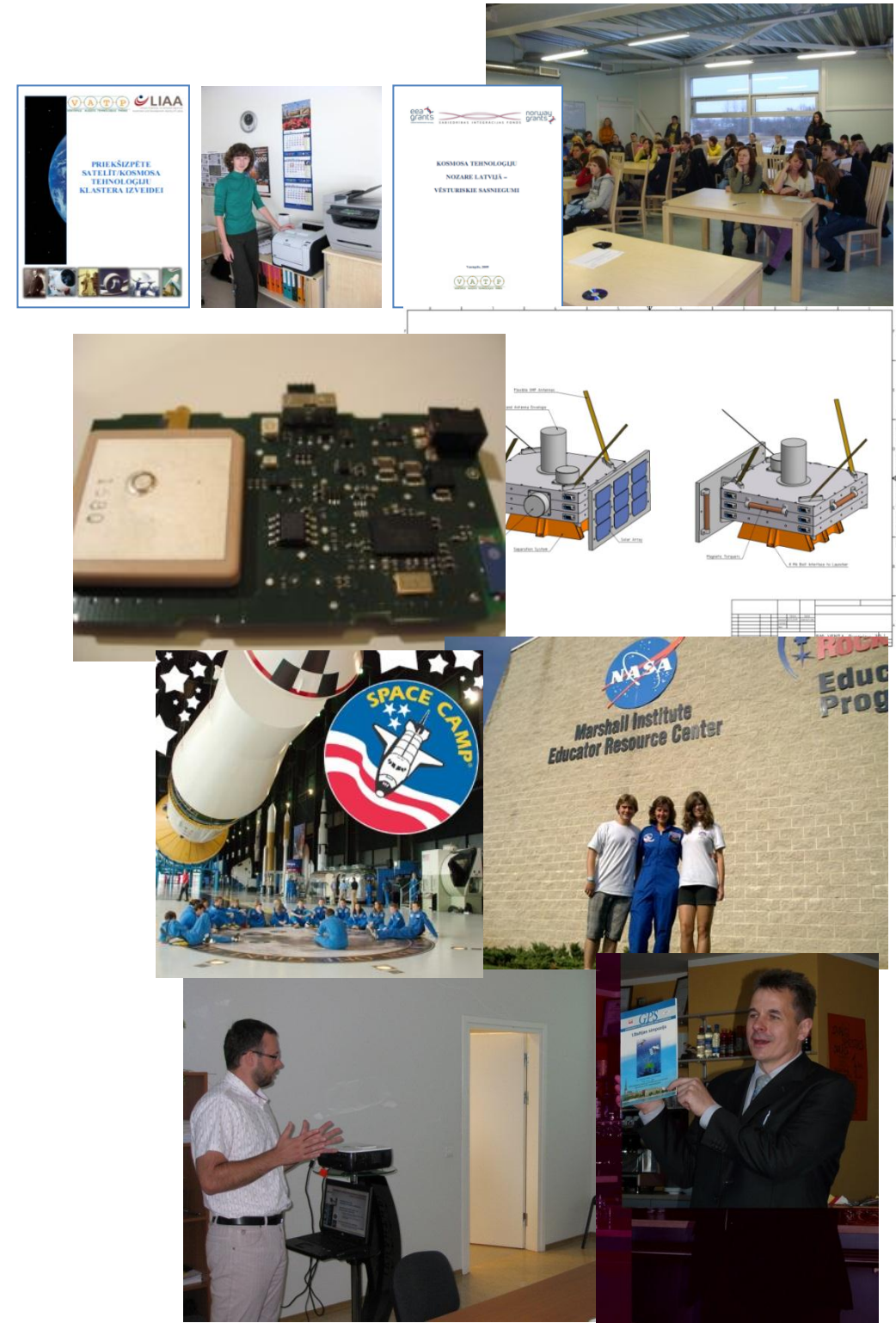


Implementation period:

02.2009. – 09.2010.

Results:

- Gathered **information** on Latvian historical achievements in space, existing situation and development perspectives in Latvia
- **Cooperation with Latvian policy makers** and preparation of recommendations for space field development
- **Informative events** for pupils, students, organisations
- Competition for Latvian pupils **“We own the sky!”**

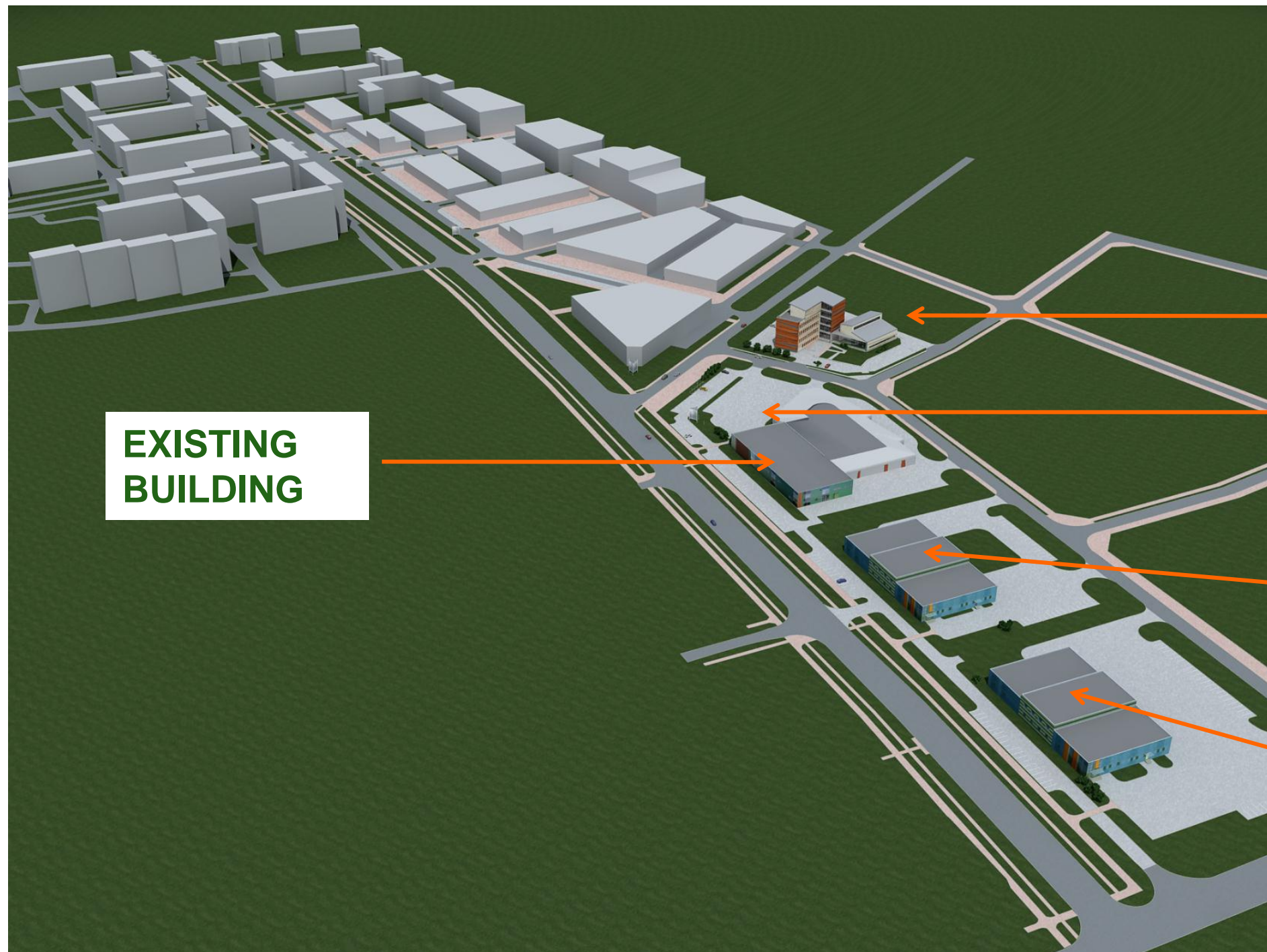
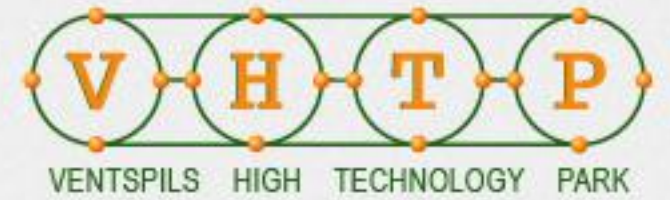


Different activities done by VHTP



VHTP future activities

TECHNOLOGY PARK



INNOVATION CENTRE

**INTERACTIVE
SCIENCE CENTRE**

**LCD MODULES
ASSEMBLY**

**PROJECTED
BUILDING FOR
ELECTRONICS
MANUFACTURER**

**EXISTING
BUILDING**

- **Interactive Demonstration centre**

BI, Space, Virtual demonstration centre

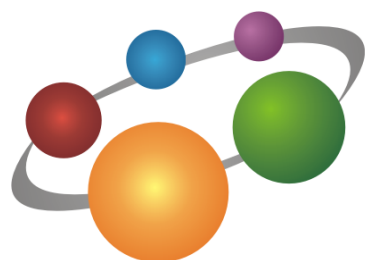
- Annual participation in **International Space camp** in USA Space & Rocket centre

- Annual **Satellite Technology Summer schools**

- **Competence centre**

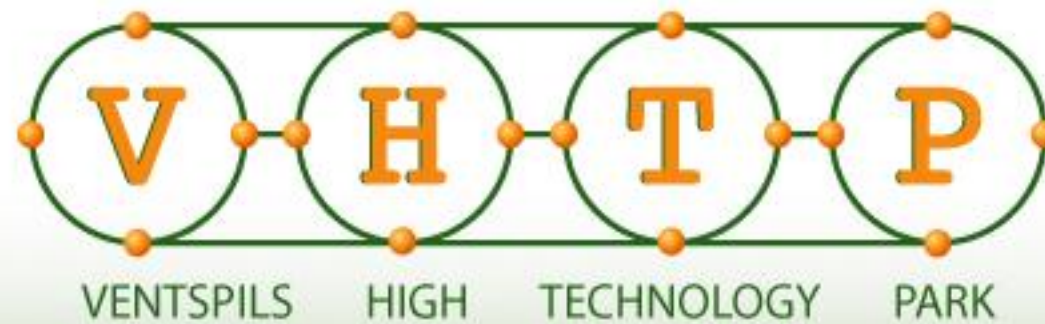
2 million EUR for 5 years for the projects related to space technologies

- Participation in «**European Satellite Navigation competition**»



MUMS PIEDER
DEBESIS
2011





Reach the goals
others are only thinking of!

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