

RIT

RYMD FÖR INNOVATION OCH TILLVÄXT

Kick-off – October 1-2 2015
Johanna Bergström-Roos
Project Manager
LTU Business

www.ritspace.se

www.ritspace.se



Cofinancing by



Norrbotten

Partners



KIRUNA KOMMUN



NANOSPACE



Operated by



Programme

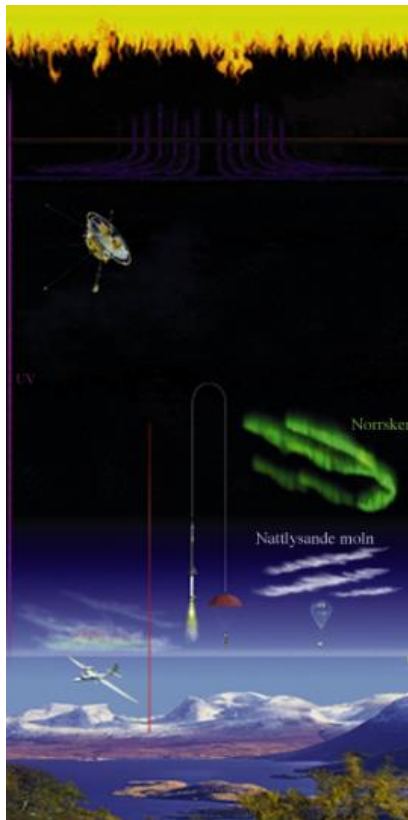
12.00	Lunch	The restaurant at Space Campus
13.30	Welcome	Jonas Ekman Prefect, Luleå University of technology
13.45	Presentation of the project RIT	Johanna Bergström-Roos Project Manager RIT, LTU Business
14.00	Inspiration	Mikael Börjesson Regional process leader for Data Centers
14.15	Presentation of partners and their expectations	The space industry: Petrus Hyvönen, SSC Kent Andersson, SSC Patrik Johansson, GKN Per Bodin, OHB Sweden Johan Sundqvist, NanoSpace Emil Vinterhav, ÅAC Microtec
14.50	Coffee	
15.20	Presentation of partners and their expectations	Public sector: Lars Bäckström, Kiruna kommun Innovation system: Jens Lundström, ABI Lisa Braafnäs, LTU Business Tommy Lahti, Progressum Academia: Marta-Lena Antti, LTU Reza Emami, LTU Peter Törlind, LTU Javier Martin Torres, LTU
16.00	Workshop 1 Purpose & Objectives of the project RIT	Reza Emami Chair onboard space systems, LTU
17.00	Presentations of the outcome of Workshop 1	All groups
18.00	Buss to town	
19.00	Dinner	

	Breakfast	and check-out
08.00	Practicalities for project members	Johanna Bergström-Roos
09.30	Coffee	
10.00	Workshop 2 What "Meeting Point" shall we offer within RIT?	Lisa Braafnäs, Business development, LTU Business
11.00	Presentations of the outcome of Workshop 2	All groups
11.30	Summery	Johanna Bergström-Roos and Reza Emami
12.00	Lunch	



Unique conditions

- Esrange Space Centre
- Space Campus
- Geographic location
- An established space town
- Experience since the 50th
- International network



New initiatives

- EISCAT 3D
- New Esrange
- Space Lab
- Planetary Exploration Center
- Centre of Excellence for Space Technology
- NanoSatLab
- Commercial spaceflights

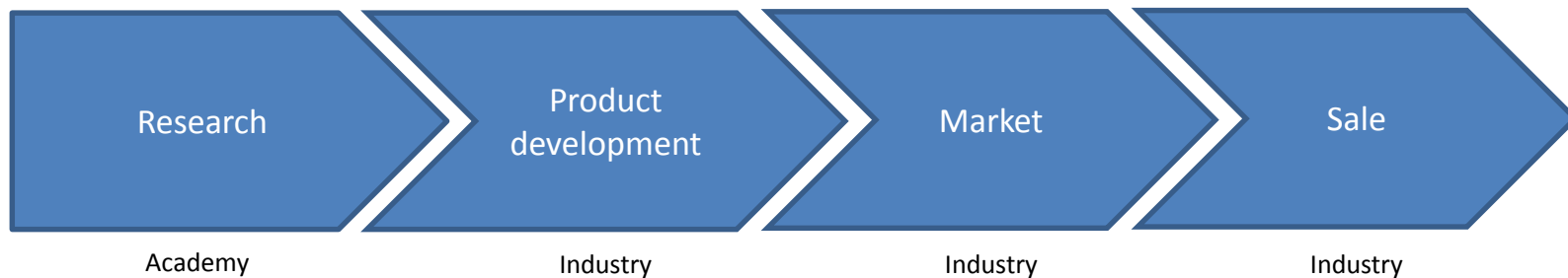
Spin-offs



What drives spin-offs?

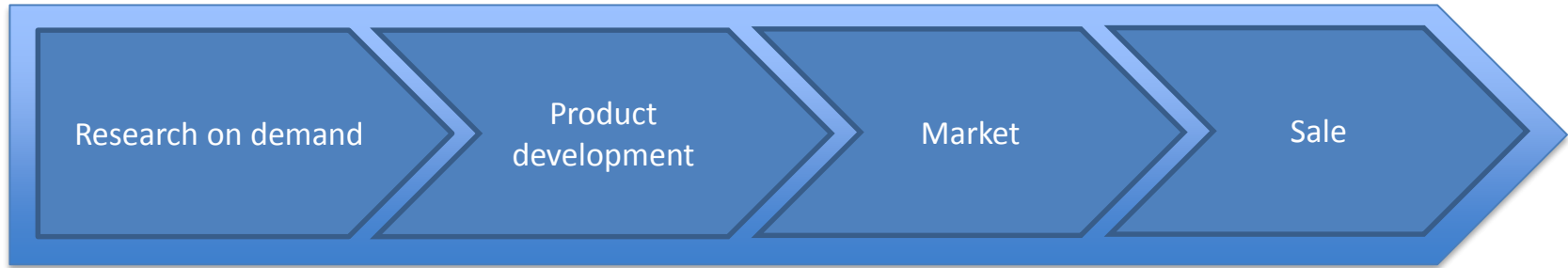
- A driving force
- Skills and higher education
- Amount of R&D projects – new ideas
- Technical development
- Economic policy
- Funding
- A critical mass of minds
- Infrastructure

Today



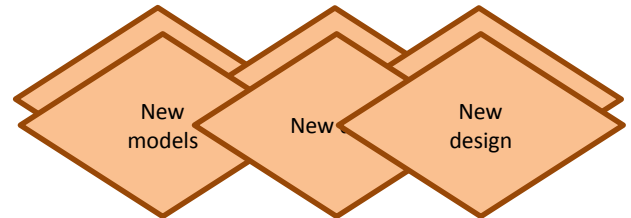
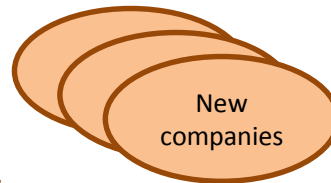
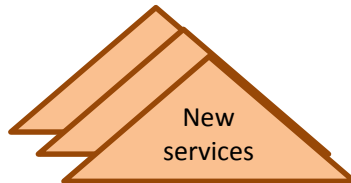
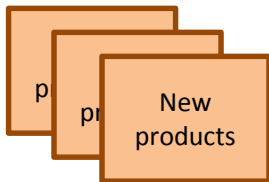
No external innovation support system is used

Tomorrow



Academy – Industry – Innovation support system

Industry – Innovation support system



Strengthening R&D collaboration

Academia - Space Sector - Innovation Support System

WP1

A Centre of Excellence for Space Technology



WP2

R&D projects between Academia and Space Sector

WP3

An innovation Support System for Aerospace

Purpose & Goal

Purpose

The space sector will contribute to increase growth in the region on a much broader scale than it does today.

Strong links local-regional-
national-international

Overall Goal

The region has a current and well anchored space strategy, linked to the Swedish strategy for space.

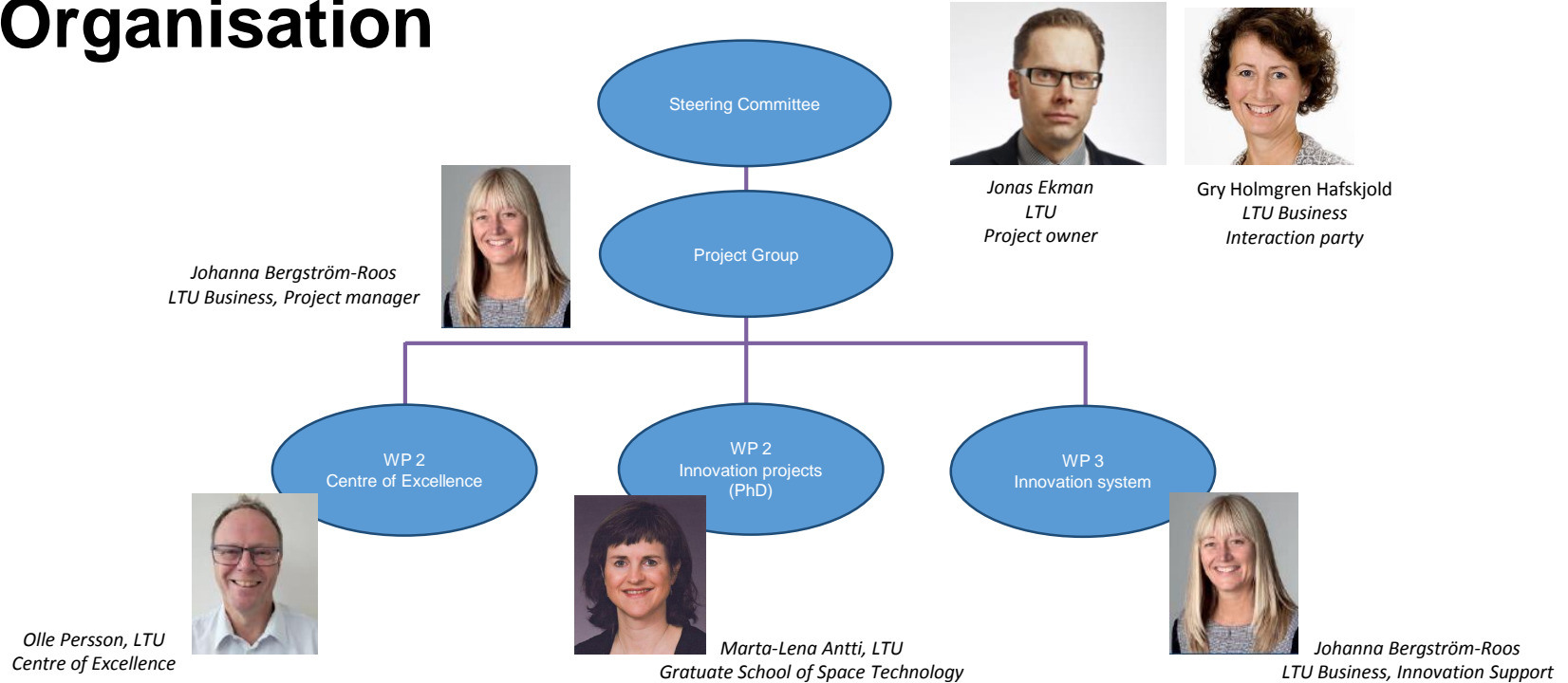
Project Goal

The space sector in the region has increased its capacity in R&D collaboration between academia, industry and stakeholders in the innovation support system.

What shall we deliver?

WP 1	WP 2	WP 3
A Centre of Excellence	8 PhD students half way through their education Identified 8 products or services for commercialisation	Initiate an innovations support system Involve 15 “new” regional SME:s in space business

Organisation



Establish a Centre of Excellence

- Create a development arena for academia and industry
- Be based on the needs of industry
- Make the expertise available
- Invite SME's, entrepreneurs, inventors, other industries etc
- Implement the innovation support system
- Implement commercialization and entrepreneurship
- Establish new networks



Maria-Paz Zorzano Mier



Olle Persson



Javier Martin Torres



Reza Emami

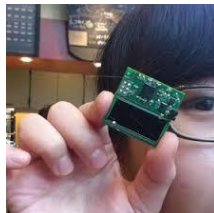


R&D projects

- 8 R&D projects
- Already 2 additional
- Research based on the needs of industry
- Research based on the academic competence
- Recruit and educate innovation PhD
- Create bridges between industry and academia



Marta-Lena Antti



8 innovationsdoktorander

1. New measuring method for balloon-borne stratospheric wind profiling
2. Software-defined radio for ground-based satellite communication
3. Formation flying in space – on-board systems to calculate trajectories etc.
4. Development of high-performance avionics for the satellites of the future
5. MicroPILS – Micro Propulsion In the Loop Simulations
6. Facilitation of innovation within space manufacturing (2 PhD:s)
7. SMARTi – Samband mellan additiv Metalldeponeringsprocess, mikrostruktur och mekAniska egenskapeR för Titan



Supervisors RIT



Marta-Lena Antti



Reza Emami



Anna Öhrwall Rönnbäck



Peter Törlind



Javier Martin Torres



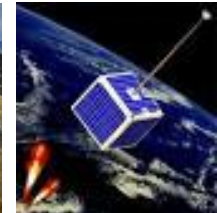
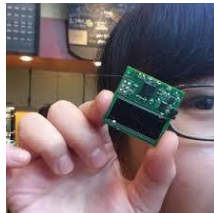
Thomas Kuhn



Maria-Paz Zorzano Mier



Jaap van de Beek



Supervisors Graduate School



Marta-Lena Antti



Reza Emami



Anna Öhrwall Rönnbäck



Peter Törlind



Javier Martin Torres



Thomas Kuhn



Maria-Paz Zorzano Mier



Jaap van de Beek



Rikard Slapak



Jana Mendrok



Mathis Milz



Lars-Göran Westerberg



Mattias Grahm



Hans Nilsson



Eugenia Belova



Gabriella Stenberg



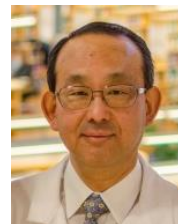
Johan Kero



Vinit Parida



Magnus Gustavsson



Ichiro Minami



Robert Person



Peter Völger

Innovation Support System

- Develop cooperation within the innovation system
- Create innovative venues for stakeholders in the space sector
- Develop the methods and processes for innovation and commercialization
- Conduct inventory of results
- Capture potential business ideas
- Verify and develop potential business ideas



*Johanna
Bergström-Roos*



Innovation Support System



*Johanna
Bergström-Roos*



Pär Johansson



Jens Lundström



Joakim Enerstam



Tommy Lahti



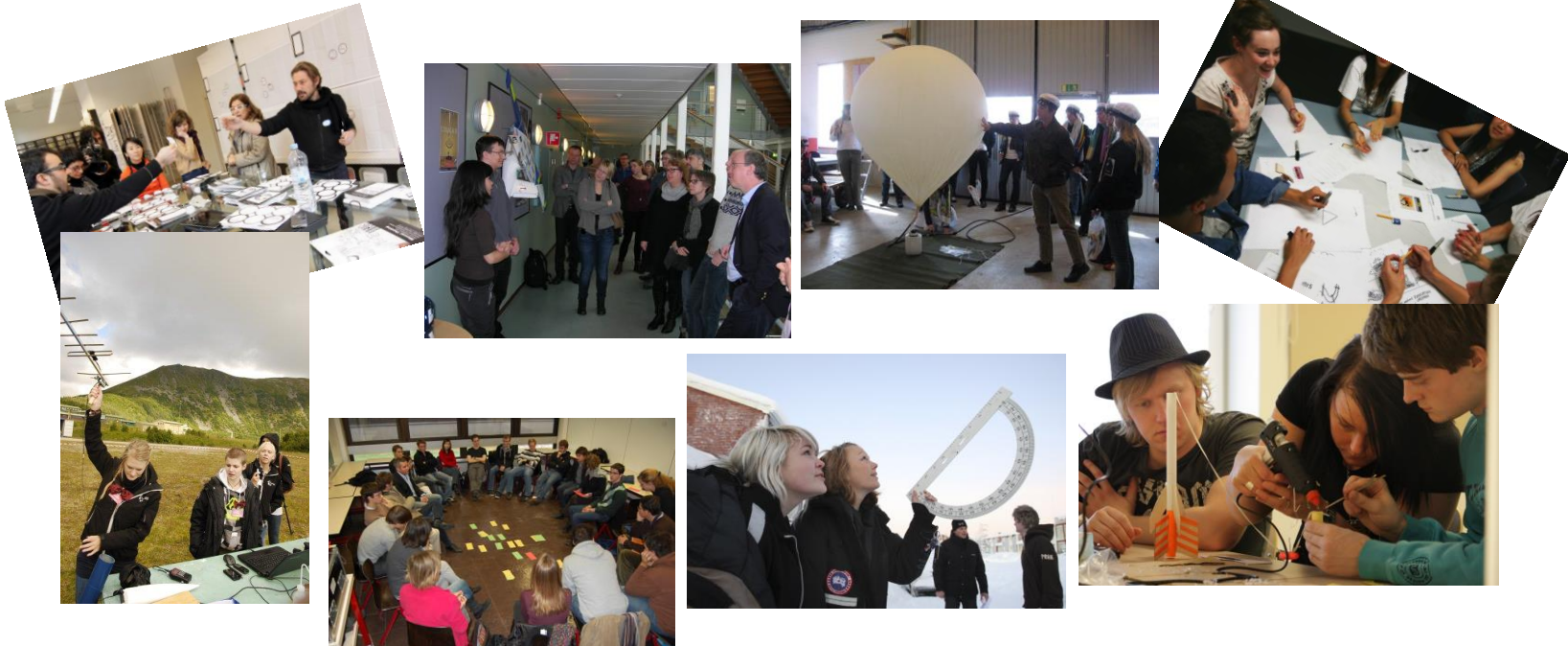
*Ann-Christin
Samuelsson*



Vacancy



20 PhD students - 100 graduate students



SME:s in the region



Meetings and Meeting Points

1. Steering Committee/ Board of Directors/ Reference Group meetings
2. Project Group meetings
3. Work Package meetings
4. Supervisor – PhD student – Space company
5. Meetings including RIT and the Graduate School of Space Technology
6. Six "Meeting Points" during the project
Workshops lunch – lunch
Students-PhD:s-Scientists-Engineers-Entrepreneurs-SME:s etc

