



# Space Situational Awareness

The European Space Agency  
programme

# SSA

- Sweden participates to the SSA programme since C-MIN 2012
- The participation is funded by the Swedish Defence (FM) and the Swedish Civil Contingencies Agency (MSB)
- Three parts: SWE, NEO, SST
- Swedish priorities: SWE and SST
- Reference group

# Innovative low-cost research satellites

Status of the SNSB Call for Ideas

# The call for ideas

- 12 contributions received (March 2012)
- 5 contributions selected on scientific merit (April 2012)
- Industrial consortium study (fall 2012)
- One concept withdrawn from study (Cheops was selected as ESA S-mission)
- Industrial consortium report (Jan 2013)

# Results

- Goal: meet long-term cost target of 40 MSEK/mission (excluding payload).
- The industrial consortium study shows that:
  - All four concepts can be done ...
  - ... but not meeting the cost target!
  - Public study report now available ([www.snsb.se](http://www.snsb.se))
- SNSB investigates possible ways forward.

# New enclosures in the annual call for research proposals

# Application for new positions

- Ph.D. Students, Post-Docs. Researcher, Senior researcher
- Includes relevant CV:s (supervisor, applicant)
- Description of the research programme with respect to the position applied for.

# Number of new positions

- Ph.D. Students: 3 each year => 12 at any year
- Post-Docs: 3 each year => 9 at any year
- Researchers (4 yr): 1 each year => 4 at any year
- Senior researchers (6 yr): 1 each year => 6 at any year
- In 2013, almost half of the annual budget is dedicated to positions.
- In 2016 onwards, one third of the annual budget will be for positions.



# Instrument contributions

- Enclosure requested for new scientific instrument contributions, e.g. for future ESA science missions
- Scientific interest of the applicant's group in the mission
- Long-term cost estimate with preliminary funding request

# JUICE

Swedish contributions to the JUICE  
mission

# JUICE timeline

- May 2012: JUICE selected as L1 mission
- Feb 2013: Instruments and payload consortia selected for the JUICE payload
- 2014: Mission adoption.
- 2018: nominal payload delivery
- 2022: Launch
- 2030: Jupiter orbit insertion
- 2033: End of mission

# Swedish-led instruments

- Particle Environment Package
  - Stanislav Barabash
  - Institute of Space Physics, Kiruna
- Radio Plasma Wave Investigations
  - Jan-Erik Wahlund
  - Institute of Space Physics, Uppsala

# Additional contribution

- Sub-millimetre Wave Instrument
  - Additional Swedish contribution
  - Donal Murtagh, Chalmers
  - Omnisys Instruments

