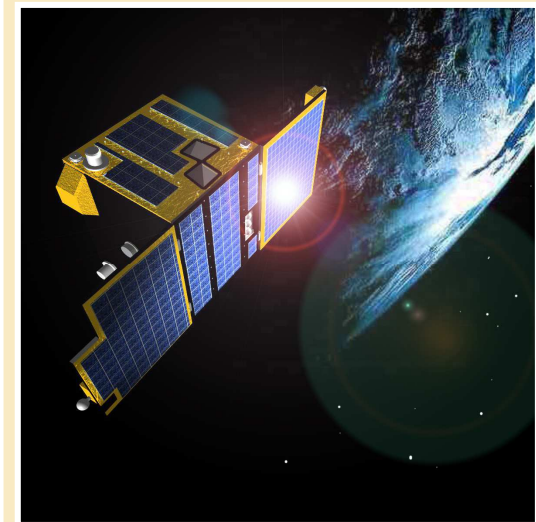
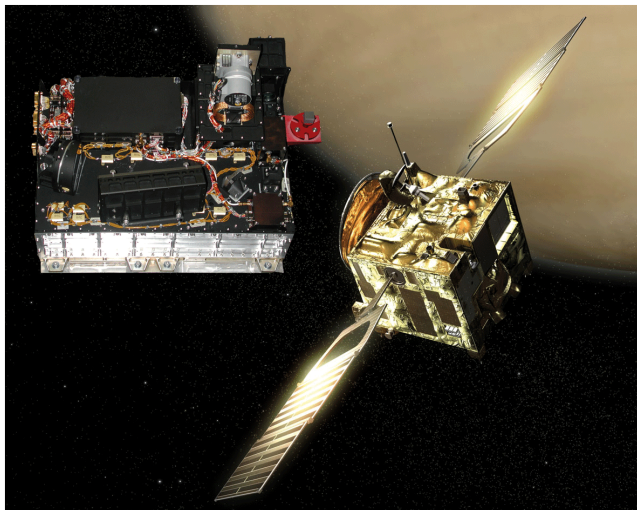
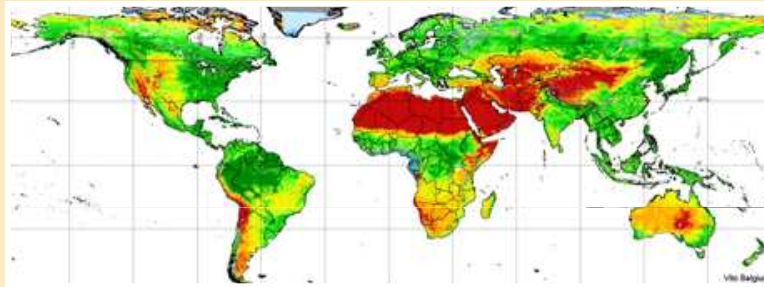


# Flemish Space Industries



# Flemish Space Industries

- Association of members active in the space field
- A non-profit organisation
- Subsidized by IWT (Institute for the Promotion of Innovation by Science and Technology in Flanders)

# Belgian Space Policy

- Regions:
  - Flanders: VRI
  - Wallonia: Wallonie Espace
  - Brussels: Bruspace
- Belgian Space Policy (Belspo):
  - No national Space Agency
  - Space Directorate of BELSPO is responsible for
    - Management of national and international space programmes
    - Management of aeronautics programmes

# Belgium and ESA

Position of Belgium compared to the other Member Countries in ESA (2003-2005)

<u>% contribution</u>	<u>Mandatory Programmes</u>	<u>Optional Programmes</u>
<b>Austria</b>	<b>2.3</b>	<b>0.9</b>
<b>Belgium</b>	<b>2.8 (8)</b>	<b>7.4 (4)</b>
<b>Denmark</b>	<b>1.8</b>	<b>0.8</b>
<b>Finland</b>	<b>1.4</b>	<b>0.5</b>
<b>France</b>	<b>15.6</b>	<b>31.6</b>
<b>Germany</b>	<b>23.4</b>	<b>21.5</b>
<b>Greece</b>	<b>1.5</b>	<b>0.1</b>
<b>Ireland</b>	<b>1.0</b>	<b>0.3</b>
<b>Italy</b>	<b>12.9</b>	<b>14.6</b>
<b>Luxembourg</b>	<b>0.2</b>	<b>0.1</b>
<b>Netherlands</b>	<b>4.4</b>	<b>2.9</b>
<b>Norway</b>	<b>1.7</b>	<b>1.0</b>
<b>Portugal</b>	<b>1.2</b>	<b>0.2</b>
<b>Spain</b>	<b>6.9</b>	<b>5.8</b>
<b>Sweden</b>	<b>2.6</b>	<b>2.1</b>
<b>Switzerland</b>	<b>3.4</b>	<b>3.5</b>
<b>United Kingdom</b>	<b>16.9</b>	<b>5.9</b>

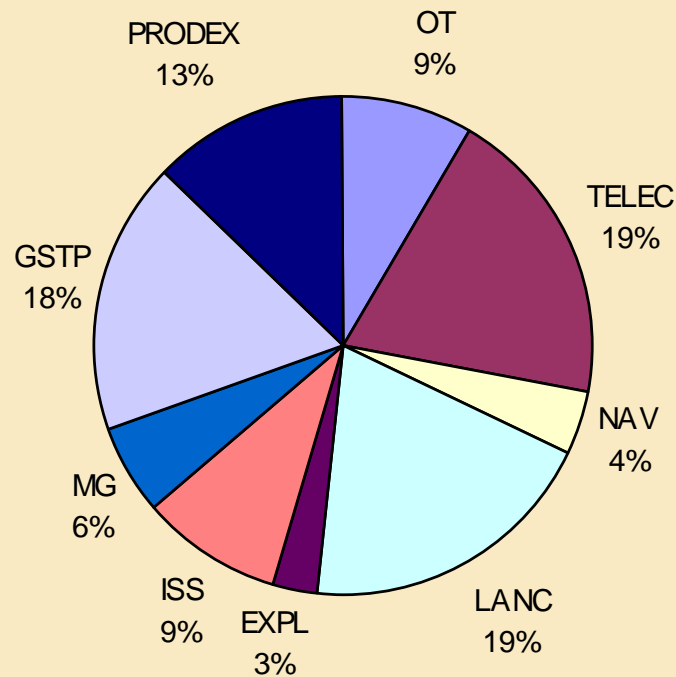
+ Coop state : Canada

+ Pecs : Czech rep. , Hungary, Romania, Poland

# Distribution by theme for Belgium

Optional programmes

Ministerial Councils – ESA 1995 to 2005



# VRI History

- 1995: 11 founding members
  
- 2008: 31 members
  - Flemish Companies
  - Research Centers
  - Educational Institutes

# Purposes

- Encourage the interaction of our members with research institutes and universities
- Represent the Flemish Space Industries towards the regional, Belgian and European authorities
- Stimulate technology transfer
- Support the image of the Flemish Space Industries to the general public

# Important VRI task

- Show the effect of Space activities on society, economy and security to the general public
- Use the fascination for the field in order to promote careers in science and technology

# VRI tools

- Flemish Space Days
- Newsletters
- Organisation of workshops / seminars
- VRI-site [www.vrind.be](http://www.vrind.be)

# Actual VRI members

- AeroGo Europe
- Bracquené Legal Consulting
- Canberra
- CMOSIS
- Epas
- E.S. Tooling
- Eurosense Belfotop
- Flag
- FOS&S
- GIM
- Imec
- KHBO
- KMS
- K.U. Leuven
- LMS
- Newtec
- OIP Sensor Systems
- Orban Microwave Products
- Pedeo Techniek
- Sabca Limburg
- Septentrio
- Siemens
- Space Applications Services
- Spacechecker
- Thales Alenia Space Antwerp
- Umicore Electro-Optic Materials
- University Antwerp
- Verhaert Space
- Vito
- Von Karman Institute for Fluid Dynamics
- XenICs

# Space segments

- Groundstations and equipment \*
- Launch activities
- Satellite production \*
- Satellite services \*
- Navigation \*
- Scientific research \*
- Military projects

\* *Segments in which our members are active*

## Points of concern for SME's

- Time between proposal and contract awarding is too long
- Work load and amount of documents required for proposals are too large
- Milestone payment time too long for SME and more and more depending on ESA payment to primes
- Limited number of valuable development opportunities for SME's
- Difficult for SME's to get involved in phase A studies, because are mostly pre-financing and own investment is necessary due to limited ESA budgets

# Suggestions to improve SME participation in ESA programmes

- Increase opportunities of valuable development projects for SME's
- Consider system of variable profit for complex and critical projects to guarantee availability of engineering skills for space business
- Reduce work load by less paper work
- Decrease payment dependence on primes
- More flexibility to allow innovative solutions

# Flemish Space Industries

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