

Space Transportation Assets Valorisation in Europe

Presentation du projet *STAVE*

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STAVE project



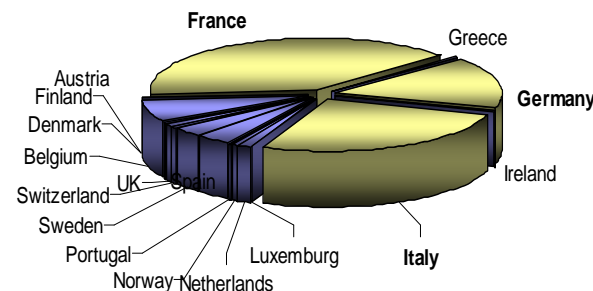
- Project proposed in June 2007 within FP7 1st Space call
the project is running since March 1st, 2008

- Project in cooperation in between 3 space agencies:

- French CNES (coordinator),
- Italian ASI and
- German DLR

> 85%

Relative Country contributions
to Space Transportation
2007-2009 programmes



- Project duration is 2 years

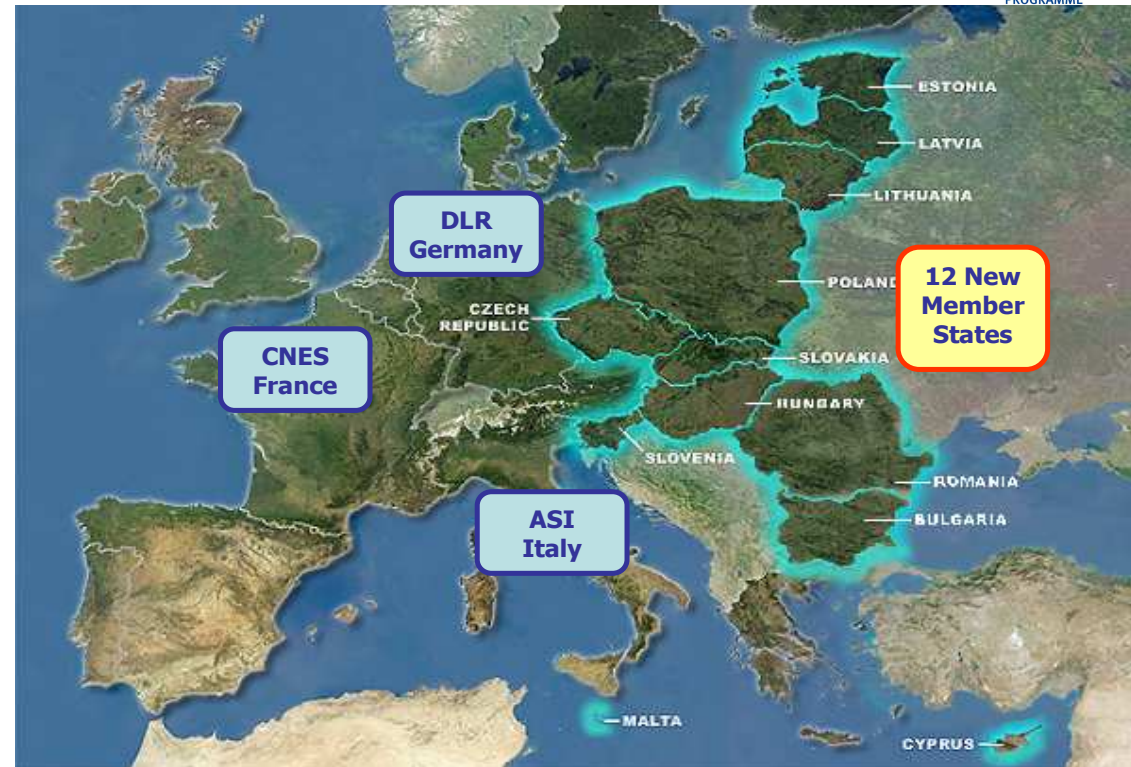
- The domain concerned is « Space Foundations », in the field of Space Transportation



STAVE project



IDENTIFY and VALORISE existing skills **in the 12 NMS** within industries, SMEs, research organizations, institutes, universities, laboratories



GOAL :

increase participation of these entities for:

- Favoring innovation
- Taking profit of all existing european capacities

=> **Reinforcing european independent and affordable access to space**



STAVE project General Objective



Contact the most possible entities in NMS

Set up of an efficient **network**

Present the ST needs and arouse interests

Hold presentation **workshops** in each NMS country

Evaluate skills and elaborate guidelines for optimising the use of existing skills

Visit volunteer entities in NMS countries and give them **hints** to valorise their skills

Disseminate **guidelines** among eastern and western Europe Space Transportation actors



Workshop Presentation Summary



General Introduction of Space transportation

Scope (missions, ...)

Current European launchers

Future trends (R&T, System demos,...)

Space transportation disciplines

System definition loop (3)

Trajectories, GNC, Missions, Flight mechanics (8)

Space Transportation Technologies

Avionics & Software (5)

Thrust Vectoring Control (4)

Propulsion – Solid, Liquid, Components(14)

Pyrotechnics (6)

Ground Facilities (6)

Operations (3)

Environment, Aerodynamics, Acoustics,.. (10)

Structures & Materials (7)



Workshop Presentation Summary



Scientific Disciplines

- Classification, Methodologies of Analysis (3)
- Aerospace Sciences (3)
- Propulsion, Energy (2)
- Structures, Design & Testing (2)
- Materials, Electronics (5)

Project Phasing

- Technology Readiness Level (TRL) (3)
- Technical Project Phases (2)

Space Transportation Specificities

- Production Rate, Double Source Requirement (2)
- Quality Management (3)
- Reliability, Availability, Safety (5)

Conclusion

Total is 140 slides

Presentation was made available on the web site as a pdf file



The questionnaire and its evaluation form

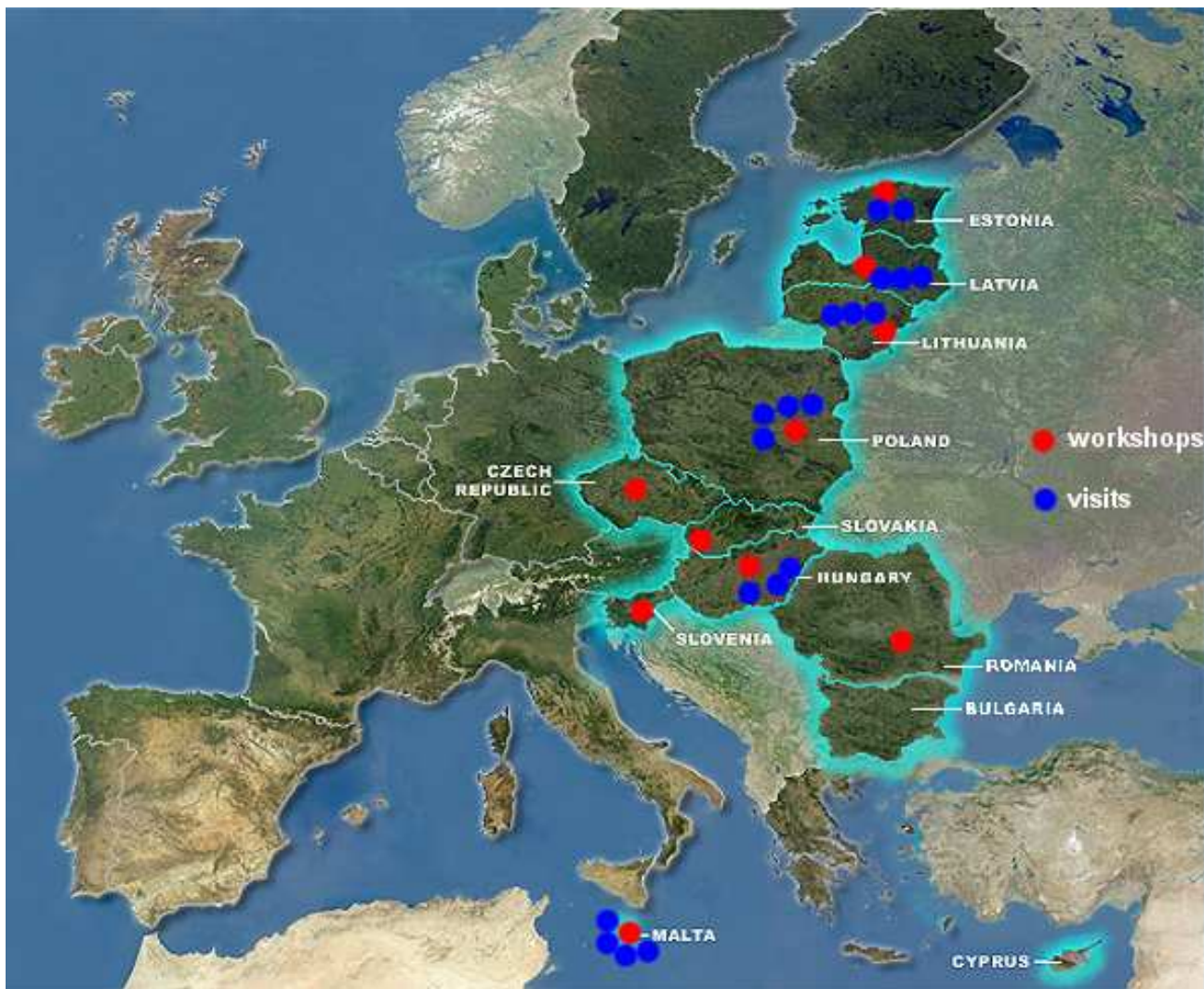
76 questionnaires have been received

The country distribution is:

■ Bulgaria	1 questionnaire
■ Czech R.	5 questionnaires
■ Estonia	3 questionnaires
■ Hungaria	16 questionnaires
■ Latvia	11 questionnaires
■ Lithuania	15 questionnaires
■ Malta	10 questionnaires
■ Poland	8 questionnaires
■ Romania	2 questionnaires
■ Slovakia	1 questionnaire
■ Slovenia	4 questionnaires

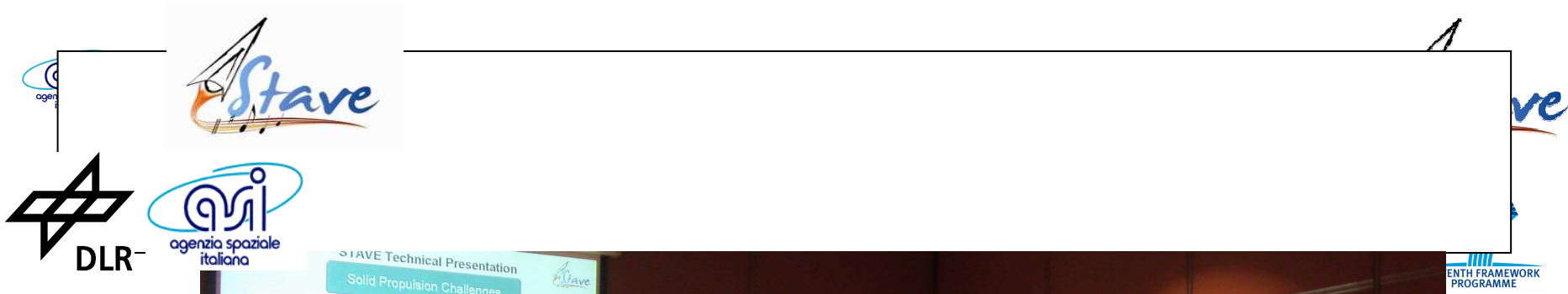


The complementary visits



CNES Paris

2010 June, 30th



ENTH FRAMEWORK PROGRAMME

Ljubljana

CNES Paris

2010 June, 30th

agen



FRAMEWORK
RAMME

Vilnius

CNES Paris

2010 June, 30th



The Final Report

The final report includes all the agreed evaluation reports.

In order to satisfy both the needs of NMS countries entities and Western countries entities, tables shall present the skills in different ways:

- By Country
 - by discipline (System, Electronics, Software, Propulsion, Structures, Environment, Ground Support,)
 - by domain (Academic, Industrial company, agency, ...)
- It shall permit to crosslink the needs and the offers



Conclusions :

- More than 1000 contacts, 400 participants to the workshops,
- 76 questionnaires received

- Some interesting technical activities already identified
- More research than industry entities have answered
- Very few entities already involved in space activities, some niches found (historical situation)

- It is made for facilitating your cooperation with these entities and favour innovation
- Contributes to « Europe 2020 » strategy
- This report is available to anybody requesting it
- The right of use is granted if you name the STAVE project when using these results





Pour demander le rapport

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Merci de votre attention