ASSOCIAZIONE ITALIANA
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ASTOS

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esa

SPACE4SME PROJECT

MORE SPACE TO SMEs.
IMPROVING SMEs PARTICIPATION IN ESA PROGRAMMES

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THE SPACE4SME PROJECT

Commissioned by esa

AIPAS → **Project Coordinator (Italy)**

ASTOS → **The Association of Specialist Technical Organisations for Space (UK)**

With the collaboration of CZECH SPACE ALLIANCE **and** ACT ENGINEERING

THE PURPOSE:

A)to identify the difficulties facing SMEs in their efforts to participate in ESA programmes;

B) to derive possible recommendations on how to overcome these difficulties,

THE SPACE4SME PROJECT

❖ **FRAMEWORK OF REFERENCE: SMEs of all ESA Member States and companies of the 4 ESA Cooperating Countries (Czech Republic, Poland, Hungary and Romania);**

❖ **TWO MAIN ASPECTS:**

- **SMEs participation in ESA programmes (AIPAS)**
- **contractual and programmatic issues (ASTOS)**

❖ **METHODOLOGY:**

- **A questionnaire was sent to more than 1.400 SMEs**
- **Two Workshops:**

Prague (April 2008): ESA Cooperating States

Athens (June 2008): Improving SMEs Participation in ESA Programmes (focusing on new ESA Member States)

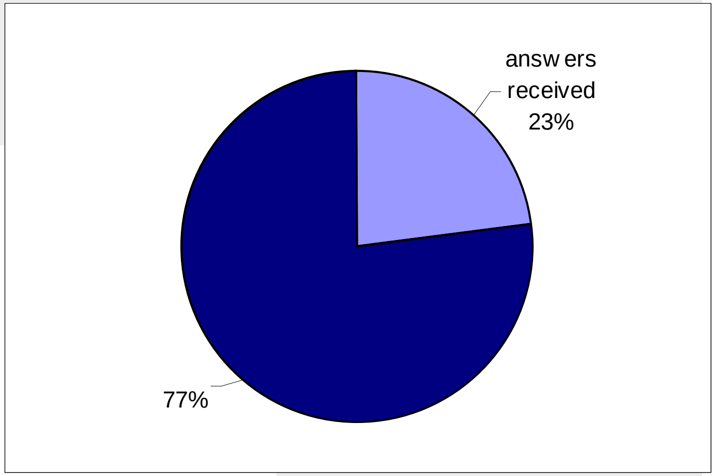
THE STRUCTURE OF THE QUESTIONNAIRE – 6 SECTIONS

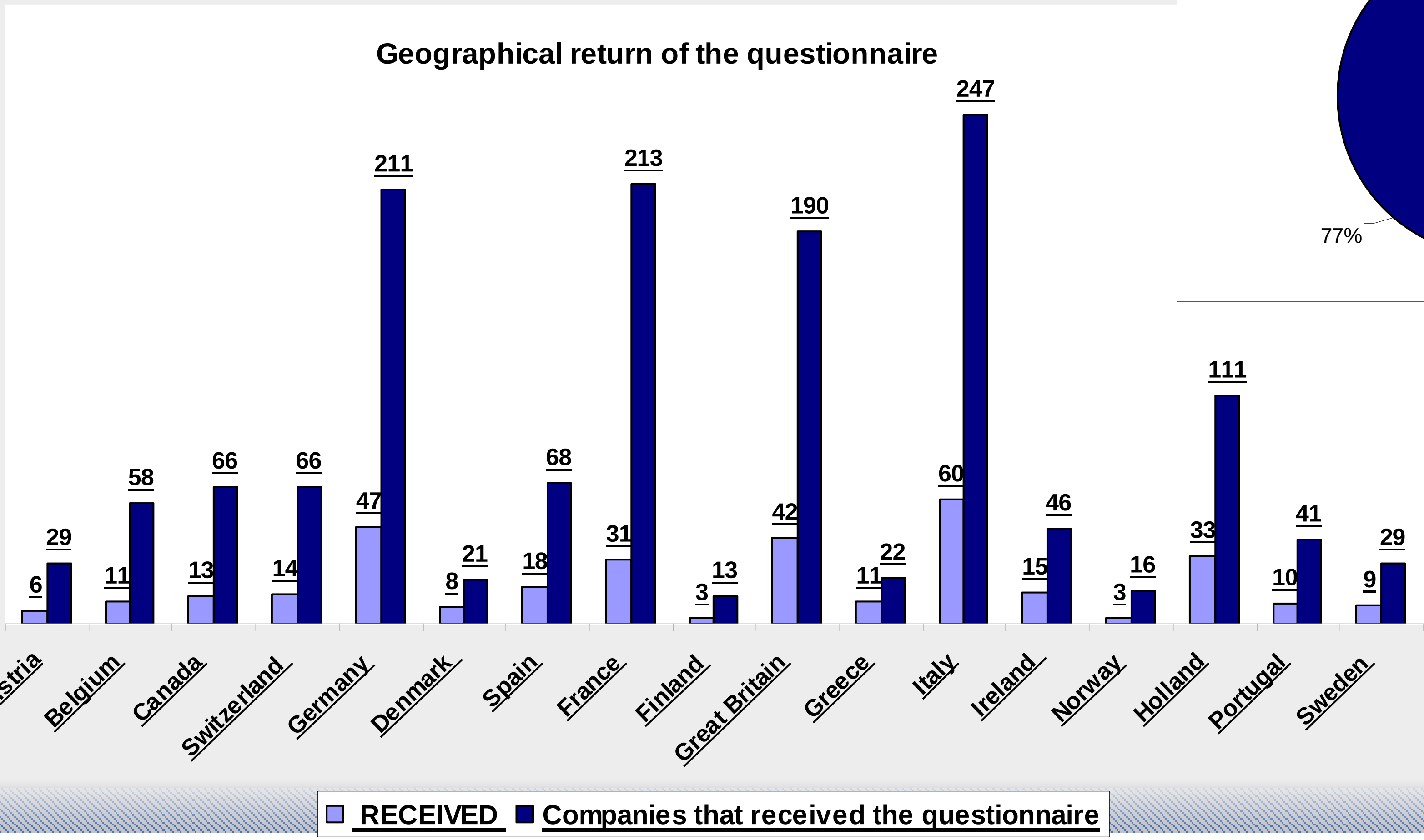
1. **ACCESS TO ESA PROCUREMENT INFORMATION**
2. **THE ITTs CONTENT (2.1 Have you ever considered bidding for ESA? If not → Section 6)**
3. **BIDDING PERIOD (3.1 Have you ever submitted a bid for ESA work? If not → Section 6)**
4. **CONTRACT AWARD (4.1 Have you ever won an ESA bid? If not Section 6)**
5. **AFTER THE CONTRACT**
6. **FUTURE INVOLVEMENT IN ESA PROGRAMMES**

- **569 companies started the questionnaire**
- **333 companies completed the questionnaire**

QUESTIONNAIRE FEEDBACK

- **The questionnaire has been sent in the middle of January 2008 to 1.466 SMEs**
- **333 answers (23% of the total)**





SUMMARY OF RESPONDENTS

DIMENSION:

53% < 1MEuro	**60% < 15 people**
88% < 10MEuro	**22% < 16 < 50 people**

- almost 90% of the companies have considered to bid to ESA (81% in PECS)
- 78% have actually submitted a bid (29% in PECS)
- 67% of companies that tried to bid managed to win

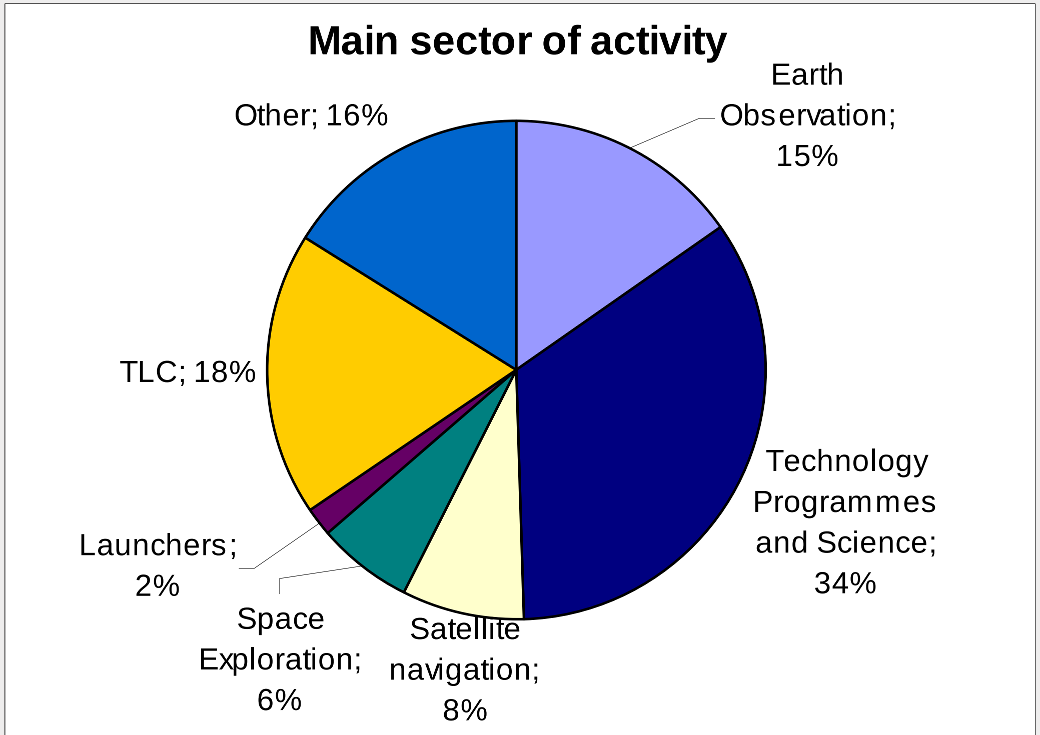
WAY of PARTICIPATION:

- **52% as subcontractors;**
- **48% act as Prime, bid-leader or project coordinator.**

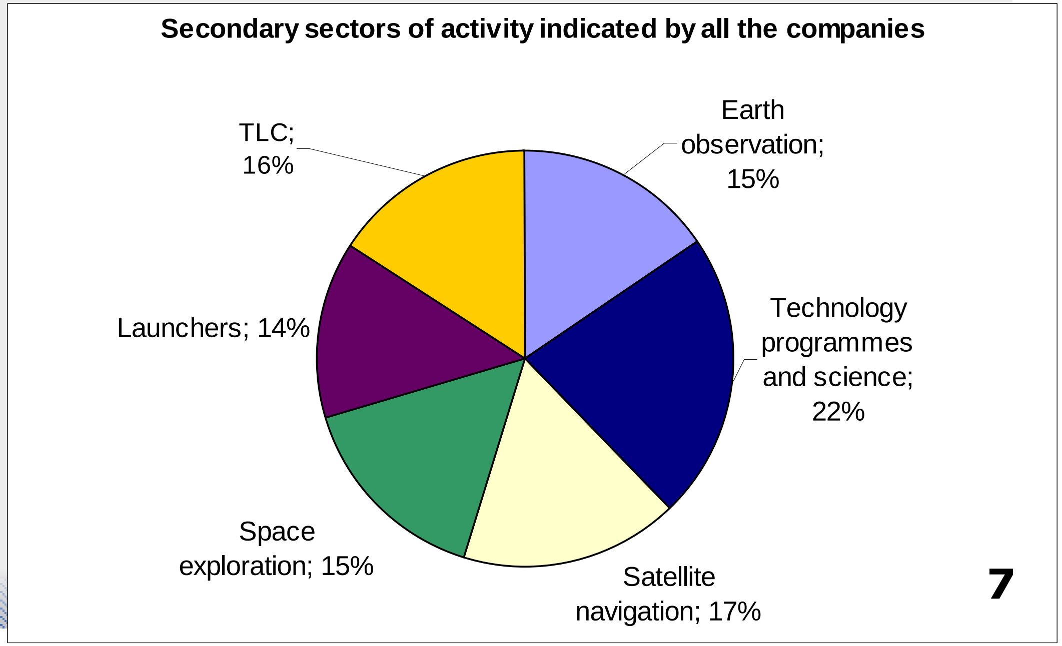
SUMMARY OF RESPONDENTS

TURNOVER COMING (DIRECTLY OR INDIRECTLY) FROM ESA IN THE LAST 3 YEARS:

30% no activities with ESA in the last 3 years
38% less than 20% of the turnover coming from ESA activities
15% between 40% and 60% of the turnover coming from ESA activities
17% more than 60%



TP and Science is the sector with the highest concentration of SMEs activities

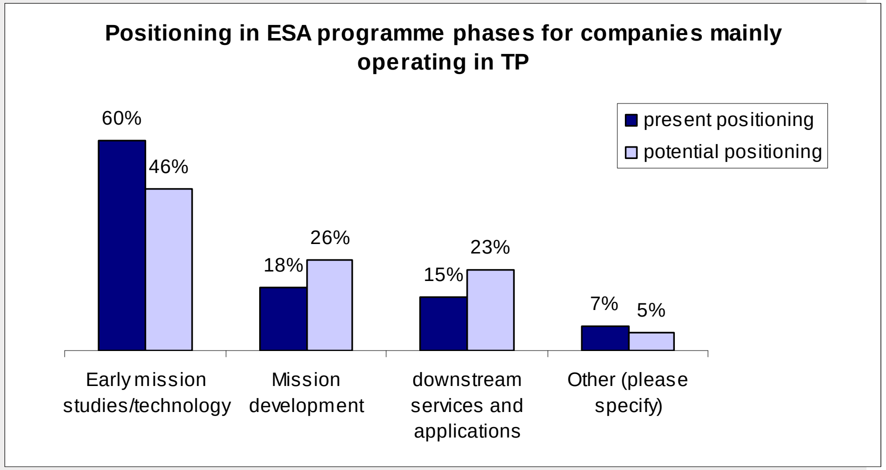


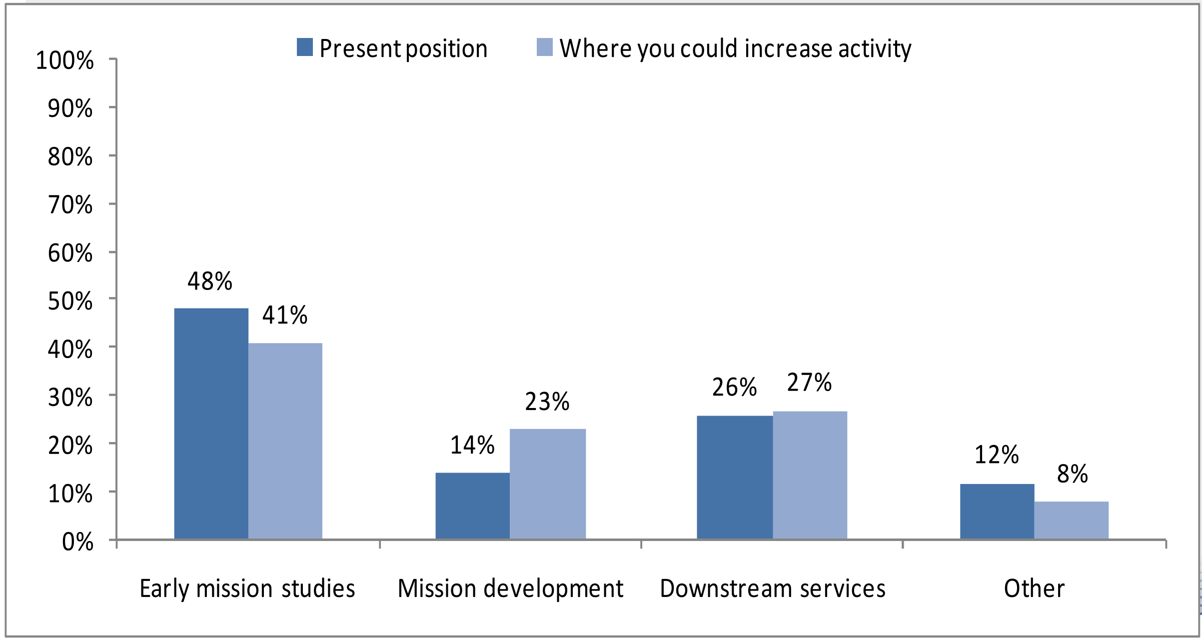
THE POSITIONING OF SMEs IN THE ESA PROGRAMMES

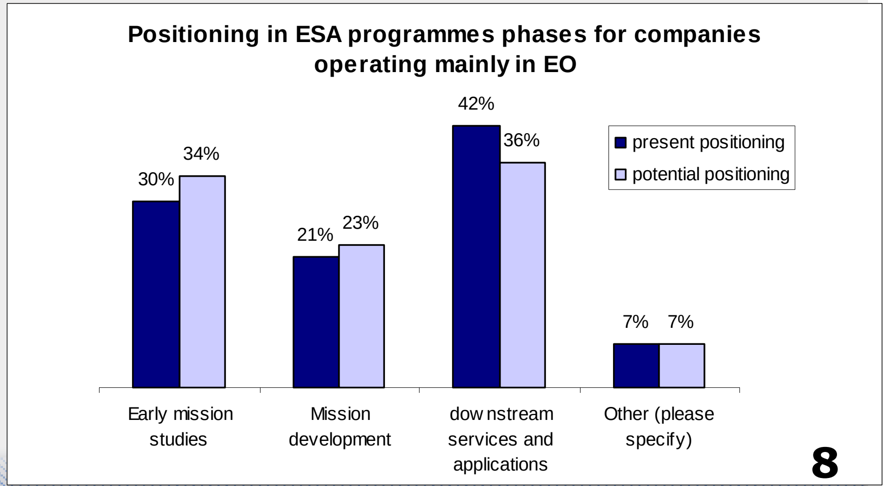
Three main phases:
1. early mission studies/technology development projects;
2. mission development;
3. downstream services and applications

Where would you be able to increase your activities?

- **9% more in the mission development phase**
- **2% downstream services and applications**
- **another 41% in the first phase**







THE BENEFITS FOR SMEs COMING FROM THE PARTICIPATION IN ESA PROGRAMMES:

-further participation in ESA programmes (33% - PECS 50%)
-new space markets (23%)
-non-space markets (19%) – but without ESA help
-no gain at all (26%)

THE BENEFITS FOR ESA COMING FROM A STRONGER INVOLVEMENT OF SMEs IN ESA PROGRAMMES (ACCORDING TO THE SMEs' POINT OF VIEW):

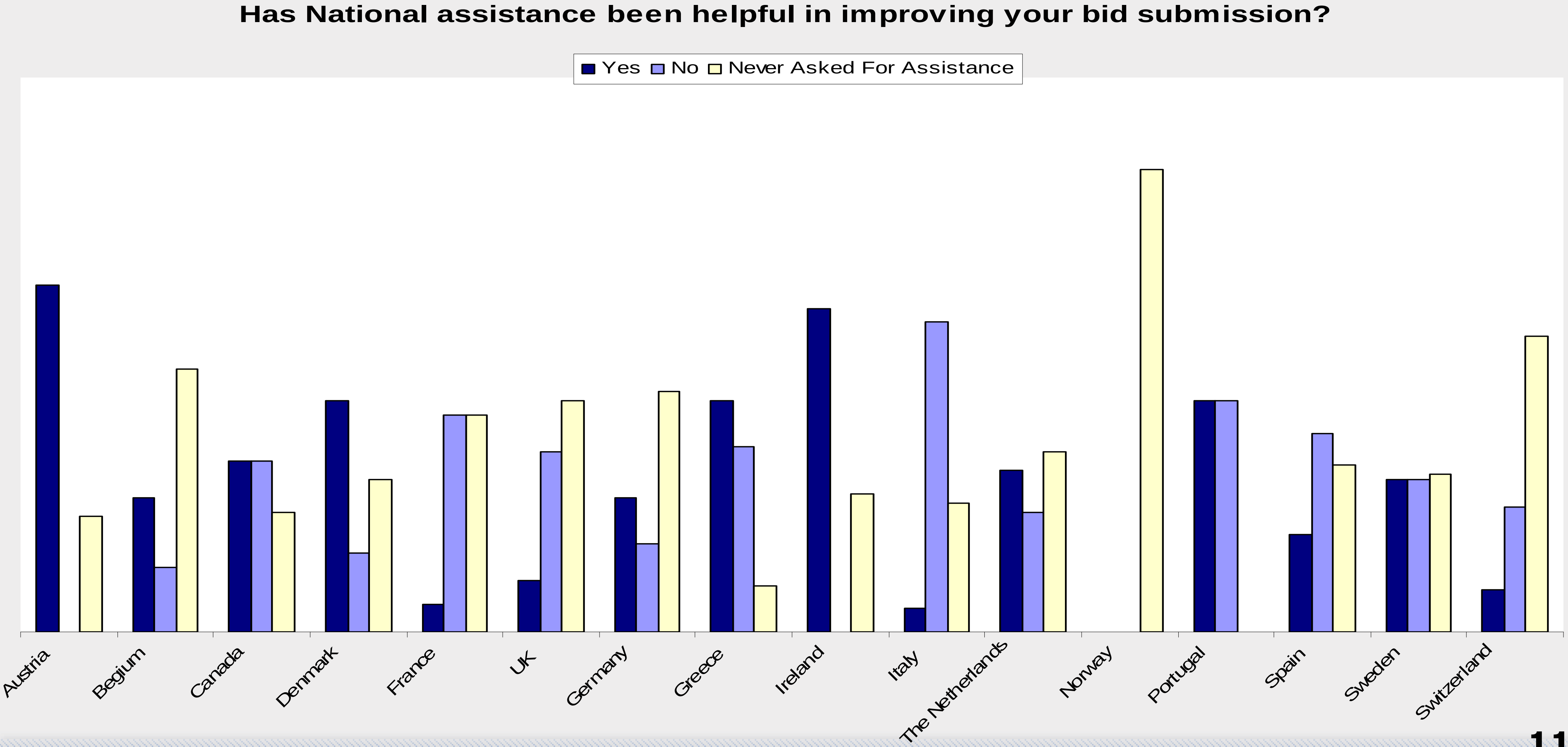
- Innovation (81% considered this aspect of high or very high importance)
- Cost effectiveness (79%)
- Increased industrial competition (69%)
- Flexibility: lower delivery time to achieve and higher return on investment (62%)

MAIN DIFFICULTIES AND BOTTLENECKS THAT SMEs ENCOUNTERED:

1. too much administration work with respect to the profitability (68%- very high or high difficulty), especially financial information
2. competition with large industries even in small contracts (66%)
3. the introduction of SMEs innovative technologies is under funded (58%), also in terms of costs estimation
4. especially for TP: lack of integration between technologies developed and continuation of developments in C/D phases
5. lack of support by national space agencies or national institutions. In aggregated terms 54% of the sample considered this aspect as a low or medium difficulty, but the results are very different from one country to another

NATIONAL ASSISTANCE

Different results from one country to another:

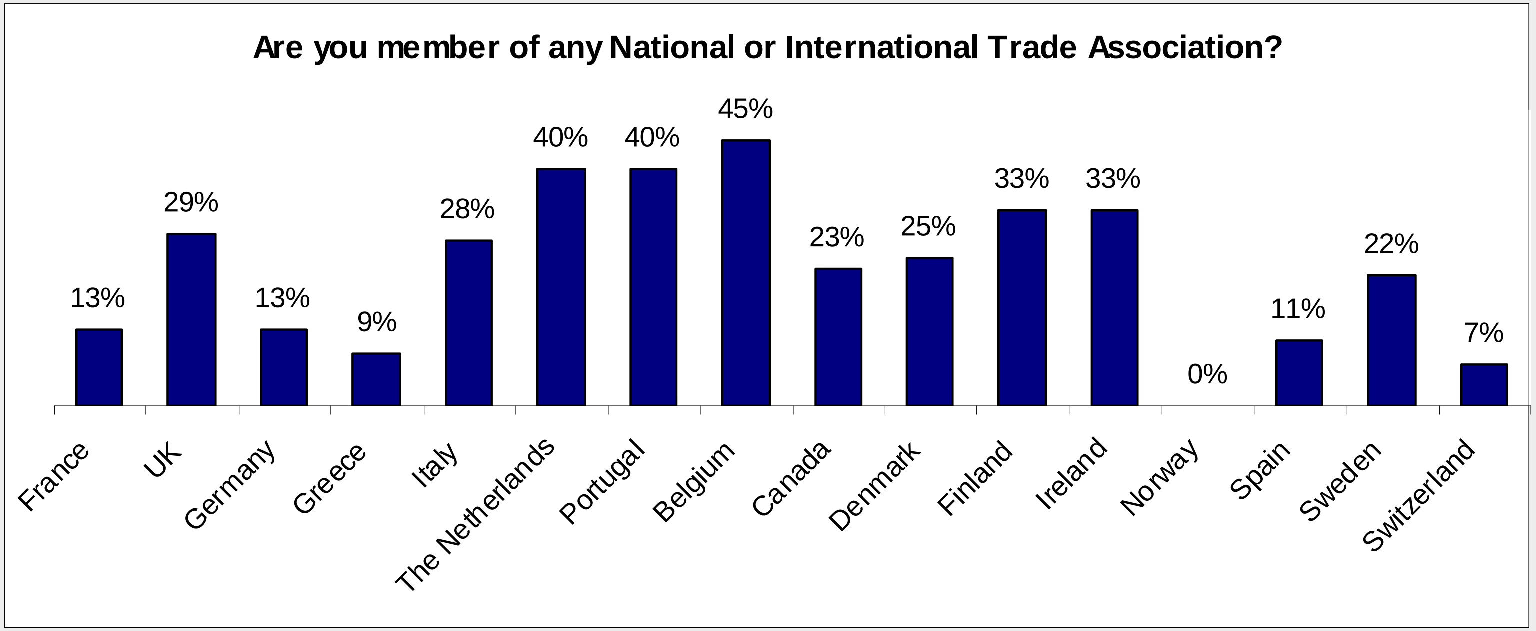


MEASURES TO IMPROVE SMEs PARTICIPATION

- **Improve SMEs participation to small missions or parts of missions (81% gave to this aspect high or very high importance). This could happen also with the creation of missions with suitable dimensions for SSI;**
- **Improve the involvement of SMEs in the early phases of the missions (79%);**
- **introduce new measures and specific procurement policies for SMEs (73%) and increase the information about measures already existing;**
- **simplify tender rules and amount of documentation for SMEs (70%), especially financial information;**
- **a better segmentation of ESA programs in phases available for SMEs (68%)**
- **National space agencies and organisations should play a more proactive role in general with regard to SMEs and ESA.**

OPPORTUNITIES TO ENGAGE WITH SMES BETTER

-76% of the SME sample is not a member of any kind of national or international Trade Association, and the most important reasons are that they haven't found a relevant Trade Association, or that they do not perceive a significant benefit from joining.



ESA Successes

EMITS

- >85% satisfied with service

Bid content

- <7% say language is unclear
- Bid response time 4-8wks (only 10% >8 weeks)
- Tech bid length ok (75% 6-20pages – 200kEuro)
- Contract conditions OK (only 5% have a problem)

Cashflow

- 17% find EFIS difficult
- Milestones (80% 20-30% k.o., 75% 10-20% withheld)

Funding Level

- Only 20% say not enough (however there are complains for funding for innovative technologies)

Areas for Improvement

IT Technical Specification

60% happy, 25% suggest over specification (10% under)

Bid Process

25% Don't Understand Process

Financial Data

50% say 1-5 pages ok for 200kEuro

50% say <10 pages for 2MEuro

ECOS, 60% not used, >50% who have find it difficult

Bid Evaluation

50% Don't Understand Evaluation Process

60% think < 4 weeks reasonable evaluation time

75% think <4 weeks reasonable award/contract time

Opportunities?

SME4space

- 76% of Respondents are not part of <u>ANY</u> Trade Association

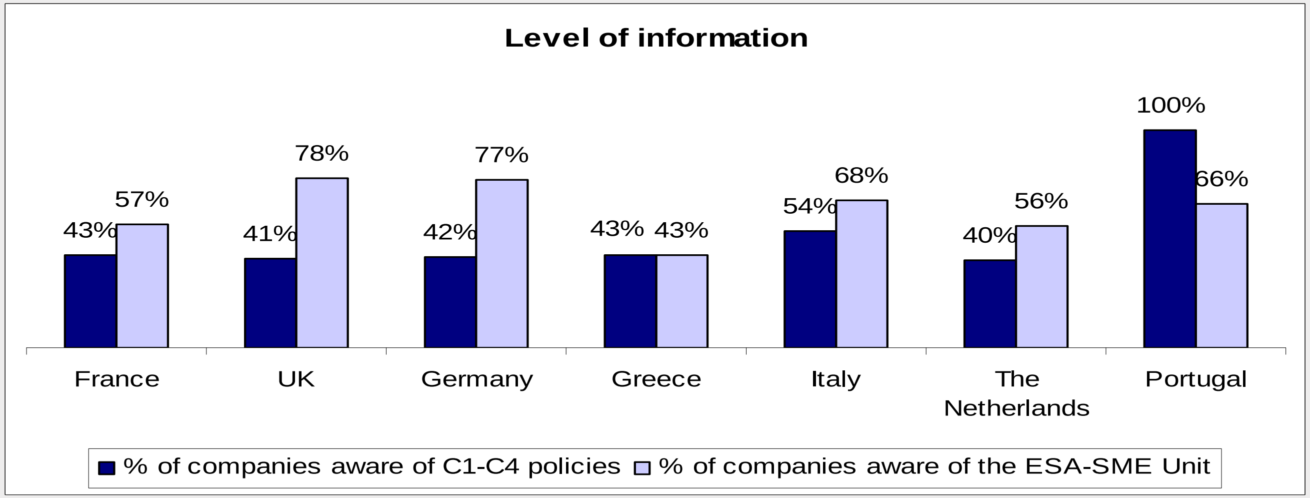
Harmonisation

- 67% Not aware of Harmonisation
- Half who are aware think it has no benefit

ESA SME Unit

- 33% Not aware of ESA SME Unit
- Only 9% had spin-out help
- 55% Not aware of C1-C4 Measures
- <10% Claim direct benefit of SME Unit

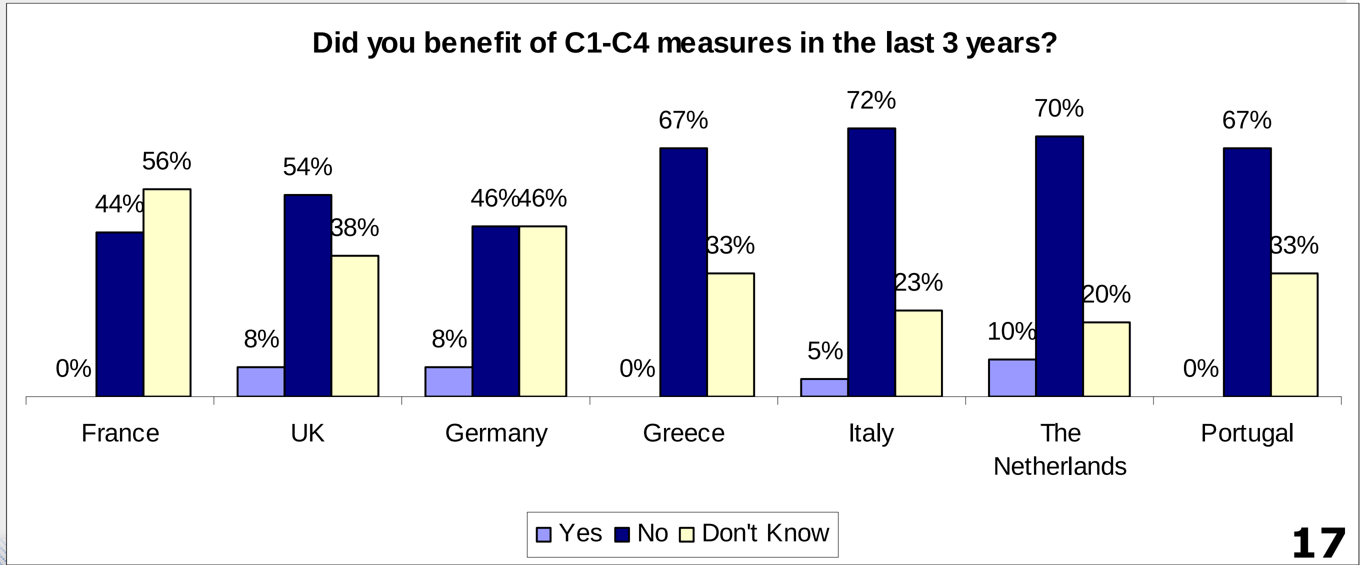
THE LEVEL OF INFORMATION



- in general 55% unaware of C1-C4 measures;

- 46% of these companies got the information from EMITS

As general average, only 7% of the companies benefited from these measures, while a large number (34%) did not know.



Priority Areas to Change

Competition with Primes

- Strengthen C1-C4

Profitability vs Administration

- Reduce Financial Burden (PSS Forms)

Introduction of New Technology

- Increase TRP spend
- Fund More Spin-In
- Broaden Harmonisation Process