



## National Evaluation on Eurostars-1 (2008-2013)

performed by the

ZEW Centre for European Economic Research, Mannheim



# National Evaluation on Eurostars-1 (2008-2013)

In 2015, the BMBF launched a national study to evaluate Eurostars-1, focussing on the following topics:

- **Relevance**  
Was the target group (R&D SMEs) reached? Why was Eurostars chosen by the applicants?
- **Impact**  
What was the added value for the participants? Was the envisaged product brought onto market?
- **Effectiveness**  
Which were the advantages and disadvantages of Eurostars-1?
- **Efficiency**  
How big is the work load to file an application?
- **Political Impact**  
What is the contribution of the national funding activities to international collaboration?

# Basic Data on Eurostars-1 (2008-2013)

<b>Number of German subprojects</b>	<b>1773</b>
<b>Funded subprojects</b>	<b>247</b>
SME	139 (56%)
Research institutes	94
Large companies	12
Other	2
<b>Self-funded subprojects</b>	<b>82</b>
<b>Non-funded subprojects</b>	<b>1444</b>

**Questionnaire return rate: >50%**

<b>Number of interviews:</b>	<b>13</b>
SMEs	8
Research institutes	4
Large companies	1
Funded	11
Self-funded	2
Non-funded	8

Number of <b>consortia</b> with German participation	
all applications	1101
funded by Germany	144
self-funded by German partners	63

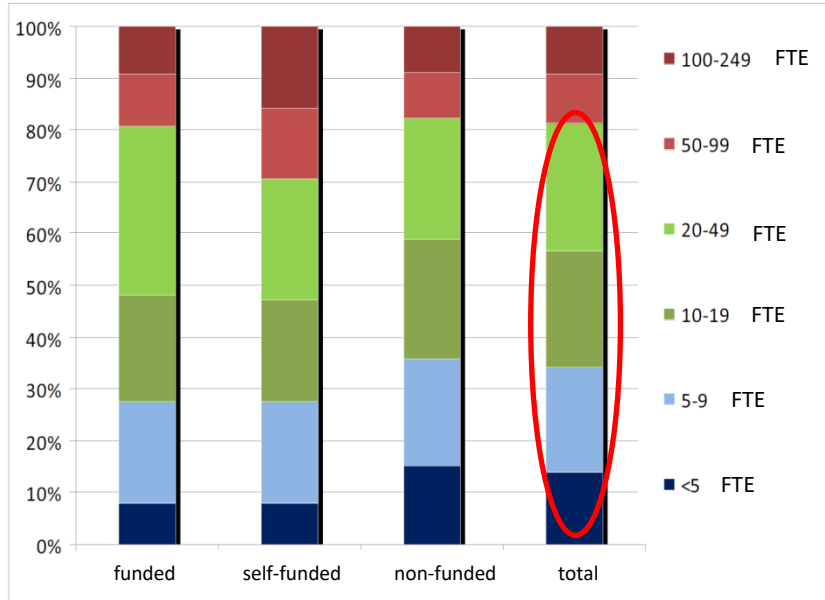
Project costs for German participants:	<b>103.9 Mio. €</b>
German funding	<b>66.81 Mio. €</b>
SMEs	53%
Research institutes	45%
Large companies	2%

# Relevance

**Was the target group (R&D SMEs) reached? Why was Eurostars chosen by the applicants?**

# Relevance: Target Group

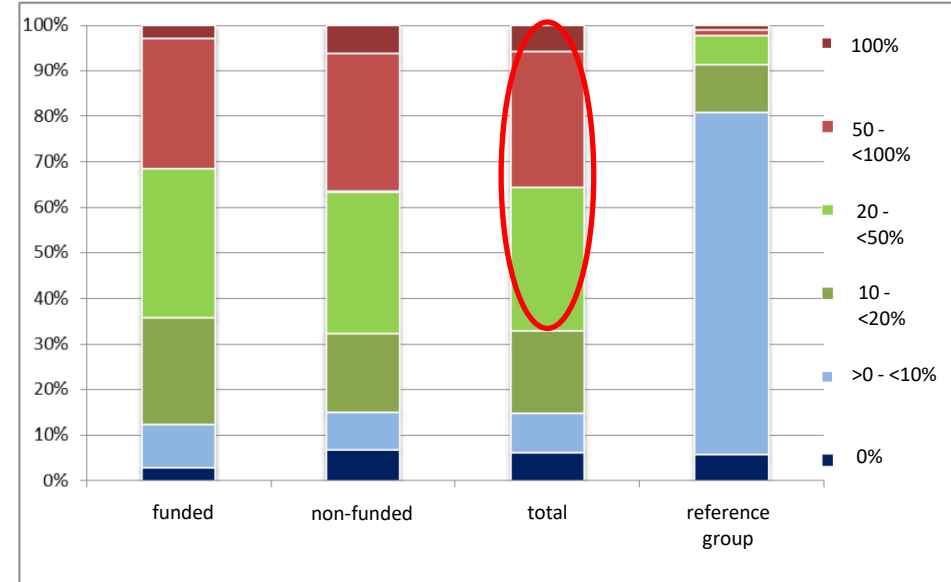
SME size



Quelle: DLR, Eurostars-Datenbank; ZEW, Mannheimer Unternehmenspanel

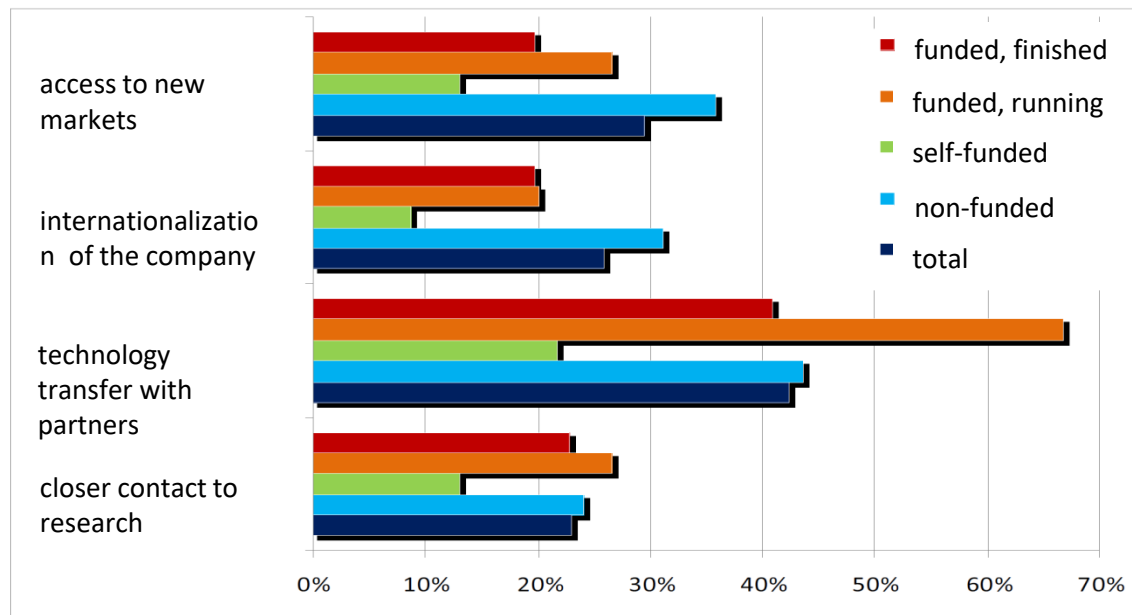
⇒ Eurostars-1 addressed small SMEs with a large R&D intensity.

SME research intensity



# Reasons to form a consortium

SMEs



Quelle: ZEW: Eurostars-Befragung Deutschland - Unternehmen

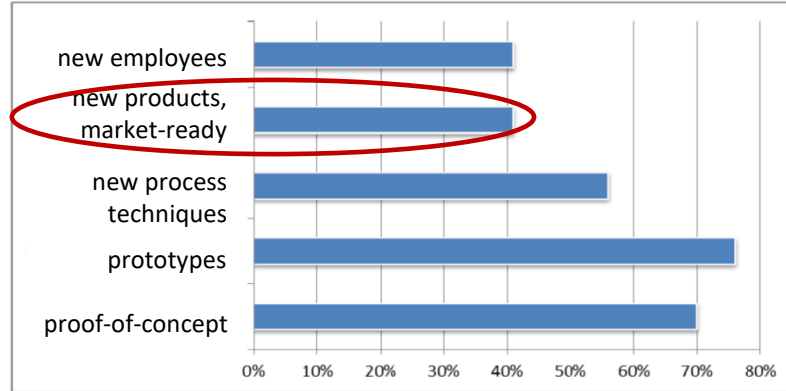
The initiative to apply for Eurostars-1 funding mainly originated from **industrial partners**.

⇒ Consortia are formed complementary and projects start at early phase of R&D.

# Impact

**What was the added value for the participants? Was the envisaged product brought onto market?**

# Project results

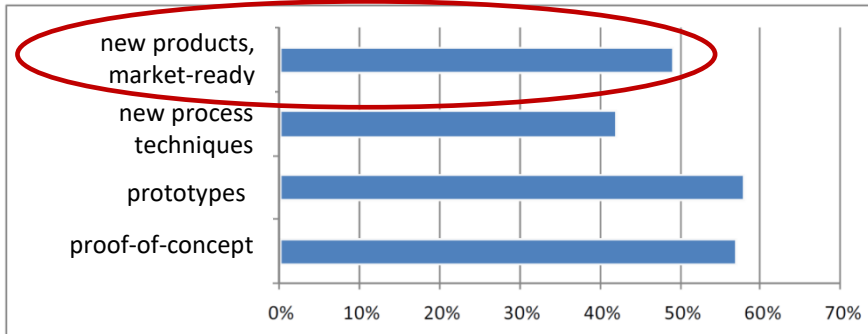


SMEs

20% of SMEs stated to **already have introduced** their product on the market, leading to an additional yearly turnover of 440 K€.

**SMEs:** on average 1.51 new employees

Quelle: ZEW: Eurostars-Befragung Deutschland – geförderte Unternehmen



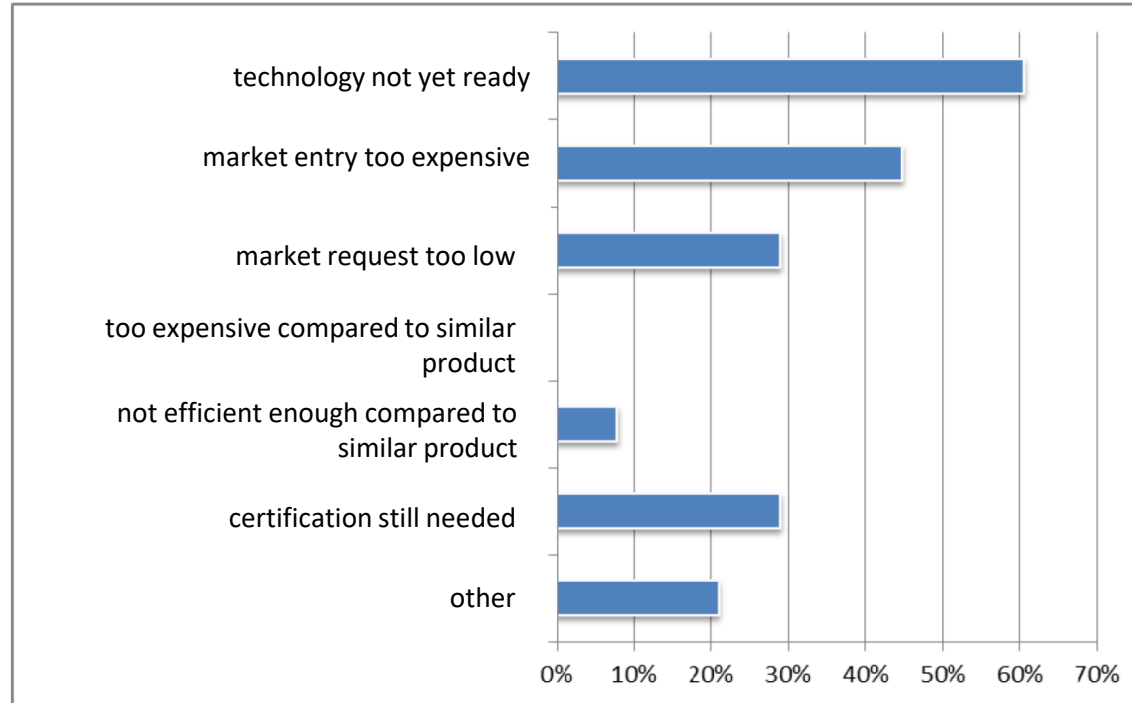
Research institutes

**Research institutes:** on average 1.39 new employees

Quelle: ZEW: Eurostars-Befragung Deutschland – geförderte Forschungseinrichtungen



# Reasons NOT to release products to the market



Quelle: ZEW: Eurostars-Befragung Deutschland – geförderte Unternehmen

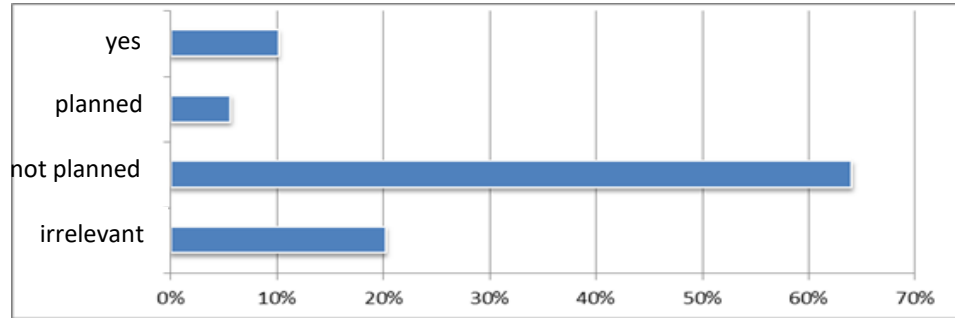
## SMEs

⇒ German participants contribute to the early R&D phase.

⇒ There is obviously a need for a subsequent funding until market introduction

21% of funded SMEs planned a market introduction within 12 months after the survey.

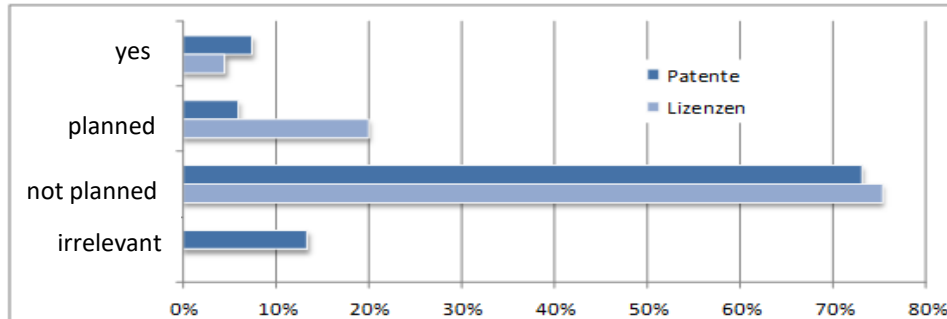
# Patent applications



SMEs

⇒ ~15% of SMEs patent results

⇒ 5% of SME issued licences,  
19% plan to issue licences



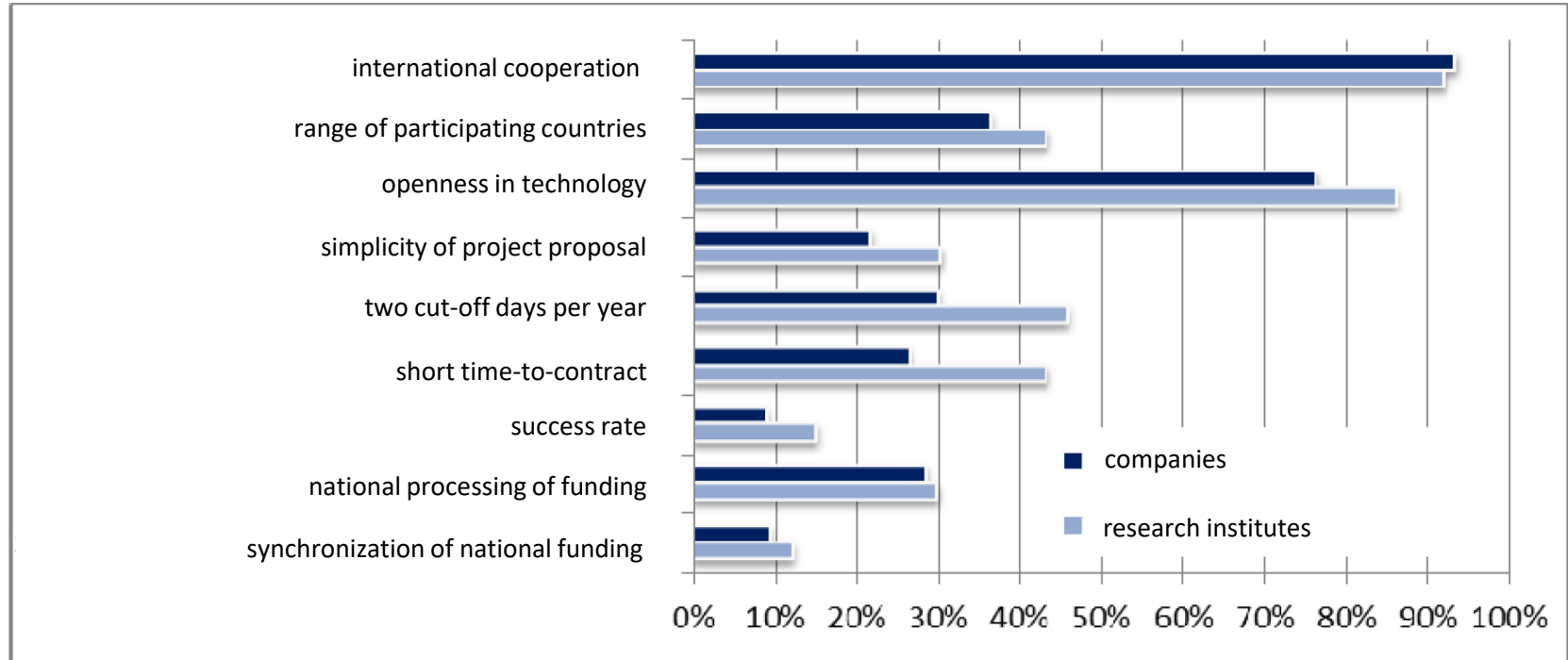
Research  
institutes

⇒ ~10% of research institutes  
patent results;  
~25% issued licences

# Effectiveness

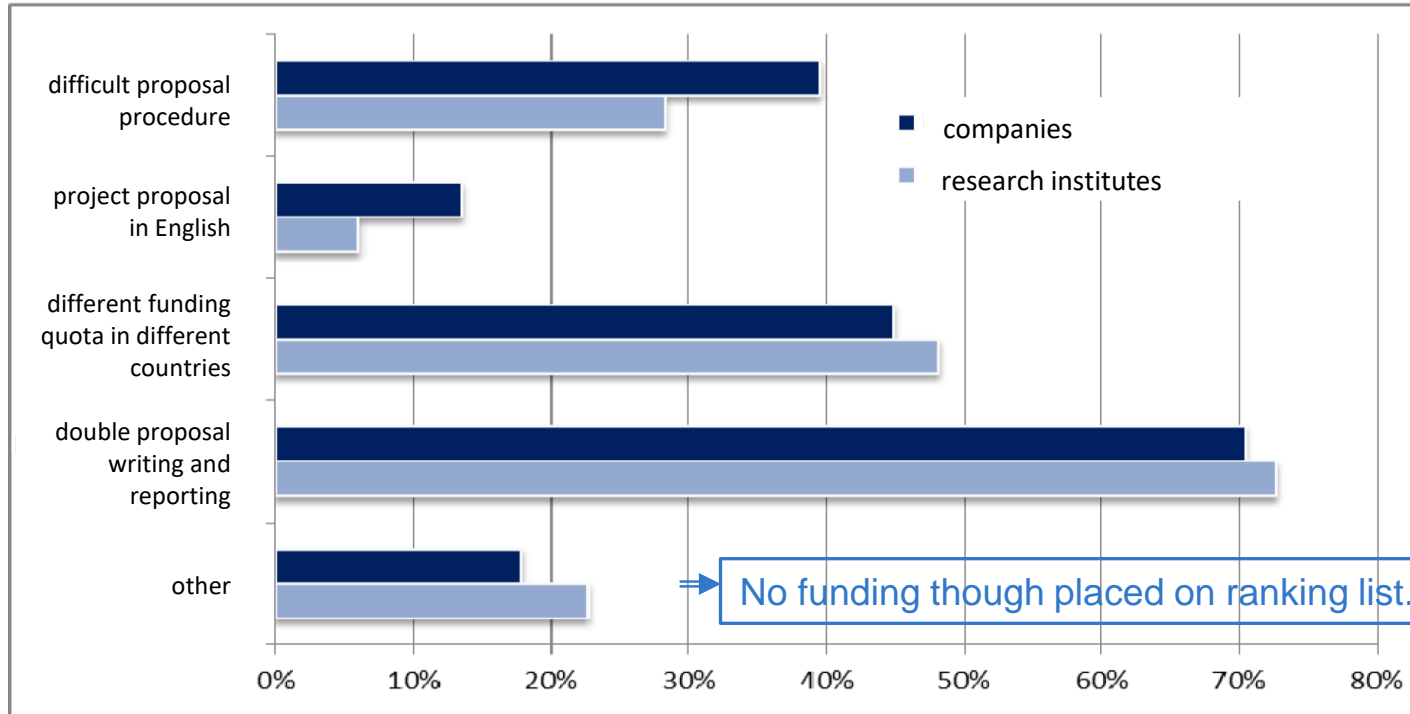
Which were the advantages and disadvantages of Eurostars-1?

# Advantages in participating in Eurostars-1



Quelle: ZEW: Eurostars-Befragung Deutschland – Unternehmen und Forschungseinrichtungen

# Disadvantages in participating in Eurostars-1



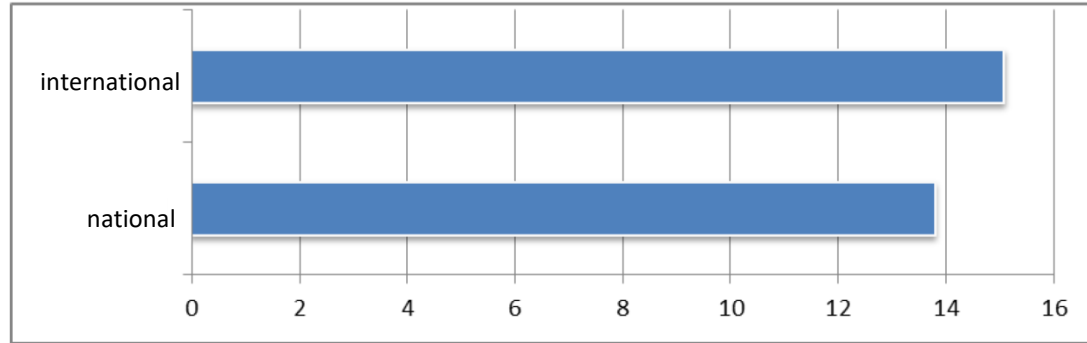
Quelle: ZEW: Eurostars-Befragung Deutschland – Unternehmen und Forschungseinrichtungen

# Efficiency

How big is the work load to file an application?

# Days spent on Eurostars-1 proposals

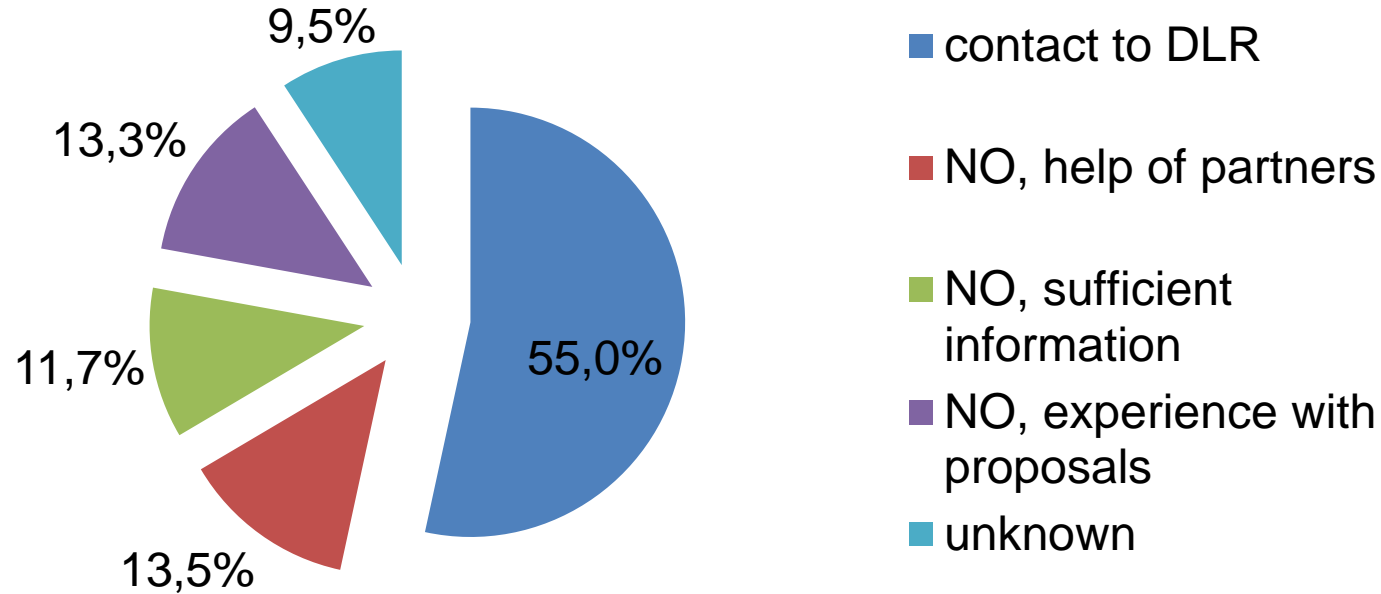
SMEs



Quelle: ZEW: Eurostars-Befragung Deutschland – Unternehmen

⇒ ~1 month needed for a full Eurostars-1 proposal, similar for research institutes

# Contact of SMEs to DLR project management agency



72% of the successful applicants contacted DLR Project Management Agency



# Political Impact

What is the contribution of the national funding activities to international collaboration?

# Contribution to the European Research Area (ERA)

Eurostars-1 has a **pilot character**:

- common funding criteria,
- central application procedures and project review,
- central administration of the programme,
- etc.

Eurostars-1 has a **unique selling point**:

- funding of international cooperations including SMEs
- small projects and consortia
- bottom-up principle
- promoting the access to European markets

⇒ Eurostars-1 is complementary to other funding programmes in Germany  
(only 11% of the applicants mention alternatives)

# Economic Impact Analysis

Comparing **funded** and **non-funded** SMEs that applied to Eurostars-1 shows:

1. a clear impact on employment growth: **Funded SMEs grow by 1 employee (or 1,59%) more**

The EU evaluation found a 3% - 3.5% higher employment growth. A possible reason for the discrepancy: there are various other funding programmes in Germany.

2. **no statistically significant impact on turnover or patent registration**

On average, funded German participants:

- Turnover growth: 259 T€, patent growth: 1.012, but large standard deviation.

The EU evaluation did not address the impact in turnover but found 2.9 more patent registrations for funded Eurostars SMEs.

Possible reasons for this discrepancy:

- i) for some areas, like software, patents are usually not successful,
- ii) the exploitation of the results can be split within the consortium,
- iii) German SMEs might have filed patents beforehand.

# Recommendations

# Recommendations to improve Eurostars

- **Lowering the R&D intensity of the SMEs**

With Eurostars-2, the R&D intensity was lowered to 5% of FTEs. This reaches 9.000 SMEs in Germany. Lowering it to 2.5% of FTEs would address 16.000 German SMEs.

- **Increasing the exploitation of the projects**

The exploitation strategy should be explained and reviewed with the international proposal. Another idea is to establish a platform on which the projects can introduce themselves to investors.

- **More national funding**

With Eurostars-2, more national funding was provided.

- **Simplified proposal and reporting procedure**

Description of the joint project in English is accepted. A common reporting structure is on working.

- **More partner countries**

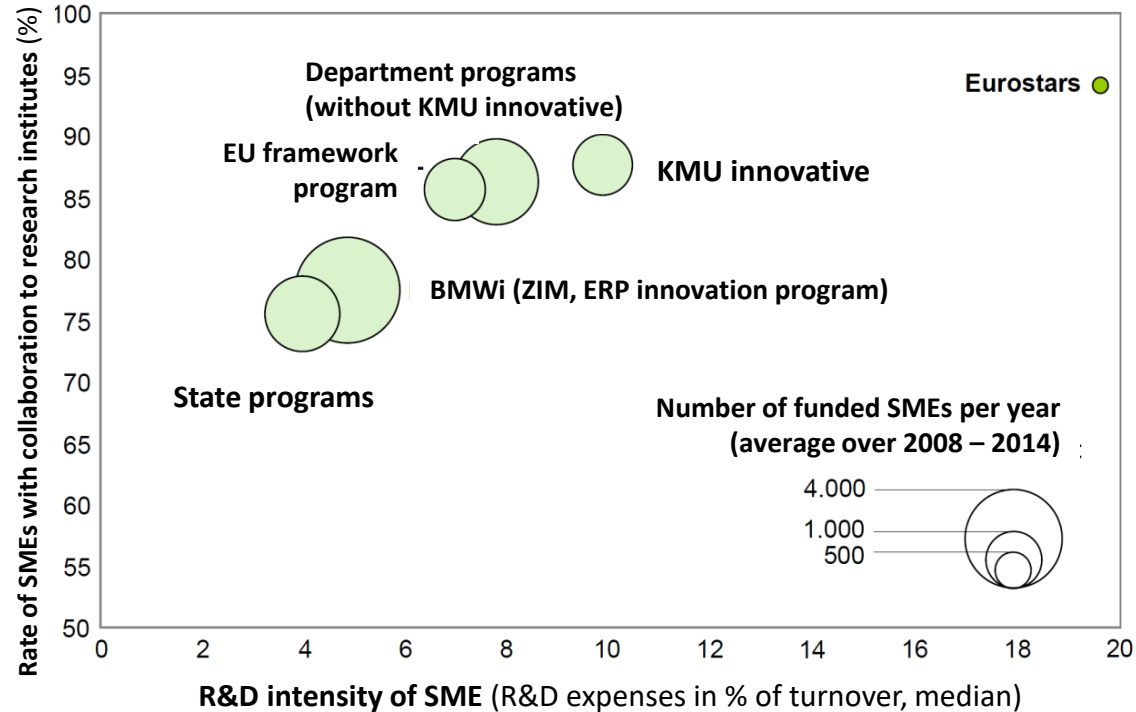
By now, three more countries (South Africa, South Korea, and Canada) joined Eurostars.



# Thank you for your attention!

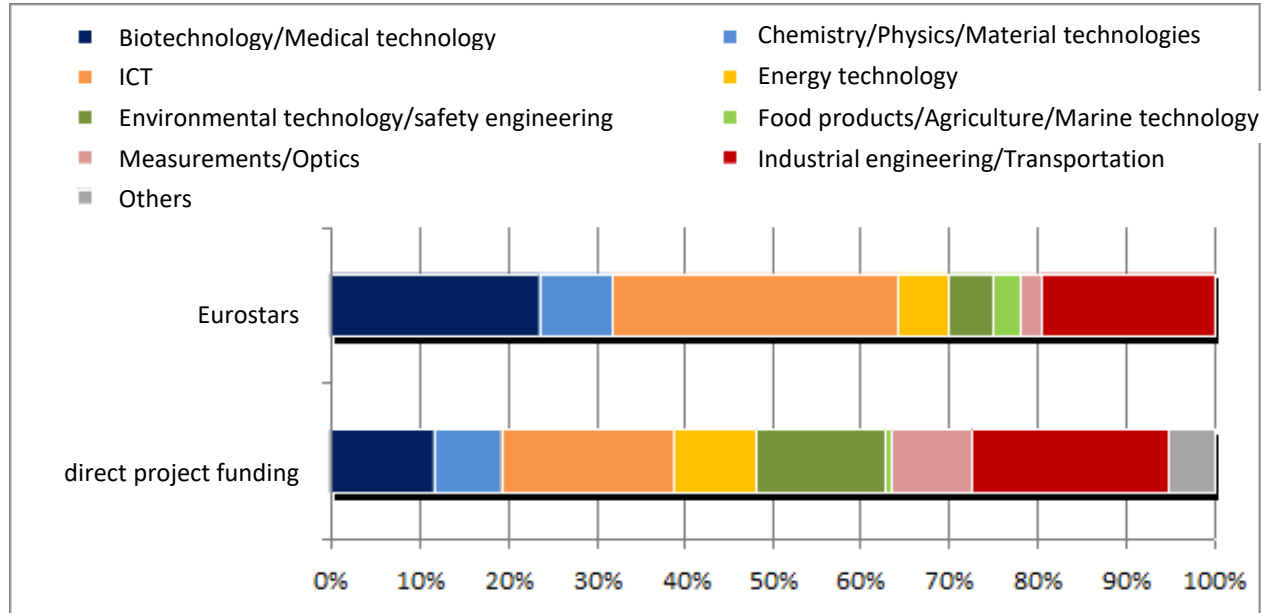
[https://www.bmbf.de/files/Eurostars-1-Evaluierung\\_ZEW\\_Mai-2016\\_final.pdf](https://www.bmbf.de/files/Eurostars-1-Evaluierung_ZEW_Mai-2016_final.pdf)

# Comparison of Eurostars with other German funding programmes



Quelle: ZEW: Eurostars-Befragung Deutschland – Unternehmen; Mannheimer Innovationspanel sowie Aschhoff et al. (2012).

# Technology fields of the project proposals



⇒ 32% ICT, 24% biotechnology

⇒ Bottom-up approach fills a niche market