
Fraunhofer priorities & views



Info Day Security & Space

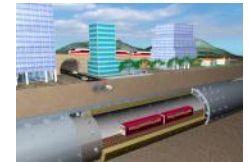
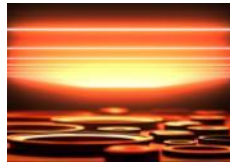
Athens, 12 December 2013

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Fraunhofer – Applied Scientific Research from A to Z

- **66 institutes** and independent research units
- More than **22,000 staff**
- **€ 1.9 billion annual research budget** totaling (2012)
 - **Approx. 2/3: contract research** on behalf of industry and publicly funded research projects; 1/3: institutional funding



Pooling expertise - the Fraunhofer Groups:

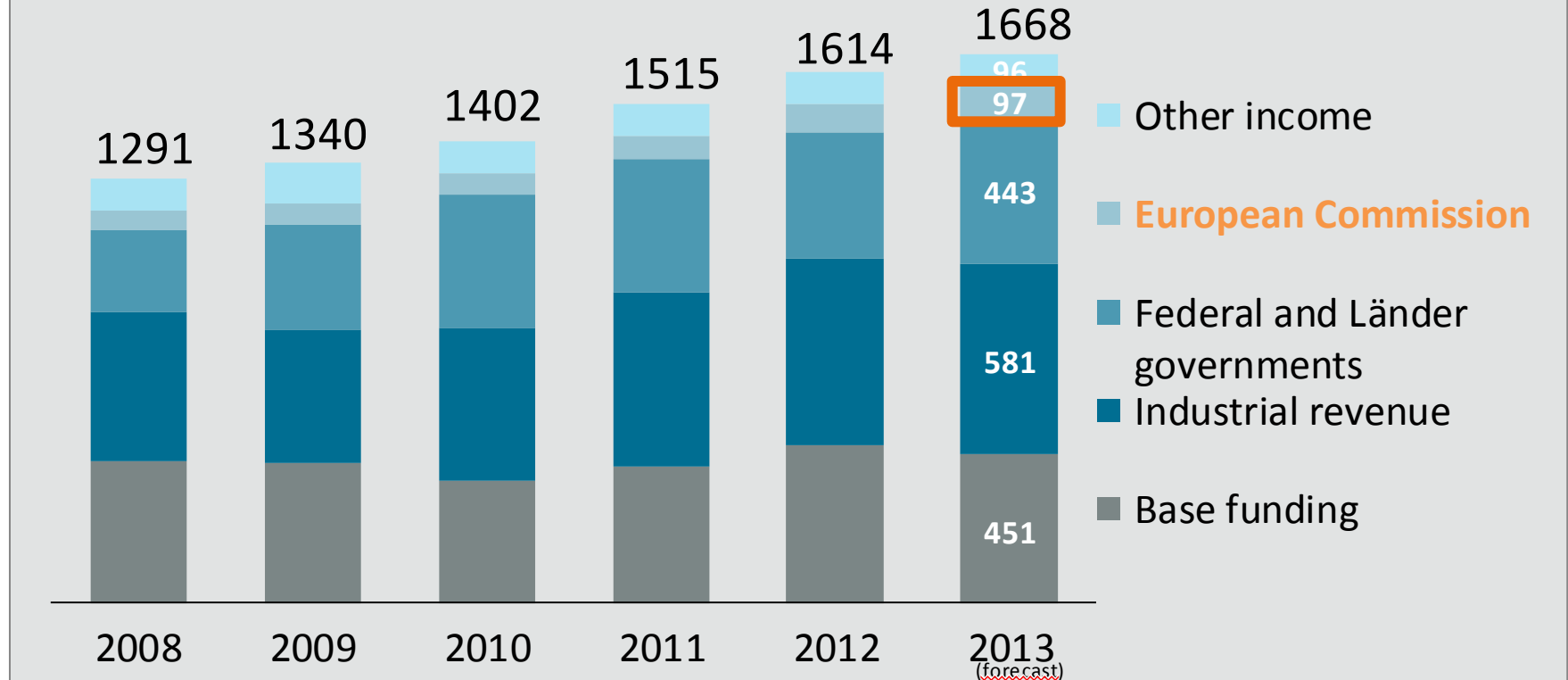
- | | |
|--------------------|--|
| ■ ICT | ■ Production |
| ■ Life Sciences | ■ Materials and Components – MATERIALS |
| ■ Light & Surfaces | ■ Defence and Security (VVS) |
| ■ Microelectronics | |

slide 2

Why do we participate in EU research?

Contract research

2008 – 2013 in € million



slide 3

Why are we so ‘successful’ in EU research?

- Contributor of excellent research
- Economies of scale
- Functioning know-how and technology transfer (*more or less ...*)
- Vast national and international networks
- Participation in many (successful) projects leads to many more new project opportunities

=> EU research as a ‘force multiplier’!

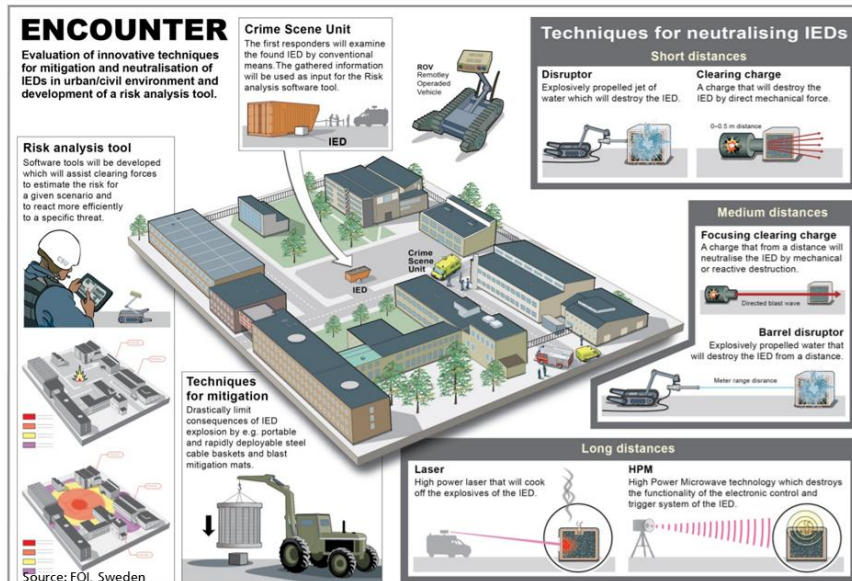
Example 1: EU research as multiplier – (C)IP

Safety and Protection of built Infrastructure to Resist Integral Threats – SPIRIT (CP)

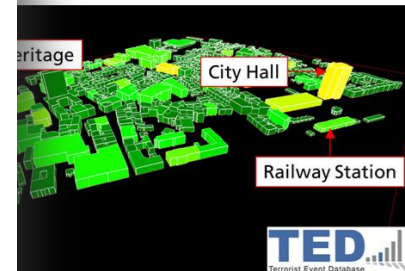
VITRUV: Vulnerability Identification Tools for Resilience Enhancements of Urban Environments



ENCOUNTER: Explosive Neutralization and Mitigation Countermeasures for IEDs in Urban/Civil Environments



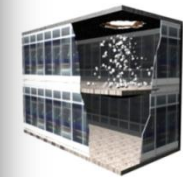
City analysis based on e.g. building costs



2010
2011
2012



Handling the tool on a palmtop



2010

Example 2: Maritime Surveillance

PASR 2005

Preparatory Action for Security Research
(PASR 2005)

SOBCAH SURVEILLANCE OF BORDER CO

AMASS

Autonomous Maritime Surveillance System

EUROSUR



Protecting the Schengen external borders

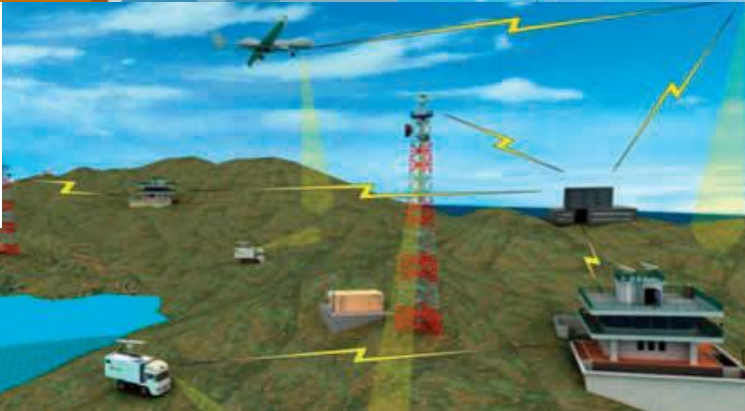
Protecting migrants' lives

WIMAS

>> Anti-Pollution

>> Maritime Traffic Control

>> Anti-illegal immigration



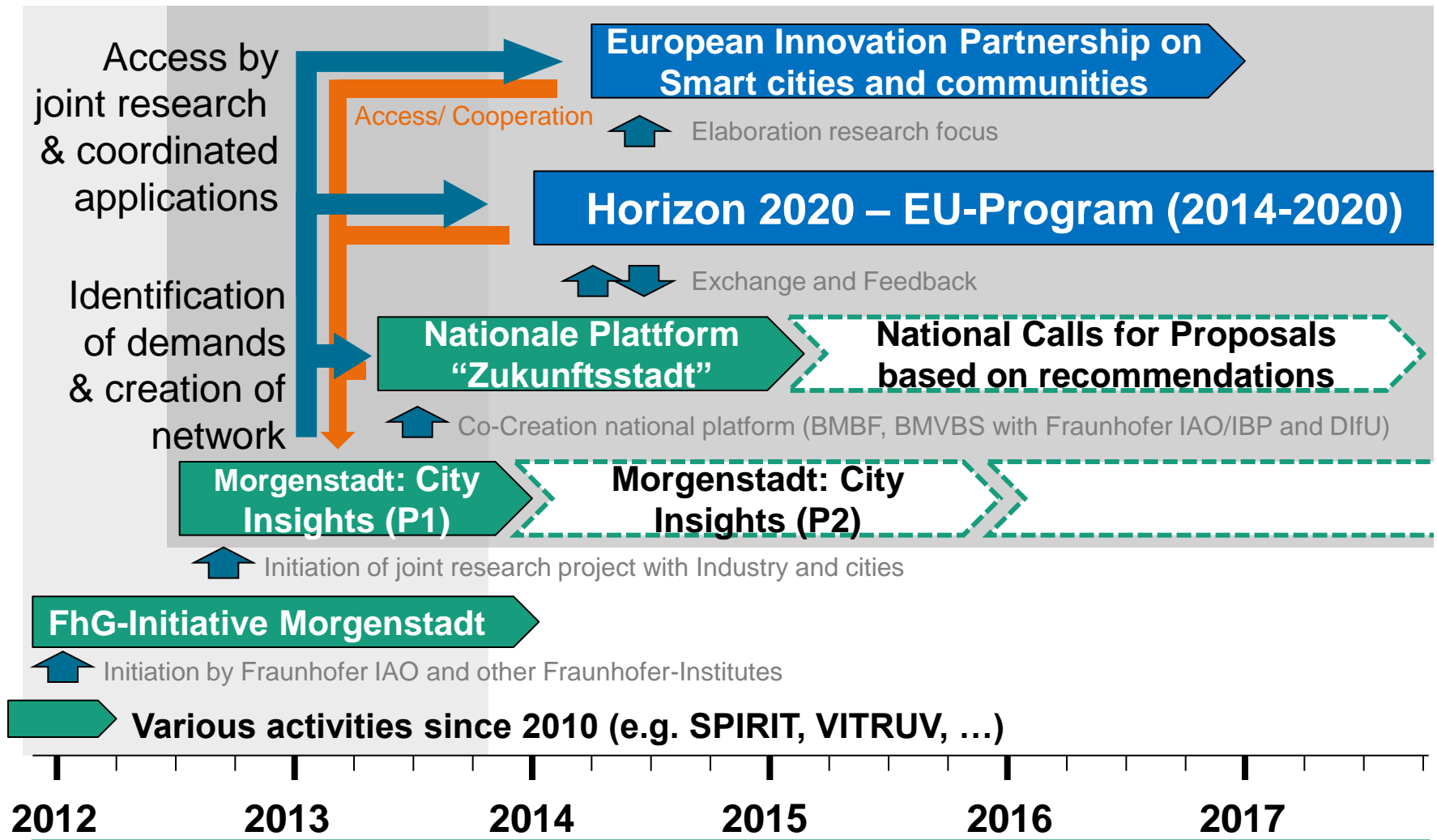
Both 2008

2011

Priorities in EU Security Research

- **Resilient Cities, Infrastructures and Citizens,**
 - **SECUR-ED, EDEN, DRIVER, SPIRIT, VITRUV, COPRA, STAR-TRANS, ARGUS 3D, ...**
- Resilience of socio-technical systems,
- **Cyber security,**
- Sensor networks and systems for first responder communities,
- Autonomous assistance systems for complex security environments
 - In border management: ABC systems (FASTPASS, XP-DITE projects)

Example: Fraunhofer “Morgenstadt” lighthouse project

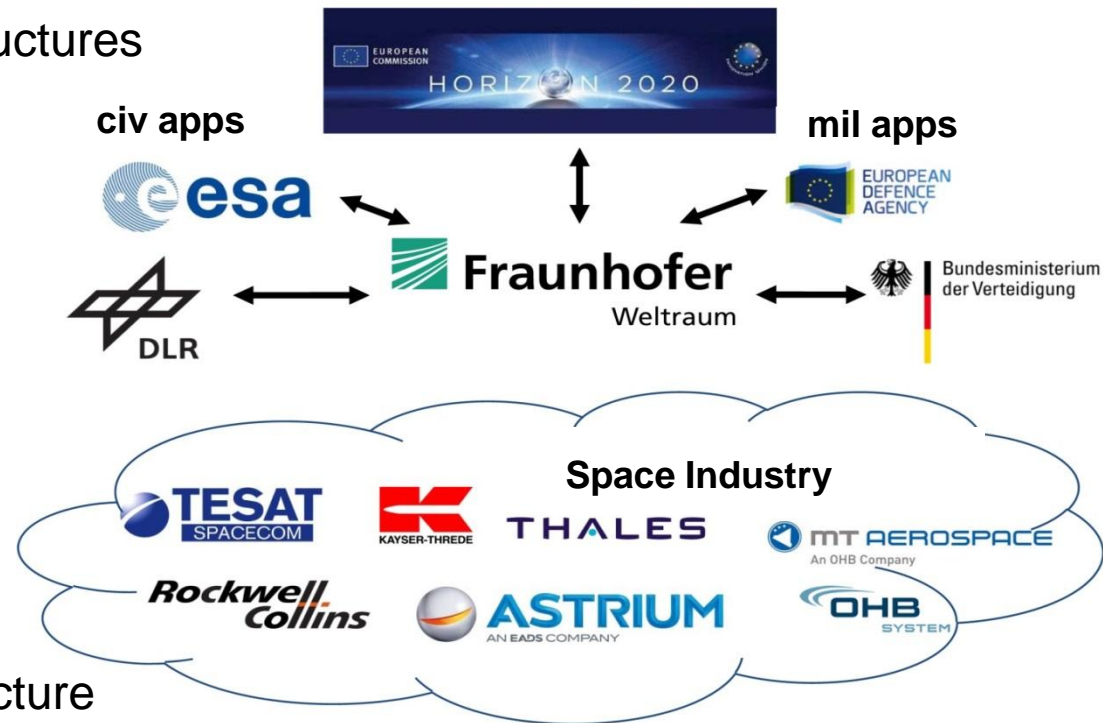


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Fraunhofer & Space

A **Fraunhofer Alliance on Space** is about to be launched (13 institutes), priorities:

- Materials and lightweight structures
- Surface engineering
- Semiconductor technologies
- Communications
- Navigation
- Sensors
- Earth observation
- Space situational awareness
- Protection of space infrastructure



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