

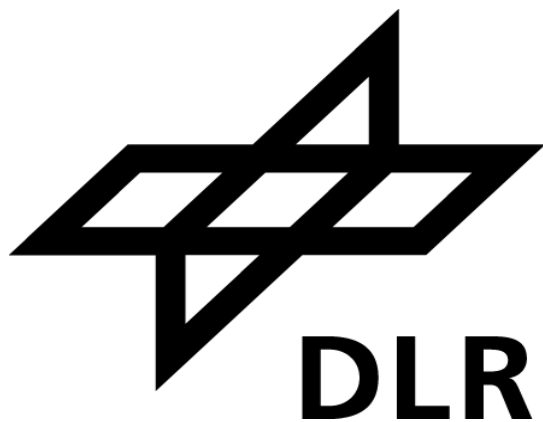
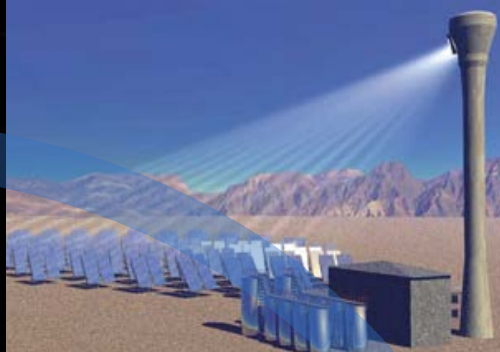
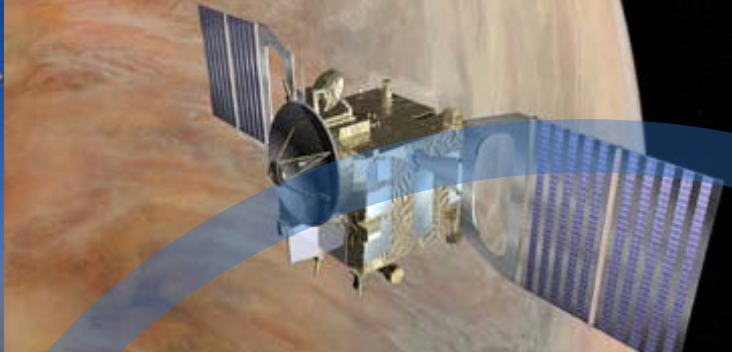
German Initiatives on Space and Security

Nina-Louisa Remuß, DLR



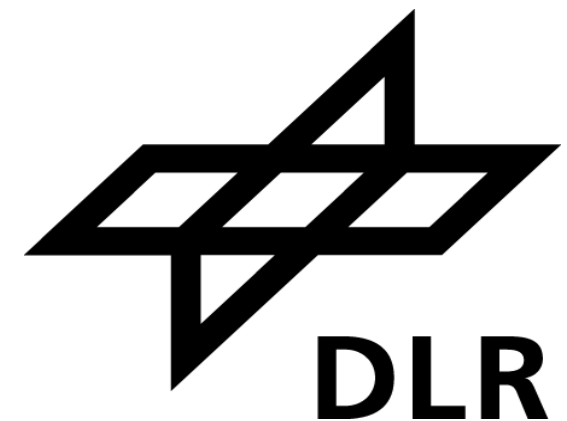
Wissen für Morgen





DLR

**Research Center
&
German Space Agency
&
Project Managing Agency**



DLR



Missions



Research



Services



Technology



Security & Safety Outreach



Locations and Staff

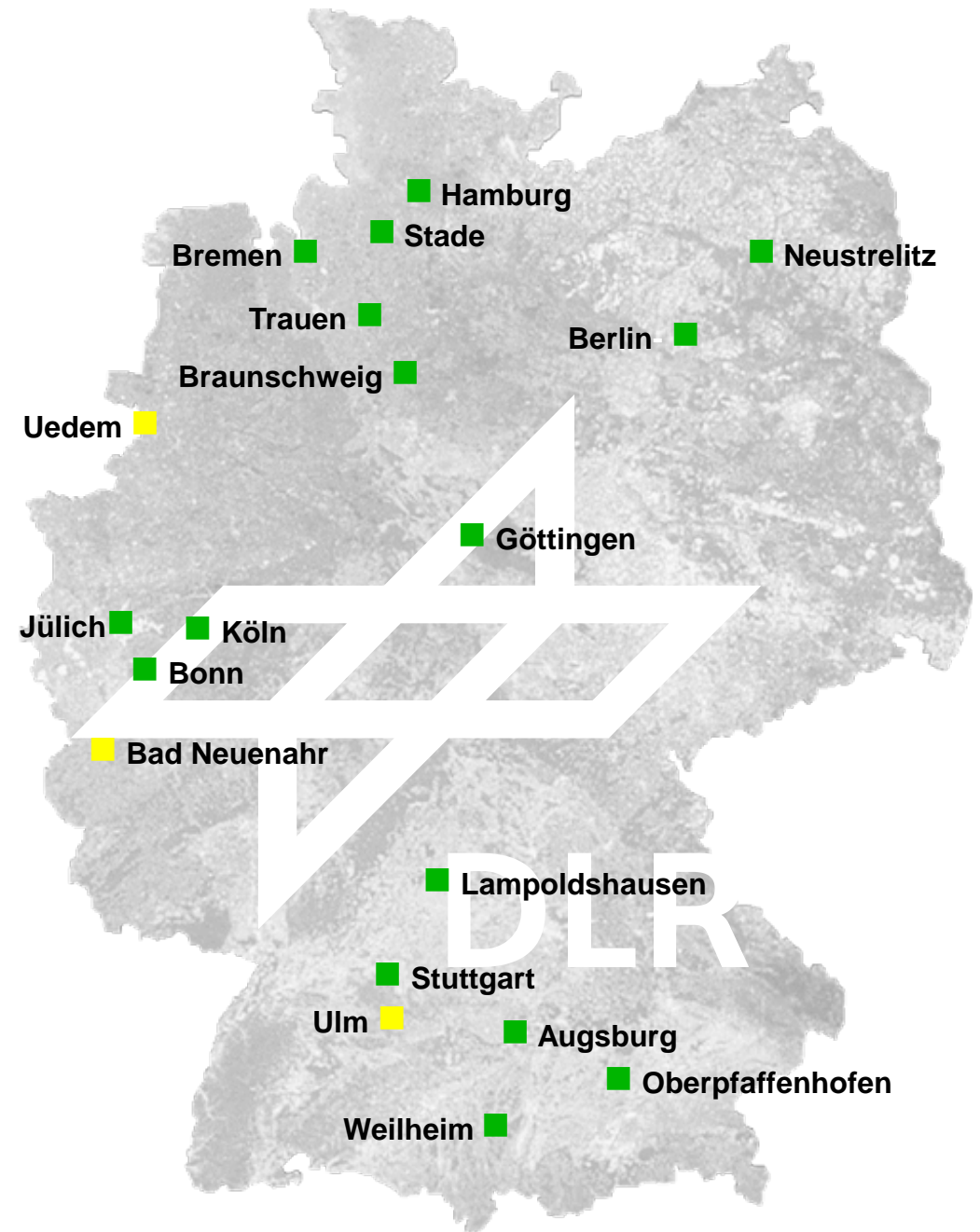
ca. 8.000 staff

32 Institutes and Facilities

■ 16 Locations

Stations in O'Higgins (Antarktis),
Inuvik (Canada), Almeria (Spain)

Offices in Berlin, Bruxelles,
Paris, Washington D.C.
and Tokio



Space Strategy of the German Federal Government

“Making Germany's space sector fit for the future”

- Space as a key to **global challenges**: globalisation, knowledge society, climate change, **security**
- **Guidelines** of the Federal Government's space policy
 - Orientation toward **benefits** and **needs**
 - Orientation toward the principle of **sustainability**
 - Intensifying **international cooperation**



Space **in Germany**: Political Provisions on Security



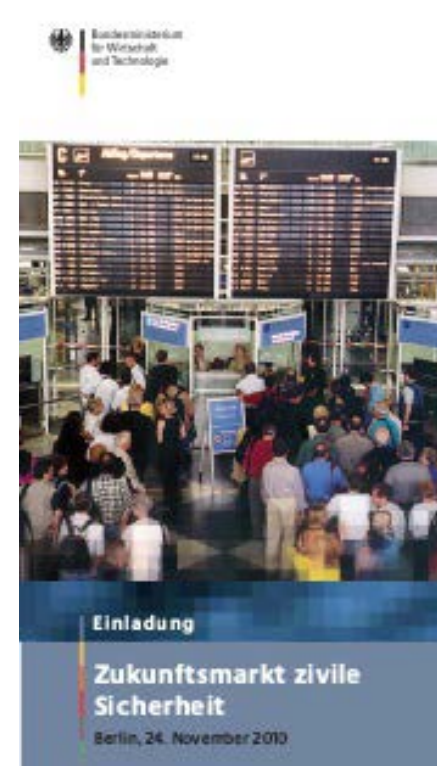
Coalition
Agreement



Hightech
Strategy



Research Programme
Security



Future Market
Civil Security

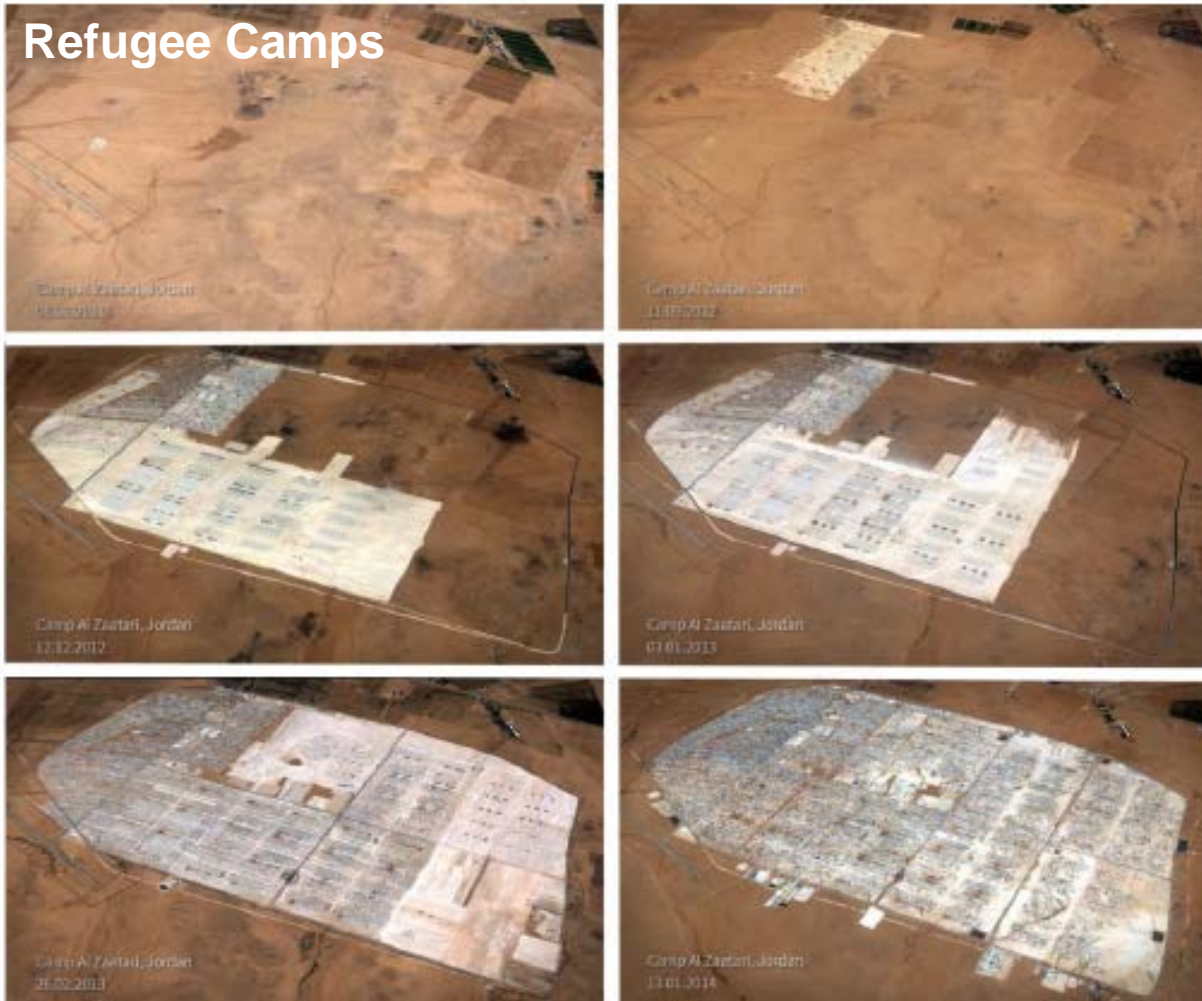


National Strategy for the
Protection of CI

+ European and International Provisions: i.e. Horizon 2020, EUMSS, EDRT, NATO S&T Strategy, International Charter etc.

Space **in** **Germany**: Space and Security on Earth

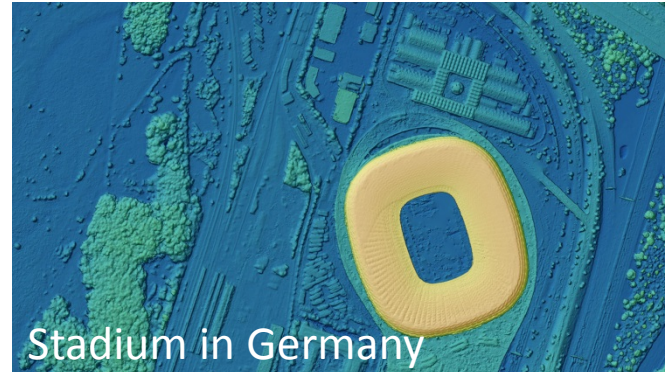
Refugee Camps



Flood → Germany, June 2013



Space **in** **Germany**: Space and Security on Earth

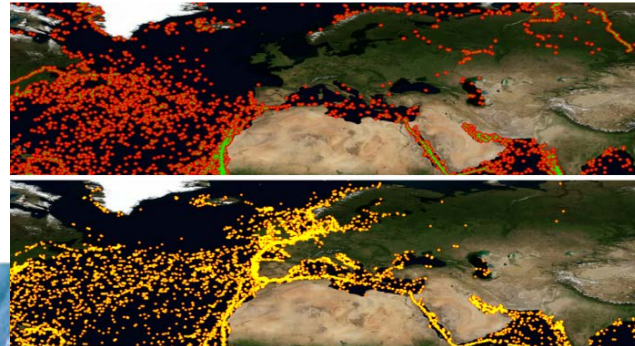
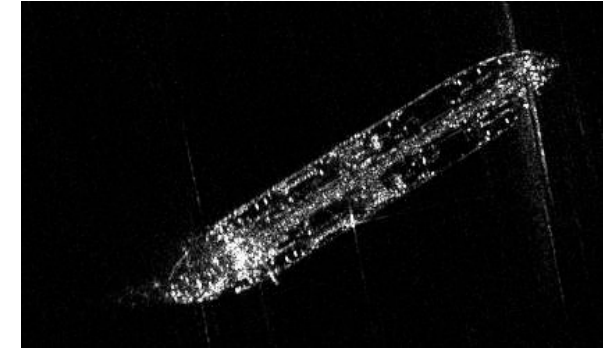
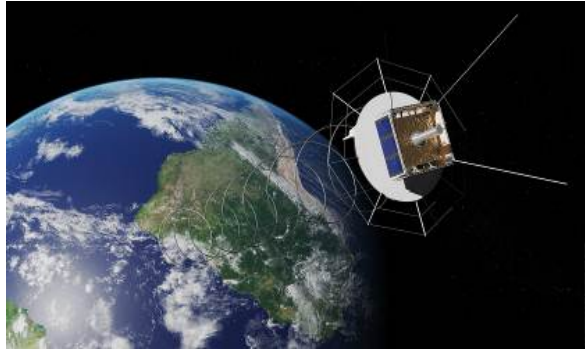


Military Security

Security at Mass Casualty Incidents

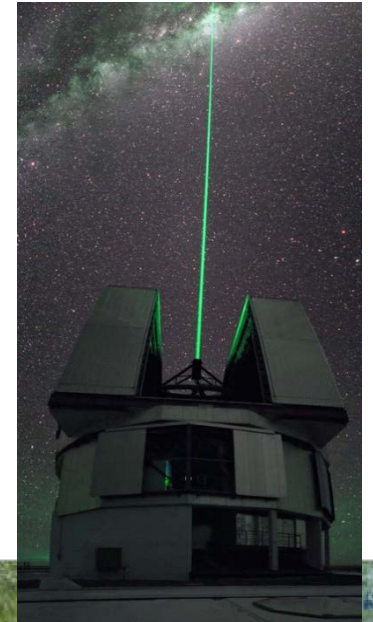


Space **in Germany**: Maritime Security through Satellites and Airplanes



Space **in Germany**: Space and Security in Space

- GSSAC (**G**erman **S**pace **S**ituational **A**wareness **C**enter
- GESTRA (**G**erman **E**xperimental **S**pace Surveillance and **T**racking **R**adar), TIRA and Radiotelescope Effelsberg
- EU Space Surveillance and Tracking Support Framework (EU SST)
- Satellites/space applications as critical infrastructures



Space **in Germany**: New Space – Commercialisation

- Publication of study on business models at the interface of space and digital economy
- „Germany has good starting position for an increased commercialisation“, SecState Zypries
- Study shows opportunities and challenges for Germany in the new space economy
- Experts conclude that US-NewSpace model cannot be transferred 1:1 to Germany

=> Will lead to further questions related to space and security

