

The German Interagency Approach to SSA

German Air Force HQ 1 | b
LTC (GS) Karsten Auras, Space Concepts





German Space Actors and Responsibilities



German Air Force HQ
LTC (GS) Karsten Auras

Military domain

 Federal Ministry of Defence

Joint Support Service



JSS Command



CIS Command
→ SatCom



GeoInfo Center
→ Navigation
→ Earth Observation



Joint Imagery Intel Center
→ Reconnaissance

Air Force



German Air Force HQ



Air Operations Command

German Space Situational Awareness Center



Civil domain

 Federal Ministry of Economic Affairs and Energy

 Federal Ministry of the Interior

 Federal Ministry of Transportation and Digital Infrastructure

DLR

Space Administration



SSA program office




GALILEO
COPERNICUS
EUMETSAT
SST Support


Research & Development

Industry & Operators



Strategies → Concepts → Plans



German Air Force HQ
LTC (GS) Karsten Auras

Military domain

Civil domain



**Defence Policy Guidelines
Strategic Guidelines for Space**



German Space Strategy



Bundeswehr



**Bundeswehr Concept
Guidelines for future development**



Joint Space Concept



**Joint CIS Concept
Joint INTEL Concept
Joint GeoInfo Concept**



DLR Space Administration



DLR national space program Activities targeted to:

- **Space and Security**
- **Earth observation**
- **Communication & Navigation**
- **SSA**



Luftwaffe





German SSA System



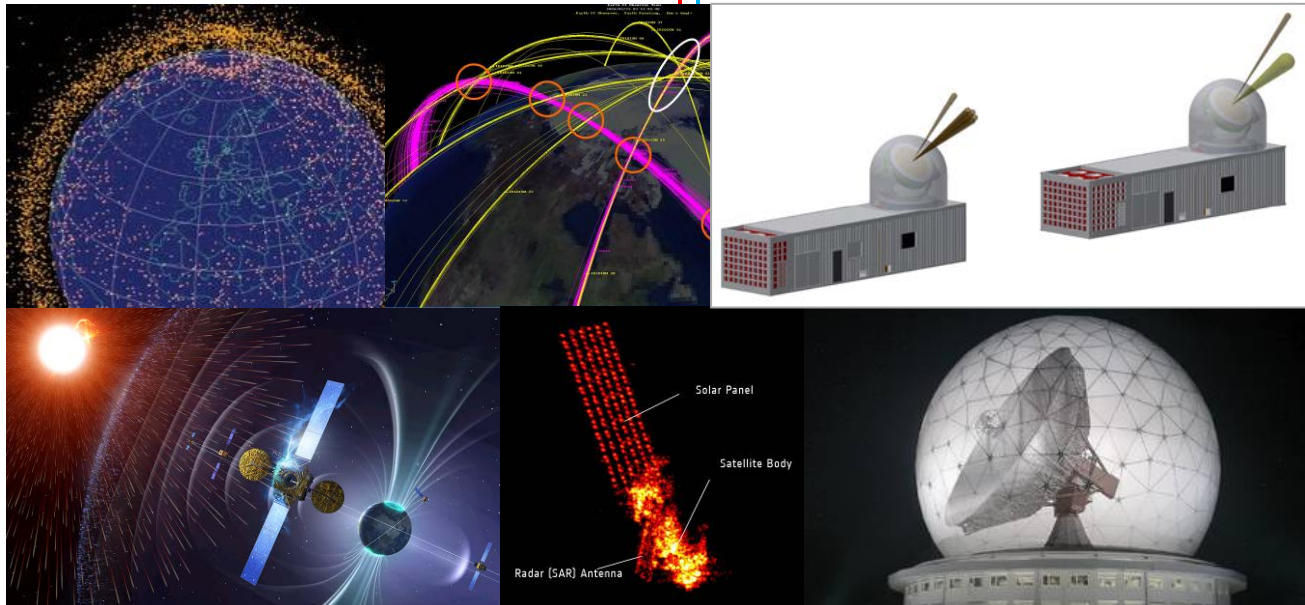
German Air Force HQ
LTC (GS) Karsten Auras

Military domain

- Support to satellite operations
 - SAR-Lupe
 - SARah
- GPS predictions for users
- SSA, SpWx
- GSSAC Upgrade 1
 - IOC 2018
 - FOC 2020

Civil domain

- Support to satellite operations
 - Reentry monitoring
 - SSA R&D program
 - End-to-end capability
- German Experimental Space Surveillance and Tracking Radar
 - IOC 2018





SSA Cooperation Network



German Air Force HQ
LTC (GS) Karsten Auras

Military cooperation



- SSA Information sharing
- Space support to military operations
- Joint / Combined Space operations
- Exercises, Wargames

Civil cooperation



- International Research & Development programs
- EU Space Surveillance & Tracking Support Program:
- Operational services to EU Member states
- Coordination of capabilities & activities



Questions?



LTC (GS) Karsten Auras, HQ GAF 1 | b