National Data Security Policy for Space-Based Earth Remote Sensing Systems

Background Information for the Draft of an Act to Safeguard the Security Interests of the Federal Republic of Germany from Endangerment by the Distribution of High-Grade Earth Remote Sensing Data.

“Satellitendatensicherheitsgesetz” - SatDSiG

www.bmwi.de
Activities to Prepare the Draft Act (SatDSiG-E)

activities to set up a National Data Security Policy started end 2003

close cooperation with many relevant ministries, including:

- AA, Foreign Office;
- BMI, Federal Ministry of the Interior;
- BMVg, Ministry of Defence;
- BKA, Federal Chancellery;

relevant agencies:

- BND, Federal Secret Service;
- BKA, Federal Criminal Police Office;
- BSI, German Information Security Agency;
- BGeoBw, Geo-Information Office of Germany’s Federal Armed Forces;

federal commissioners

and in consultation with Industry and international partners (USA, Canada)
Status of the Draft Act (SatDSiG-E)


09. March 2007: Bundesrat (upper house)

24. April 2007: first Bundestag Committee Meeting

10. Sept. 2007: Public Hearing

19. Sept. 2007: Bundestag Committee

20. Sept. 2007: Bundestag (2nd and 3rd reading)

Signature and Publication

Bundestagsdrucksache 16/4763
http://dip.bundestag.de/btd/16/047/1604763.pdf
distribute "VERBREITEN"
on request of the distributor

Operator
“Betreiber”

Data Distributor
“Datenanbieter”

distribute “VERBREITEN”

distribute “VERBREITEN”

distribute “VERBREITEN”

Customer
downstream Customer
Draft Act, Area of Application is limited to

German satellites, satellites operated by German citizens

non-military satellites

“High-Grade” earth remote sensing systems
- High Grade derives from the system’s capacity for acquiring data of particularly high information content

First-Time or primary marketing/dissemination
the Draft Act consequently pertains to primary data distributors
but generally NOT to
- remote sensing service providers, value-adding firms or
- data resellers

there might be indirect effects to downstream customers
Central Elements of the Draft Act (SatDSiG-E)

- central Part of the Draft Act is a clearly defined and transparent **procedure for distributing**

- **licensing requirements** and **obligations**
  - satellite operators
  - data distributors

- regulations under company law concerning operators
  (acquisition of firms and stakes in firms or corporate takeovers)
Distribution of Data from High-Grade Satellites

two-layered approach for first-time/primary distribution:

▶ sensitivity review
- to be performed on a case-by-case basis for any transaction
- to be performed by and in the full responsibility of the data distributor
- predefined procedures and criteria without any power of discretion
- requirement to document and record any transaction for possible official audit/inspection

→ in case the transaction is “not sensitive”, the distributor is free to deliver the data
→ in case the transaction is “sensitive”, a permit is required

▶ permission/refusal by governmental authority
(BAFA, Federal Office of Economics and Export Control)

- only for sensitive transactions
- decision is based on (probably classified) criteria and internal procedures
customer inquiry
(individual Transaction)

Sensitivity review

transaction is not sensitive

transaction is sensitive

request for permission

review/decision by governmental authority

permission to deliver

Permission with Conditions, Obligations

ban to deliver

delivery of the data

delivery of the data

Delivery but under respect of conditions
Sensitivity review concerns the customer request and the meta data of the individual data set (never the data set itself)

- information content of the individual data product
  - operation mode of the sensor
  - processing (specification of the data product)

- target area surveyed by the data product

- time lag between data acquisition and supply to the customer, time of the data acquisition

- ground segments to which the data are to be transmitted

- Customer
## Structure of the Draft Act

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### Part 1: **Area of Application**

**§1 Area of application**

### Part 2: **Operation of a High-Grade Earth Remote Sensing System**

**§2 Definition of Terms**

- Operator ("Betreiber")
- Data
- Data Distributor ("Datenanbieter")
- Sensor
- Distribution ("Verbreiten")

### Part 3: **Distribution of Data**

- Chapter 1: General Provisions
- Chapter 2: Procedure for Distributing Data

### Part 4: **Priority Treatment of Data Requests submitted by FRG**

- High-Grade Earth Remote Sensing Systems derived from the respective system's capacity for acquiring data of particularly high information content
Structure of the Draft Act

Part 1 Area of Application

Part 2 Operation of a High-Grade Earth Remote Sensing System

Chapter 1 General Provisions

Chapter 2 Procedure for Distributing Data

Chapter 3 Distribution of Data

Part 3 Distribution of Data

Chapter 1 General Provisions

Part 4 Priority Treatment of Data Requests submitted by FRG

Part 5 Implementation Provisions


Part 7 Transitional and final Provisions

Part 2 Operation of a High-Grade Earth Remote Sensing System

§ 3 Licenses
§ 4 License requirements
§ 5 Documentation requirements
§ 6 Obligation to notify
§ 7 Information requirements
§ 8 Right of access and inspection
§ 9 Possible measures by responsible government agency
§ 10 Acquisition of firms and stakes in firms; corporate takeovers

Part 3 Distribution of Data

Chapter 1 General Provisions

§ 11 Licenses
§ 12 License requirements
§ 13 Obligation to notify
§ 14 Information requirements
§ 15 Right of access and inspection
§ 16 Possible measures by responsible government agency
### Structure of the Draft Act

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#### Part 3 Distribution of Data

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Status and Next Steps

- interim Regulation has been set up in July required because of TerraSAR-X launch

  Implementation via contracts between
  - DLR with BMWi
  - Infoterra with BMWi

- the Final Act is planned to become effective in December 2007