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BMWi, Directorate-General „Technology Policy“ (DG VII)

# GMES data security policy and German experiences in the national satellite data security policy

*13 January 2012, GMES data policy workshop, Brussels*

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# Outline of the presentation

1. Brief overview on the German satellite data policy and legislation
   - Legislation and procedures
   - Practical experiences
2. Potentially useful orientations and aspects for the GMES data and information security policy
   - Security interests
   - Security criteria
   - Scope of application (sentinels/contributing missions/services)
   - Need for efficiency, promoting use of data, strengthening markets
   - Connection with national policies

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# SatDSiG - German Satellite Data Security Policy

- Purpose of the Act
  - Safeguarding the security and foreign policy interests
  - Germany and Allies
  - Legal certainty for affected companies
- Assessment is exercised on three stages
  - Only for "high-grade" satellite systems; derives from the system's capacity for acquiring data of particularly high information content
  - sensitivity check
    - to be performed for any data request by and in the full responsibility of the data provider
    - predefined procedures and criteria without any power of discretion
  - permit/refusal by governmental authority

    only required if the result of the sensitivity check is "sensitive"

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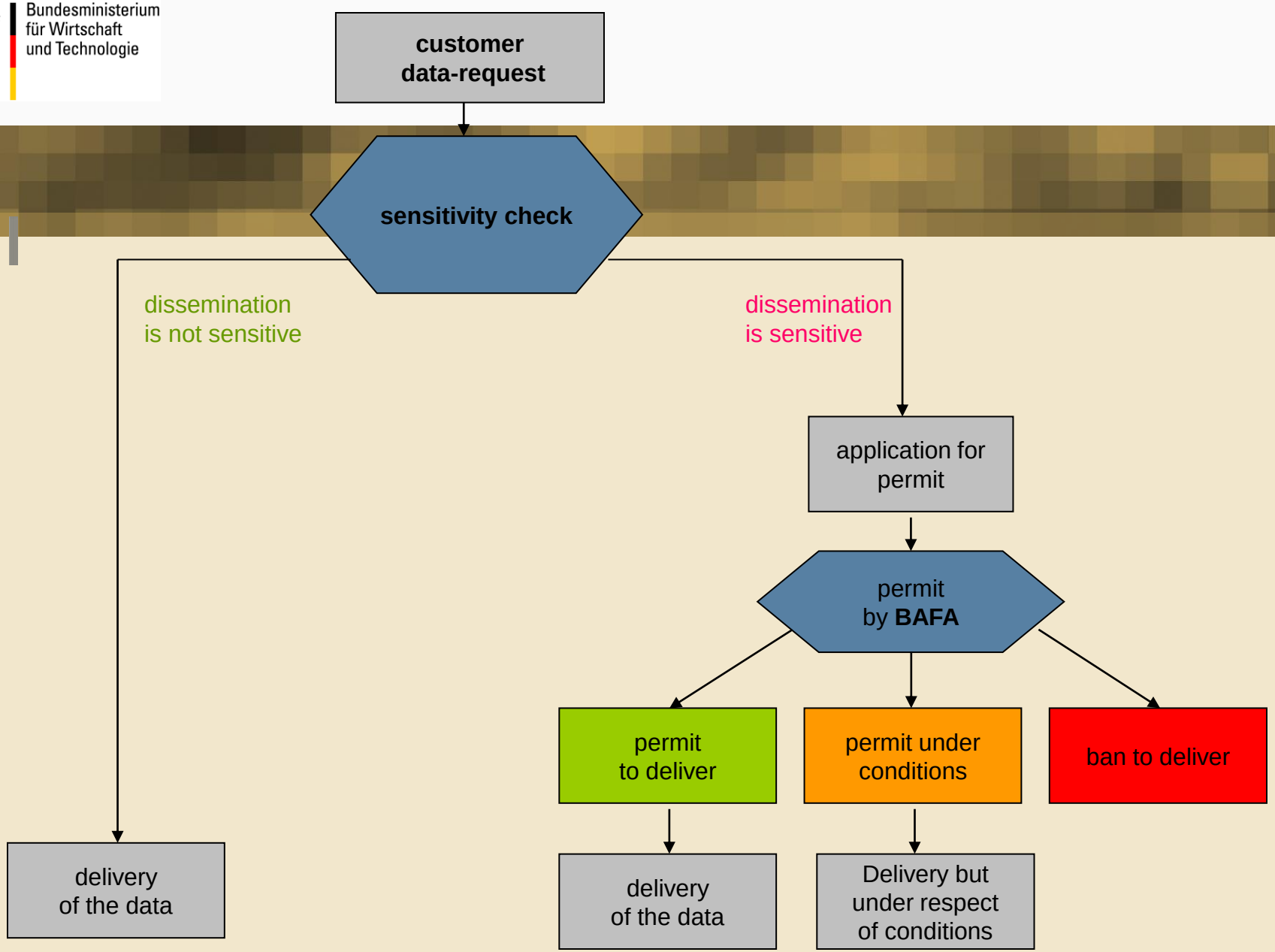

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# Criteria Examined during the Sensitivity Check

Sensitivity check concerns the data request by the customer 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 represented/surveyed by the data product
- Time period between data generation and supply to the customer
- Time of the data generation
- Ground segments to which the data are to be transmitted
- Individual customer

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# Practical Experiences

- Two satellites (TSX, TDX) licensed under the law
- Two data distributors
  - DLR (German Aerospace Centre) for scientific users
  - Infoterra (Astrium D) for commercial (and governmental) users
- 80 - 90% positive result of sensitivity check, i.e. direct data distribution
- Approx. 90% of sensitive requests (approx. 2.500 per year) permitted by BAFA

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# Security concerns focussed on on data use

- Goal: safeguard of security policy interests of EU, MS and friendly countries in the dissemination and use of data

  Should include human rights and peaceful coexistance of nations
- Need to identify
  - Possible endangerments for security interests by use of data
  - Which quality of data, type of dissemenation and use or user could provoke endangerment
  - Competent authorities and procedures to asses these two aspects

# Criteria for assessment

- Quality of generated data itself
  - Spatial resolution
  - Spectrum (radar,optical, IR)
  - Additional information (e.g. phase history)
  - Area of interest
  - Processing mode
- Circumstances of generation and dissemination
  - Timeliness, time of generation
  - Dissemination: downloading stations
  - Intervall of data requests for certain area?
- Intentional user and purpose of use
  - Data access for any third person possible / intended?
- Combination of criteria enhances flexibility and therefore efficiency in security and promotes use of data
  - Same data can be used under different conditions fur different purposes
  - „shutter control"?

# Scope of application

- Satellite data
  - Specific needs for satellite data
  - Regulation designed for satellite data favourable
- Sentinel data
  - Have to be in the focus
  - Probably very high percentage can be disseminated without any endangerment
- Contributing missions
  - National regulations guarantee national security interests
  - Further (EU-)security interests possible?
  - Do different national regulations lead to maximum use of data?
  - Could different national regulations lead to reduce security level to support market for national systems (race to the bottom)?

# External effects

- International availability of data
  - GMES satellite data in competition with inernational satallite data
  - At the same time use of international satellite data favourable
  - Can change, so flexible modification of standards needed
  - Data policy must not be more restrictive than international availability, no effect on security interests
- Export controls
  - International availabilty of data can be the result of export of satellite systems from EU-MS (e.g. F, D, I) to outside EU
  - Data policy should refer to practice in export controls (MS too)

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# Thank you very much!

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