

# Challenges and solutions in constructing a functional SDI in Baden-Württemberg

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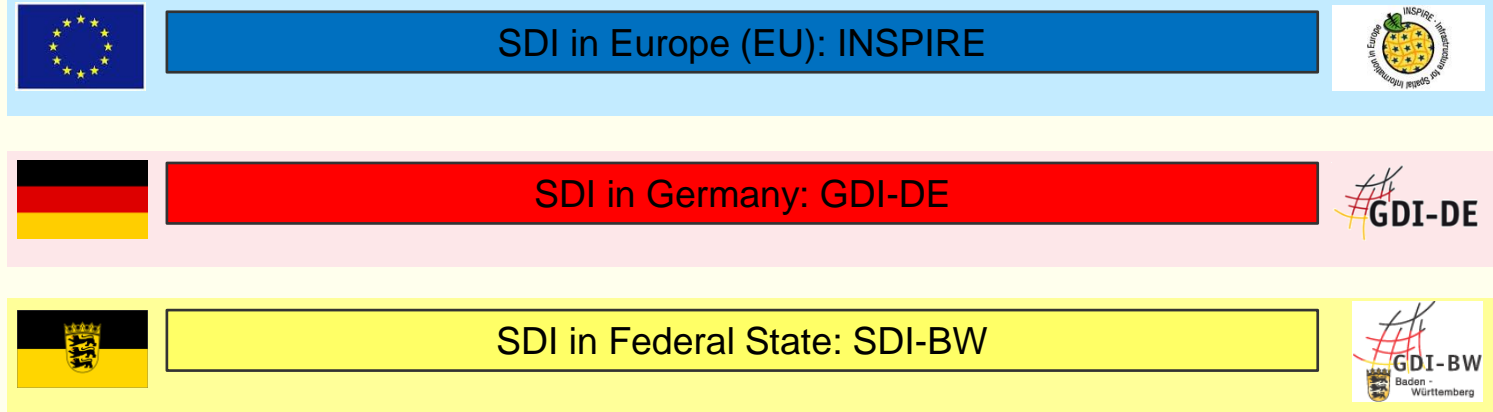
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## Quality Management System (QMS) within an SDI-BW

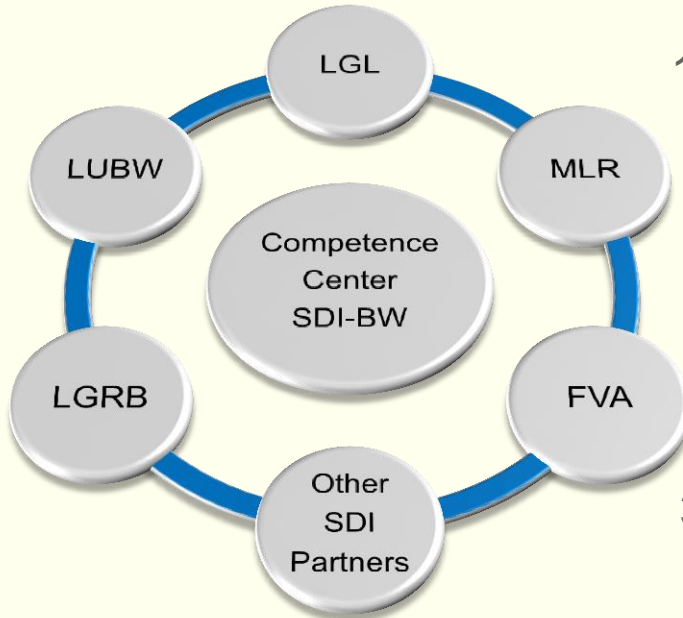
1. Quality management of a metadata **harvesting** processes **triggered** by **constraints**
2. Fully-automatic generation of a **monitoring report**
3. Report generation concerning an existence of a metadata record containing a **non-unique resource identifier (RI)**
4. Report generation concerning a current state of the **implementation** of an **SDI in Baden-Württemberg**
5. Quality management of a **data-service-coupling**
6. Quality management of the **central components, SDI services, ...**

## Decentralized organizational structure of SDIs



*Figure 1: Integration of an SDI-BW in INSPIRE*

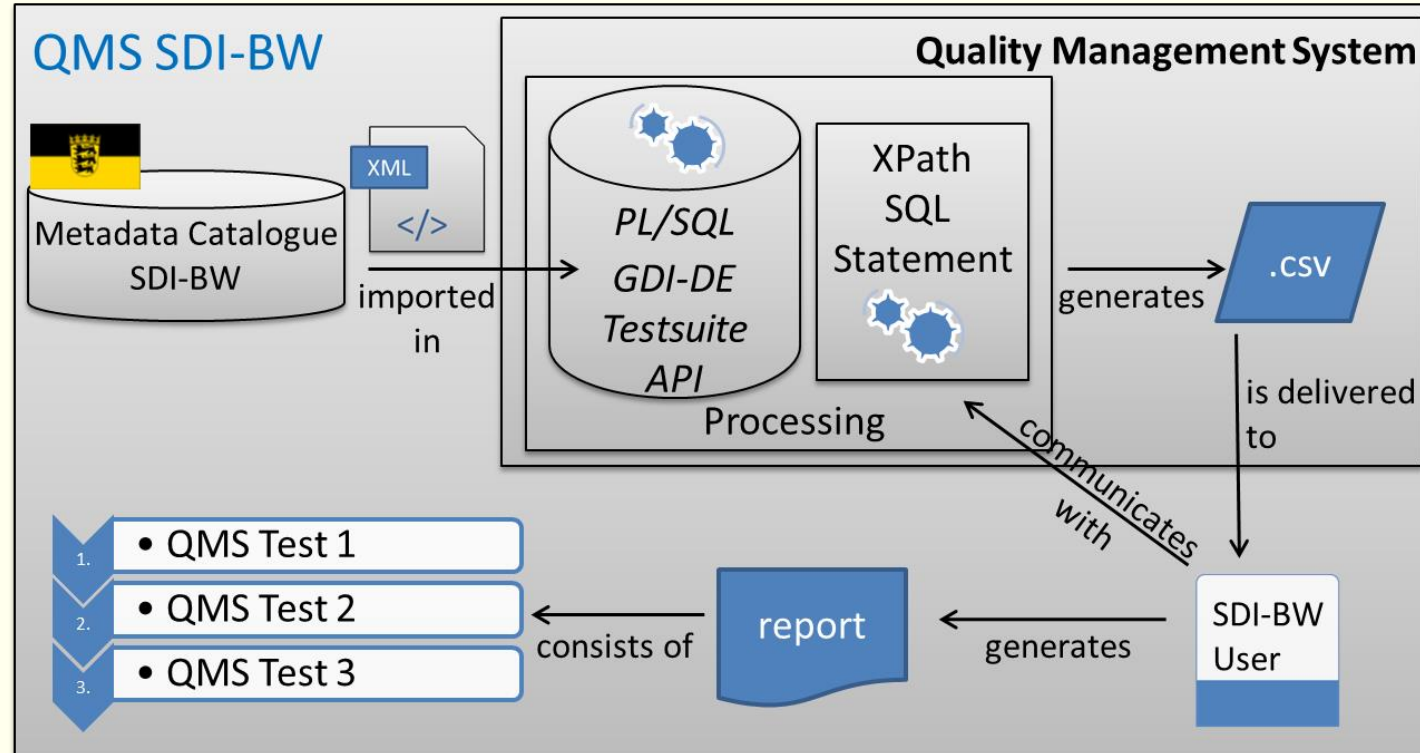
## Decentralized organizational structure in SDI-BW



1. different levels of **knowledge** regarding an SDI
2. different levels of **existing spatial infrastructures** (services, metadata catalogues, ...)
3. GDI-DE and INSPIRE are also **decentrally** organized

Figure 2: SDI-BW is decentrally organized

## Quality Management System in SDI-BW



## P1: Do „opendata“ metadata reach GovData Portal?

Metadata (MD) harvesting process triggered by the constraints!

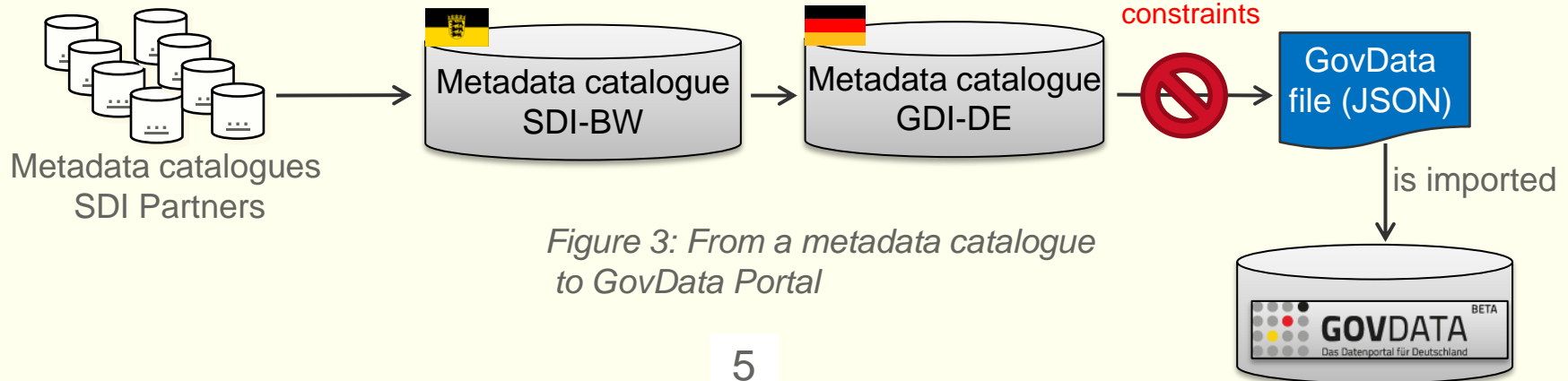


Figure 3: From a metadata catalogue to GovData Portal

## S1: Generation of a report based on the log files provided by GDI-DE

Metadata harvested by GovData portal?

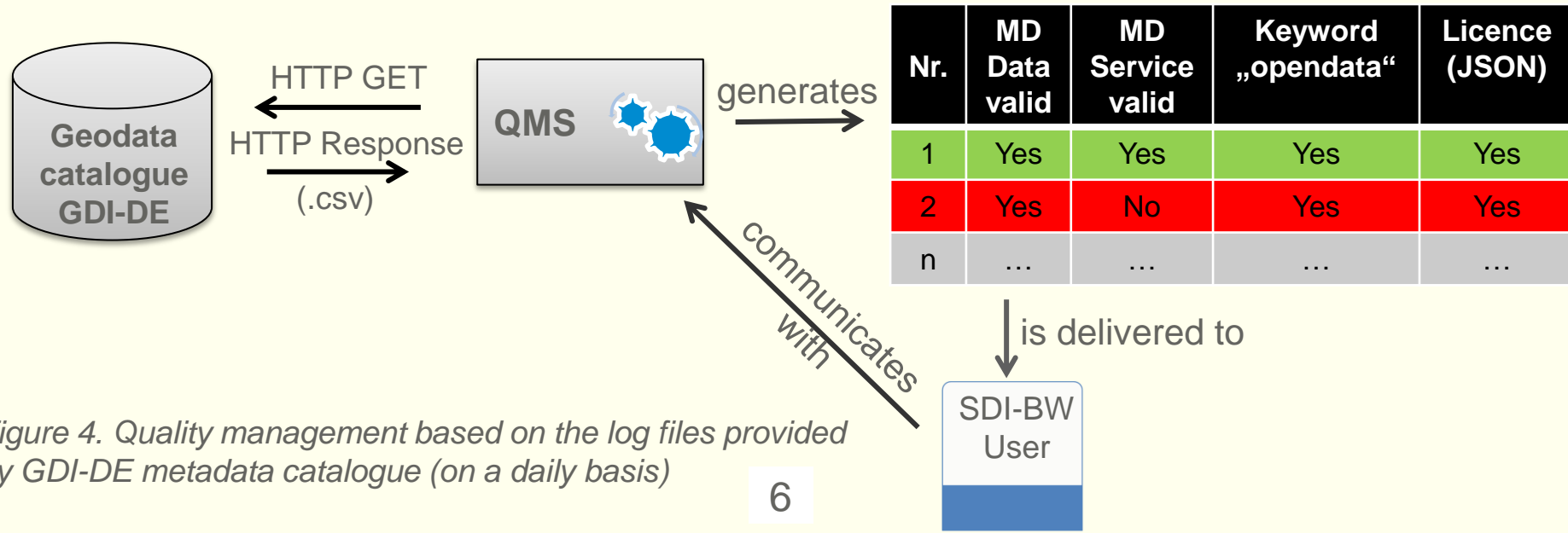
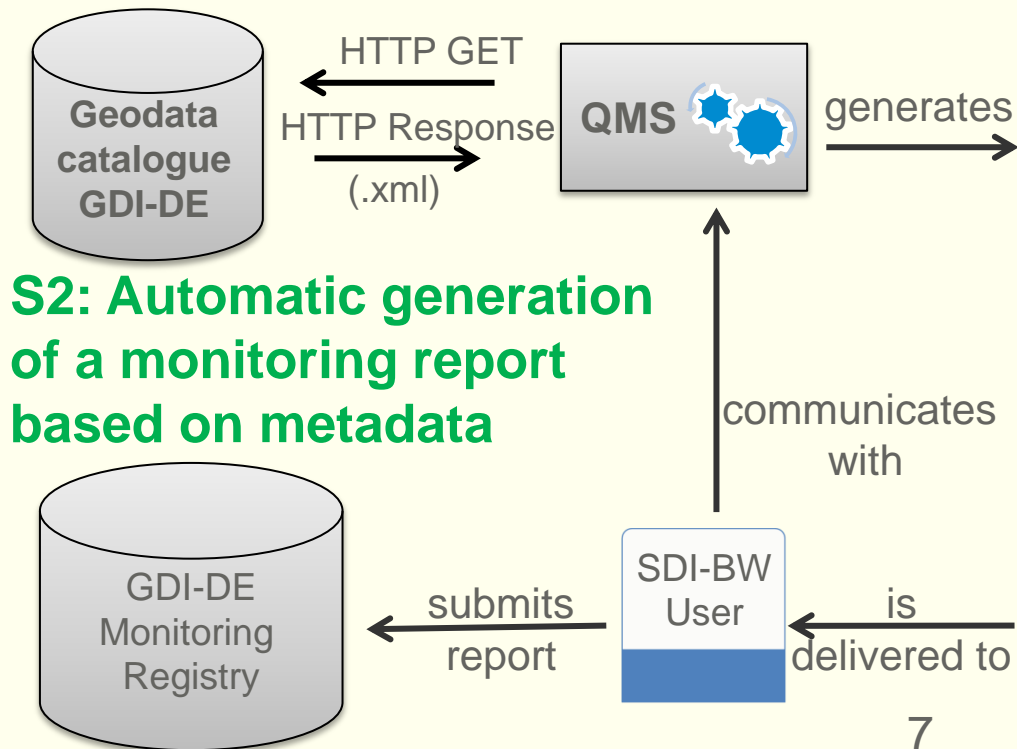







Figure 4. Quality management based on the log files provided by GDI-DE metadata catalogue (on a daily basis)

## P2: Fully-automatic generation of a monitoring report



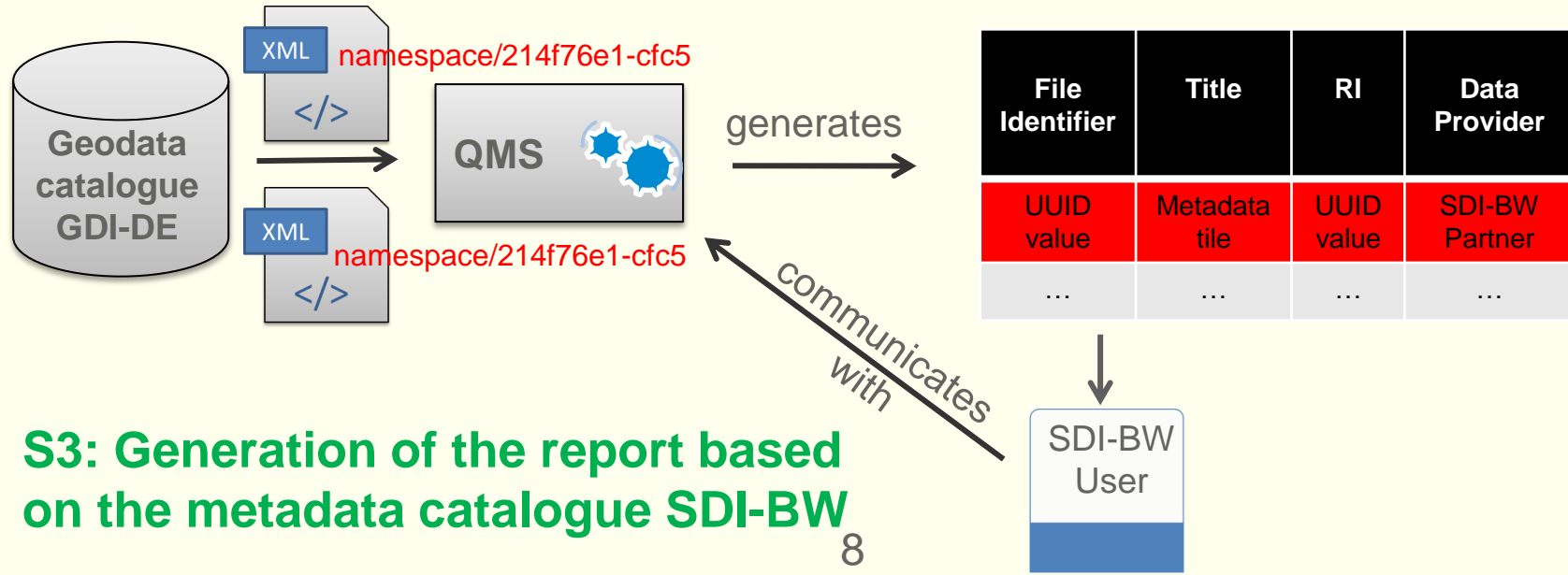
## S2: Automatic generation of a monitoring report based on metadata

Monitoring parameter	Requirement	Specification
actual area [km <sup>2</sup> ]		Metadata profile SDI-BW
relevant area [km <sup>2</sup> ]		Metadata profile SDI-BW
annual number of service requests		Metadata profile SDI-BW
municipality code		GDI-DE Konvention regarding Metadata
organisational level		GDI-DE Konvention regarding Metadata



## P3: Non-uniqueness of a resource identifier

**Resource identifier:** Value **uniquely** identifying an object within a namespace  
(XPath: `gmd:citation/gmd:CI_Citation/gmd:identifier/*/gmd:code`)



**S3: Generation of the report based on the metadata catalogue SDI-BW**

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## Conclusion

- SDI BW decentrally organized
- Numerous organizational agreements and technical solutions are necessary
- All specifications and regulations must be simultaneously met!
- Quality management system is an integral part of an SDI-BW

# QUESTIONS?



Any additional questions regarding the presentation?  
You would like to discuss other interesting topics with us?

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EXHIBITION SITE!