

Eress Forum 2018

## Workshop 2: The Future of Energy Metering Data

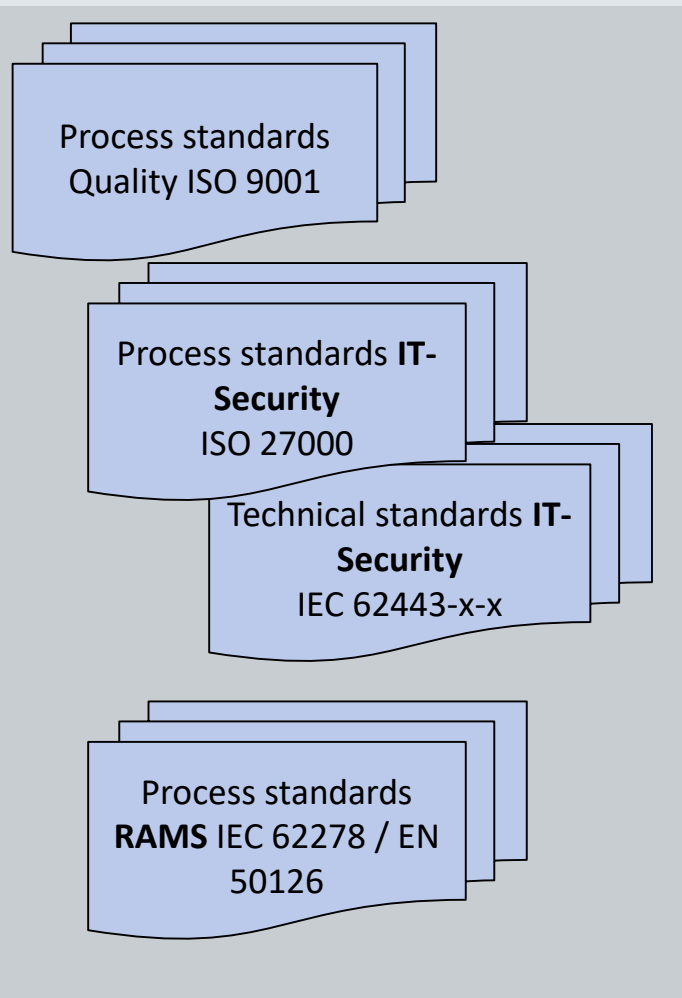
### Data ownership & data security

- Information Security Management System (ISMS)
- Influence of threats
- Standards Communication – Energy measurement
- EMS functional structure and dataflow diagram
- Safety related communication - transmission systems

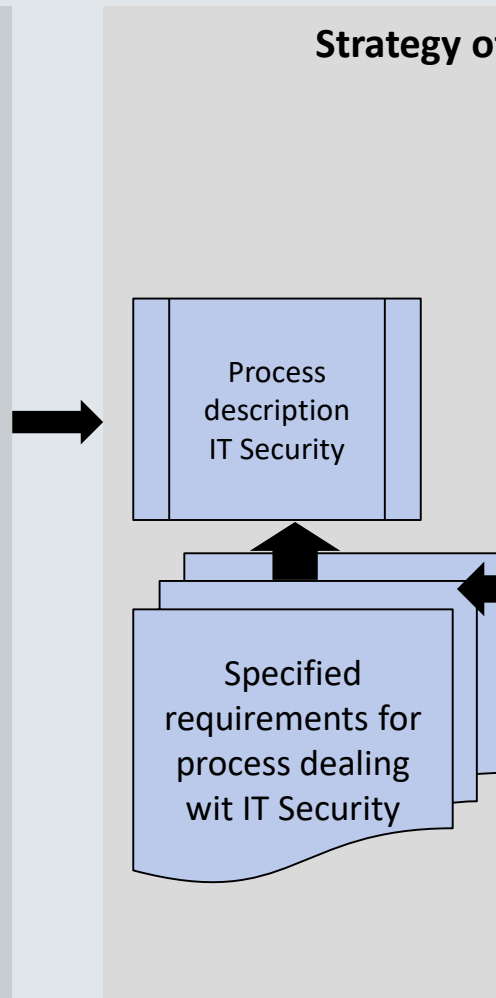
# Data ownership & data security

## Information Security Management System (ISMS)

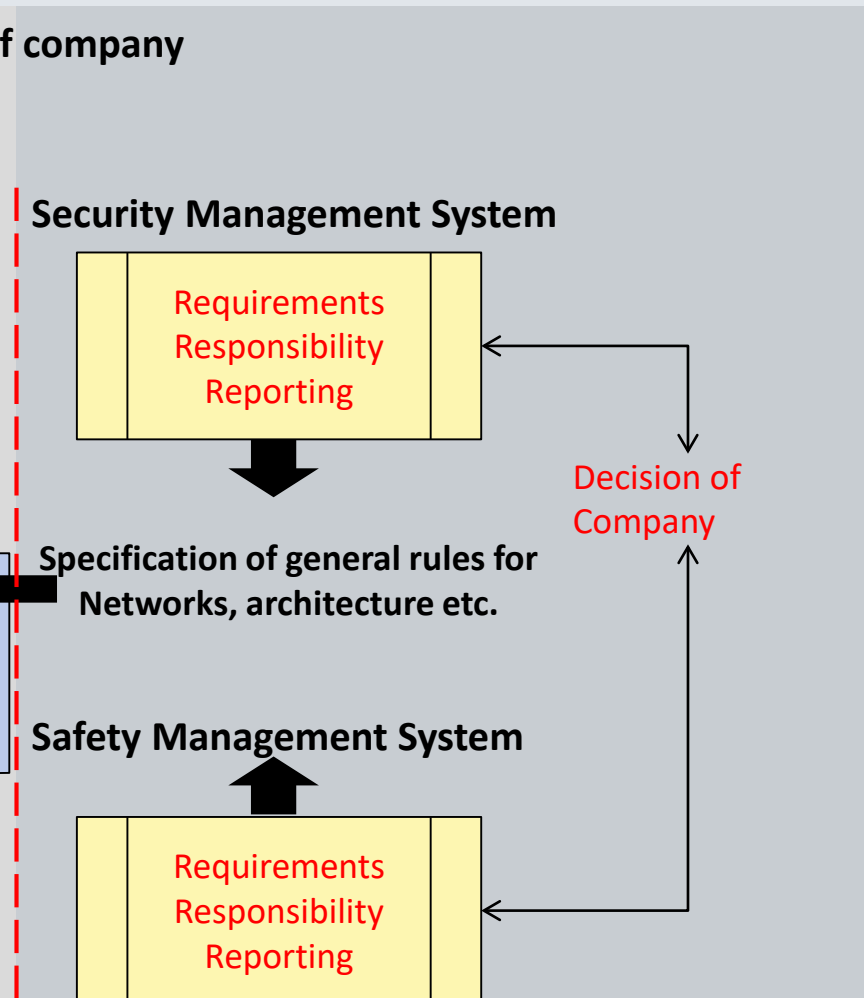
### Public / State of the Art



### Internal

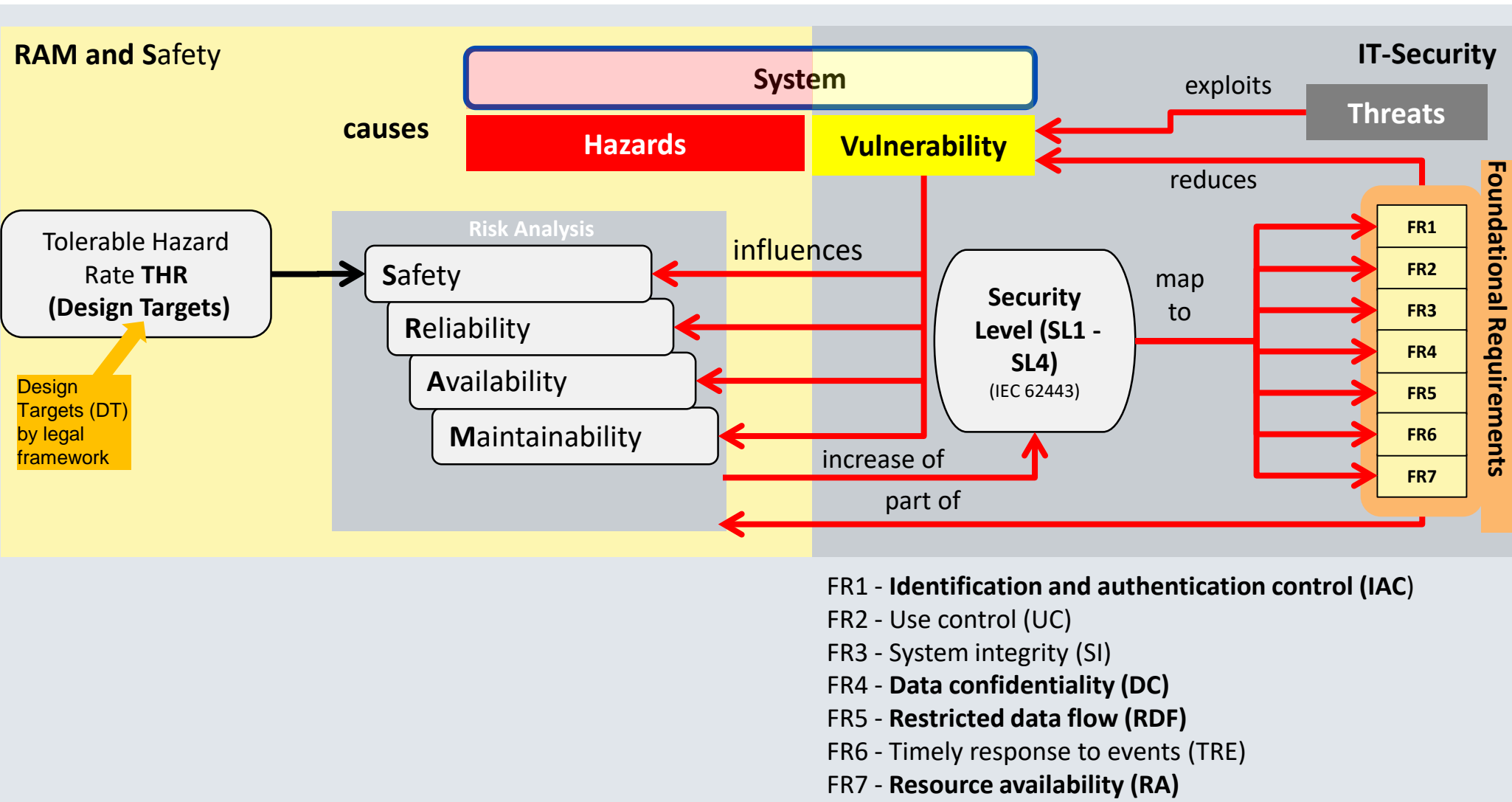


### Confidential



# Data ownership & data security

## Influence of threats



# Data ownership & data security

## Standards Communication – Energy measurement

### **IEC 61375-2-6**

FDIS closed 2018-03-16

### **Electronic railway equipment – Train communication network (TCN) – Part 2-6: On-board to ground communication**

IEC TC9

#### **Scope**

- communication between the onboard subsystems and the ground subsystems
- security requirements
  
- Out of scope: safety related data between on-board applications and ground applications

### **EN 50463-4:2017**

enquiry Ed 2: 2015, final vote: 2017-03-31, published 2017-10-06

### **Railway applications – Energy measurement on board trains – Part 4: Communication**

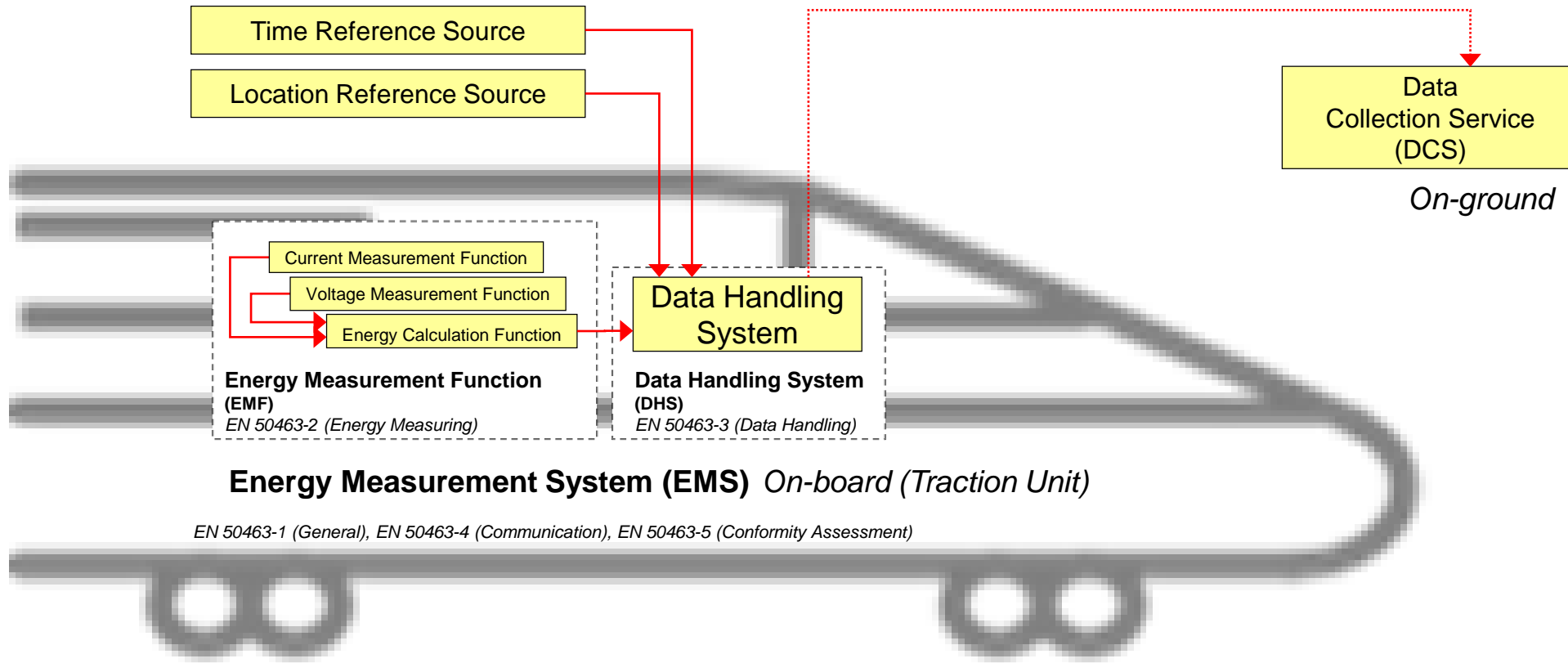
CLC/TC 9X EN 50463-4:2017 (pr=60931)EU directive 2008/57/EC

#### **Scope**

- on board and on board to ground communication services
  
- using digital interfaces:
  - between functions implemented within the EMS;
  - between EMS function and other on board subsystems;
  - between EMS and ground communication services.
- includes conformity assessment requirements.

# Data ownership & data security

## EMS functional structure and dataflow diagram



Source: Figure 1 of EN 50463-4, modified

# Data ownership & data security

## Safety related communication - transmission systems

**IEC 62280:2014 Railway applications - Communication, signalling and processing systems - Safety related communication in transmission systems**

**EN 50159:2010 - Railway applications - Communication, signalling and processing systems - Safety-related communication in transmission systems**

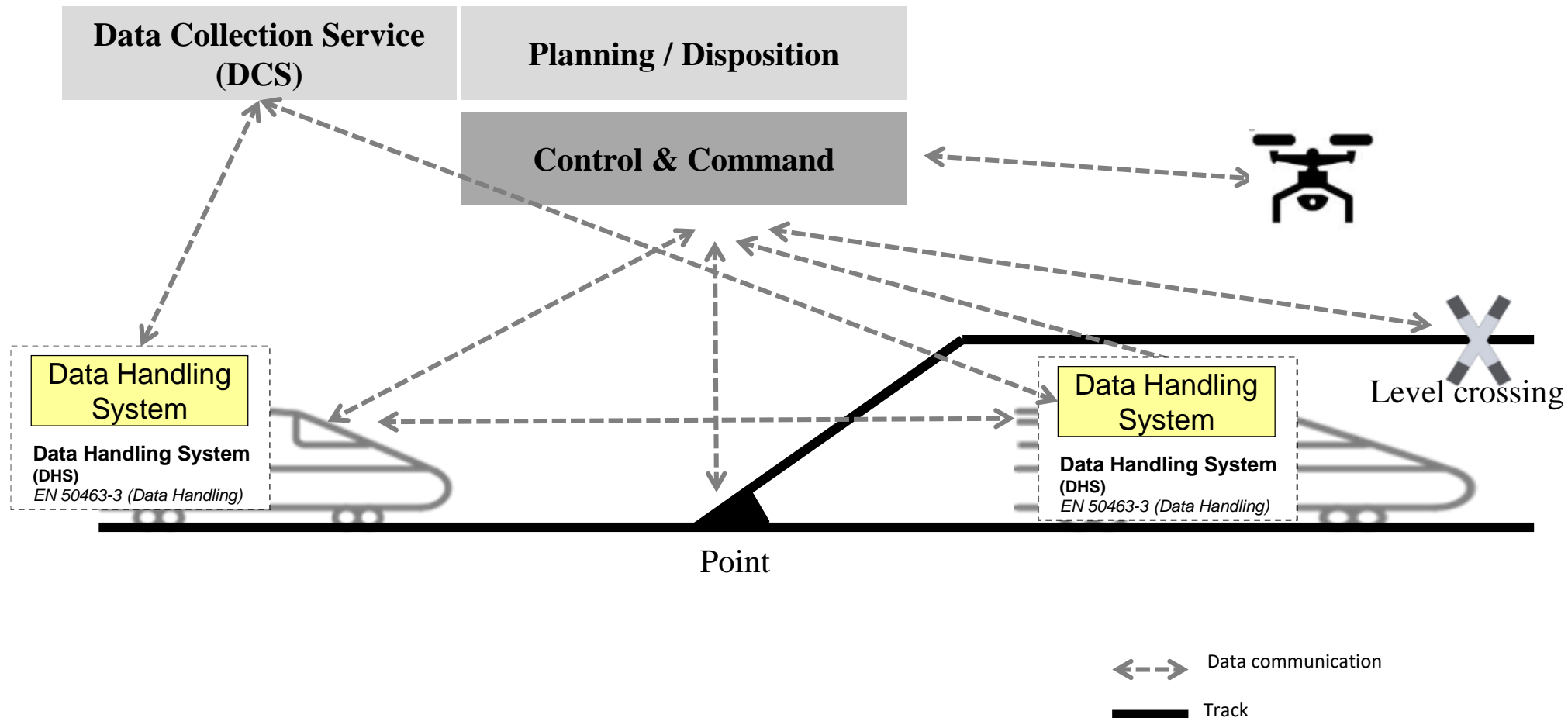
- basic requirements
  - achieve safety related communication between safety related equipment connected to the transmission system.
- safety requirement
  - specification of the safety related equipment connected to the transmission system,
  - allocated safety integrity requirements.

### Normative references

- IEC 62278 (EN 50126) and IEC 62425:2007 (EN 50129)

# Data ownership & data security

## View on the system



Thank you for your attention