

## Process improvement examples

B5 PS3

Question 3.04 What are other experiences to improve the specification, engineering, testing and maintenance to address the challenges in our industry?

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**HITACHI**  
Inspire the Next

# Two examples addressing industry challenges

1. Harmonization of models using Flexible Product Naming
2. Improved interoperability with IEC 61850 Edition 2, Amendment 1

# Specification – harmonization of models



## Motivation

Customers

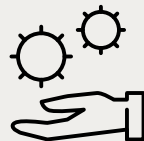
- Ease of understanding applications
- Ease of exchanging IEDs
- Simplify/automate system engineering
- Reduce integration and maintenance
- Shifting complexity from system to IED engineering



## Specification

Customers

- Enrich existing standard signal lists with IEC 61850 definitions
- Create SSD or SCD files with template and IED section, reflecting standard signal list



## Implementation

Vendors

- Map the customer's data model to the IED data model
- Feedback the level of fulfillment



## Roll-out

Customers

- Freeze data model, and test implementations
- Deploy for site installations
- Own and maintain

Group Discussion Meeting

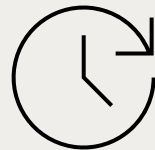
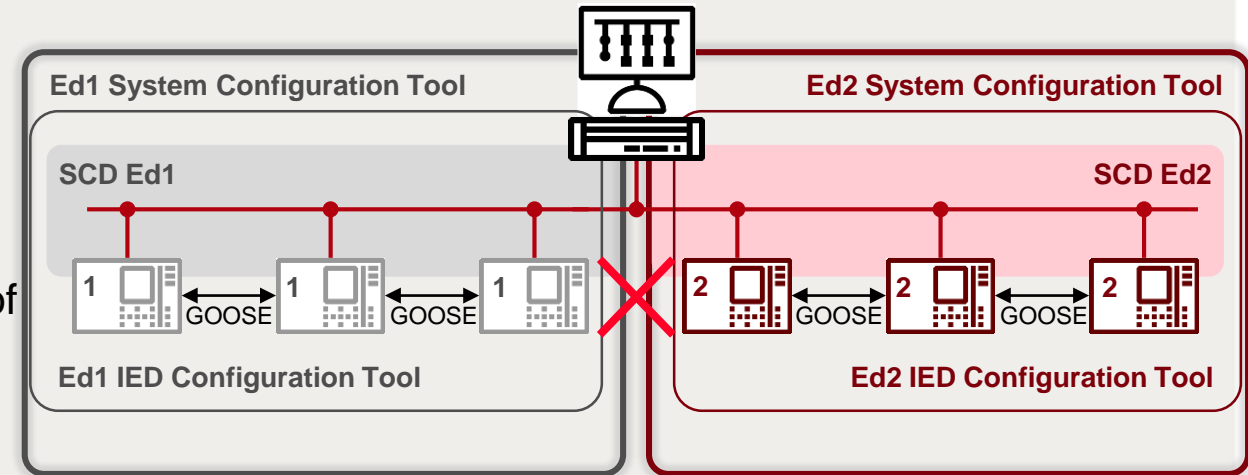
# Engineering – IEC 61850 edition compatibility



## Past

Separation of Ed1 and Ed2

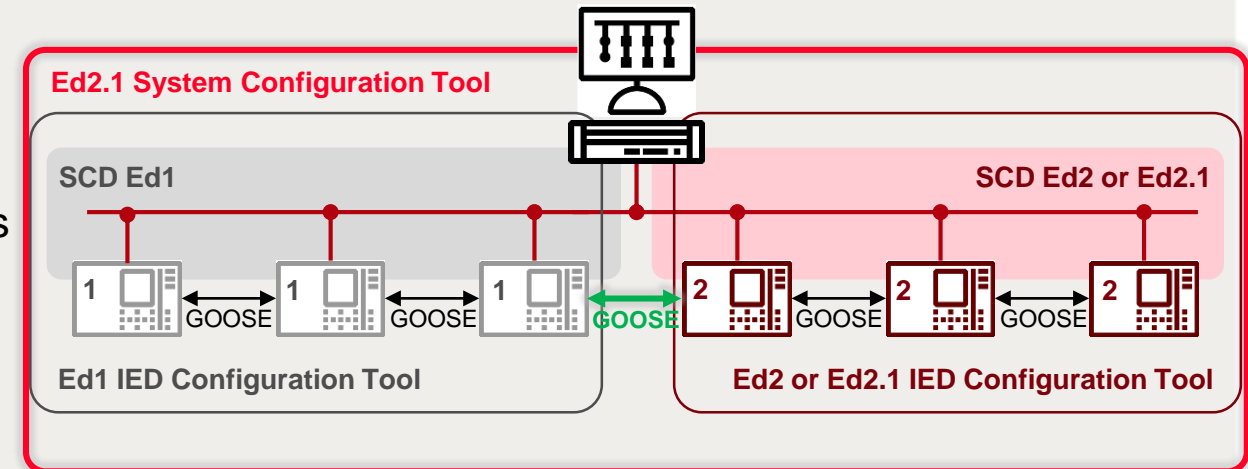
- Systems had to be split in an Edition 1 and an Edition 2 part
- This hindered communication between IEDs of different editions



## Present

IEC 61850 2.1 up- and downgrading rules

- Communication between legacy and new devices, respecting the abilities and limitations of both versions
- Defined workflows to engineer data exchange between different edition IEDs



Group Discussion Meeting