

# Model issues identified during Rosemount / Pittsburgh meetings

-To be discussed-

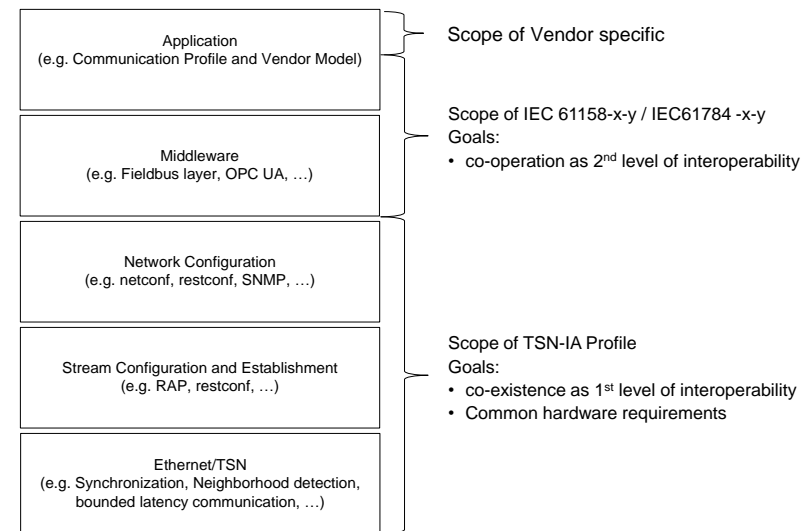
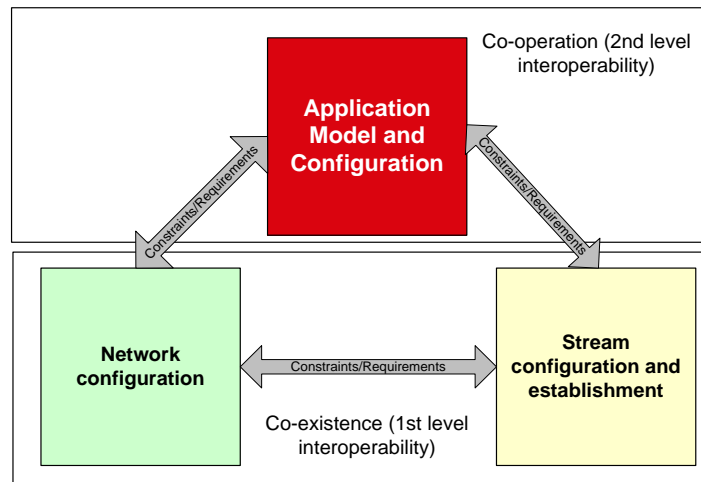
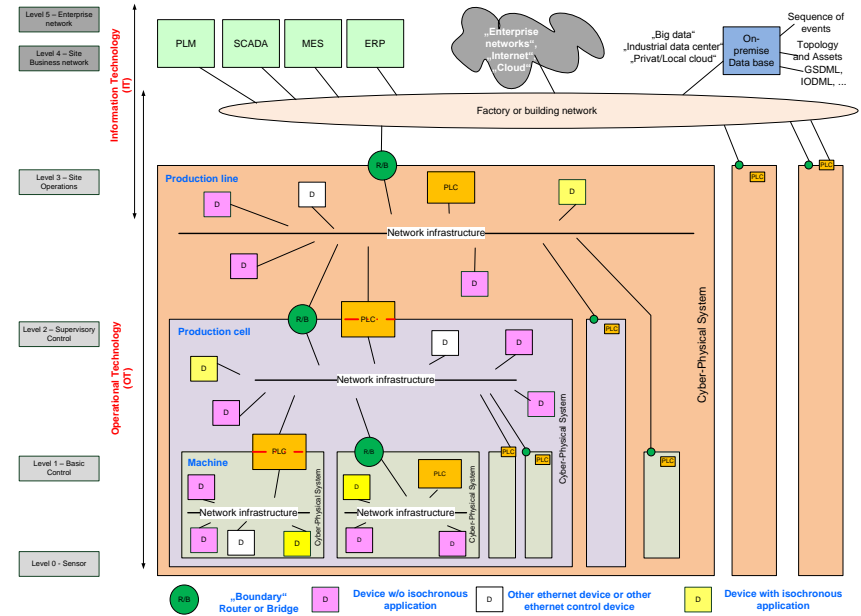
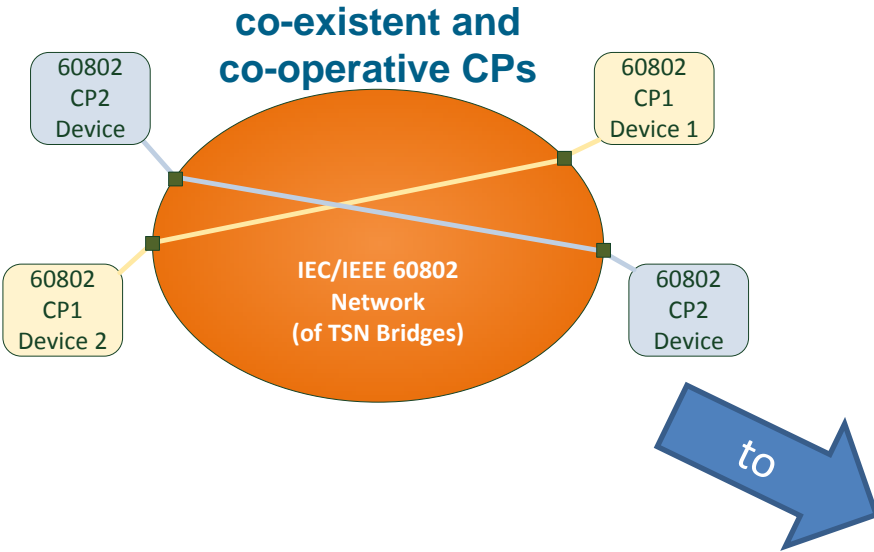
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# Basic scope

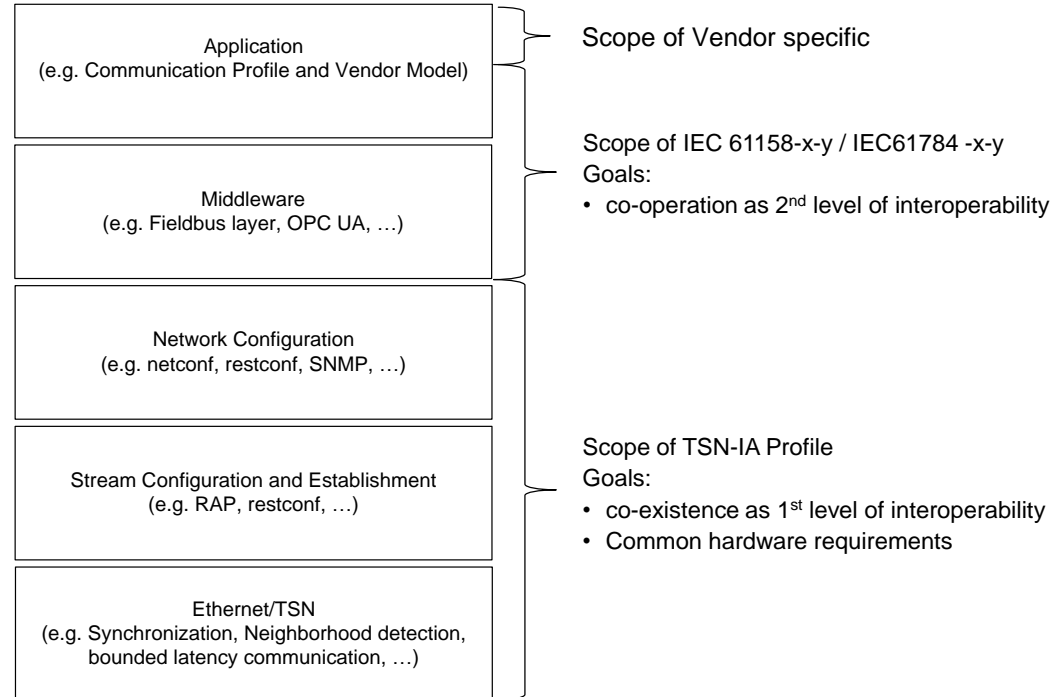
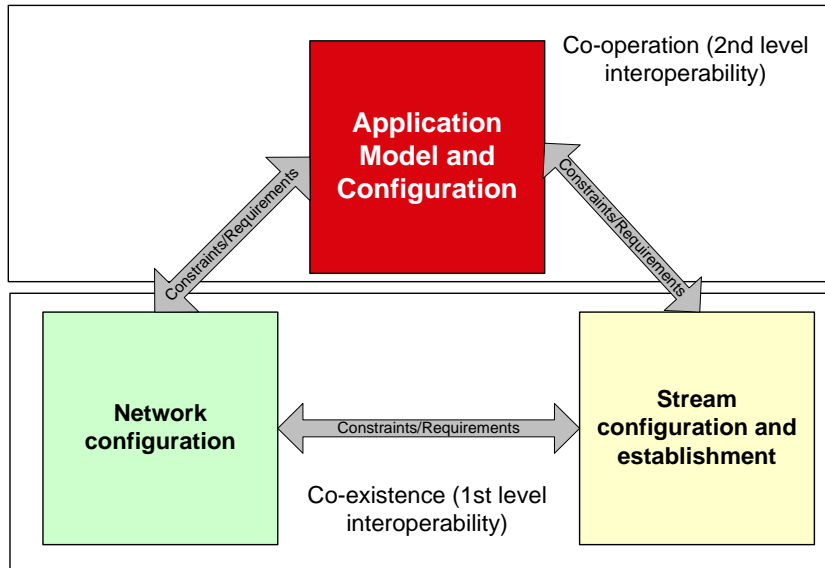
The TSN cloud shown at the initial presentation in Frankfurt is replaced by

- 1.) Hierarchical Industrial Automation structure  
and
- 2.) Dependencies triangle

# Basic scope



# Zoom in

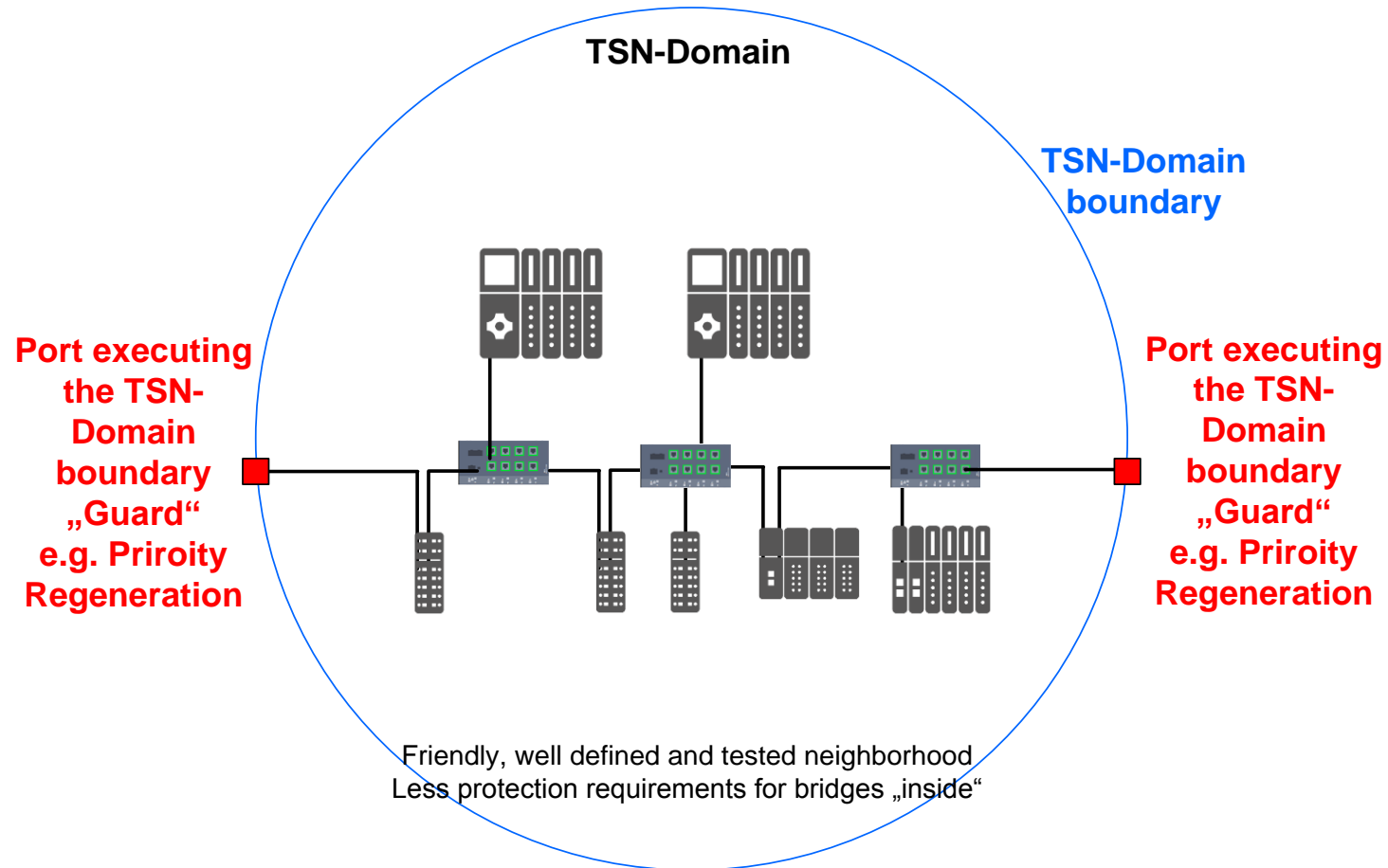


# Principle design pattern

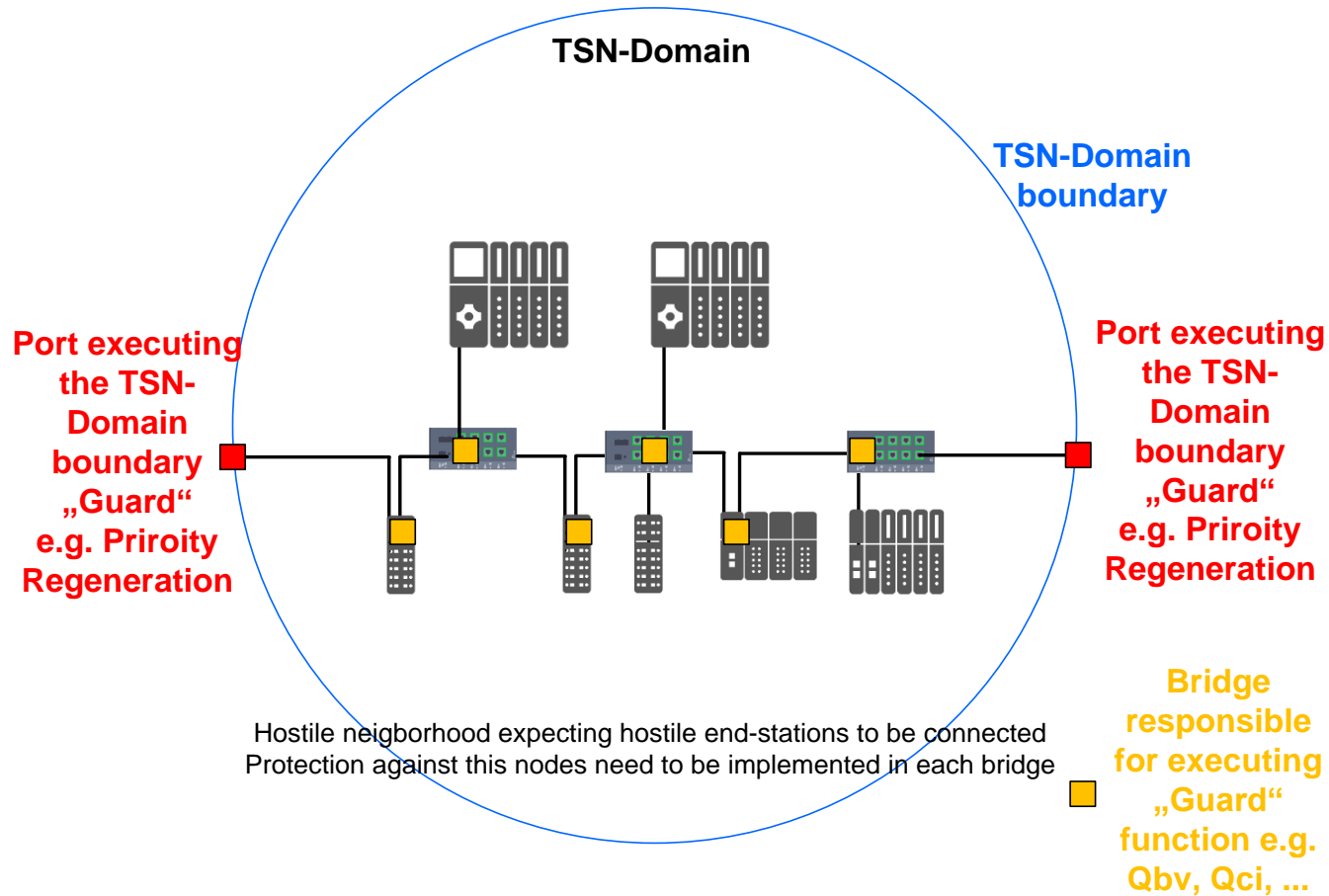
Two principle design pattern seems to exist:

- 1.) „Friendly, guarded neighborhood“  
Well defined TSN-Domain. All nodes in this domain are known during the design time. Traffic pattern are known, too.
- 2.) „Hostile neighborhood“  
Classical network design pattern. Bridges need to ensure expected/defined patterns due to unknown or even hostile end-station behavior.

# Friendly, guarded neighborhood



# Hostile neighborhood



# Derived design pattern

Assumption:

A „Friendly, guarded neighborhood“ allows the use of simpler shapers/setups to achieve the customer goals.

Example:

Within a TSN-Domain supporting Gigabit links, the use of strict priority together with pre-emption may fit for many customer applications including both, isochronous cyclic real-time and cyclic real-time traffic.



Thank you

Questions?