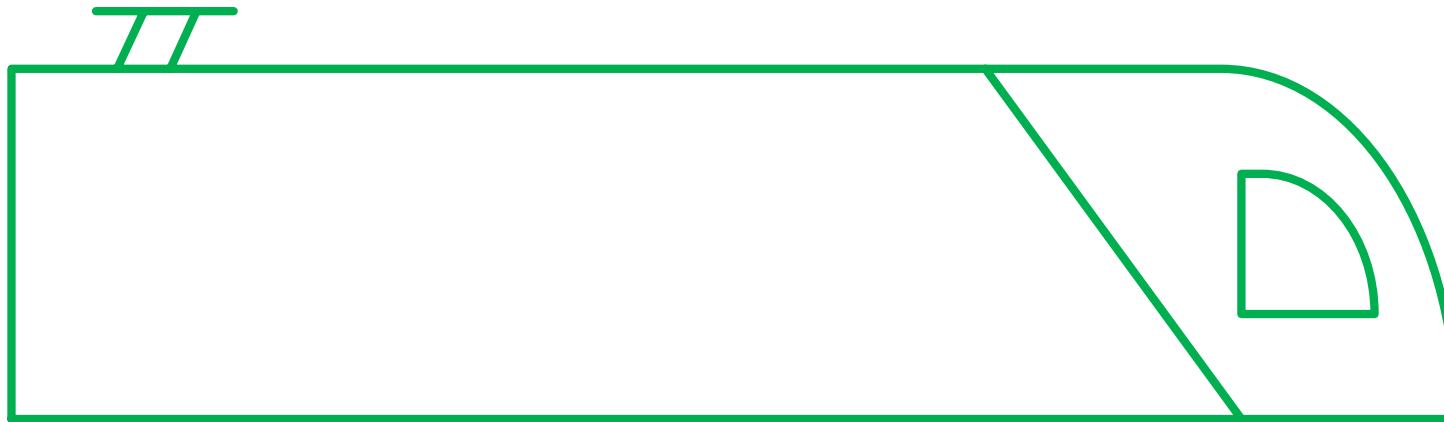


APPENDIX A2-7

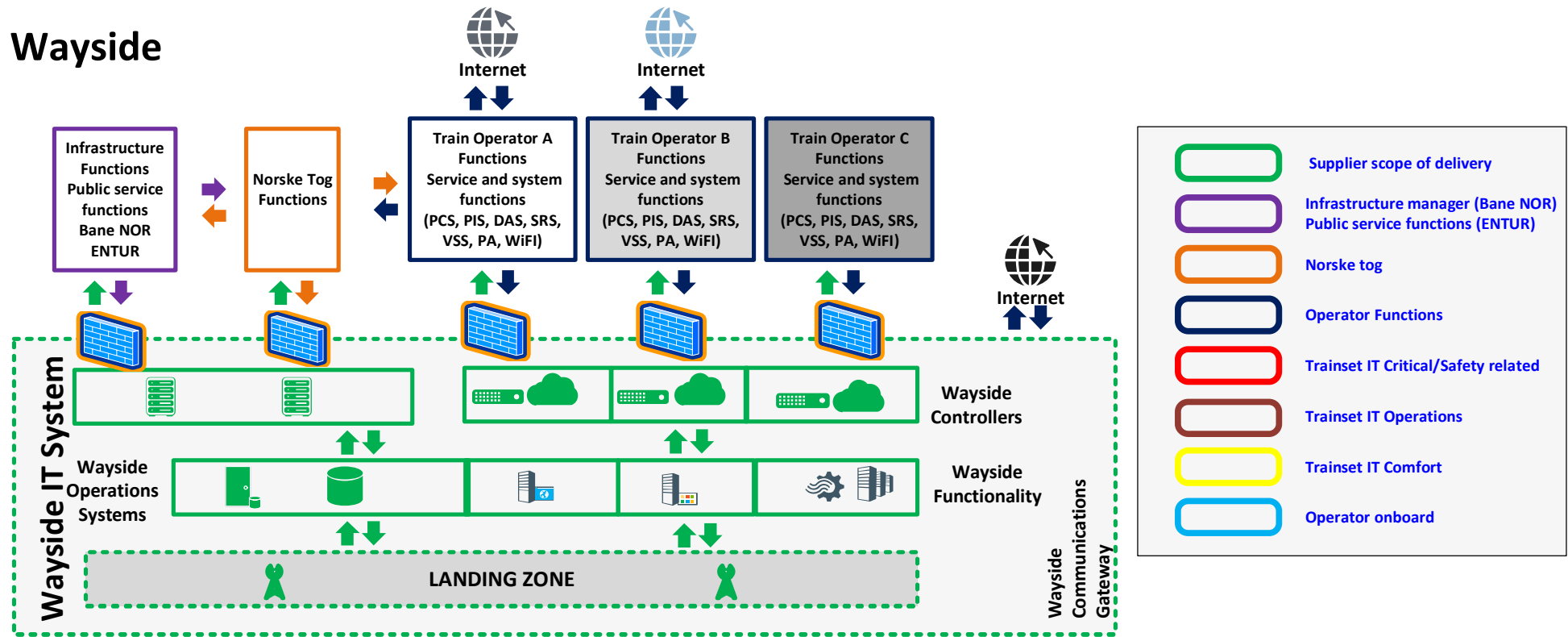
IT System Architecture



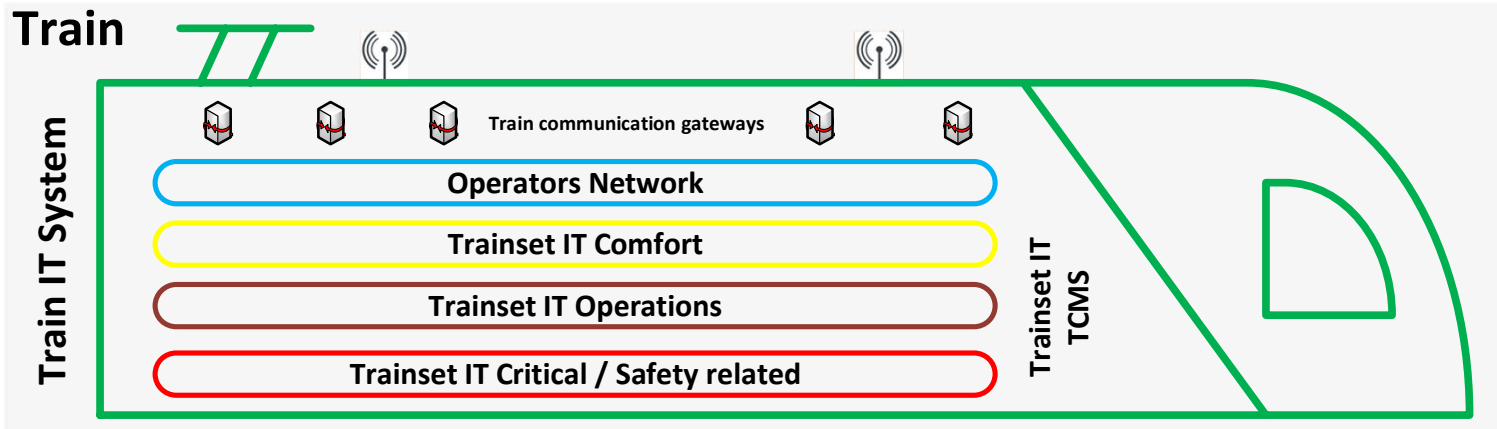
System Architecture Layouts



Wayside



Train



List of Definitions

Landing Zone – This refers to the system where all the data transmitted from the trainsets will land.

Network Operations Center – This refers to the operations centre that process and makes available WiFi service onboard.

Norske tog Functions – This refers to the Norske tog Wayside systems that deliver functionality to and from the trainsEts.

Operator Functions - This refers to the Operators Wayside systems that deliver functionality to and from the trainsets.

Operators Network – This refers to a physically separate network on the trainset for Operators use.

Trainset IT Comfort – This refers to the comfort system that form part of the onboard Trainset IT System.

Trainset IT Operations – This refers to the operations critical part of the onboard Trainset IT System.

Trainset IT Safety related - This refers to the vehicle control and the safety critical part of the onboard Trainset IT TCMS.

Trainset IT System - This refers to the systems on the trainset responsible for the correct operations of the trainsets. This includes the Trainset IT TCMS, Trainset IT Operations, Trainset IT Comfort and Operators Network and all other onboard equipment such as Train communication gateways.

Trainset IT TCMS – This refers to the total train control and monitoring part of the onboard Train IT System. This includes Train IT Safety related, Train IT Operations, Train IT Comfort but not the Operators Network

Wayside Communications Gateway- This refers the system on the Wayside responsible for the communications between the trains and both Norske tog and the Operators.

Wayside Interface – This refers to the interface that will form the demarcation point between the Supplier and Norske tog and or the Operator.

Wayside IT System – This refers to the system on the Wayside responsible for the correct operations of the trainsets. This includes the Wayside Communications Gateway delivered by the Supplier.

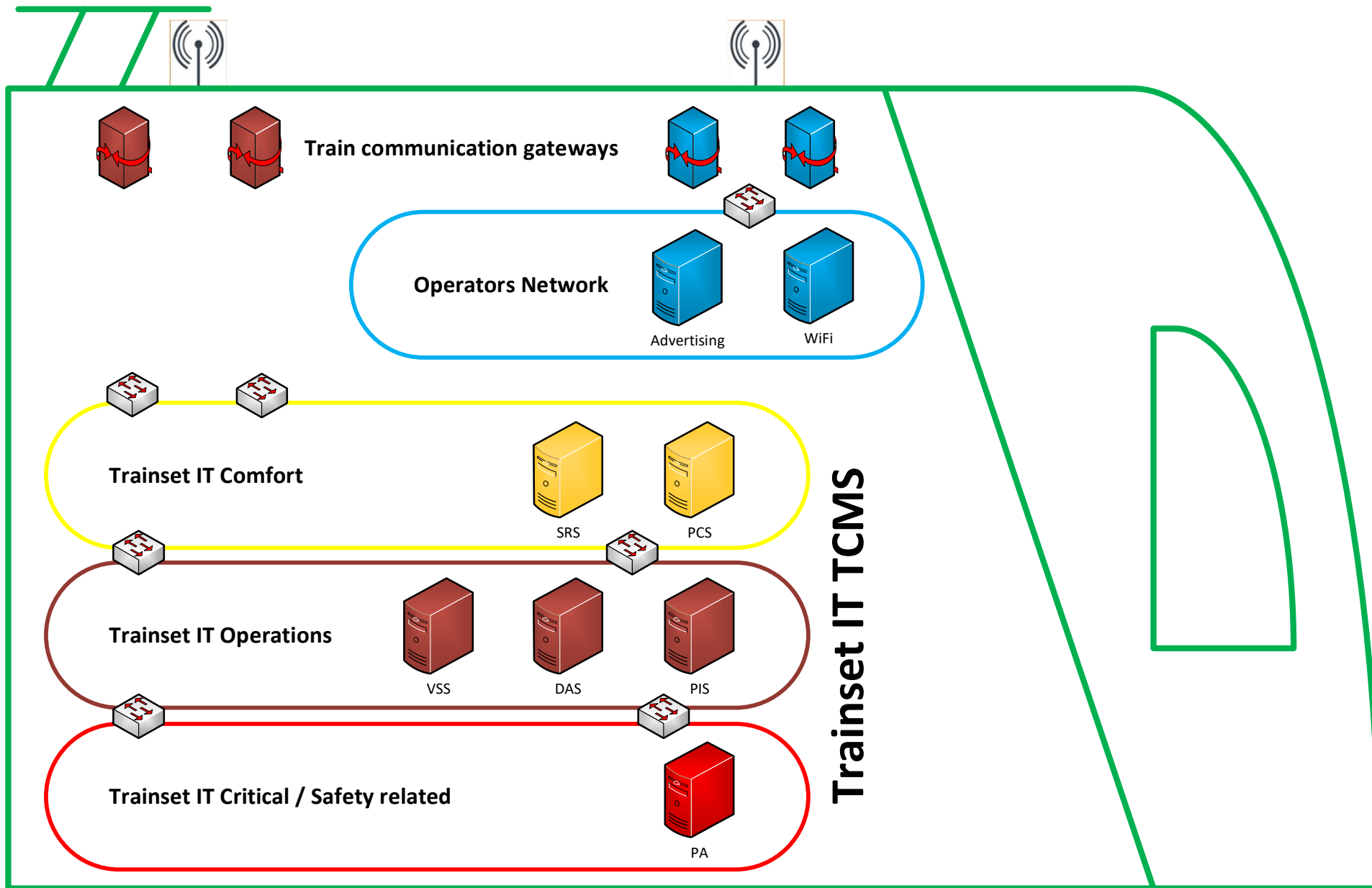
Wayside systems – This refers to the systems delivered by the Supplier to process the output from the Norske tog Functions and Operators Functions and deliver to the trainsets as well as take communications from the trainset and deliver to Norske togs Functions and Operators Functions. This includes but is not limited to Train state data and other data such as PIS etc, and also including options like PCS, VSS etc.

Traffic Package – Contract between the Railway directorate and an Operator for performing rail services in a defined area.

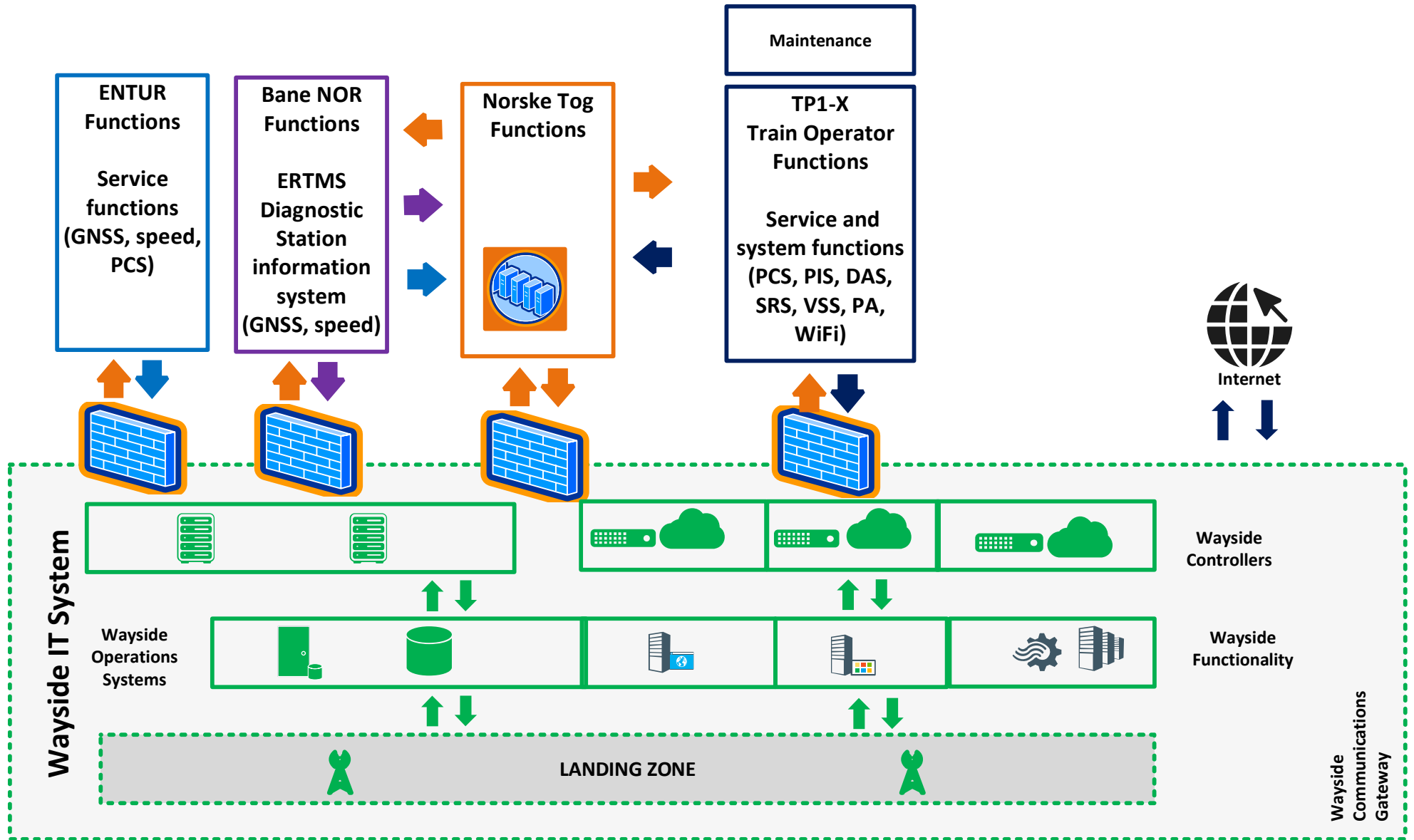
Legend:

DAS = Driver advisory system
ERTMS = European railway traffic management system
GPS = Global positioning system
IM = Infrastructure manager
NOC = Network Operating Center
PA = Public Address system
PCS = Passenger counting system
PIS = Passenger information system
SRS = Seat reservation system
VSS = Video surveillance system
TPx = Traffic Package X

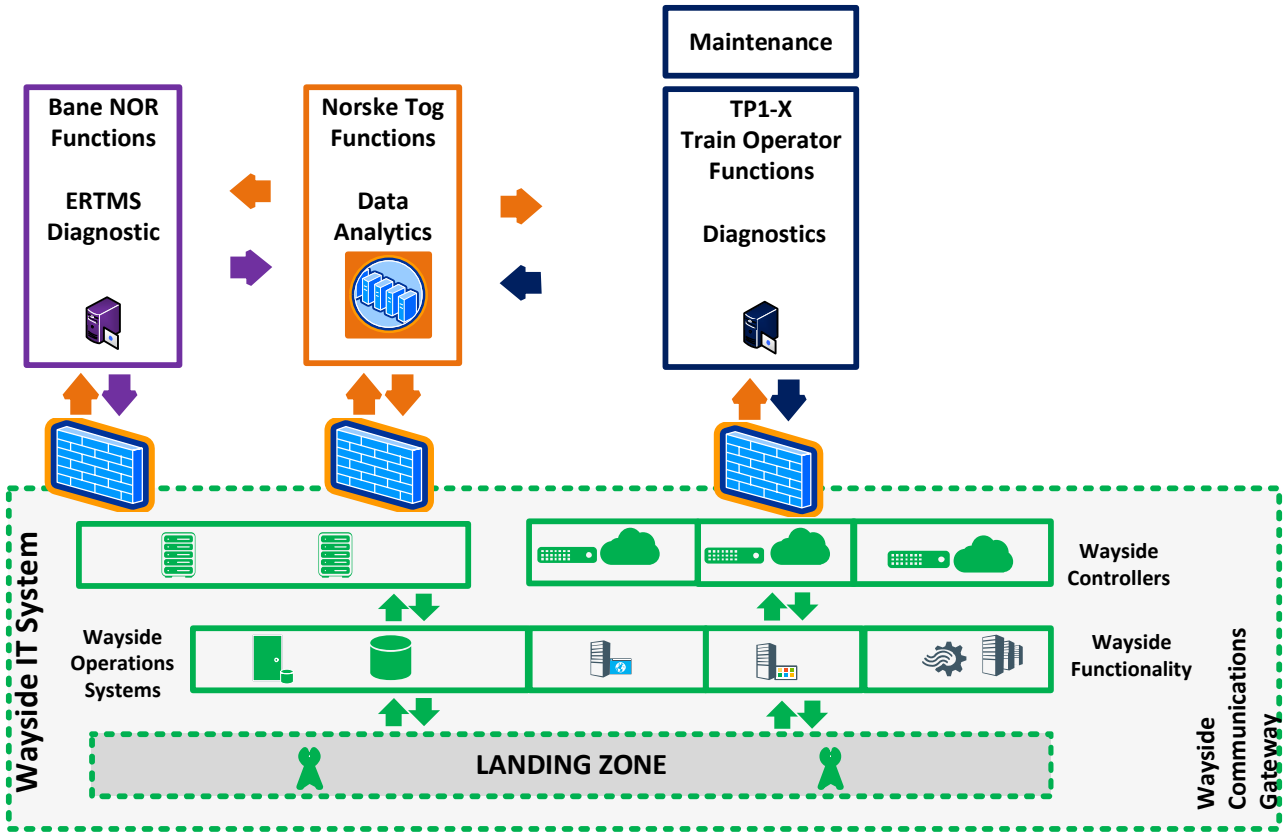
Trainset IT System



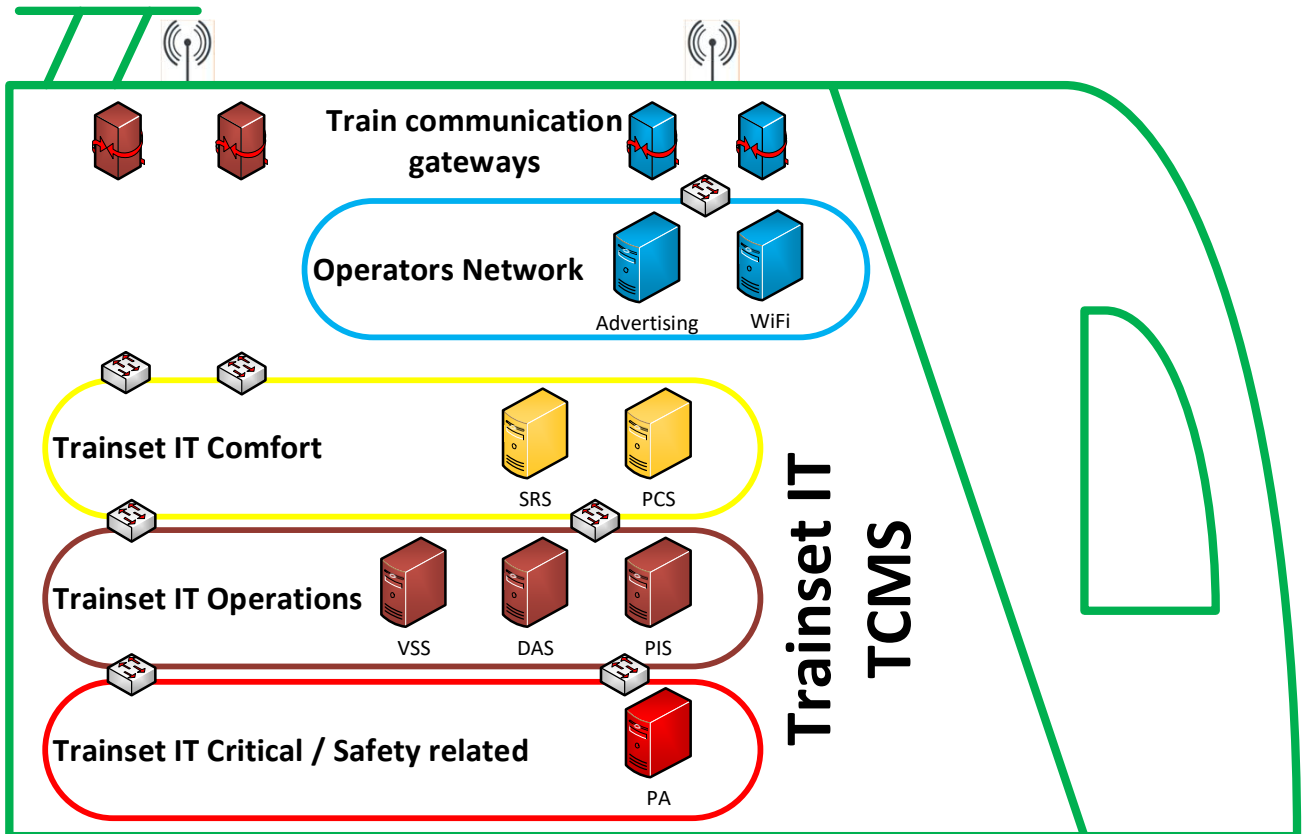
Wayside IT System



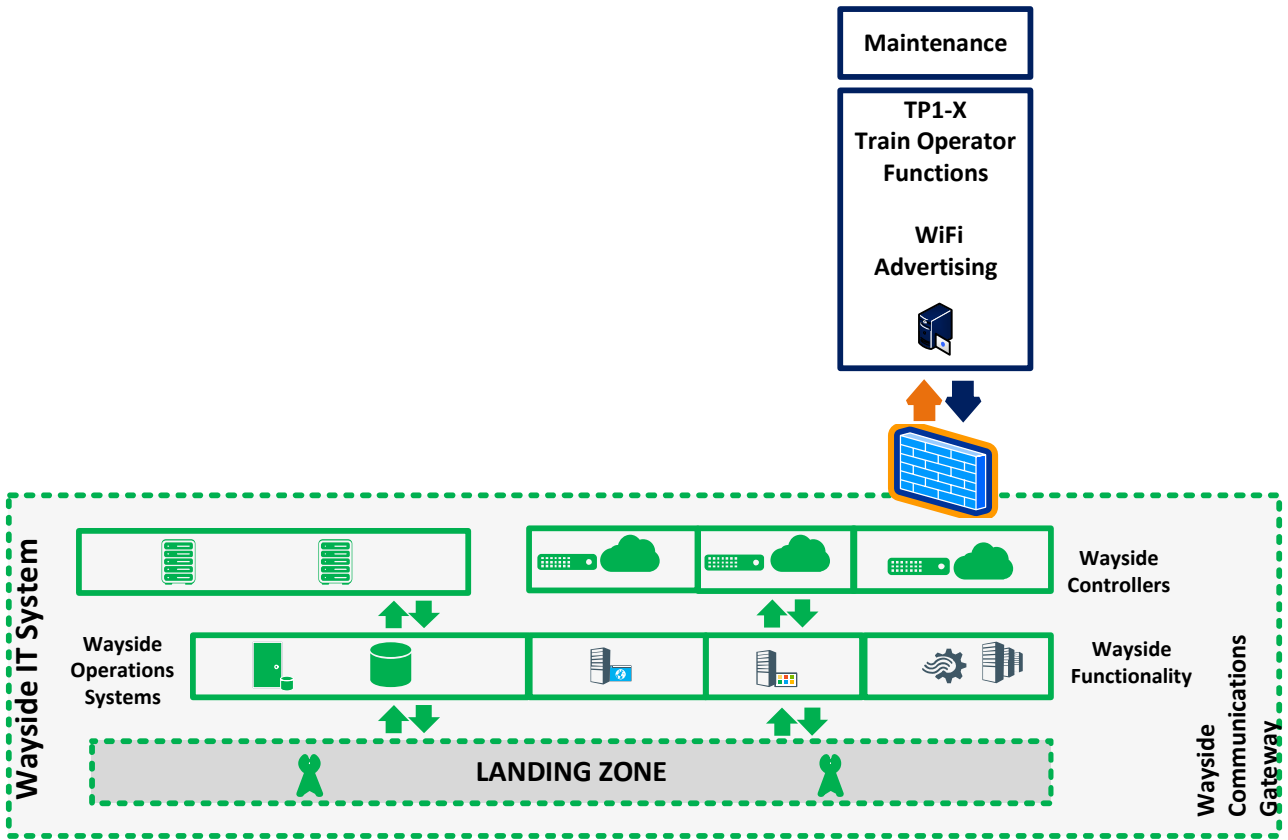
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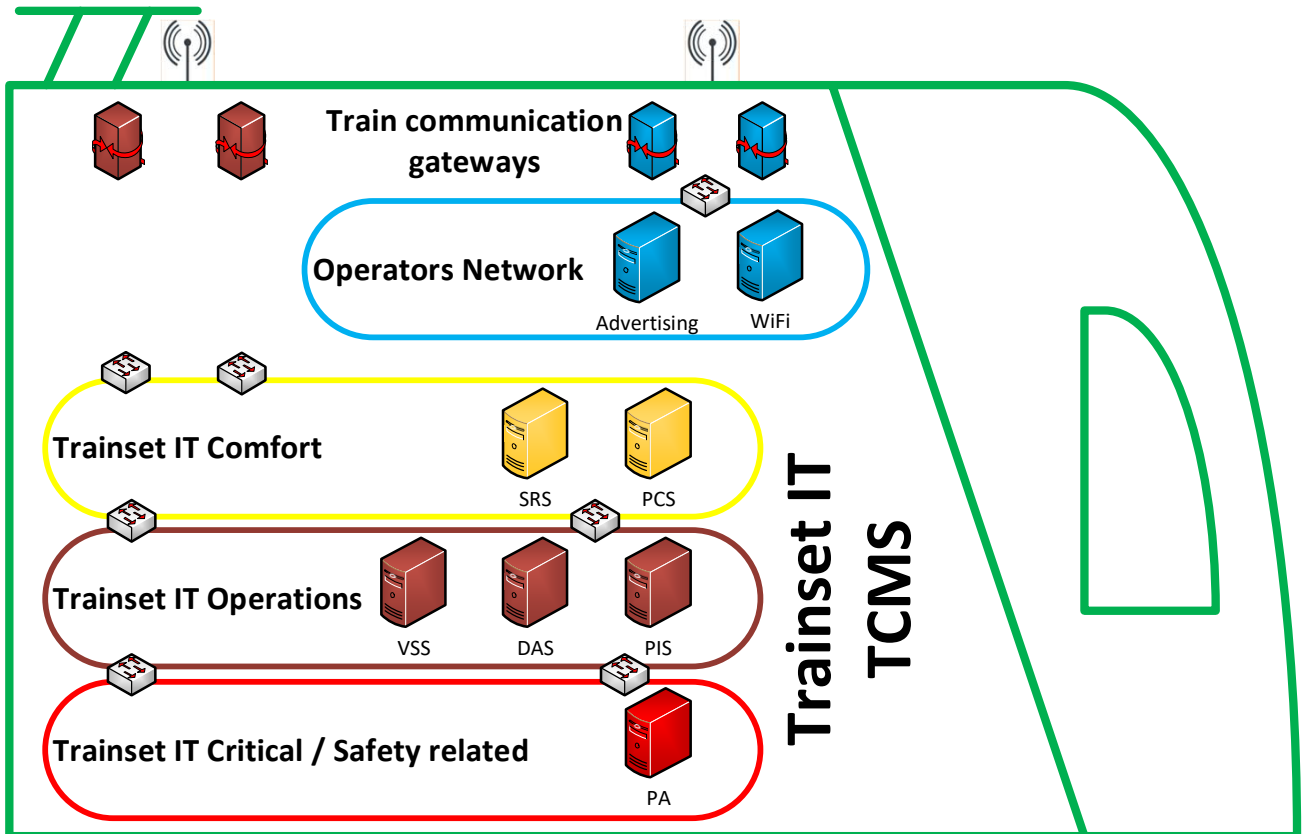
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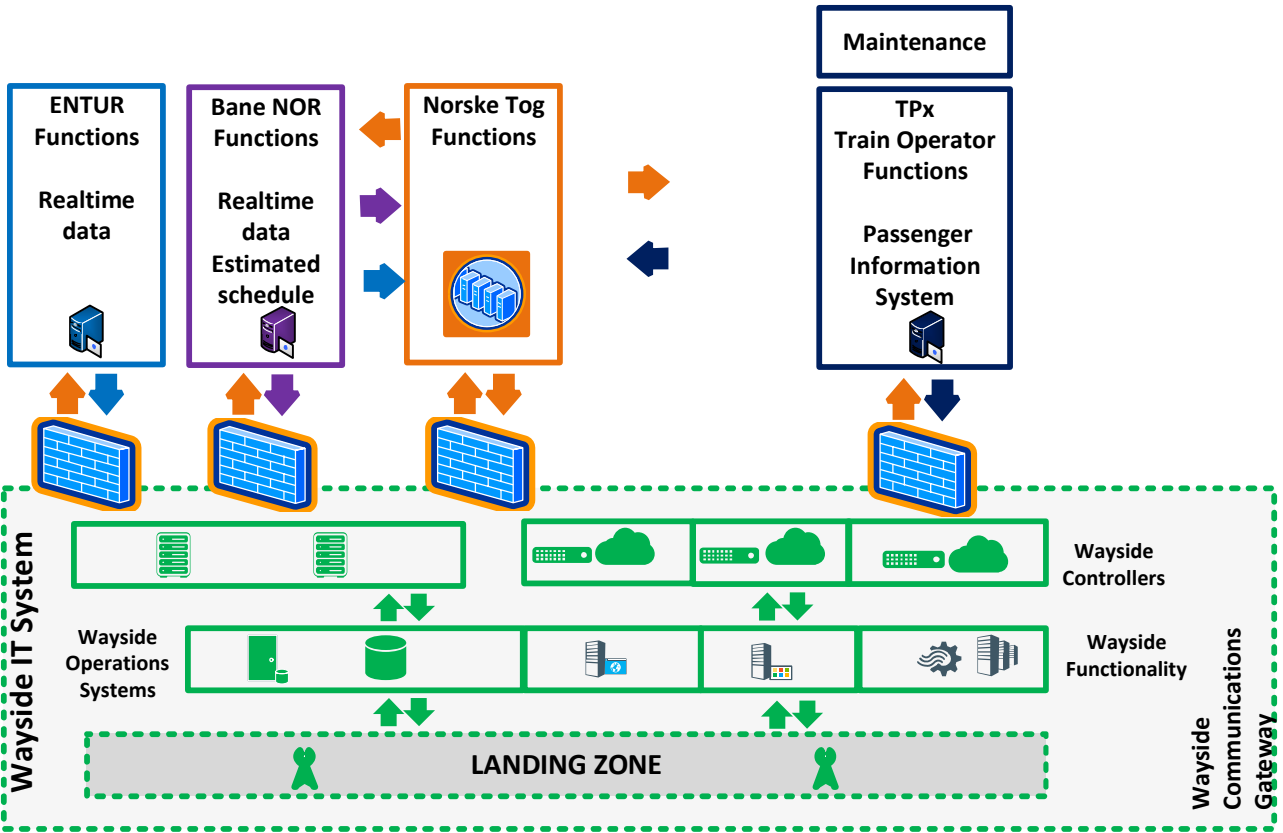
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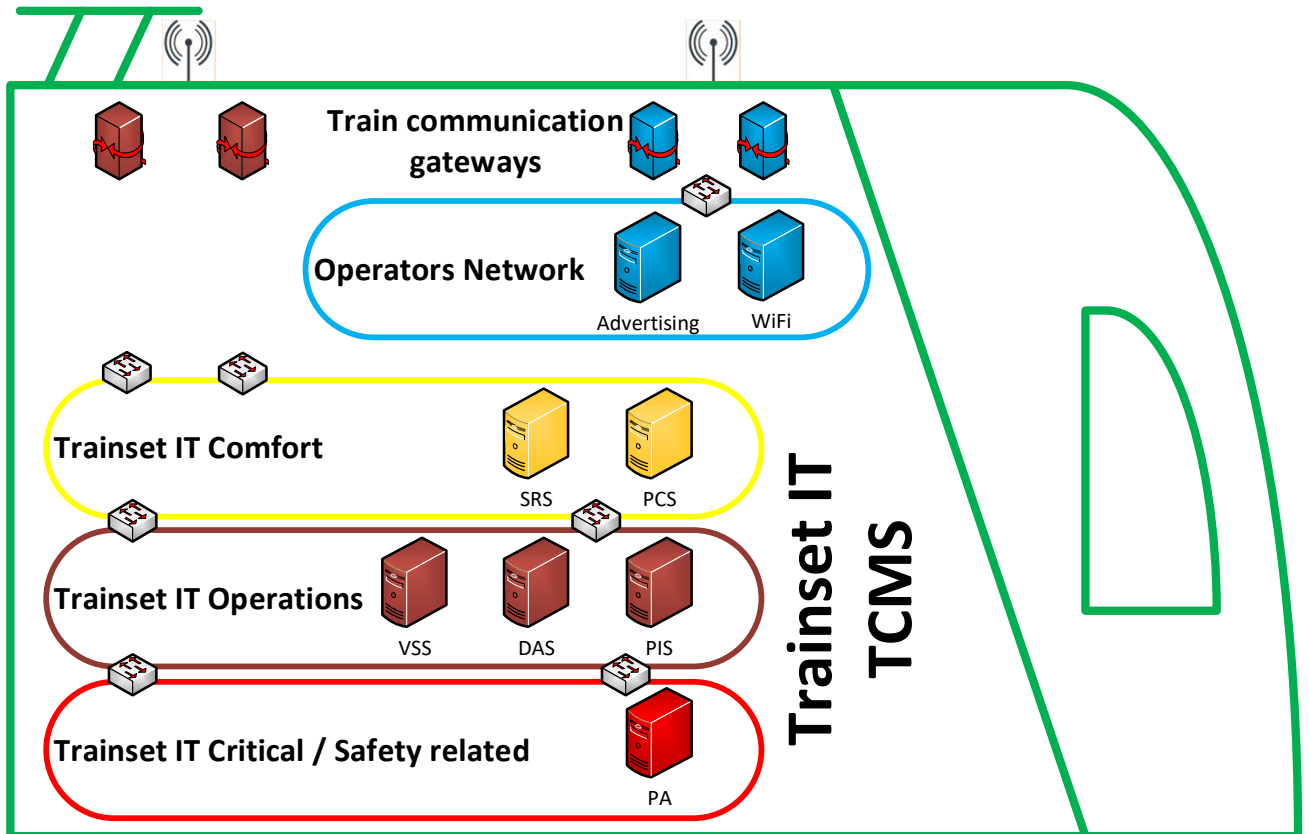
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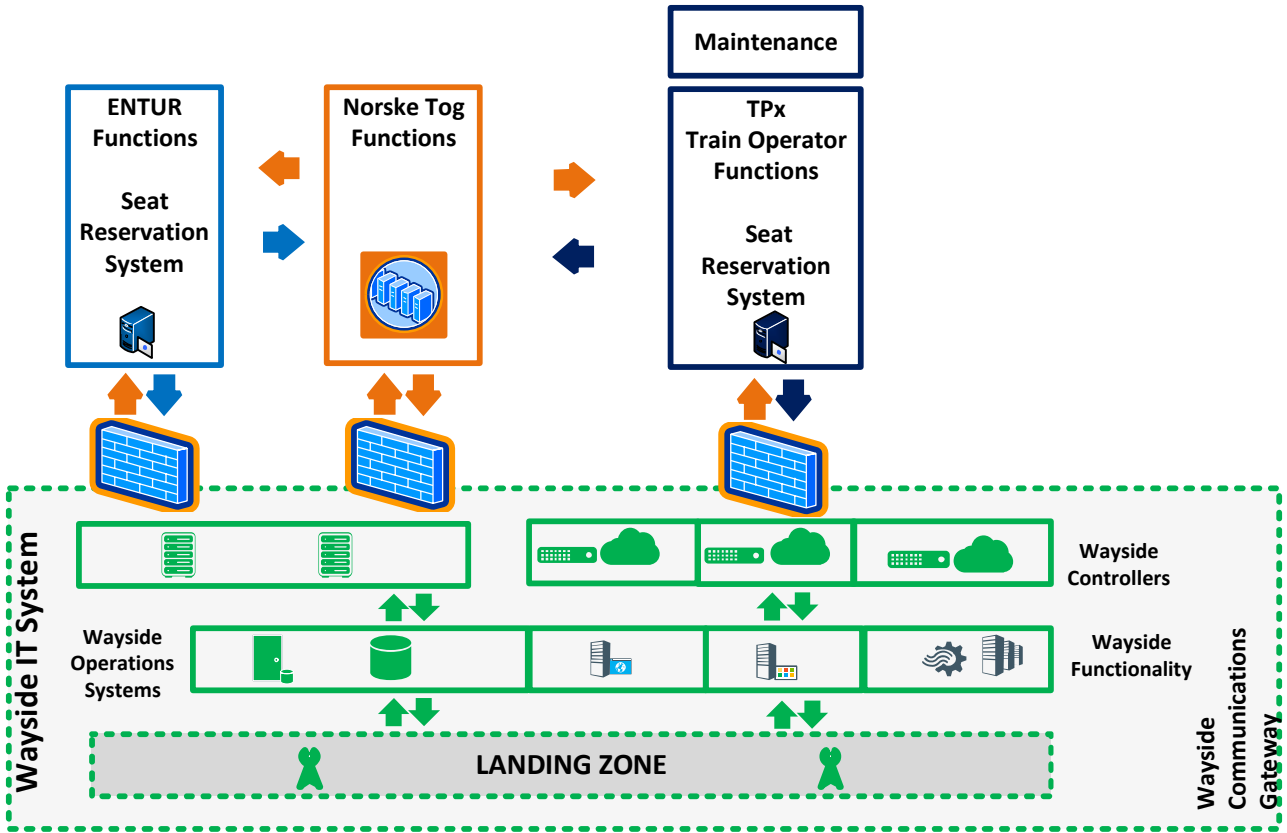
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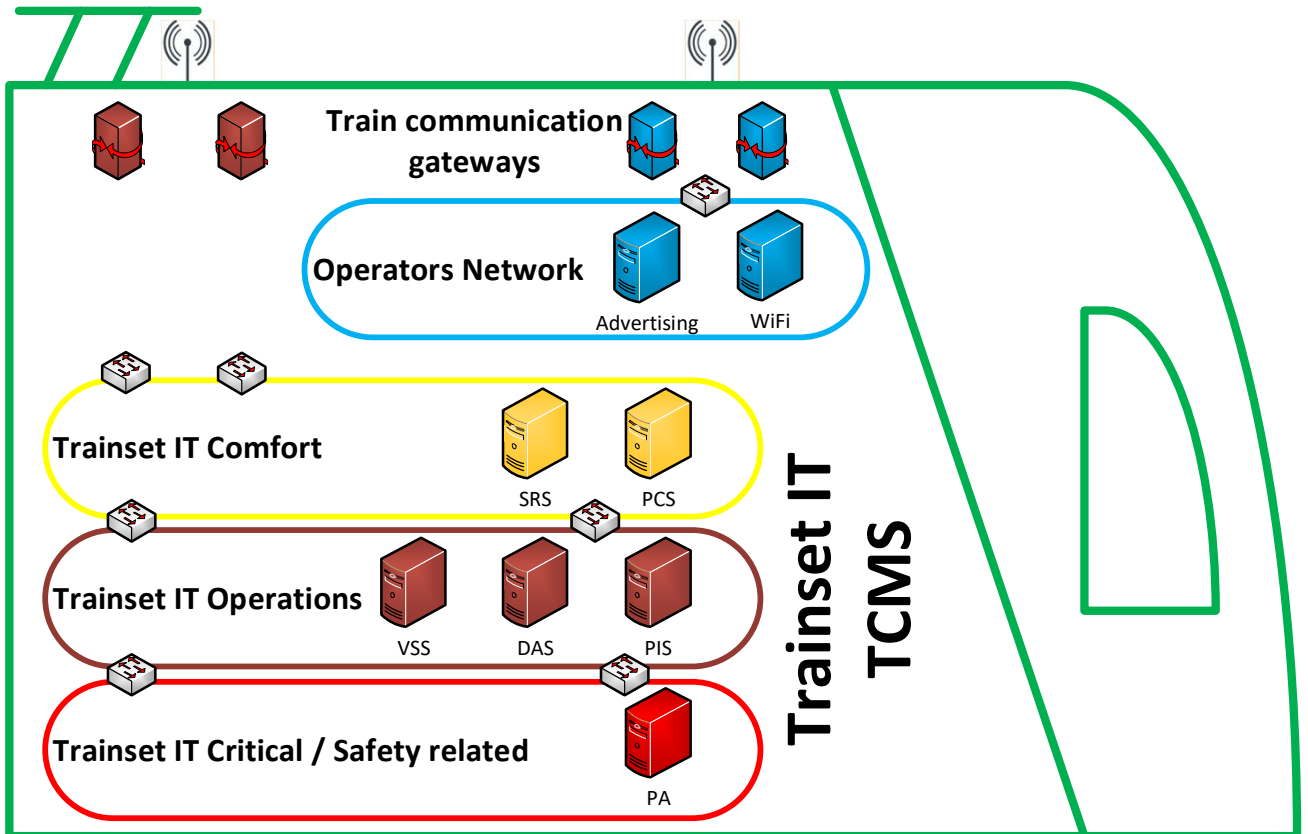
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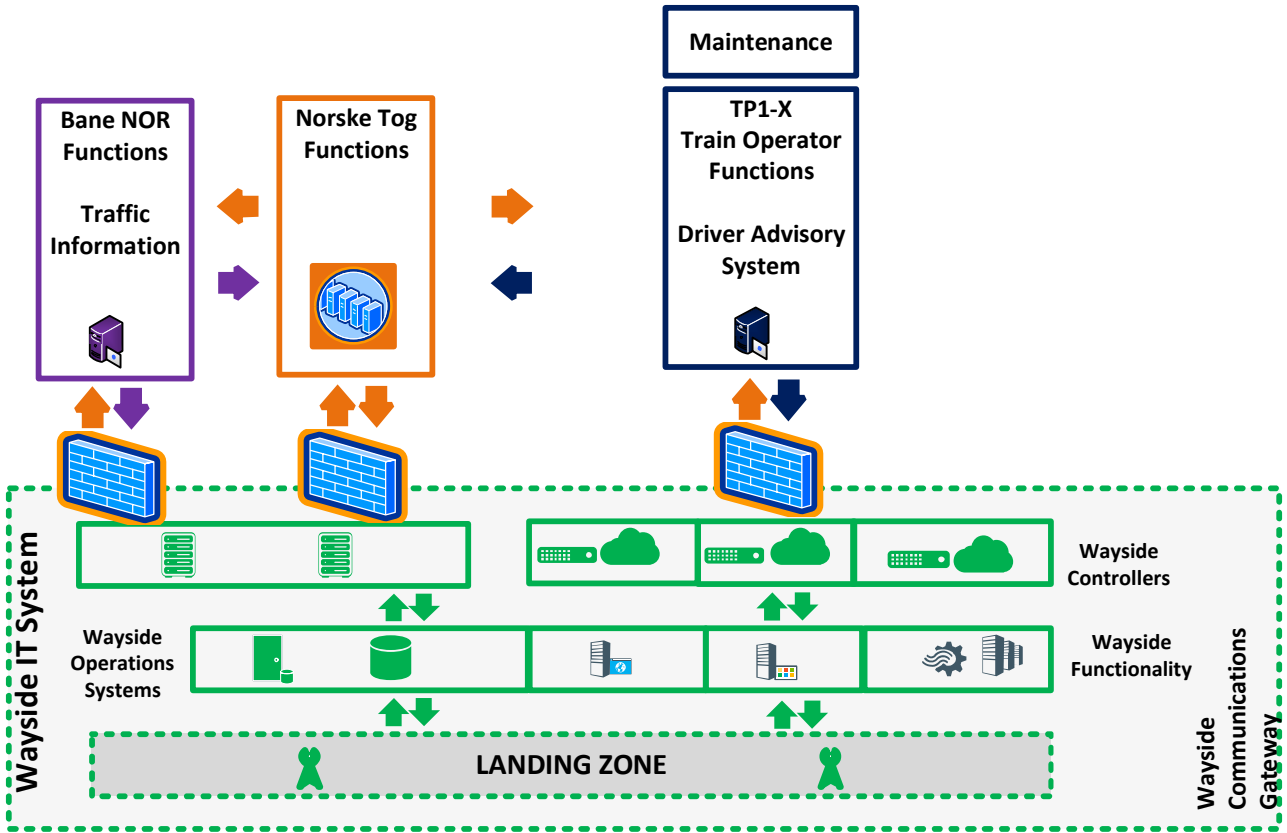
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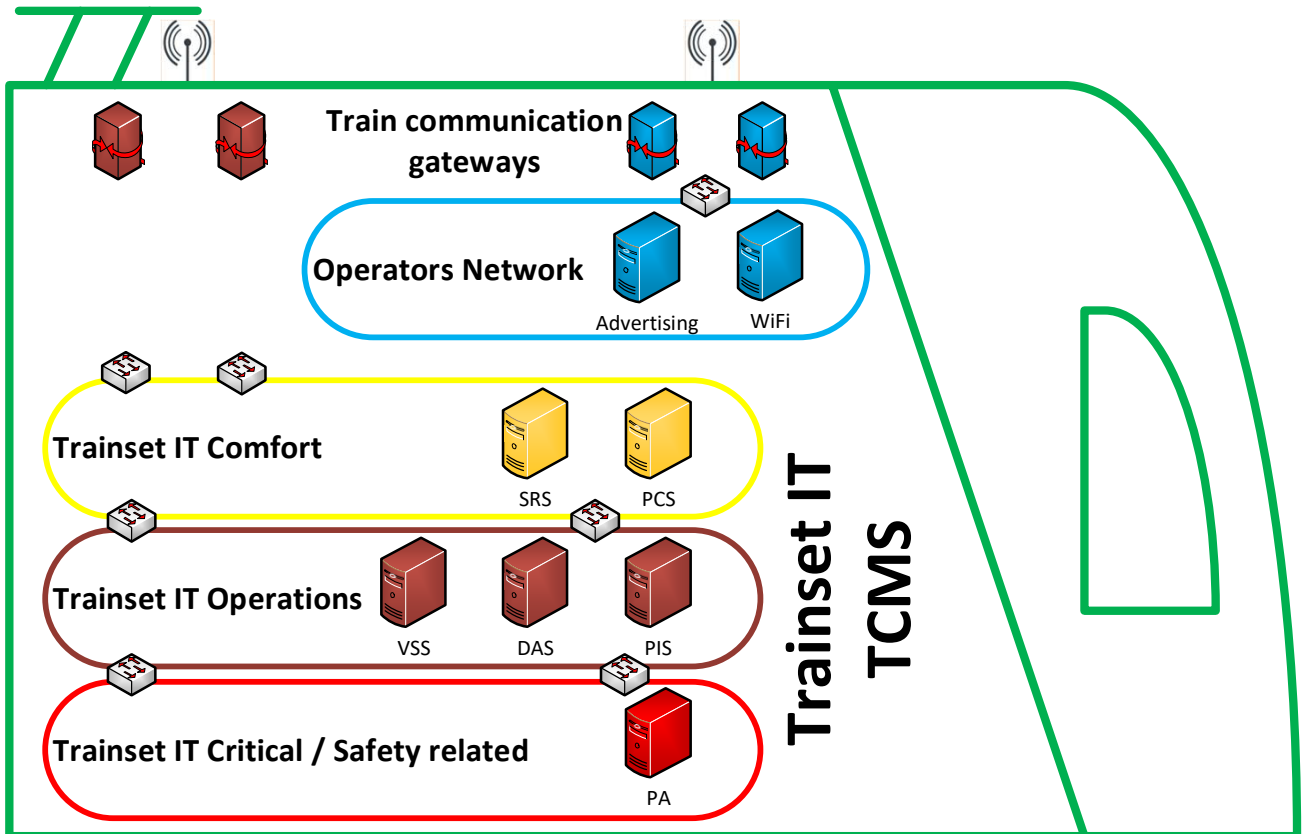
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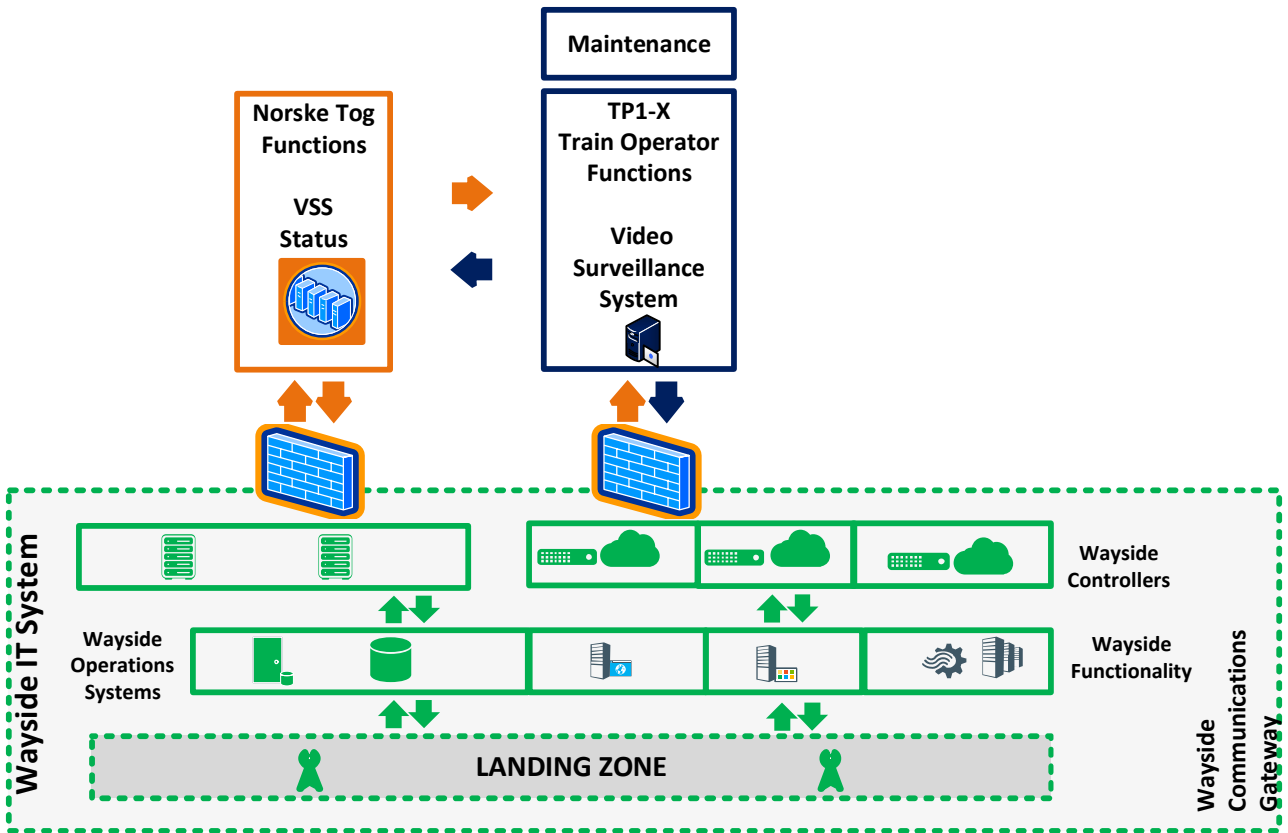
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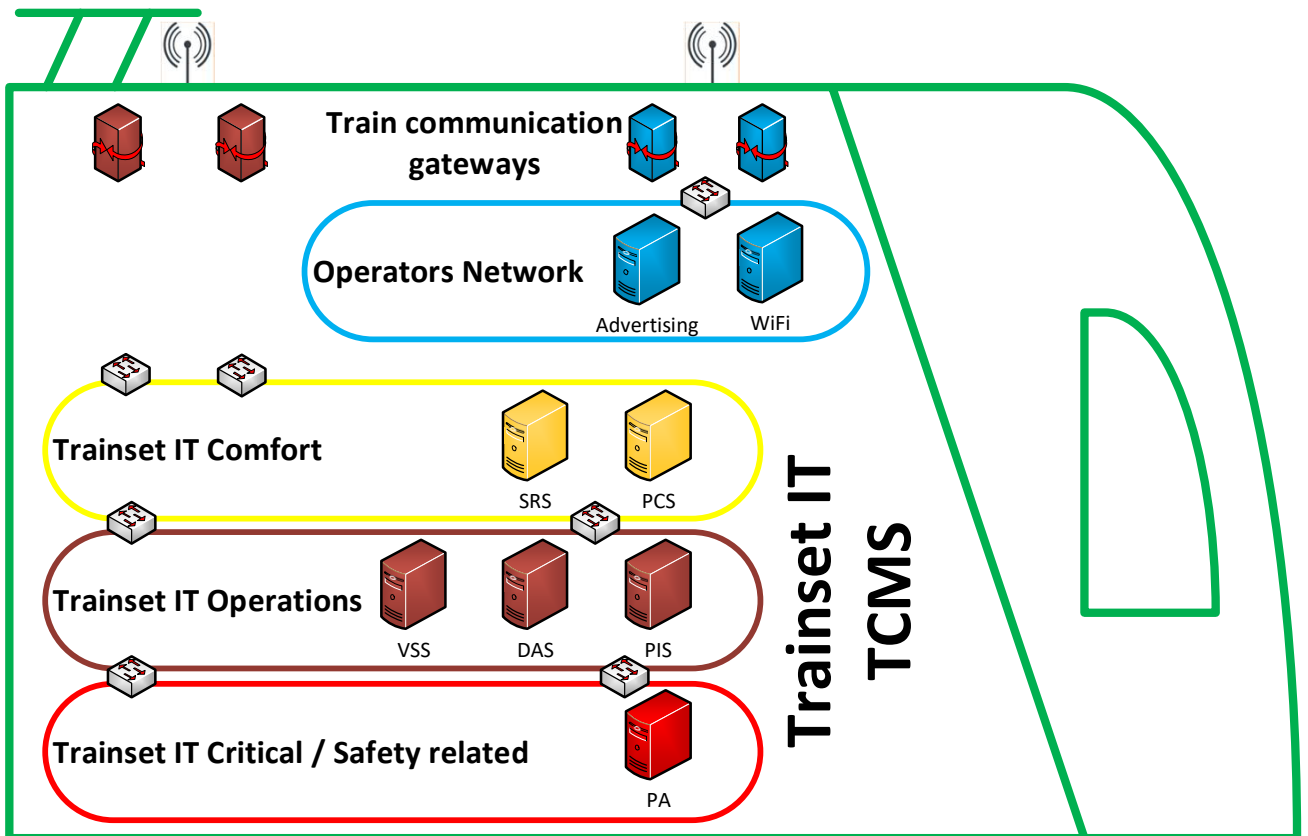
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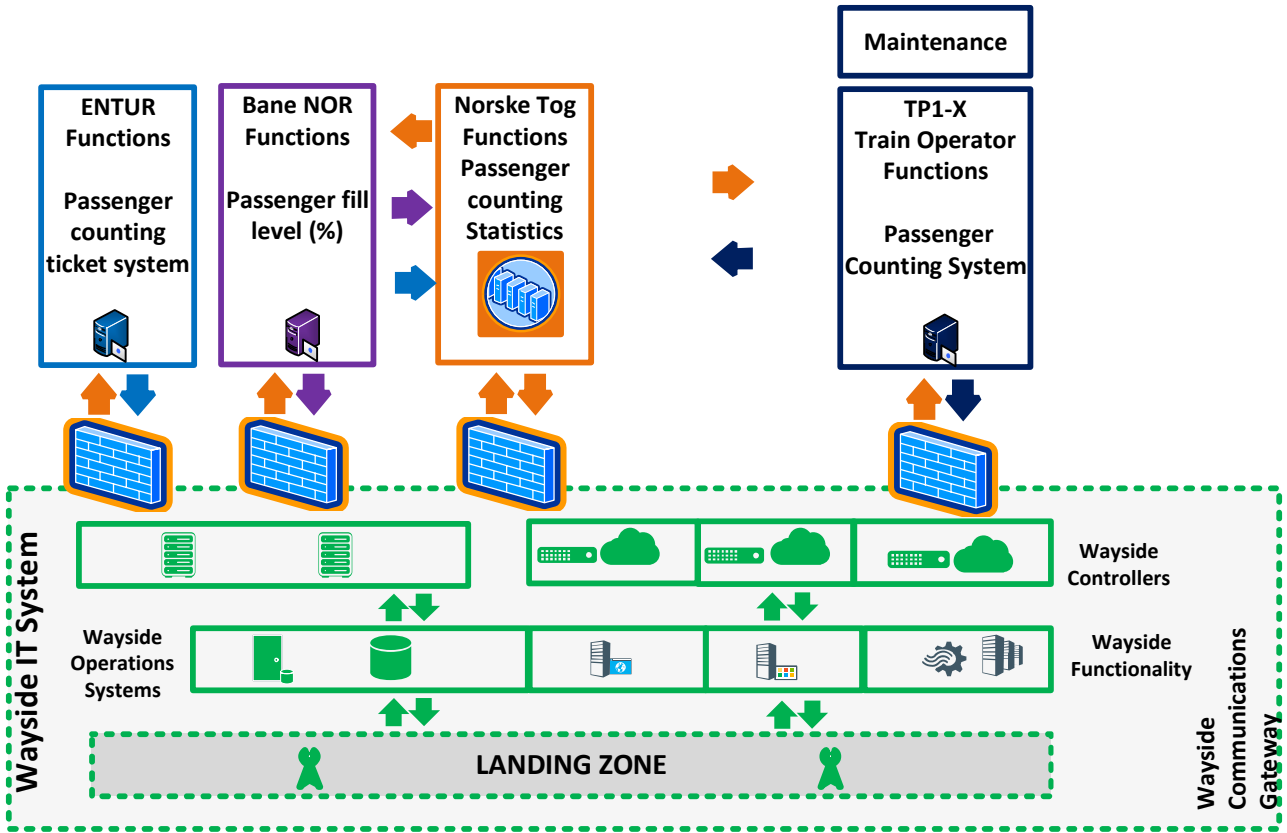
Wayside IT System



Trainset IT System



Wayside IT System



Trainset IT System

