Work Package 5 - Mid-term conference

WP5: Components prototyping, testing and vehicle integration

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NextETRUCK WP5

Components prototyping, testing and vehicle integration

1) Software development and deployment

Multi-level control systems' functionalities   ç

Eco-driving (VUB) - BMS, BTMS (CID) - Smart VCU (TEC) - VTMS (AVL-D)

Control algorithm calibration based on digital twin optimizations

2) Component prototyping and model calibration

vehicle ECUs, new powertrain components and upgrades and thermal related components and upgrades.

Prototypes test at Test Bench Level

Verified under laboratory conditions.
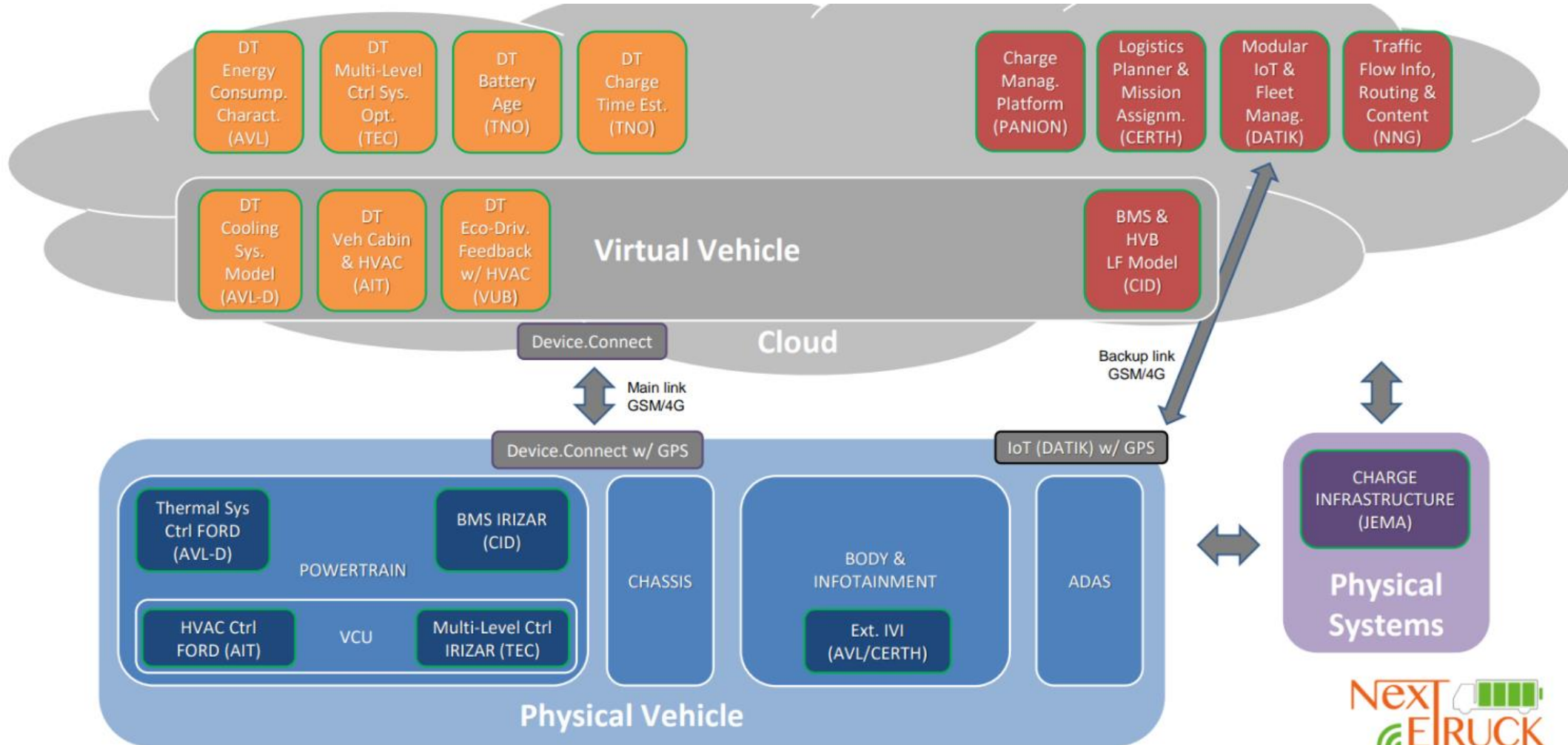
3) Integration test into vehicle and final calibration

Main scientific and/or technological achievements

Design each Use Case the requirements for the implementation of the multi-level control systems' functionalities :

Cloud & E/E architecture - DTs - Interface matrix (cloud & vehicle) - IoT dispositive - ECUs - CAN buses

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Main innovation outputs

Control algorithms tuning through <u>several scenarios</u> and <u>driving conditions</u> using DTs in the cloud

Eco-driving (VUB) - BMS, BTMS (CID) - Smart VCU (TEC) - VTMS (AVL-D)