12th Heavy Duty Hybrid (HDH) meeting

15 Jan 2013, Geneva

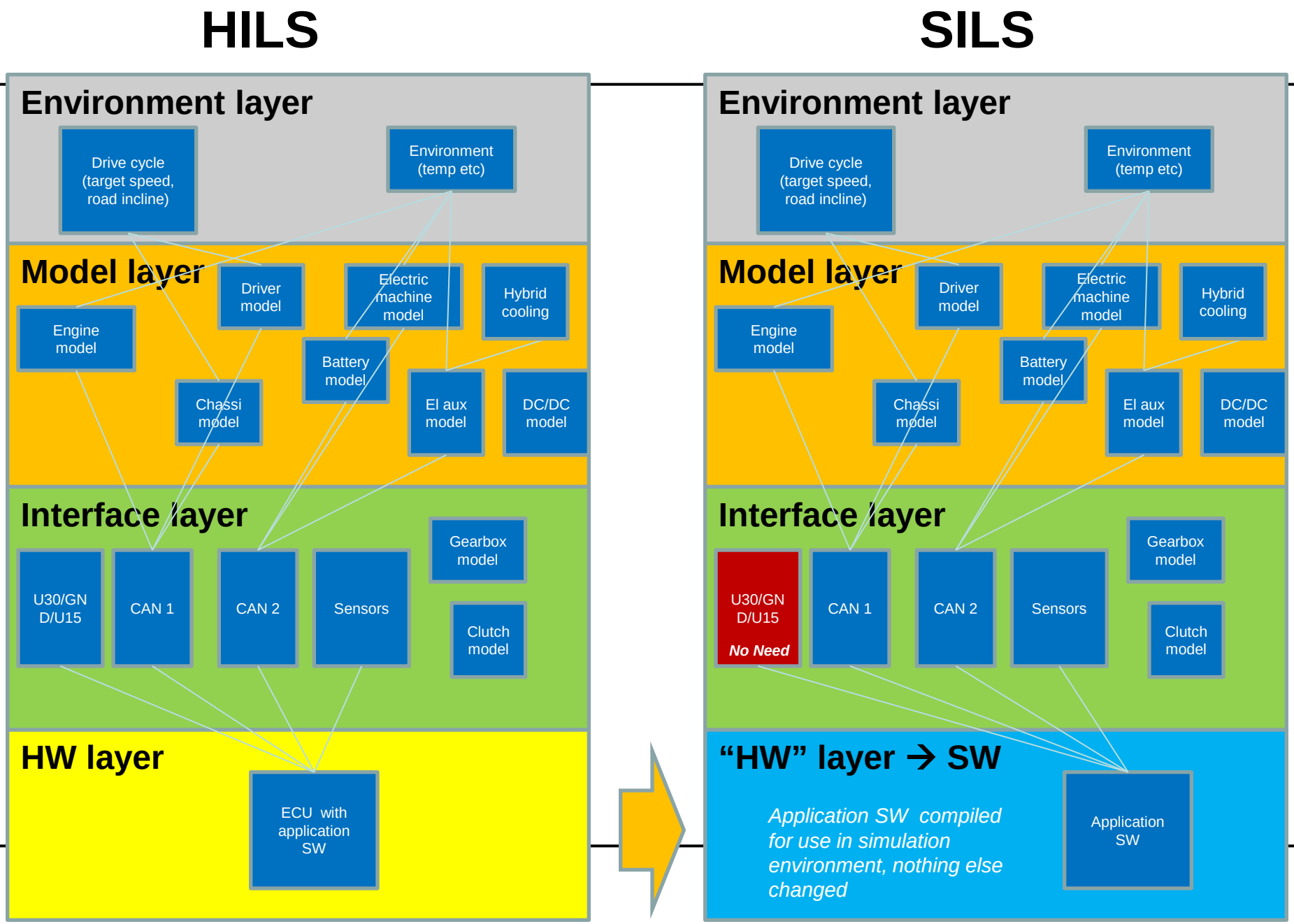
HILS Validation program

- OICA and members will support the validation test program with the required inputs for the interface signal list and the component list.

- Minimum two vehicles will be available for validation test program 2 (March 2013)
  - ➔ One serial hybrid plus one parallel hybrid.

- Requesting acceptance for **SILS** approach in-house during validation program

  Preferable due to:
  - ➔ Timing
  - ➔ Cost
  - ➔ Property


HILS
Environment layer
Drive cycle (target speed, road incline)
Environment (temp etc)
Model layer
Engine model
Driver model
Electric machine model
Hybrid cooling
Battery model
Chassi model
El aux model
DC/DC model
Interface layer
U30/GN D/U15
CAN 1
CAN 2
Sensors
Gearbox model
Clutch model
HW layer
ECU with application SW
SILS
Environment layer
Drive cycle (target speed, road incline)
Environment (temp etc)
Model layer
Engine model
Driver model
Electric machine model
Hybrid cooling
Battery model
Chassi model
El aux model
DC/DC model
Interface layer
U30/GN D/U15
No Need
CAN 1
CAN 2
Sensors
Gearbox model
Clutch model
“HW” layer → SW
Application SW compiled for use in simulation environment, nothing else changed
Application SW