

Integrated Vehicle Health Management Centre, Cranfield University

Suresh Perinpanayagam

Cranfield
UNIVERSITY

IVHM

BOEING

EEDA
East of England Development Agency

Rolls-Royce

MEGGITT
smart engineering for
extreme environments

BAE SYSTEMS

THALES

EPSRC
Engineering and Physical Sciences
Research Council



MINISTRY OF DEFENCE

ALSTOM

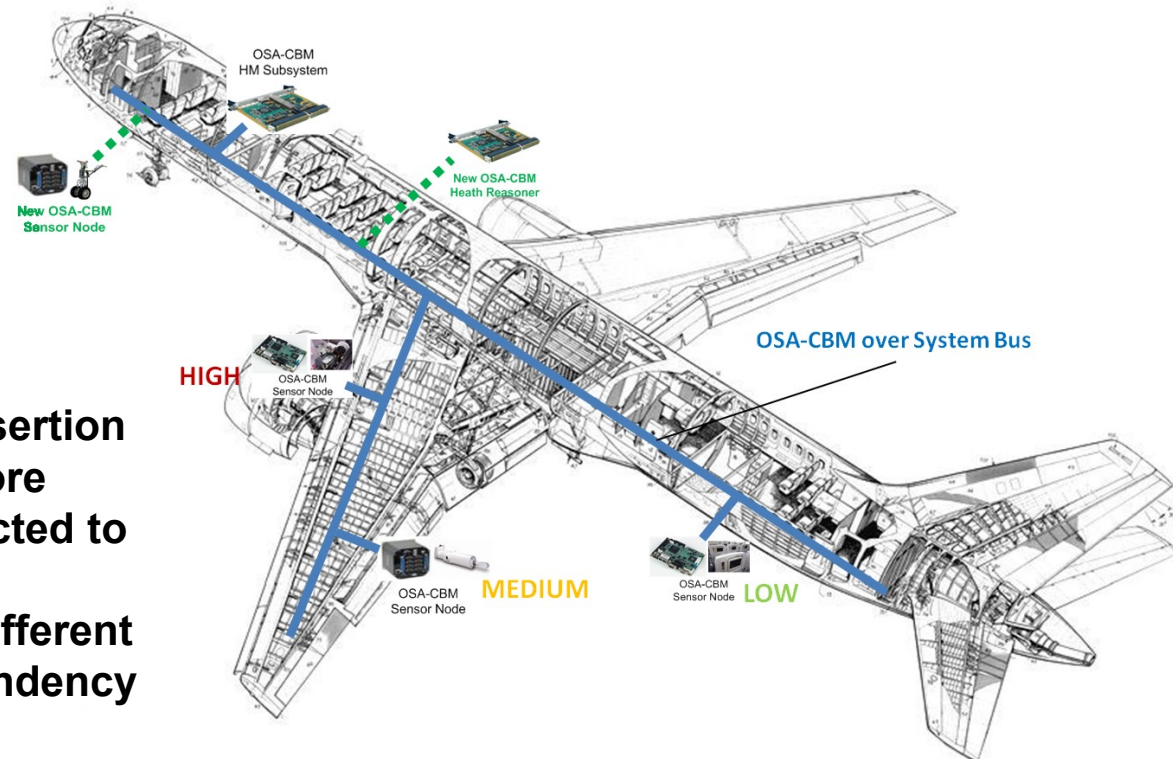
WESTERN POWER
DISTRIBUTION
Serving the Midlands, South West and Wales

housing21

Background

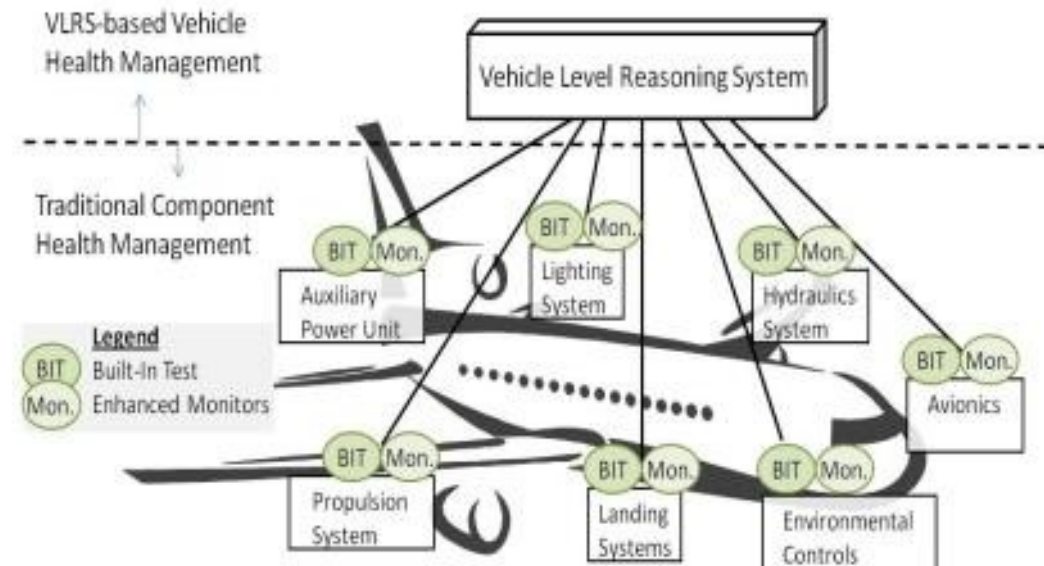
IVHM systems:

- **Incremental technology insertion**
 - Grow over time, i.e. more components will be connected to the IVHM network
- **Different IVHM data have different levels off priority and dependency**
 - Same old data bus
 - Bandwidth capacity – constant
 - Bandwidth requirements – keep increasing



Background

- VLRS – top level system
 - Responsible for fusing data or information from different sub-systems (e.g. control, IVHM)
- Make static or temporal diagnoses about overall vehicle health





IVHM

Integrated Vehicle Health Management