

LIEBHERR

electrical Environmental Conditioning System in IMA2G *Modelling of air system control impact for latency*

Air system / IMA status

Air systems still in LRU : challenge is to incorporate future air systems like electrical ECS in IMA 2G.



Dynamics needs

3 different control loops:

- Compressor protection
- Flow control
- Temperature control

Interface needs

- Valves : command and feedbacks
- Temperature sensors
- Pressure sensors
- Heaters
- Numeric bus with Power electronics



Architecture study

Workshop with Airbus to define IMA2G architecture:

- Allocation of eECS Software in IMA2G avionic components and remote components

Modelling of software

Simulations to check that latency implied by IMA2G architecture answers to eECS needs

