ADS TSOTC

RATIO-SIM Position

TSOTC position

1. **Current status**: What are the major bottlenecks maintaining or replacing the Modelling and Simulation Infrastructures?
   - *SimTG is highly integrated in the Airbus DS overall design and development process (With Range and other tools).*
   - *A strong product line approach has also been set up (E3000, eNeo, Astrobus)*

2. **Opportunities**: what are main drivers to renew simulation infrastructure (technology push or application pull, obsolescence, etc.) ?
   - *New requirement to come/assess related to MBSE / Early simulation or compatibility with FMI standard*
   - *New requirement to improve/detect modelling (lack of) fidelity thanks to in orbit data*
   - *New requirement for automatic testing to reduce simulator overall cost*
   - *New requirement for Automatic modelling/simulator creation based on System Architecture/Data Definition (see Digital Factory 4.0)*

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3. **Common interest**: are the European Industry (Primes and SMEs) willing to work towards a harmonised Modelling and Simulation Infrastructure?
    - *A global modelling / standardisation approached is welcomed. It should allow (global) cost reduction, better exchange between primes and Agencies and should comply with a global 'satellite product line' approach'*
    - *A global consideration of what is done in Avionics should be investigated (co simulation, dynamics, environmental)*
    - *A validation of AGILE development on an extended enterprise scale*
4. **Approach**: What are the next steps that need to be taken to work towards a harmonised Modelling and Simulation infrastructure? Who needs to be in charge and who shall develop and maintain the tools?
    - *SMP2 for level 1 & 2 standard could be improved (latest LL from CERES) and progress/agree on a Standard REFerence Architecture.*
    - *Lesson learned from EGS-CC should be analysed and implemented*
    - *Simulation is perceived as a competitive advantage differentiator. A clear mastership and a strong level of customisation is seems as mandatory at Airbus DS level to influence and master its global S/L overall development process*
    - *Harmonisation should be compatible if possible to a wider field of application than Space (ie; Aircraft, UAV for instance)*

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