Migrating to a Real-Time Distributed Parallel Simulator Architecture – An Update

Bernardt Duvenhage
Council for Scientific and Industrial Research
&
University of Pretoria
Under leadership of *Prof D Kourie*

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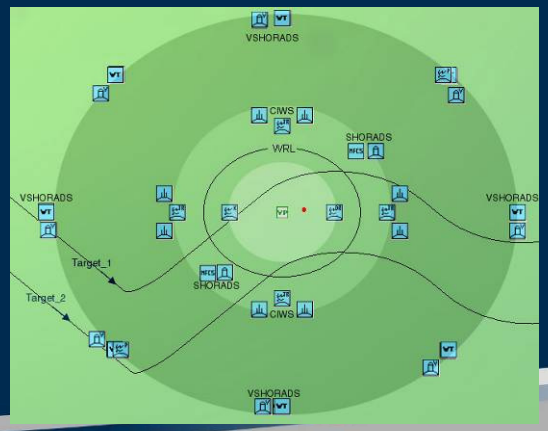
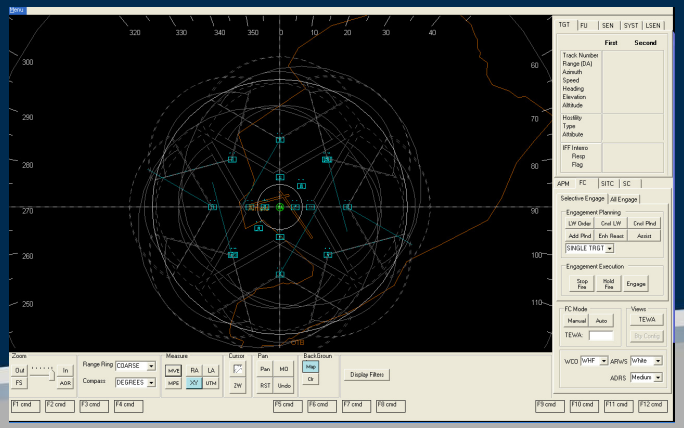
Background…

- GBADS Simulation Support Capability conceptualised in 1998 by CSIR, ARMSCOR and SANDF
  - Acquisition decision support
  - Tactical Doctrine development
  - Live integrations for field exercise support





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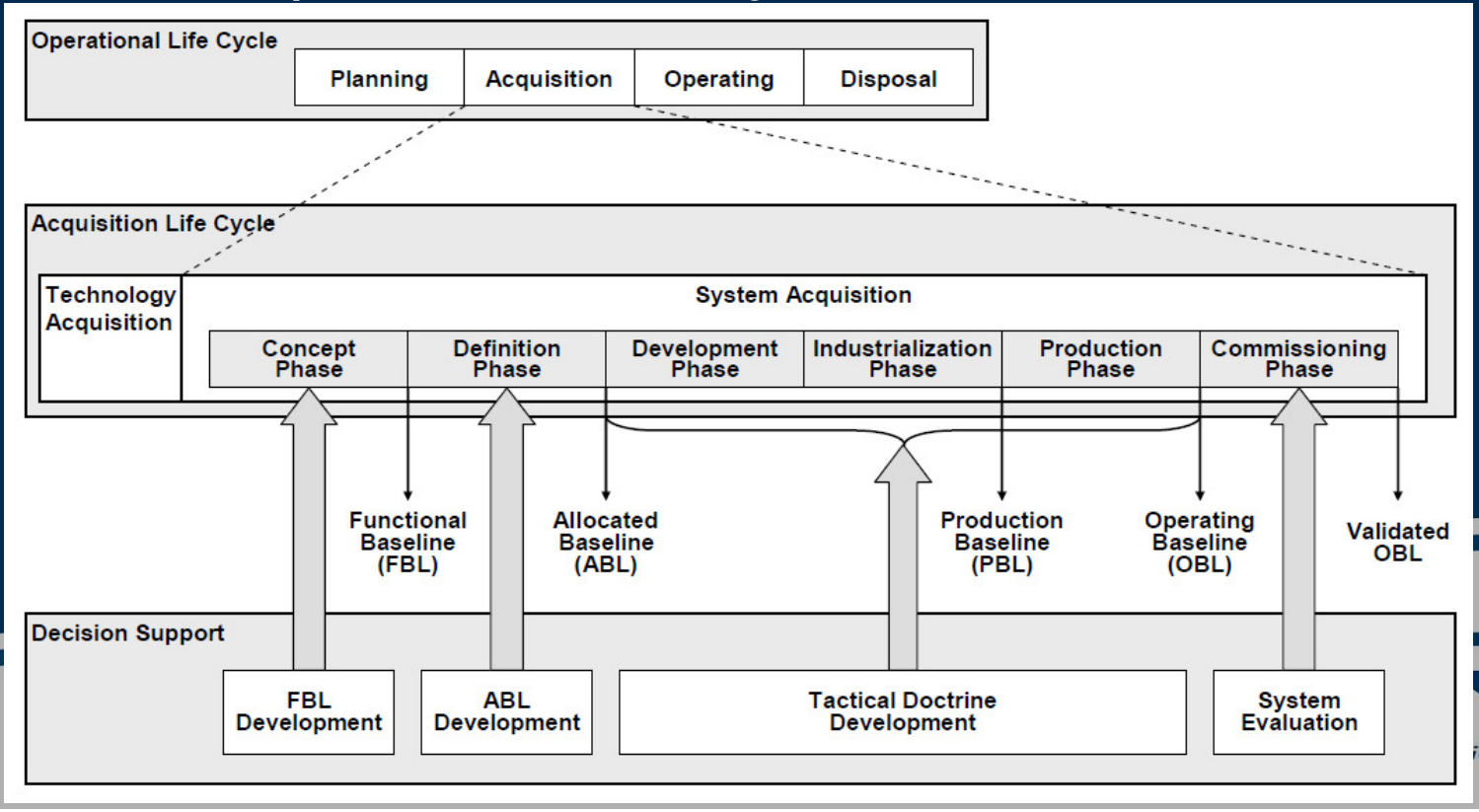
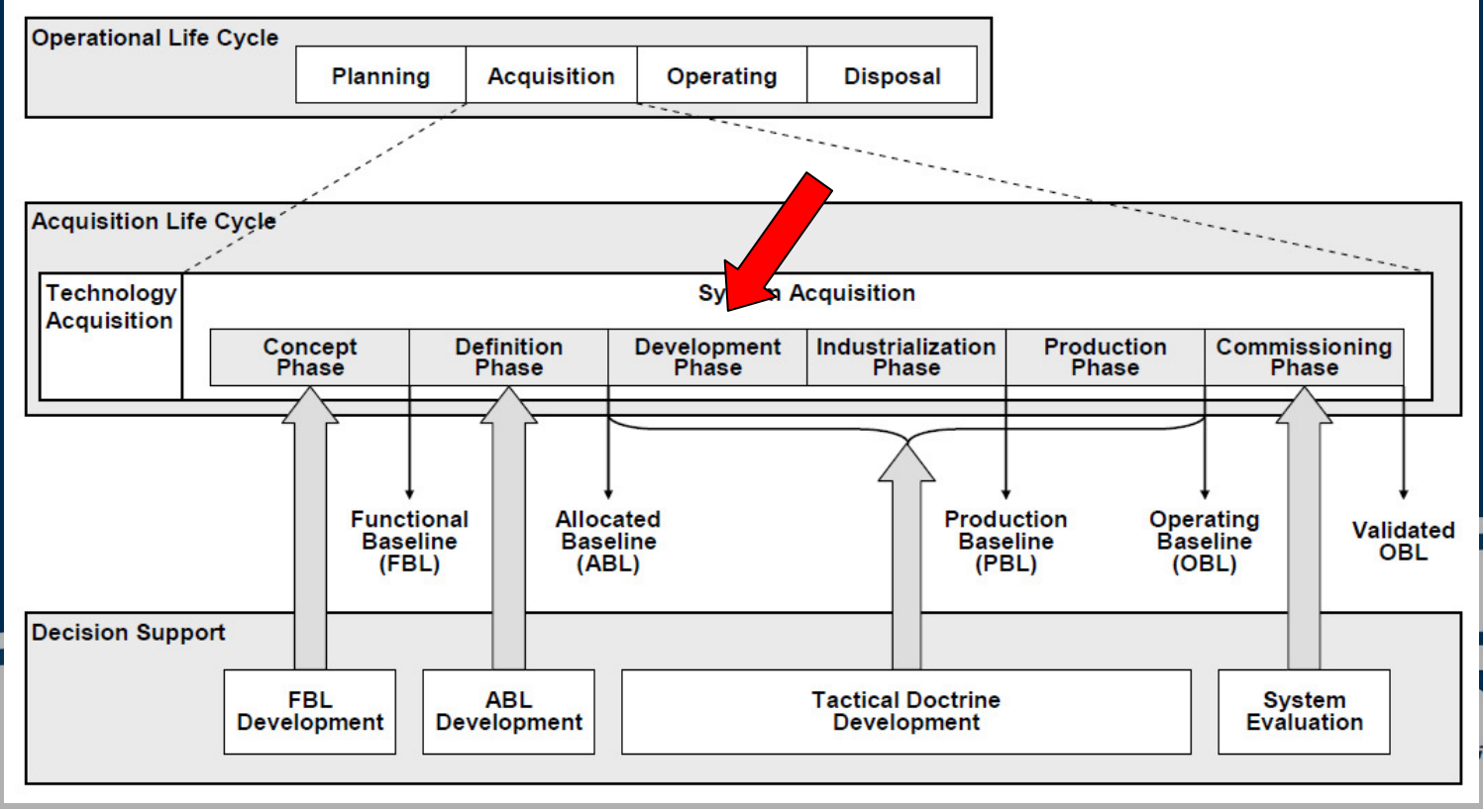
Background…

- Simulator Architecture currently in its 3'de revision
  - Evolved along with the phased progression of the Acquisition Life Cycle.



Background

- Latest simulator architecture started in 2004 with the *development phase* of the acquisition life cycle.



Simulator Requirements

- Simulation of an air defence deployment:
  - A synthetic environment,
  - ground based weapon and sensor systems,
  - their related ground crew operators and
  - a threat scenario.
- Tactical doctrine development facilitated by real-time Operator In the Loop (OIL) support
- Requires 4 to 5 times parallelisation of execution for some of the bigger scenarios.
- Reuse of existing simulation components and models important for economical reasons.

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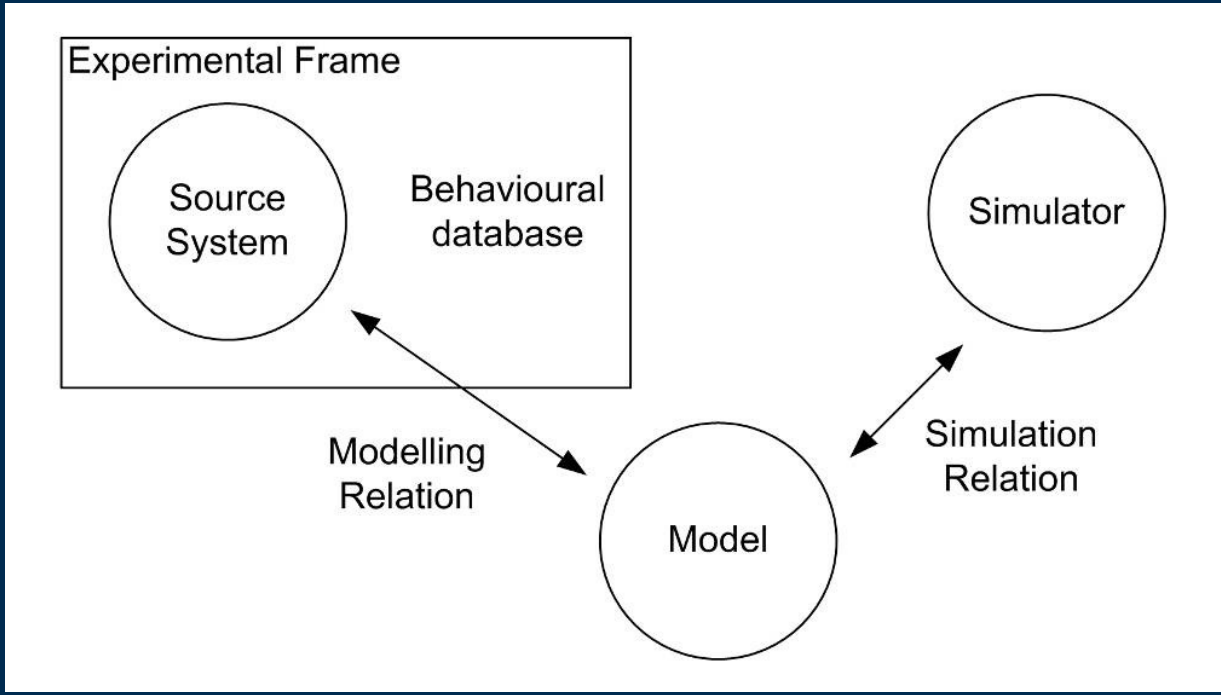
M&S Framework…



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