



# Sensor Signal Processing for Defence 2013

**UDRC Phase 2** 

Signal Processing
For the Networked Battlespace

**An Industry Perspective** 

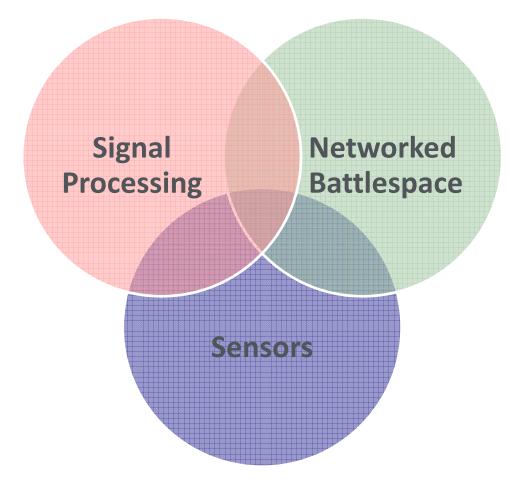


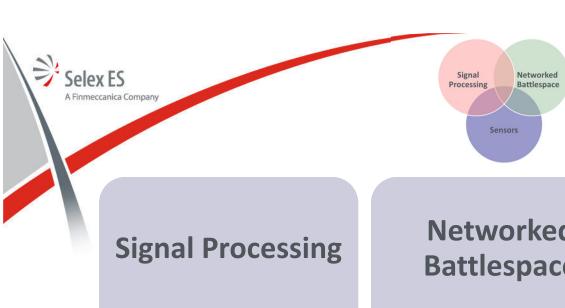
# Two different viewpoints: Technology and Collaboration

**Sensor Signal Processing for Defence 2013 UDRC Phase 2 Signal Processing** For the <u>Networked Battlespace</u> An **Industry** Perspective Networked Signal Academia MoD **Processing Battlespace** Industry Sensors



# **The Technical Viewpoint**





**Broad definition, scope** to include data processing, Al etc

Real time, sequential,

**Implementation** efficiency

# **Networked Battlespace**

Distributed, interconnected

**Synchronised** 

**Standards** 

### **Sensors**

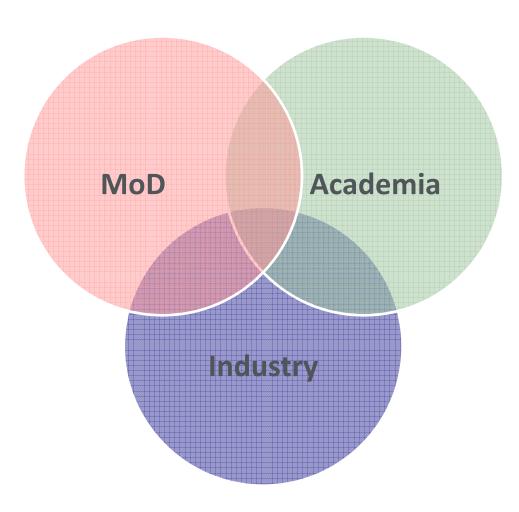
Platform/system integration

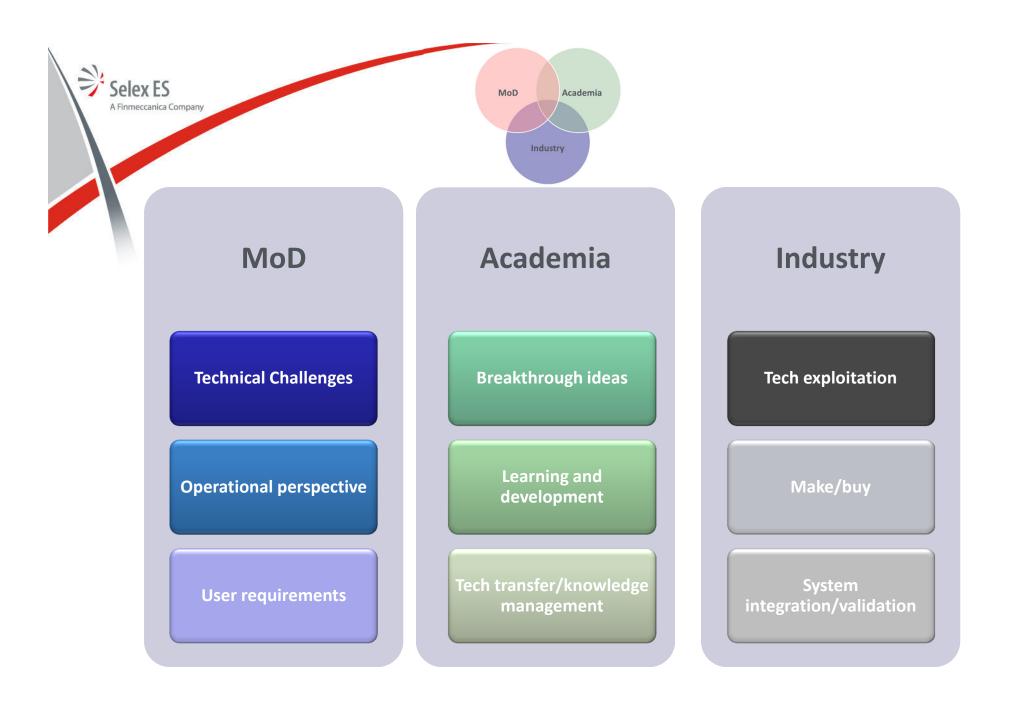
Wide variety of sizes, modalities, age, architectures

Limited processing resources



# **The Collaboration Viewpoint**





# System Test, Launch & Operations System/Subsystem Development TRL 9 TRL 8 Development TRL 7 Technology Demonstration TRL 7 TRL 6 Project Definition Requirements and Architecture

TRL 4

TRL 3

TRL 2

TRL 1

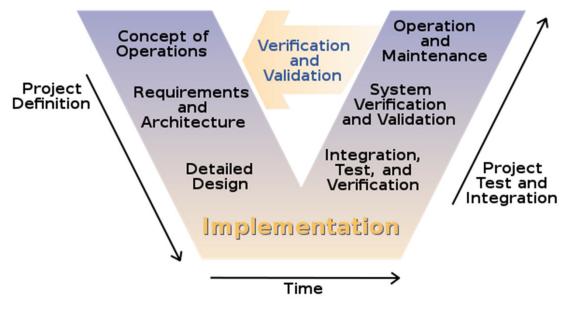
Technology Development

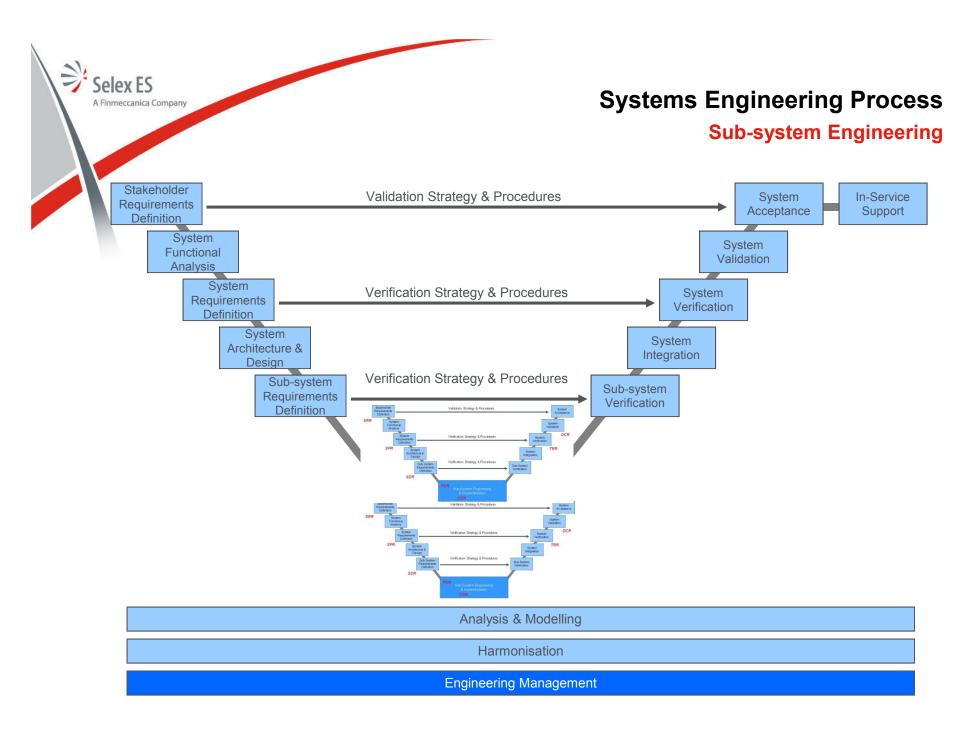
Research to Prove Feasibility

**Basic Technology** 

Research

### TRLs and SRLs







### A few summary points...

- Look for breakthrough ideas, not just incremental
- Maintain a focus on education and skills training
- Consider long term knowledge management
- Be aware of the specifics of defence industry, e.g.
  - Small volumes, irregular product cycles
  - Wide variety of sensors systems: small, large, distributed, old, new...
  - Long service life: support, maintenance and upgrade
  - Development costs often dominated by system integration and validation
  - Processing platforms are often resource limited: e.g. thermal, memory etc.
- ..and have fun



# The End