PROJECT HYPER REAL IMMERSION

A PARTNERSHIP APPROACH TO CAPABILITY DEVELOPMENT

By Air Vice Marshal (Retd) Sean Bell

FIRE ACCESS

ROYAL AIR FORCE

£170 Bn/10 Years

ARMY

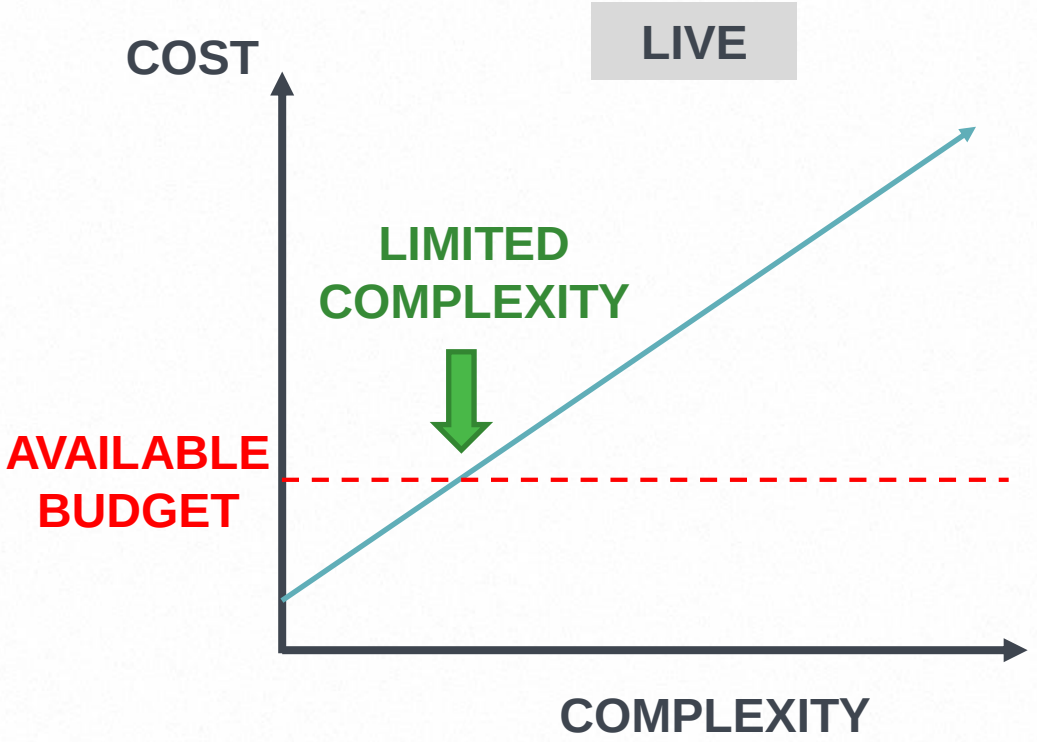
ROYAL NAVY

MINISTRY OF DEFENCE

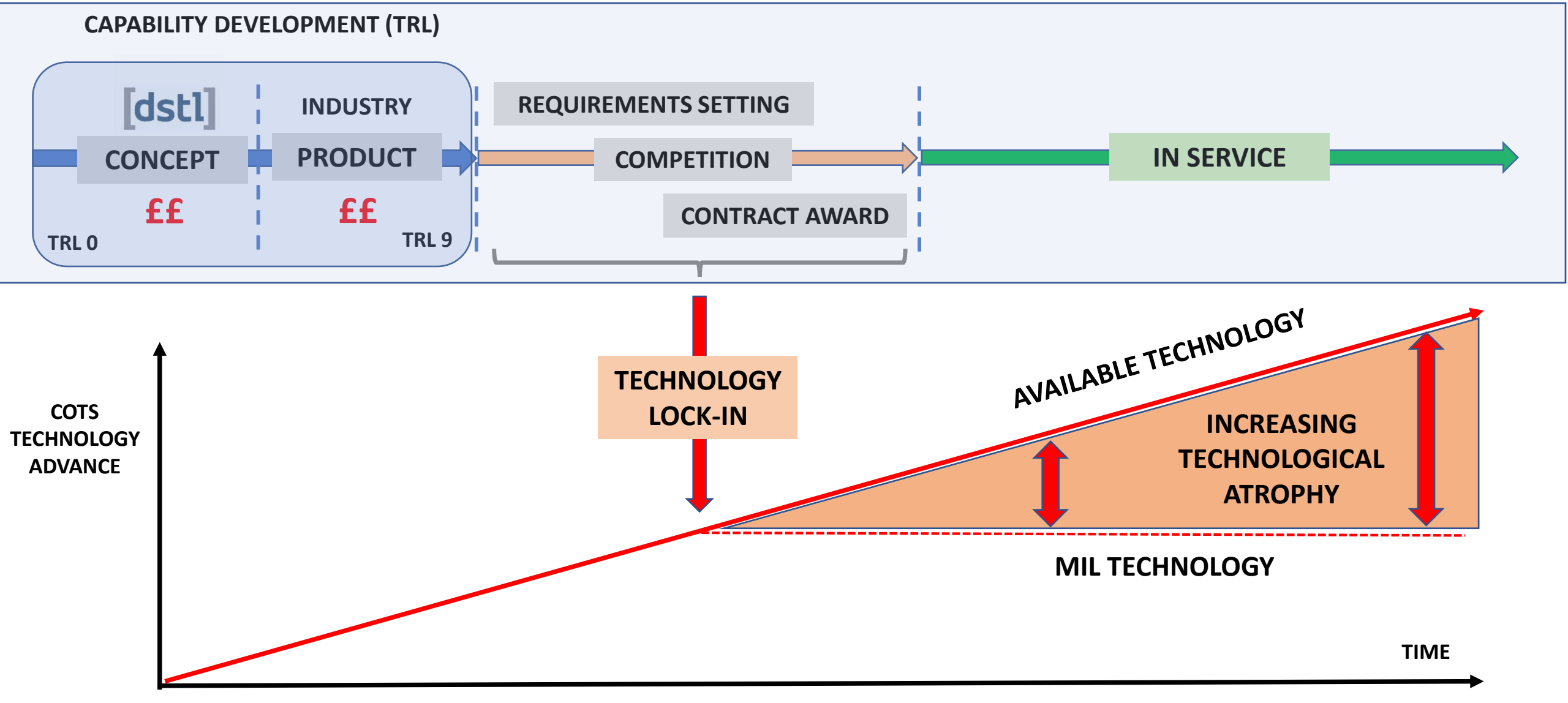
CLOSE AIR SOLUTIONS

DEFENCE CHALLENGE

- Cost of Training
- Realism
- Complexity
- Immersion
- Peacetime safety constraints
- Simulation has place, but ..
- Increasing gap between peacetime training and realism of warfare
  - Duty of Care
- **Currently Train Easy, Fight Hard**



LEGACY CAPABILITY DEVELOPMENT



LEGACY PROCUREMENT PROCESS ILL-SUITED TO MAINTAINING TECHNOLOGICAL ADVANTGAGE

"...the JTAC Simulator Accreditation Standard quickly became the build-to-standard, which was never intended. This resulted in a short-term increase in capability as programs had joint justification for funding to make improvements, ***however as time passed little effort was given to go beyond the JFS ESC standard***. This has resulted in the stagnation of JTAC simulation capability."

Section B.3.2 - JTAC MOA

Defence and Security Accelerator

The Defence and Security Accelerator (DASA) finds and funds **exploitable** innovation to support UK defence and security quickly and effectively, and support UK prosperity. Our vision is for the UK to maintain its strategic advantage over its adversaries through the most innovative defence and security capabilities in the world. DASA is a cross-Government organisation, launched in December 2016 by the Secretary of State for Defence.

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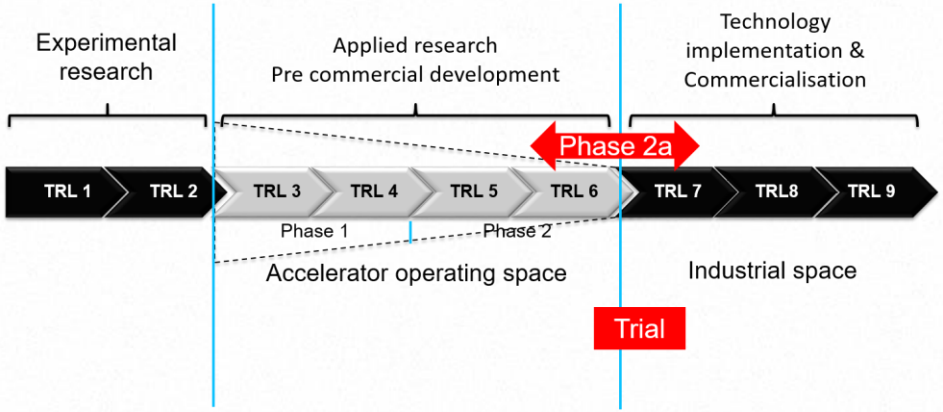
PARTNERSHIP APPROACH TO DEFENCE INNOVATION



Defence and Security Accelerator

A priority for Defence is to increase the pace at which innovation is developed and brought into service. We are therefore adopting a more compressed timescale, to support more rapid exploitation.

Partnership between MOD and UKDSC to bring exciting new technologies closer to successful exploitation with the military users. It provides a valuable opportunity to leverage industrial investment to support MOD technology pull-through

uk defence solutions centre

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HYPER REAL
IMMERSION

LEGACY JTAC TRAINING MODEL

SIMULATOR

LIVE

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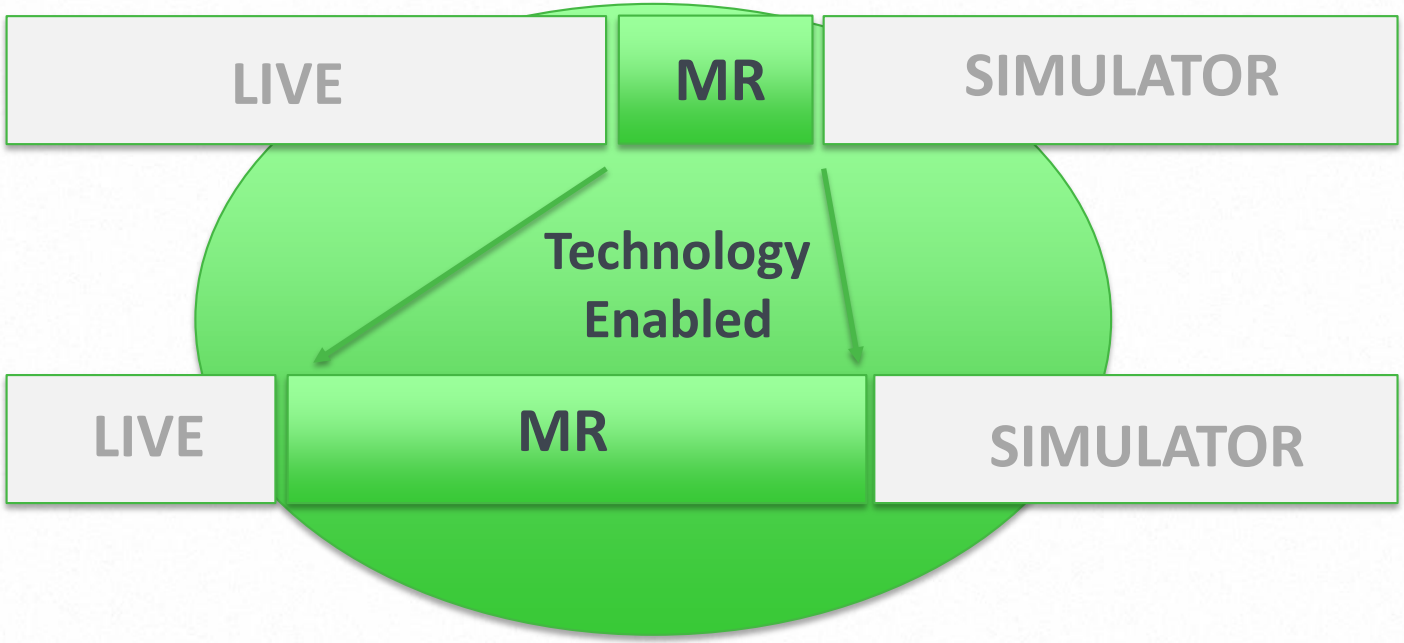
CURRENT LIVE:SYNTHETIC “BALANCE”

NEW MODEL – OPTIMUM BLEND



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Statista estimates that the augmented and virtual reality (AR/VR) market will grow to $143 billion by 2020.

SONY

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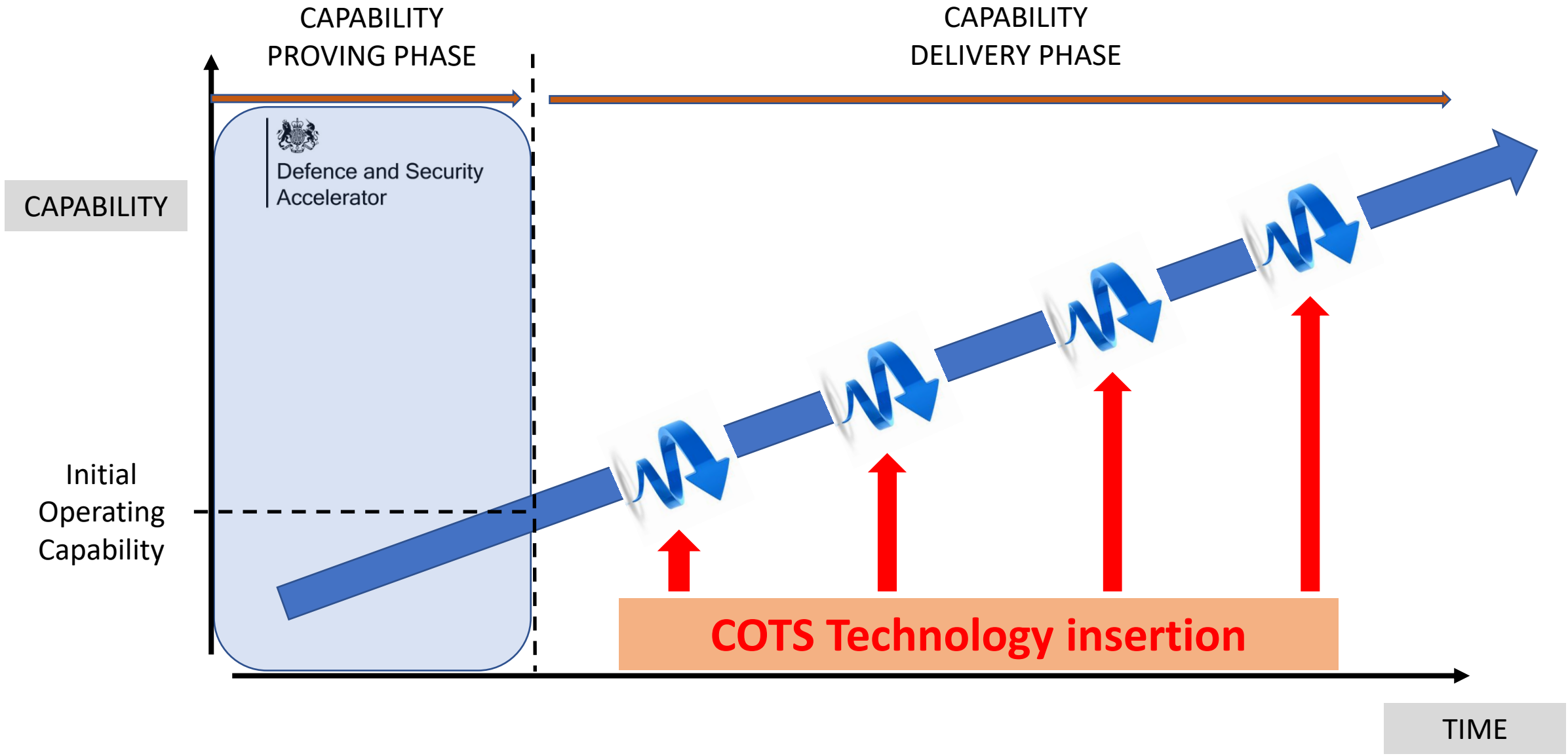
SPIRAL CAPABILITY DEVELOPMENT THROUGH PARTNERSHIP



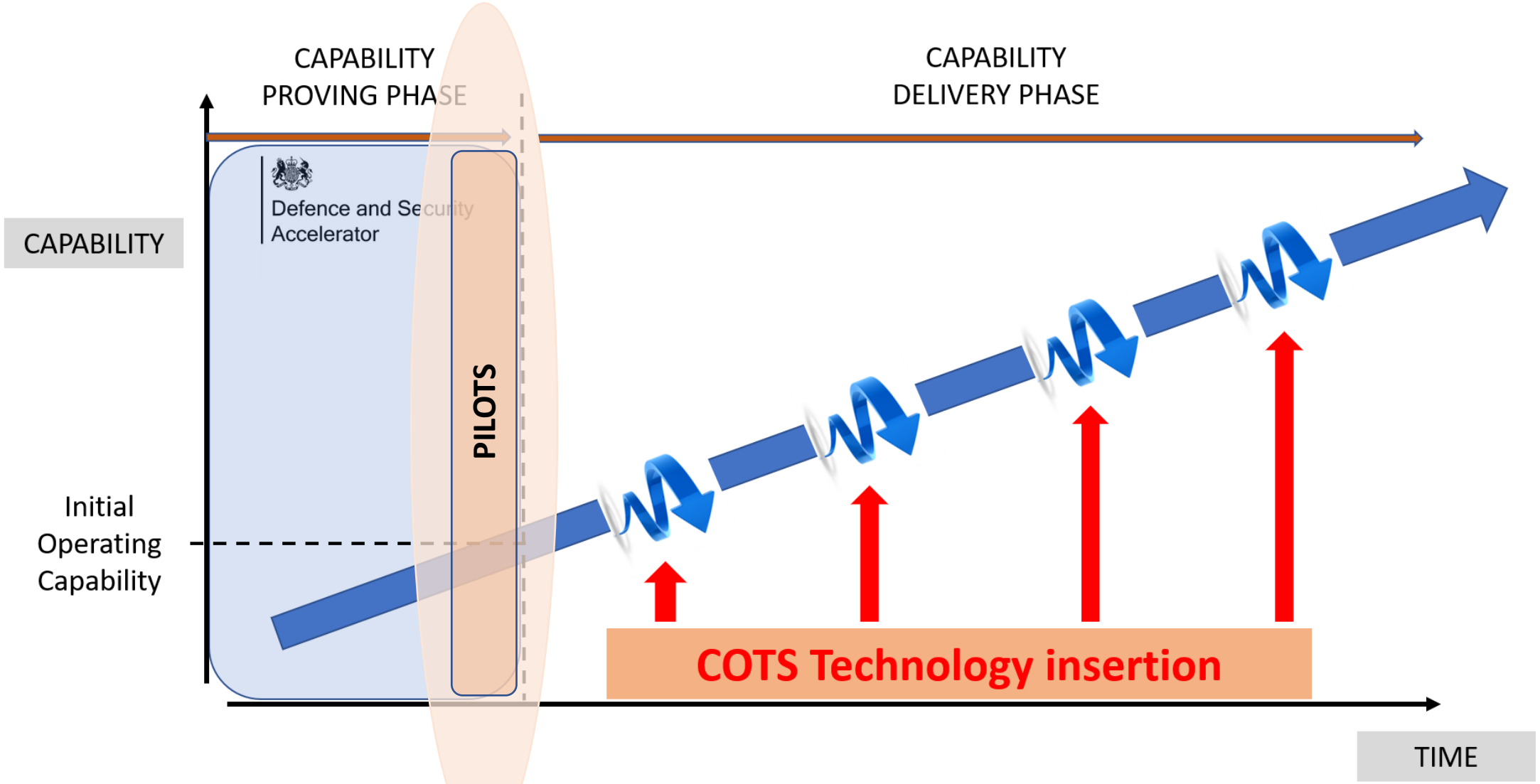
- Save Lives
- Save Money
- Improve Operational Effectiveness

CAPABILITY PILOT

- Focus on Benefits
- What is Baseline Viable Capability?
  - And what is path to development?
- Explore potential partnership approach
  - Co-development Industry/Military
- Initial Use Case JTAC
  - Focus on saving Live Hours
  - Run 1-year trial plus control group for reference
  - Multi-national involvement
- UK MOD lead

Aims …

HRI PILOT STRATEGY



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S&T
organization

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