

# Extended Readiness and Capability Regeneration

Helping the MoD to avoid costly mistakes Emma Matthews, CORDA, 29th July 2014

























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# Background





What is the impact in terms of time and cost of having to regenerate my capability?

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# Challenges





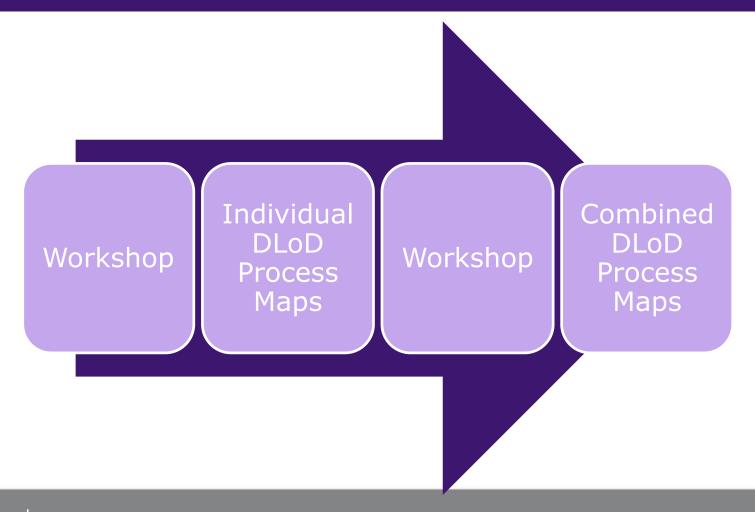






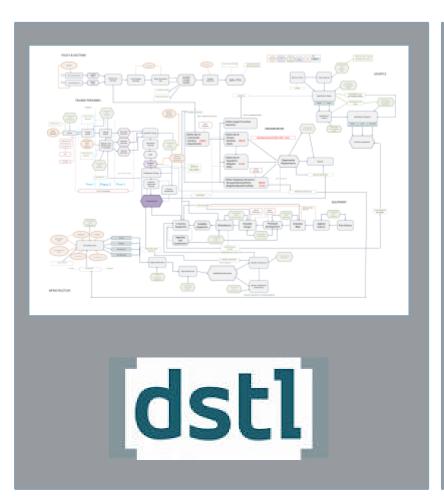


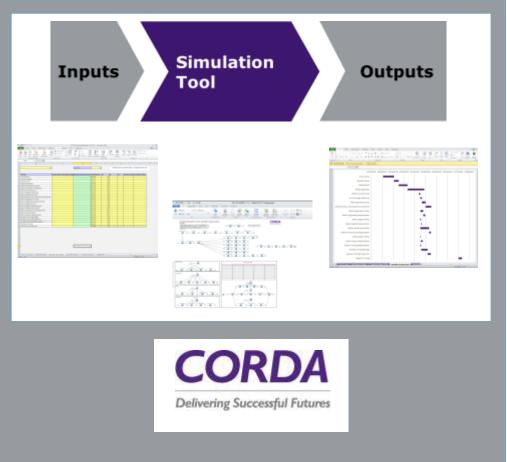
### High-Level Approach taken



# Approach Taken



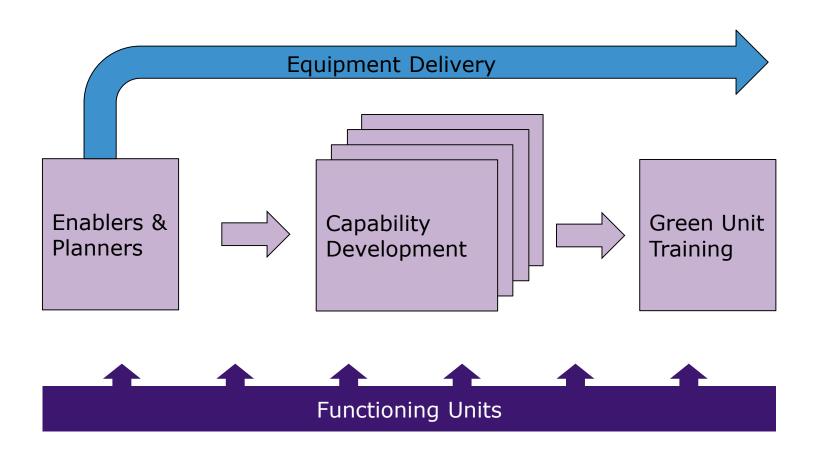




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# Solution Developed - Model Structure





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# Solution Developed - Benefits



- Quick model run time allows for rapid-fire analysis
- Simple costing calculations
- Few "hard-wired" dependencies
  - Equipment
  - Personnel, by rank & skill
  - Preceding activities
  - Functioning Units
- Outputs can be easily exported to MS Project
- Allows the feasibility of current plans to be tested

# Case Study



- Regeneration of Fast Jet Capability
- 2 scenarios:
  - 'Organic' growth progression through ranks
  - Experienced grades taken from another capability



What are the cost and time implications of these 2 scenarios?



## Case Study



### Case 1 – Organic Growth

- Small batch of new recruits trained to type by industry
- Once trained, undergo instructor pilot training
- Then train next batch of Flt Lts
- Wait time for promotion and further training

### Case 2 – Bring in experience

- Small batch of new recruits trained to type by industry
- Once trained, undergo instructor pilot training
- Train required Flt Lts (new recruits), Sqn Ldrs and Wng Cdrs (already experienced)
- Experienced hires take longer and cost more to recruit

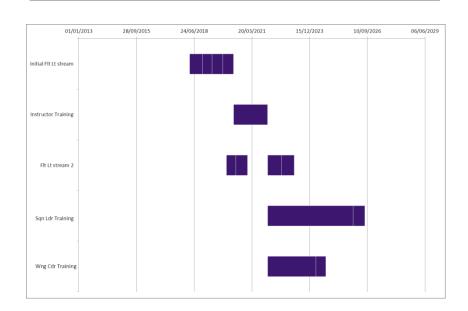




### Case 1 – Organic Growth

# 01/01/2013 28/09/2015 24/06/2018 20/03/2021 15/12/2023 10/09/2026 06/06/2029 02/03/2032 27/11/2034 23/08/2037 Initial Fit Lt stream Instructor Training Fit Lt stream 2 Wait for Promotion (1) Sqn Ldr Training Wait for Promotion (2)

### Case 2 – Bring in experience



Mean Model Completion date

09/08/2038

Mean Model Run Cost

£157,095,451

Mean Model Completion date

09/01/2029

Mean Model Run Cost

£95,179,861





### Case 1 – Organic Growth



Mean Model

17/07/2042

 $\Delta$  4 years

**Completion date** 

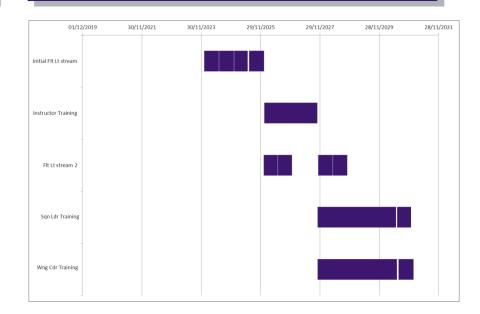
# Mean Model Run

Cost

£179,525,109

Δ £22m

### Case 2 – Bring in experience



# **Mean Model Completion date**

27/04/2034

 $\Delta 5.25$  years

### Mean Model Run Cost

£125,534,991

 $\Delta$ £30m

Delay has greater impact on Case 2, but it remains the cheaper and quicker option

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### Conclusion





# Avoidance of costly mistakes



Ability to de-risk current plans



Quick-fire analysis which provides the evidence to justify decisions