

# Program Management of Land Communication Projects



**Australian Government**

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**Department of Defence**

Capability Development Group

DGLD Presentation to MiLCIS

20 Nov 08



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# DLC3D Overview

- Land NCW Big Picture.
- DCP: JP2072, L75 and L125.
- Interoperability
- The Plan.
- End State.
- Questions

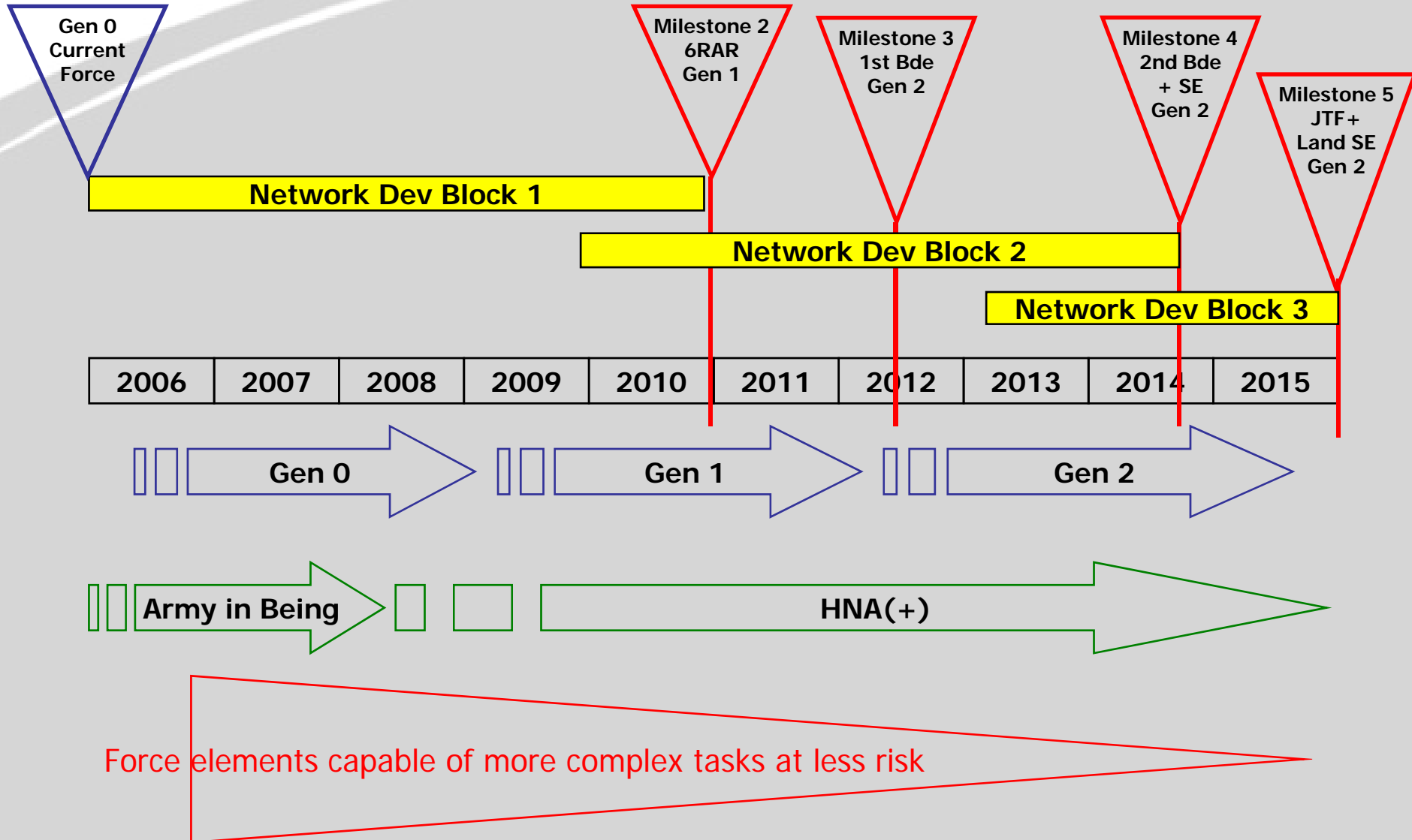


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# Land NCW Milestones





# Milestone 2 - Networked Battle Group (NBG) 2010 - 2011

- This milestone will provide an automated Blue Force Common Operating Picture (COP) within a battle group, from dismounted fire-team leader (half-section level) through to mounted battalion headquarters. The battle group will be based on a motorised infantry battalion headquarters.
- A key effect of this milestone will be to provide combat ID based on shared situational awareness (SA) and blue force tracking (BFT) for all dismounted and mounted elements of the battle group.
- The achievement of this milestone will be through the development of a coherent battle management and communication infrastructure combined with the application of tactics, techniques and procedures (TTP) that support the networked battle group. The ability to exchange data with external land elements and HQs is important however is not essential to the achievement of this milestone.
- IOC will be achieved by the delivery of effects attributed to:
  - Land 125 ph 3 Battle Management System - Dismounted (BMS-D) (C3I element). Provides C2 and battle management systems to dismounted close combatant fire-team leaders.
  - Land 75 Ph 3.4 Battle Management System - Mounted (BMS-M). Provides battle management systems to all manoeuvre elements of the battle group.
  - JP 2072 Ph 1. Provides C3 systems to all manoeuvre elements of the battle group.



# JP 2072

## Phase 1 to deliver:

- BG CIS Design.
- CIS Equipment to 6 RAR BG & ELF (not provided by L200).
- Tactical C2 System to support BCSS, AFATDA, TaCC & FBCB2 in 1 Armd Regt.
- Other in-service upgrades.
- BCS(L) Design to support JP 2072 Phase 2.

## Phase 2 to deliver:

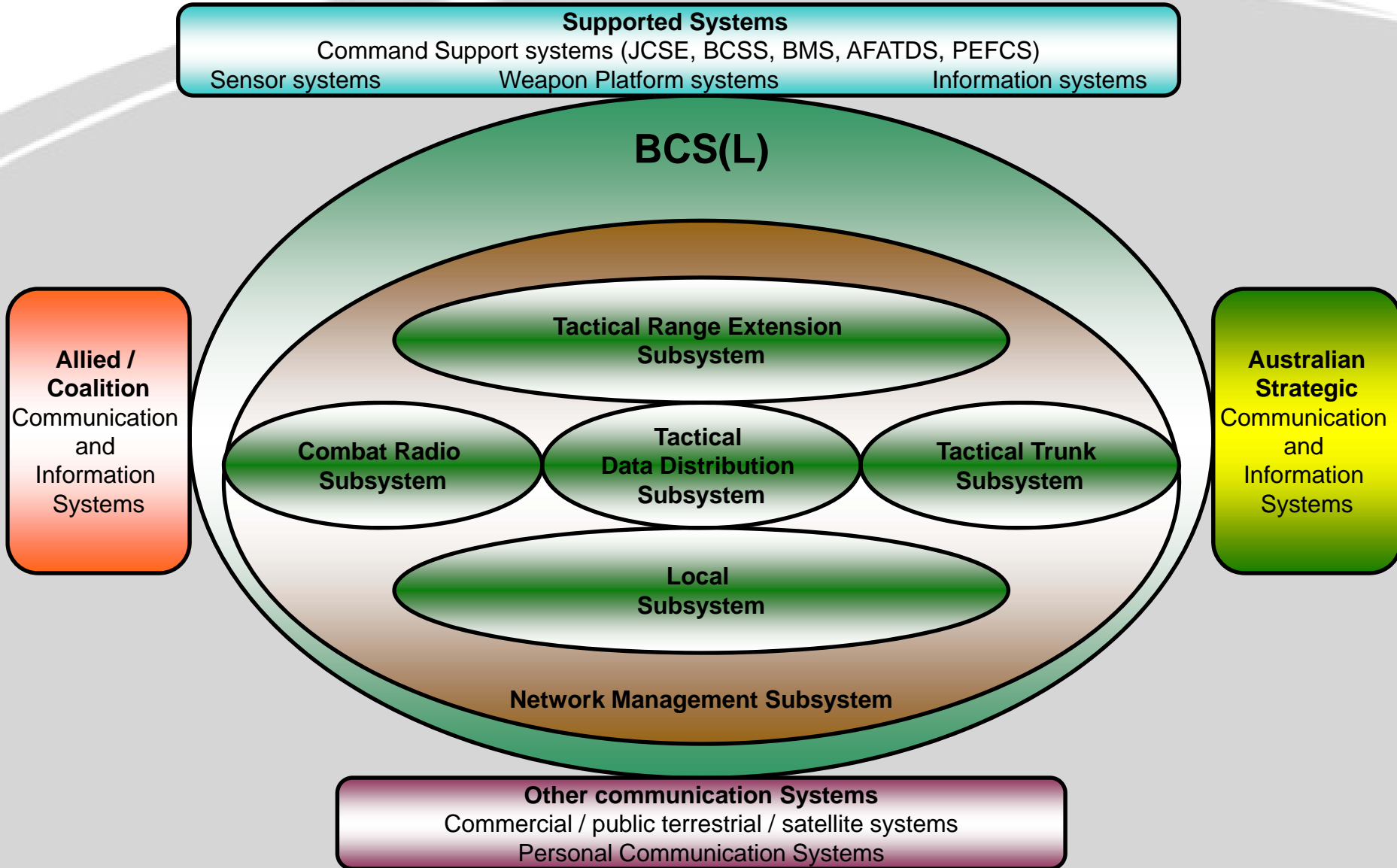
- 2A – Aligned to L75-4.
- 2B – Support to NCW Bde Milestone & ELF.

## Phases 3 and 4:

- Broadly aligned to NCW 2<sup>nd</sup> Bde & SE Milestone and NCW JTF Milestone.



# BCS (L) Subsystems





# L 75

## Phase 3.4 to deliver:

- BMS-M to 6 RAR BG and ELF.
- Lead on the ODA and CPSP.
- C2 to be delivered by JP 2072 Phase 1.

## Phase 4 to deliver:

- BMS-M to remaining high readiness land units to support the NCW Bde Milestone. Supported by JP2072 Phase 2A.

## Phase 5:

- BMS-M to remaining land units, broadly aligned to NCW 2<sup>nd</sup> Bde & SE Milestone and NCW JTF Milestone.



# L 125

Phase 3 C4I component to deliver:

- BMS-D & C2 to 6 RAR BG and ELF.
- BMS-D & C2 to remainder of Land units, but aligned to L75-4.
- Concerns on weight and load carriage.

Phase 4 to deliver:

- Increase BoP of Phase 3.
- A truly integrated soldier system.

Medium Term:  
VMF messaging for  
platform to platform  
RF data exchange

JP2072 /JP2008  
Comms  
architecture,  
standards &  
hardware

L75 C2 interface standards -  
Short Term - BCSS to route VMF  
data between NCW systems

Key Joint NCW Systems



JP129 - UAV



A87/A9000  
BMS-Avn



L17 BMS-Fires



L146 / L17  
BMS-FICAS/NGS



L75 BMS-M



L75 BMS-M



L125 BMS-D



L907 - FBCB2

Legacy RF

Legacy RF

RF

RF

Interim L-Band

JP129

GME

A87

GME

L17

TBC

JP2072

CMS

L907

TOC

RF

LAN

LAN

LAN

LAN

LAN

L75  
BCSS



JP2089 VMF Upgrade  
F18 & ANZAC



JP2030 Ph8  
JC2S



LAN/ DSN



ACSS  
ADSI

LAN/ DSN

# AS Land NCW Model



**SERVICES:**  
 HC Data  
 Voice Secure / UNCLAS  
 BVTC & Massaging  
 BCSS & BMS  
 DRN & DSN  
 ACSS & MCSS  
 PMKeys & SDSS

JCSS  
 JP2030

**SERVICES:**  
 HC Data  
 Voice Secure  
 Voice UNCLAS  
 BVTC  
 Massaging  
 BCSS & BMS  
 DRN & DSN

BCSS  
 L75

BMS  
 L75

**SERVICES:**  
 HC Data  
 Voice Secure  
 Voice UNCLAS  
 BVTC  
 Massaging  
 BCSS & BMS  
 DRN & DSN

BCSS  
 L75

BMS  
 L75

BMS  
 L75

GPS

DATA  
 JP2072

VOICE  
 JP2072

DJTF

TG/Bde

BG

Coy/Sqn

Plt/Sqn

Sect

Platform

Bandwidth

100's km(+)  
 100's km(-)  
 RANGE  
 10

DBMS  
 L125

DATA  
 L125

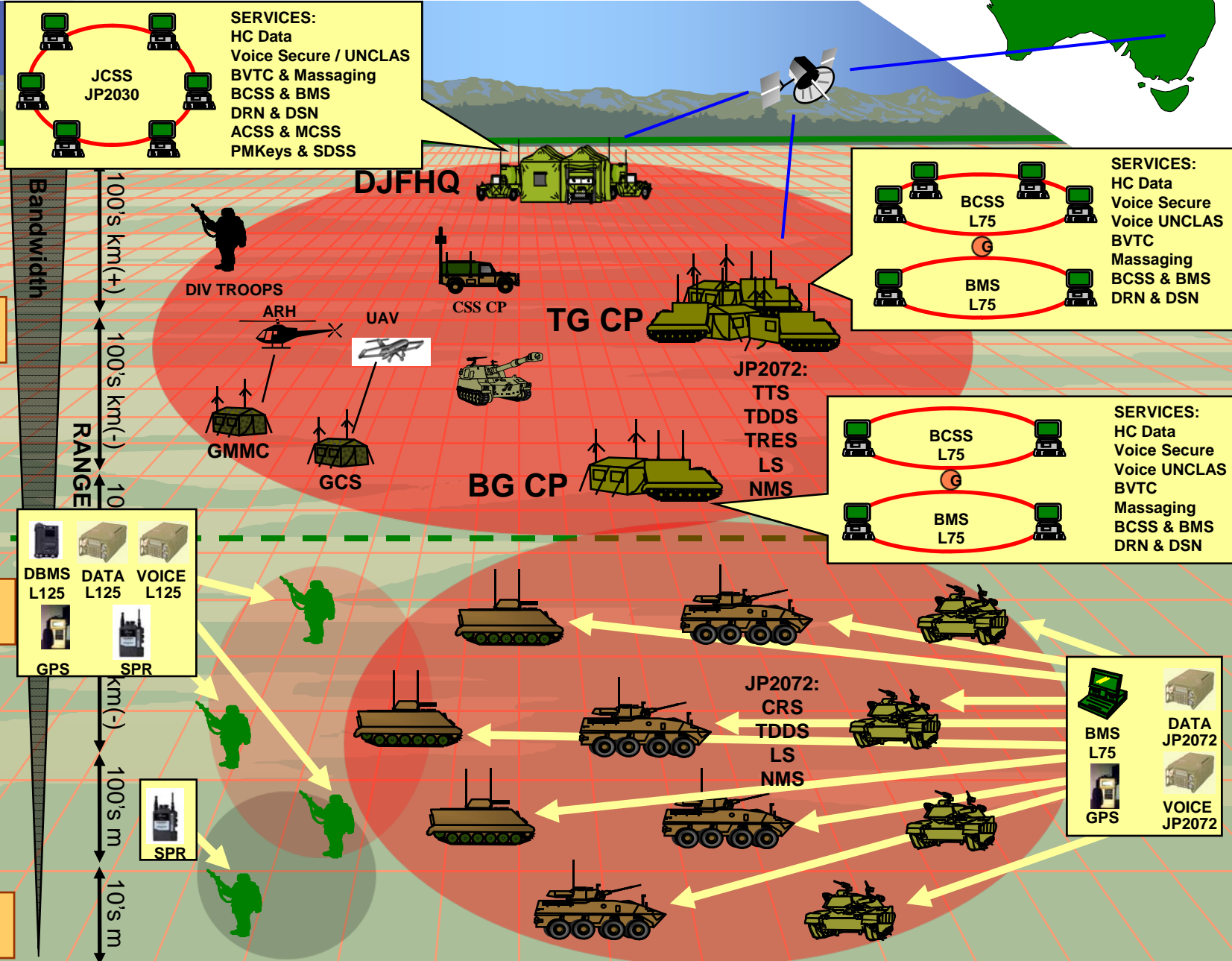
VOICE  
 L125

GPS

SPR

SPR

km(-)  
 100's m  
 10's m



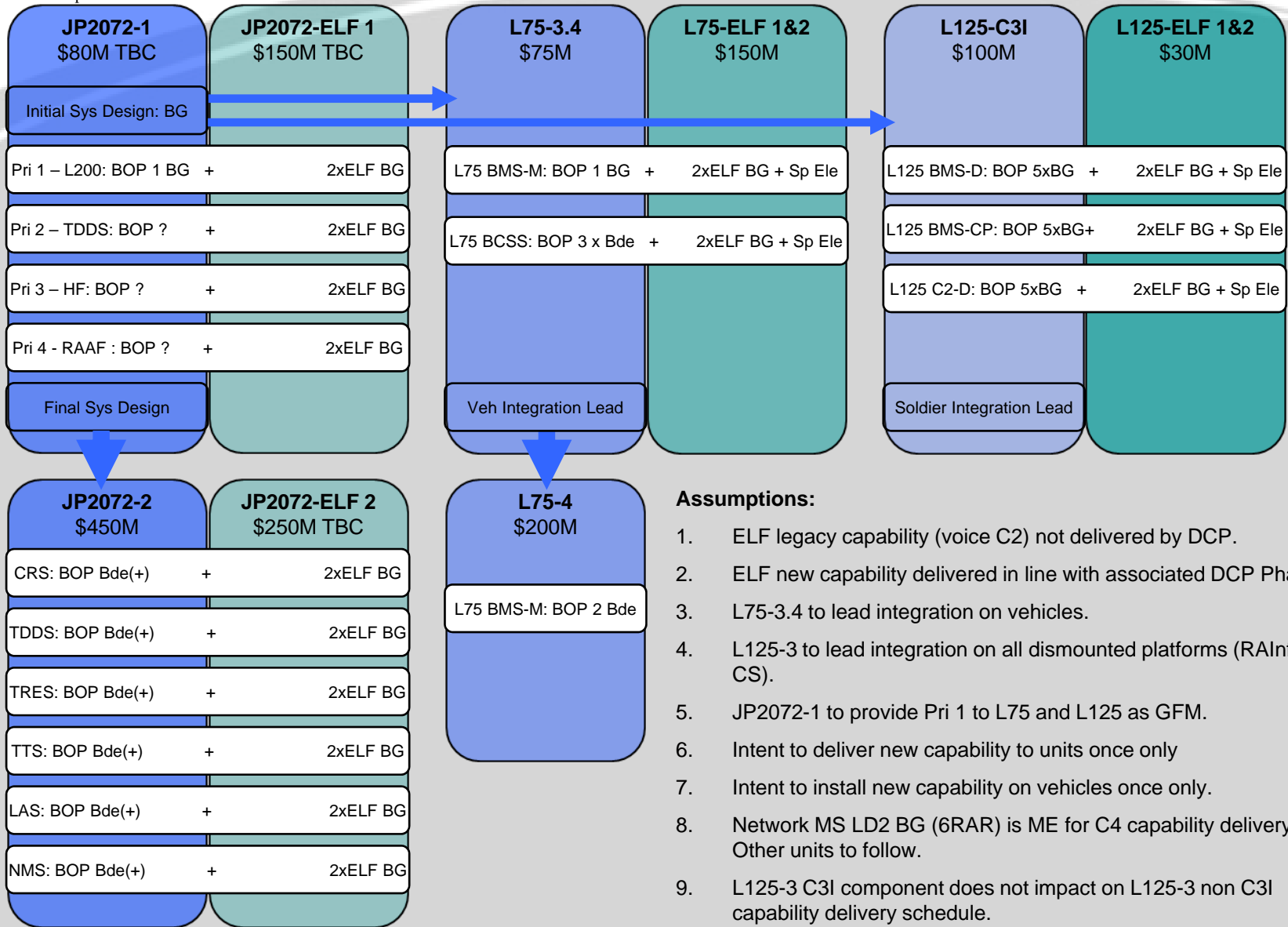


# Interoperability

- 6 ON related to interoperability & VMF.
- 18 VMF Messages Threshold – 5 to be demonstrated.
- VMF gateway part of BCSS.
- Tracking Server part of L75-3.4
- Middle-ware.
- Other initiatives.
- Unprecedented voice interoperability at all levels.



# The Plan

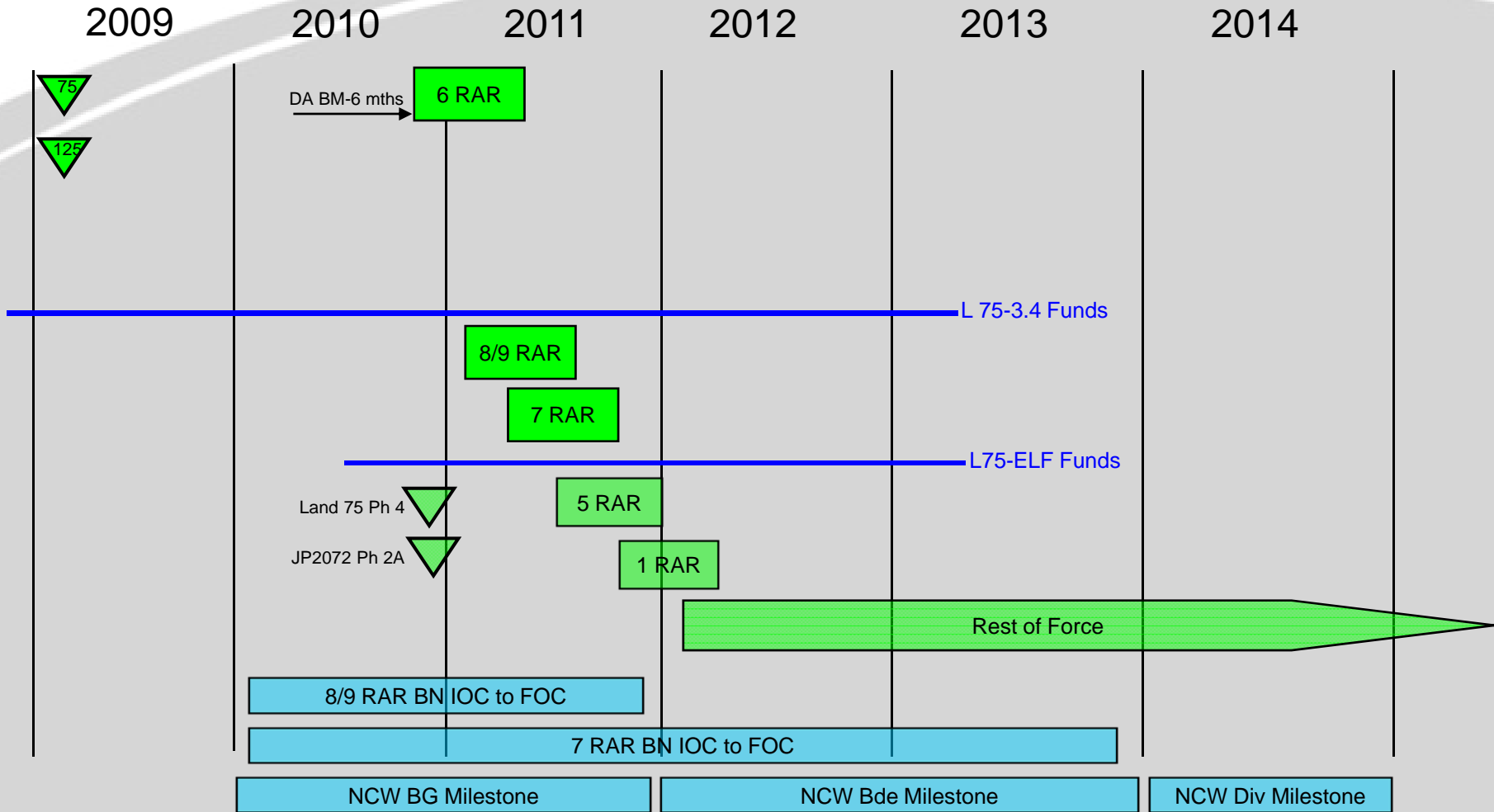


### Assumptions:

1. ELF legacy capability (voice C2) not delivered by DCP.
2. ELF new capability delivered in line with associated DCP Phase.
3. L75-3.4 to lead integration on vehicles.
4. L125-3 to lead integration on all dismounted platforms (RAInf & CS).
5. JP2072-1 to provide Pri 1 to L75 and L125 as GFM.
6. Intent to deliver new capability to units once only
7. Intent to install new capability on vehicles once only.
8. Network MS LD2 BG (6RAR) is ME for C4 capability delivery. Other units to follow.
9. L125-3 C3I component does not impact on L125-3 non C3I capability delivery schedule.



# Proposed Schedule of Delivery of the Initial C4I Capability To Army



Legend:



Proposed schedule



NCW & ELF Milestones



# The End State

- 6 RAR BG, 8/9 RAR BG and 7RAR – Networked.
- 6 RAR BG – A ‘Test Bed’.
- Nucleus of a Network ‘savvy’ force.
- Embryonic Tools – Integration Lab & Battle Lab.
- Robust C2 Grid with the Infantry Based BG.
  - Meet the legacy voice service needs.
  - Meet the ‘new’ data service needs.
- Set the foundation for the OS and ISR grids.
- Robust and ‘seamless’ Blue SA with the Infantry Based BG.
- Inform and Justify follow on phases.

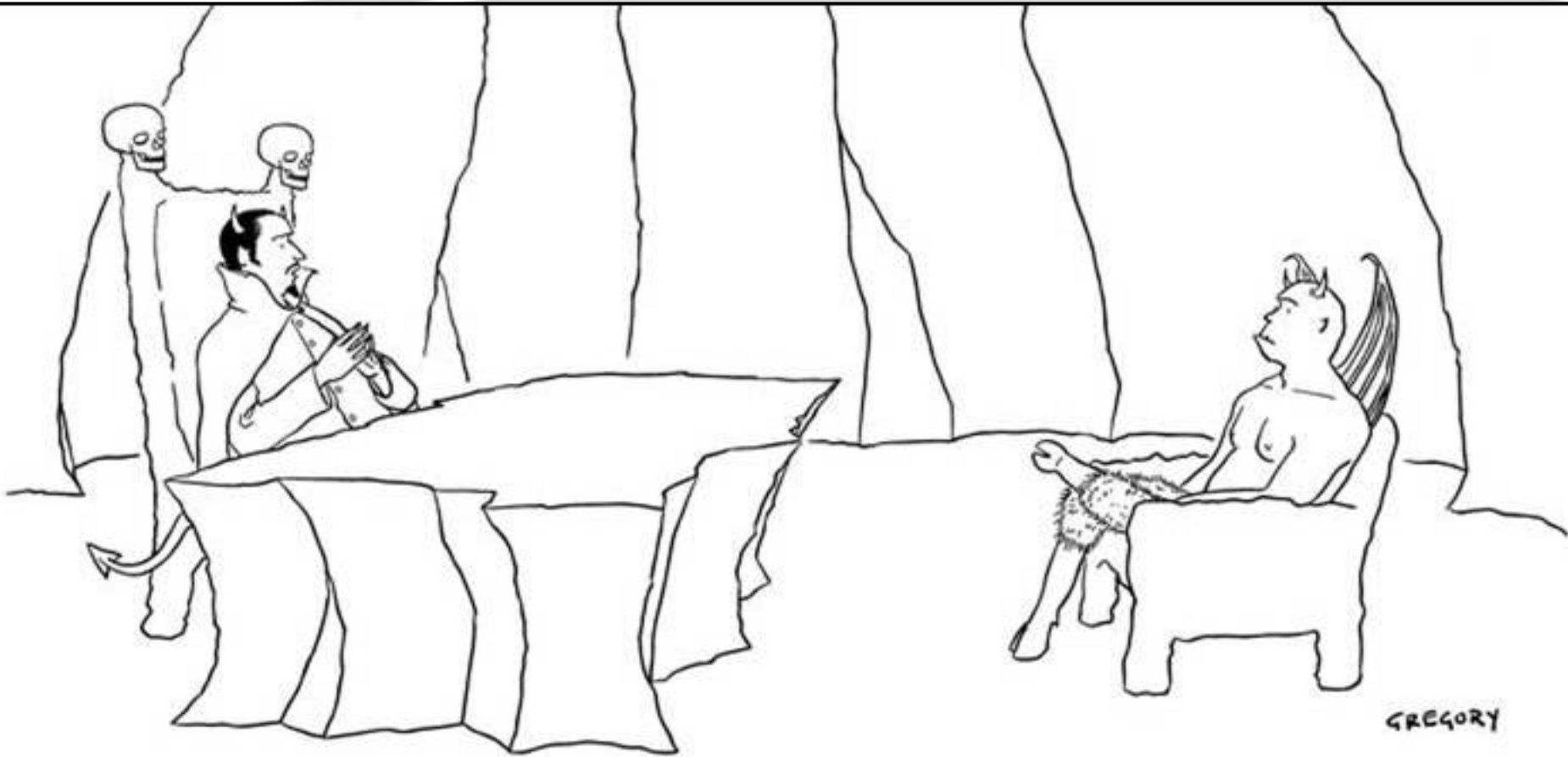


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# Questions?



*“I need someone well versed in the art of torture—do you know PowerPoint?”*

LTCOL Phil Baker – A/DLC3D

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