

Understanding A to B: MoD's logistics modelling capability

Anjna Kashyap
Policy & Capability Studies Department, Dstl Portsmouth West, Portsmouth Hill Road, Fareham, PO17 6AD

Background

- There are a large number of models across a range of logistics domain areas, employed within the UK MoD. This has led to a lack of clarity in the modelling capability available to undertake analysis to support decision makers.
- The Defence Logistics and Support research programme tasked Dstl to collate information on the MoD extant logistics modelling capability. This led to the development of the Logistics Model Catalogue (LMC).

Dstl:

- All logistics owned models
- Active / Inactive / In development

Wider MoD owned models from:

- Assistant Chief of Defence Staff (Logistics Operations) (ACDS (ogOps))
- Defence Equipment & Support (DE&S)
- Front Line Commands (FLCs)
- Permanent Joint Head Quarters (PJHQ)
- Warfare Centres

Industry owned models from:

- QinetiQ consortium
- BAE Systems

Logistics Model Catalogue

LMC coverage

- Model information providing an overview of the modelling capability; e.g. DLOD and type of logistics representation.
- Model status and requirements for potential use within logistics research.
- POC details for each model.

LMC aims

- To provide an authoritative source of information on the extant logistics models available to the MoD that will support research and procurement activities.
- To provide and set the context for future research and model development.

	Model	General Modelling Category	Land	Air	Maritime	Deployment	Sustainment	Medical	C4I	Equipment Support	Training	Equipment	Personnel	Infrastructure	Doctrine & concepts	Organisation	Information	Logistics
	ARTHUR	Medical																
	AVST	Equipment Support																
	AWG	Sustainment																
	BGM	Infrastructure																
	BSA	Other Logistics Modelling																
	CINO	Other Logistics Modelling																
	FLAME	Equipment Support																
	Fleetflow	Maritime Logistics																
	HPC	Other Logistics Modelling																
	HXP	Equipment Support																
	ITL Model	Intra-Theatre Logistics																
	LIPT	Logistics C4I																
	LISTeR	Logistics C4I																
	MAAP	Other Logistics Modelling																
	MarFlow	Generic Modelling Capability																
	MarSAT	Maritime Logistics																
	MEDEVAC	Medical																

Representative sample of LMC content



Model usage

- Version 3.1 finished and released.
- UK MoD - available via Online Science Gateway (MoD Intranet).
- External to UK MoD (industry, academia, international parties) - available upon request, via Dstl.

Next steps

- Exploitation of LMC:
 - Within UK MoD (e.g. ACDS(LogOps), DE&S, FLCs, PJHQ, Warfare Centres)
 - External to MoD
- Incorporation of other models from wider MoD, industry, academia and International parties.
- LMC updates to reflect changes to version 3.1, for future release.
- Making links with similar logistics model repositories:
 - To share modelling capability
 - To develop modelling capability to support future research.



Conclusions

- LMC provides understanding of extant MoD modelling capability, with insight into potential logistics modelling overlaps and gaps.
- LMC can be shared within defence communities to improve research and development within the logistics domain.