

Business Critical Models in the Ministry of Defence in 2016

1. We are publishing our business critical models¹ as part of our response to the Macpherson Review of Quality Assurance of Analytical Models. An initial list of MOD business critical models was published as part of the Macpherson Review report². Since this we have continued to regularly update and publish a list of the department's business critical models on our website³.

Background

2. Following the problems in the award process for the InterCity West Coast franchise by the Department of Transport, Sir Bob Kerslake and Sir Jeremy Heywood commissioned a review of the quality assurance of analytical models that inform policy across government. The review was led by Sir Nick Macpherson, Permanent Secretary at the Treasury, who published his [Review of quality assurance of government models](#) in March 2013.

How have we implemented the Macpherson Review?

3. As required by the Macpherson Review⁴, our governance statement must confirm that we have an appropriate quality assurance framework for analytical models. So we asked each Arm's Length Body that has one or more business-critical models to confirm their arrangements are appropriate in their annual Assurance Statement. We will publish our governance statement soon.
4. MOD has well established arrangements already. To further strengthen our processes and documentation - as well as our culture and the environment in which quality assurance takes place - we are implementing an Action Plan. For example, we are:
 - implementing the recommendations of a recent report by Defence Internal Audit
 - improving our governance arrangements, for example ensuring each business-critical model has a Senior Responsible Owner
 - ensuring our processes and guidance are clear and cover quality assurance arrangements
 - promoting a pro-quality assurance culture, for example by using Modelling Champions in key organisations and, where appropriate, including quality assurance as a work objective for staff

¹As suggested by the Macpherson Review, we define a model as business critical if it drives key financial and funding decisions, its essential to the achievement of our business plan, or if error could lead to serious financial, legal or reputational damage.

²<https://www.gov.uk/government/publications/review-of-quality-assurance-of-government-models>

³<https://www.gov.uk/government/collections/business-critical-models-ministry-of-defence>

⁴https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/206946/review_of_qa_of_govt_analytical_models_final_report_040313.pdf

- promoting transparency by publishing a list of our business critical models below.

Getting in touch

5. For any questions, please contact DefStrat-Econ-Gen-PC-1@mod.uk or DefStrat-Econ-Gen-AE-3@mod.uk

List of Business Critical Models in Defence

	<u>Name</u>	<u>Type</u>	<u>Description</u>	<u>Organisation</u>
1	20150407-BVRAAM Extended Assessment Phase Model	Investment Appraisal	Cost model associated with the extension of the assessment phase for Meteor on Joint Strike Fighter (JSF).	DE&S
2	20150923-Spear Cap 3 AP2 RN WLC Model	Investment Appraisal	Cost model for the assessment phase of the Weapons project, informing a Business Case Review Note.	DE&S
3	A400M Contract Milestones and Schedule Payments	Procurement and commercial	Model to analyse and monitor contract milestones and schedule payments supporting the A400M Development Production Phase Contract.	DE&S
4	A400M In-Service Cost Model	Procurement and commercial	Model used to estimate In-Service costs following the A400M Development Production Phase work.	DE&S
5	ABSV Cost Model	Investment Appraisal	This is an investment appraisal model aimed at informing decisions supporting the Armoured Battlefield Support Vehicle.	DE&S
6	Airseeker	Planning, forecasting and allocation	Airseeker planning and forecasting model supporting UK Airborne intelligence / Surveillance Capability.	DE&S
7	Ajax Cost Model	Planning, forecasting and allocation	Planning, forecasting and allocation model supporting the AJAX multi-role armoured vehicle (formerly known as SCOUT).	DE&S
8	Apache - CRBS_Model_Version 4	Procurement and commercial	Model to produce cost analysis supporting the Helicopters Capability Sustainment Programme.	DE&S

9	ASRAAM CSP MG	Investment Appraisal	This is used for modelling the MBDA bid for the Demonstration & Manufacture phase of the project. This model is used specifically for Typhoon integration.	DE&S
10	Astute cost model (PR-ICE)	Planning, forecasting and allocation	CAAS model used to form part of the Quarterly Review of Programme Costs process.	DE&S
11	AWE Management and Operation	Planning, forecasting and allocation	Provides analysis of AWE Strategic Weapons Management and Operational costs.	DE&S
12	Business case cost model	Investment Appraisal	This supports the Weapons Future Systems, which was used to analysis costs in support of the Project Team Review Note.	DE&S
13	CANOPUS	Planning, forecasting and allocation	Cost and schedule scenario tool used to assess Maritime schedule and Infrastructure Capability.	DE&S
14	CATS Financial Model	Planning, forecasting and allocation	Cost analysis model for the Combined Arial Targets contract which is used to inform the Annual Budgeting Cycle.	DE&S
15	COP cost model	Investment Appraisal	Investment Appraisal supporting Hercules C130J Capability Obsolescence Programme.	DE&S
16	CPC Cost Model	Planning, forecasting and allocation	Cost analysis model for Nuclear Propulsion Core Production Capability, used to support the Annual Budgeting Cycle.	DE&S
17	CR2 LEP Cost Model	Investment Appraisal	An investment appraisal model assessing the Challenger 2 Land Life Extension Programme.	DE&S
18	CRBS	Planning, forecasting and allocation	Planning, forecasting and allocation analysis model in support of the Strategic Weapons Boost Rocket Motor Service arrangement.	DE&S
19	DCS&S Initial Gate Cost Model	Investment Appraisal	Initial Gate Cost Model for Defence Operational Training Capability in support of Air Systems and Services.	DE&S
20	DCS&S Main Gate Cost Model	Planning, forecasting and allocation	Main Gate Cost Model for Defence Operational Training Capability in support of Air Systems and Services.	DE&S
21	DDLDP	Planning, forecasting and allocation	Devonport Load Programme cost model, which includes the in-service, superintended	DE&S

			upkeep of submarines, including de-equip, defuel and layup preparation related costs.	
22	DE&S Transformation Plan Costs and Benefits Summary	Planning, forecasting and allocation	Model to analyse and track the benefits and costs supporting the Defence Equipment and Support organisational transformation programme.	DE&S
23	FLAADS Land MG	Investment Appraisal	Cost designed to ascertain the remaining Equipment Procurement and Support control totals over the next 5 years.	DE&S
24	HIOS cost model	Procurement and commercial	Procurement Cost model supporting the Hercules C130J Integrated Operational Solution.	DE&S
25	HPP	Planning, forecasting and allocation	Analysing DE&S Equipment Procurement Programme Historical Project Cost and Schedule Performance.	DE&S
26	i-Clare (CAAS owned output)	Procurement and commercial	i-Clare serves as an analytical comparator in support of the Devonport Programme budgetary process.	DE&S
27	JAMES	Investment Appraisal	Provides analysis in support to the Defence Fuels Acquisition Project to inform the Investment Appraisal.	DE&S
28	JAMES	Planning, forecasting and allocation	This is used for the Devonport Programme for Quarterly Review of Programme Costs and its outputs are compared to its i-Clare predecessor.	DE&S
29	Joint cost model/Submarine Enterprise Model (BAES)	Planning, forecasting and allocation	BAE element of a joint cost model, used to calculate rates and inform the Annual Budgeting Cycle. Final model output will include the Rolls Royce rates analysis embedded.	DE&S
30	Lochner	Investment Appraisal	Investment approvals model providing analysis supporting Future Submarines Infrastructure costs.	DE&S
31	LTPA ABC Forecast Model	Planning, forecasting and allocation	Cost analysis model for the management of Trials and Evaluation sites within the UK and supports Annual Budgeting Cycle.	DE&S

32	Mode 5 IFF cost model	Planning, forecasting and allocation	Planning and Forecasting model supporting Mode 5 Identify Friend or Foe System.	DE&S
33	Mosaic - open system architecture system	Investment Appraisal	Model to inform an investment approvals decision in support of FLAADS Maritime Weapons integration.	DE&S
34	MRV-P Option Model	Planning, forecasting and allocation	Model to support IG options analysis for the Land Protected Multi-Role Vehicle.	DE&S
35	NGNPP Cost Model	Planning, forecasting and allocation	Planning, forecasting and allocation cost model in respect to the Next Generation Nuclear Propulsion Plant.	DE&S
36	Nuclear Propulsion in-service support whole life cost model	Planning, forecasting and allocation	Whole-life cost model supporting the Nuclear Propulsion capability.	DE&S
37	PC5 CBC	Planning, forecasting and allocation	Planning and Forecasting model supporting Case by Case Procurement Contract.	DE&S
38	PC5 IRS	Planning, forecasting and allocation	Planning and Forecasting model supporting the Inventory Repairs and Spares Procurement Contract.	DE&S
39	Phoenix II	Investment Appraisal	Suite of models used to support the commercial tenders, along with providing benchmarking analysis.	DE&S
40	Protector - Option 3 WLC	Planning, forecasting and allocation	Model analysing Protector Option 3 Whole Life Costs for long range and endurance, wide area surveillance and precision strike capabilities.	DE&S
41	PSOP3	Planning, forecasting and allocation	Model to estimate forecast costs for the provision of EJ200 in respect to Propulsion Systems Operational Support.	DE&S
42	QEC In Service Support cost model	Planning, forecasting and allocation	Ships acquisition model providing in-service support cost analysis for the Queen Elizabeth Class Carrier.	DE&S
43	QEC Re-baselining cost model	Procurement and commercial	Support cost model across the Aircraft Carrier Industrial Alliance.	DE&S
44	QEC Spares Cost Model	Planning, forecasting and allocation	Cost and forecast model of spares supporting the Queen Elizabeth Class Carrier.	DE&S
45	RDSS	Planning, forecasting and	Support cost model providing analysis on Repair Costs in	DE&S

		allocation	respect to Radar and Defensive Aids Sub-System.	
46	REAPER Peacetime whole life cost model	Procurement and commercial	Whole Life Cost Model Reaper combat air platform supporting Peacetime requirements.	DE&S
47	Rotary Wing Ascent Model	Investment Appraisal	Investment Appraisal model supporting Rotary Wing Ascent capability. This was developed by UKMFTS' training provider, Ascent.	DE&S
48	RR Joint Cost Model	Planning, forecasting and allocation	The Rolls Royce Joint Cost Model forms part of the Joint Subs Enterprise model. Analyses industry rates and supports the Annual Budgeting Cycle.	DE&S
49	SDP and FOO WLC Model	Planning, forecasting and allocation	Whole life cost model for the proposed options supporting the Submarine Dismantling Programme.	DE&S
50	SDP Project Model	Planning, forecasting and allocation	Primary feeder model to the Submarine Dismantling Programme model.	DE&S
51	Strategic Facility Cost Model	Planning, forecasting and allocation	Strategic Facility Cost Model supporting the Lightning II combat air platform	DE&S
52	TAS2	Planning, forecasting and allocation	Model to estimate future forecast costs of Typhoon Availability Service.	DE&S
53	TCC Spearfish Review Note Model	Investment Appraisal	Model to inform the Review Note submission supporting the Spearfish Torpedo Smoothing Programme.	DE&S
54	Teutates MG Confidence Model - TEUMG02	Planning, forecasting and allocation	Initially designed to inform an investment decision for undertaking a Nuclear Co-operation agreement with France. The model is being revised to support the submission of a Review.	DE&S
55	Through Life Cost Model	Planning, forecasting and allocation	Through Life Cost Model underpinning support costs for the Lightning II combat air platform.	DE&S
56	Type 26 Joint cost model	Procurement and commercial	Joint Whole Life Cost model used for T26 class navy ship. It models risk, In-Year spend, and includes both Equipment	DE&S

			Procurement and Support cost analysis.	
57	Typhoon Support Contract 1	Planning, forecasting and allocation	Model to estimate future support costs supporting the Typhoon combat platform.	DE&S
58	Unit Recurring Flyaway Cost Model	Planning, forecasting and allocation	Unit Recurring Flyaway Training Cost Model supporting the Lightning II combat air platform.	DE&S
59	Voyager ABC Baseline Planning Model	Planning, forecasting and allocation	Planning and Forecasting model supporting Annual Budgeting Cycle and the Quarterly Review of Programme Costs for the current Private Finance Initiative.	DE&S
60	Warrior CSP	Investment Appraisal	Investment appraisal model assessing the Warrior Land Capability Sustainment Programme.	DE&S
61	Watchkeeper DMIS	Procurement and commercial	Model developed producing Development, Manufacture and In-Service costing and risk analysis.	DE&S
62	Capability Systems Model (CSM)	Planning	CSM is a system level model of the entire CBR protection system (including, detection, protection, sense, etc.) and provides understanding of the impact of capabilities within the CBR protective system.	Dstl
63	CDM	Planning	Model provides Front Line Analysts, Targeteers and Dstl Analysts with collateral damage and risk assessments of UK weapons pre-strike.	Dstl
64	Close Action Environment (CAEn)	Financial Evaluation	CAEn is a multi-sided close combat interactive wargame and simulation, representing the all arms close combat battle, at up to company group level. Up to 500 entities, which may represent individual soldiers, civilians, vehicles (including helicopters) or remote systems can be deployed in a CAEn scenario. Each entity may then act as a platform upon which sub-systems such as weapons, sensors, communication and other assets can be deployed.	Dstl

65	CUTLASS	Planning	A Dstl Man-In-The-Loop simulation facility primarily to assess the Operational Effectiveness of the F-35 Joint Strike Fighter, in a variety of Air-to-Air and Air-to-Ground Missions using Military Aircrew.	Dstl
66	Dismounted Integrated Survivability Tool (DIST)	Financial Evaluation	This toolset is used to calculate the survivability of the dismounted soldier (in user defined configurations) within user defined scenarios. The toolset considers the impact of a number of factors which may affect soldier survivability including, vulnerability (protection), lethality, mobility, environmental factors and sensing capabilities of UK and threat systems in order to determine the overall survivability of UK dismount within the defined scenario. The data can then be used to trade off different capabilities to determine the impact of procurement choices or to inform capability audits.	Dstl
67	Force Structure Cost Model (FSCM)	Forecasting	The model estimates the cost of the Defence Programme out to 30 years. Key outputs include: Cost of Force elements (Equivalent Annual Cost, Whole Life Cost, etc) to inform Balance of investment studies; Manpower; and Equipment. The model is not a detailed programming / budgeting tool, although it can be used to provide a high-level check of whether a proposed Force Structure is affordable.	Dstl
68	Hazard Prediction and Assessment Capability (HPAC)	Science-based	US hazard prediction model used to provide advice on hazard areas in the event of a Chemical or Biological release. Advice is provided to the MOD and civil authorities to support decision making.	Dstl

69	Mounted Integrated Survivability Tool (MIST)	Financial Evaluation	This toolset is used to calculate the survivability of land platforms (in user defined configurations) within user defined scenarios. The toolset considers the impact of the Vulnerability, Lethality, Mobility and Sensing capabilities of UK and threat systems in order to determine the overall survivability of UK platforms within the threat environment. This data can then be used to trade off different capabilities to determine the impact of procurement choices or to inform capability audits.	Dstl
70	PALETTE	Planning	Weapon lethality model for land based Hard targets.	Dstl
71	SADM	Planning	Model used to support Naval Operational Planning	Dstl
72	SAM, GAPS and DEBRIEF	Planning	A suite of software tools for the replay and analysis of a variety of data types recorded during submarine operations. The results of these analyses are fed directly into the planning and execution of current and future operations.	Dstl
73	Strategic Balance of Investment Toolset (StratBol)	Financial Evaluation	A balance of investment toolset, investigating the cost effective balance of Force Elements and enablers required to undertake the full range of required military operations, as defined in MoD strategic guidance. (A Force Element is a MoD term to describe an appropriate collection of Trained Equipped Personnel, such as a Battalion, Ship Platform or Air Force Element (Aircraft or Squadron).) Can explore 'what if' scenarios in relation to areas such as cost, policy or capability.	Dstl

74	TARVIEW	Planning	Weapon lethality model for land based mobile and relocatable targets.	Dstl
75	Unified Weapons Modelling - Weapon Target Interaction (UWM-WTI)	Financial Evaluation	This collection of models is used to assess the vulnerability of UK platforms (including personnel) to threat weapons and the lethality of UK weapons on threat targets. Weapons modelled include long rod penetrators, burst fire cannon rounds, small arms, fragmentation weapons and shaped charge warheads. Targets modelled include armoured fighting vehicles, protected mobility vehicles, land fires vehicles, engineering vehicles, logistic vehicles and dismounted personnel.	Dstl
76	WISE	Financial Evaluation	WISE is a formation (Div/Bde) or unit (BG) level all-arms combat model, concentrating on land forces but with some ability to represent the impact of Air and Naval forces on the ground battlespace.	Dstl
77	Algorithm	Forecasting tool	Forecasts staffing requirements	DIO
78	EOM D5 - IPE	QS Summary of cost	Standard form of cost presentation	DIO

79	Strategic Planning Tool Repository	Financial Evaluation & Forecasting	Model holding all data pertaining to cost of operation, disposal value, housing potential, usage, current & future occupiers in the UK (excluding Defence Training Estate)	DIO
80	Army Basing Programme Salisbury Plain Training Areas SFA Financial Model	Economic and financial case to support approvals decisions.	Model to support Initial Gate Business Case (IGBC) down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
81	Army Basing Programme Project Allenby Connaught Footprint Financial Model	Economic and financial case to support approvals decisions.	Model to support Initial Gate Business Case (IGBC) down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
82	Hestia (South) Financial Model	Economic and financial case to support approvals decisions.	Model to support Initial Gate Business Case (IGBC) down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
83	Hestia (South East) Financial Model	Economic and financial case to support approvals decisions.	Model to support Initial Gate Business Case (IGBC) down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
84	Future Overseas Procurement (FOP)	Economic and financial case to support approvals decisions.	Model to support Initial Gate Business Case (IGBC) down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO

85	United States Visiting Forces (USVF) Next Generation Estate Contract	Economic and financial case to support approvals decisions.	Model to support Main Gate Business Case (MGBC) tenderer selection decision point. Evaluates the economic case (NPV) and financial case (affordability) of a number of tenderers and potential first generation outsourcing decisions.	DIO
86	Aquatrine Package A PFI Financial Model	Contract model forecasting costs and estimating contractual changes.	PFI Financial Model jointly owned with Service Provider, used to set original contract price and price changes due to in-service amendments. One ESCROW model plus variants for scenario modelling. Currently used to inform decisions on PFI savings initiatives.	DIO
87	Aquatrine Package B PFI Financial Model	Contract model forecasting costs and estimating contractual changes.	PFI Financial Model jointly owned with Service Provider, used to set original contract price and price changes due to in-service amendments. One ESCROW model plus variants for scenario modelling. Currently used to inform decisions on PFI savings initiatives.	DIO
88	Aquatrine Package C PFI Financial Model	Contract model forecasting costs and estimating contractual changes.	PFI Financial Model jointly owned with Service Provider, used to set original contract price and price changes due to in-service amendments. One ESCROW model plus variants for scenario modelling. Currently used to inform decisions on PFI savings initiatives.	DIO
89	Allenby Connaught PFI Financial Model	Contract model forecasting costs and estimating contractual changes.	PFI Financial Model jointly owned with Service Provider, used to set original contract price and price changes due to in-service amendments. One ESCROW model plus variants for scenario modelling. Currently used to inform decisions on PFI savings initiatives.	DIO

90	Colchester PFI Financial Model	Contract model forecasting costs and estimating contractual changes.	PFI Financial Model jointly owned with Service Provider, used to set original contract price and price changes due to in-service amendments. One ESCROW model plus variants for scenario modelling. Currently used to inform decisions on PFI savings initiatives.	DIO
91	Main Building PFI Financial Model	Contract model forecasting costs and estimating contractual changes.	PFI Financial Model jointly owned with Service Provider, used to set original contract price and price changes due to in-service amendments. One ESCROW model plus variants for scenario modelling. Currently used to inform decisions on PFI savings initiatives.	DIO
92	Northwood PFI Financial Model	Contract model forecasting costs and estimating contractual changes.	PFI Financial Model jointly owned with Service Provider, used to set original contract price and price changes due to in-service amendments. One ESCROW model plus variants for scenario modelling. Currently used to inform decisions on PFI savings initiatives.	DIO
93	Corsham PFI Financial Model	Contract model forecasting costs and estimating contractual changes.	PFI Financial Model jointly owned with Service Provider, used to set original contract price and price changes due to in-service amendments. One ESCROW model plus variants for scenario modelling. Currently used to inform decisions on PFI savings initiatives.	DIO
94	ARMADA PFI Financial Model	Contract model forecasting costs and estimating contractual	PFI Financial Model jointly owned with Service Provider, used to set original contract price and price changes due to in-service amendments.	DIO

		changes.	One ESCROW model plus variants for scenario modelling. Currently used to inform decisions on PFI savings initiatives.	
95	CRC Summary	Forecasting	Converts the reportable consumption data from kWh to Tonnes CO2 and calculates the total final cost of ensuring compliance for reporting year.	DIO
96	EU ETS Allowance Balance	Forecasting	Created to provide a clear view of the MODs EU allowance holdings and determine any deficit/surplus based on estimated annual emissions.	DIO
97	Greening Government Tracker	Central Government Reporting	Excel Data Tracker populated with MOD Energy Consumption across 398 principle sites. Carried out Calculations to convert kWh into Tonnes of CO2. Contains historic MOD Energy data sets back until 2009.	DIO
98	Cost and demand forecasting	Forecasting	Basic forecasting model takes the consumption data recorded in the Infrastructure Management System (IMS) as the basis for future consumption. This is adjusted to an average year for weather, and factors in the utility impact of projects where these are also recorded in IMS. The current version uses an average price per fuel per market area (Country) to derive an indicative cost/forecast spend on Utilities	DIO
99	Fuel Subsidy Scheme (UK)	Personnel Allowances & Payments	Establishes the balance between energy bills paid by the MOD for around 600 selected Service Family Accommodation (SFA), against energy used by these properties and monies taken from pay through F&L payments to determine if each SFA Occupant on the scheme owes money, is owed money, of that their account is in balance.	DIO

100	Fuel Subsidy Scheme (Germany)	Personnel Allowances & Payments	Establishes the balance between energy bills paid by the MOD for around 6000 (reducing with drawdown) Service Family Accommodation (SFA), across Germany, against energy used by these properties and monies taken from pay through F&L payments to determine if each SFA Occupant on the scheme owes money, is owed money, of that their account is in balance.	DIO
101	Fuel Subsidy Scheme (Cyprus)	Personnel Allowances & Payments	Establishes the balance between energy bills paid by the MOD for around 1000 Service Family Accommodation (SFA), across Cyprus, against energy used by these properties and monies taken from pay through F&L payments to determine if each SFA Occupant on the scheme owes money, is owed money, of that their account is in balance.	DIO
102	TRIAD assessment	Modelling	The model developed assesses the reduction in energy demand achieved by individual sites during TRIAD (energy transition charge) warning periods.	DIO
103	Capital Infrastructure Programme (CIP) Report and Scenario Modelling Tool	Infrastructure Investment Portfolio Business Intelligence	The CIP is the top level infrastructure CDEL (capital spend) investment programming and senior decision support tool. The CIP is both a Business Intelligence view of all CDEL Delivery and Investment by MOD, primarily Capital Projects and SD Work Tasks delivered by IPs. It also has basic functionality to develop programme/portfolio 'scenarios' and the uses the existing BI within the spreadsheet to compare the 'scenario' with the 'current baseline' position. The CIP is increasingly relying upon data from IMS, in the form of an interim PDG Report from IMS. There are still other legacy sources of data that 'feed' the CIP; primarily the CDEL projects and work tasks being delivered	DIO

			by SD.	
104	Living Accommodation Strategy Review (LASR)	Forecasting and Evaluation	Data on supply and demand of military accommodation, by type and condition in order to evaluate how much accommodation we have and what the cost will be to meet demand at the right condition level based on cost inputs.	DIO
105	Dismounted Situational Awareness	Planning Allocation and Forecasting	The models support the Main Gate submission and are used for VFM, affordability and funding profiles.	ISS
106	EMPORIUM	Planning Allocation and Forecasting	Model used to support the Business Case Approval submission and also used for forecasting and planning process	ISS
107	FALCON 2 Trinity	Planning Allocation and Forecasting	Model used to support the Main Gate submission and used for forecasting and planning	ISS
108	Grapevine 2 - Connectivity Services	Economic and financial cases to support approval decisions	Model to support the Main Gate submission	ISS
109	Grapevine 2 - Integrated User Services	Economic and financial cases to support approval decisions	Model to support the Main Gate submission	ISS
110	Legacy Support Programme	Procurement and commercial	Model used for forecasting and planning process	ISS
111	Legacy Support Update	Procurement and commercial	Model was used for Business Case submission and will continue to support forecasting and planning	ISS
112	MORPHEUS	Planning Allocation and Forecasting	The models support the Main Gate submission and are used for VFM, affordability and funding profiles.	ISS

113	New Style of IT (Deployed)	Procurement and commercial	Model to support the Main Gate submission	ISS
114	New Style of IT Base	Planning Allocation and Forecasting	Model used for forecasting and planning process	ISS
115	SHAMAN	Planning Allocation and Forecasting	Model used for forecasting and planning process	ISS
116	Manpower Models (Navy/Army/Air/Civilian)	Planning	Modelling use of manning levers to achieve future personnel commitments	Head Office
117	New Employment Modelling	Forecasting	Forecasts of MOD military pay bill under New Employment Model	Head Office
118	Defence Fire and Rescue Project	Investment Appraisal	Cost Model	Army
119	Recruitment Partnering Project	Investment Appraisal	Cost Model	Army
120	Training Review	Planning Allocation and Forecasting	Forecasting	Army