

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.
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	A400M DPP	Procurement and commercial	Model for in-year forecast and planning activities	DE&S
2	A400M ISS MTC	Procurement and commercial	Model to support A400M support contract Review Note	DE&S
3	Airseeker P9	Planning, forecasting and allocation	Airseeker planning and forecasting model supporting UK Airborne intelligence / Surveillance Capability.	DE&S
4	Ajax	Planning, forecasting and allocation	Planning, forecasting and allocation model supporting the AJAX multi-role armoured vehicle (formerly known as SCOUT).	DE&S
5	Armoured Battlefield Support Vehicle	Investment Appraisal	Investment appraisal model aimed at informing decisions supporting the Armoured Battlefield Support Vehicle.	DE&S
6	ASRAAM Bk6	Investment Appraisal	Model used for modelling the MBDA bid . This model is used specifically for Typhoon integration.	DE&S
7	Astute cost model	Planning, forecasting and allocation	CAAS model used to form part of the Quarterly Review of Programme Costs process.	DE&S
8	AWE M&O	Planning, forecasting and allocation	Provides analysis of AWE Strategic Weapons Management and Operational costs.	DE&S
9	Apache Capability Sustainment Programme	Procurement and commercial	Apache PP2 Cost Model from CAAS to support Main Gate Approvals	DE&S
10	Challenger 2 LEP	Investment Appraisal	An investment appraisal model assessing the Challenger 2 Land Life Extension Programme.	DE&S
11	Combined Aerial Targets Service (CATS)	Planning, forecasting and allocation	Cost analysis model for the Combined Aerial Targets contract which is used to inform the Annual Budgeting Cycle.	DE&S

12	Core Production Capability	Planning, forecasting and allocation	Cost analysis model for Nuclear Propulsion Core Production Capability, used to support the Annual Budgeting Cycle.	DE&S
13	D5LE-Boost Rocket Motor	Planning, forecasting and allocation	Model for the Life Extension Review Note	DE&S
14	DCS&S	Planning, forecasting and allocation	Initial Gate Cost Model for Defence Operational Training Capability in support of Air Systems and Services	DE&S
15	DCS&S	Investment Appraisal	Main Gate Cost Model for Defence Operational Training Capability in support of Air Systems and Services.	DE&S
16	DDL P (F)	Planning, forecasting and allocation	Devonport Load Programme cost model, which includes the in-service, superintended upkeep of submarines, including de-equip, defuel and layup preparation related costs.	DE&S
17	Devonport Programme	Planning, forecasting and allocation	Model is used for Planning round programme costing.	DE&S
18	DFAP	Investment Appraisal	Model for the Investment Appraisal of Defence Fuel Acquisition Project (DFAP)	DE&S
19	FLAADS Land	Investment Appraisal	5 Year Equipment Procurement and Support control Planning Model	DE&S
20	FLAADS Maritime - Sea Ceptor T26	Investment Appraisal	Investment Appraisal model for the Review Note for FLAADS Maritime -Sea Ceptor T26	DE&S
21	Future Systems	Investment Appraisal	Model for the Future Systems Review note	DE&S
22	GBAD FI	Planning, forecasting and allocation	Model for GBAD Phase 2	DE&S
23	HIOS	Procurement and commercial	Procurement Cost model supporting the Hercules C130J Integrated Operational Solution.	DE&S
24	Historical Project Performance	Planning, forecasting and allocation	Analysing DE&S Equipment Procurement Programme Historical Project Cost and Schedule Performance.	DE&S
25	HMS Vanguard DMP	Procurement and commercial	CAAS owned model used to generate the Business Case for the Vanguard Deep Maintenance Period Main Gate	DE&S
26	INDIGO - Independent Nuclear Safety Advice and Assessment	Planning, forecasting and allocation	INDIGO - Independent Nuclear Safety Advice and Assessment, Nuclear Propulsion in-service support whole life cost model	DE&S

27	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
28	Lightning II Facility	Planning, forecasting and allocation	Strategic Facility Cost Model	DE&S
29	Lightning II Flyaway	Planning, forecasting and allocation	Unit Recurring Flyaway Cost Model	DE&S
30	Lightning II Support	Planning, forecasting and allocation	Through Life Cost Model for Lightning II Support	DE&S
31	Lochner-FSM	Investment Appraisal	Investment approvals model providing analysis supporting Future Submarines Infrastructure costs.	DE&S
32	Long Term Partnering Agreement	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
33	Maritime Surface Ships Enterprise Model-CANOPUS	Planning, forecasting and allocation	Cost and schedule scenario tool used to assess Maritime schedule and Infrastructure Capability.	DE&S
34	Meteor on JSF	Investment Appraisal	Cost model associated with the extension of the assessment phase for Meteor on Joint Strike Fighter (JSF).	DE&S
35	Mode 5 IFF	Planning, forecasting and allocation	Planning and Forecasting model supporting Mode 5 Identify Friend or Foe System.	DE&S
36	MRV-P Option Model	Planning, forecasting and allocation	Model to support IG options analysis for the Land Protected Multi-Role Vehicle	DE&S
37	Phoenix II	Investment Appraisal	Suite of models used to support the commercial tenders, along with providing benchmarking analysis.	DE&S
38	Protector	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
39	QEC Build	Procurement and commercial	Model to inform the QRPC for QEC	DE&S
40	QEC Future Support	Planning, forecasting and allocation	Ships acquisition model providing in-service support cost analysis for the Queen Elizabeth Class Carrier.	DE&S
41	QEC Support	Planning, forecasting and allocation	Support cost model across the Aircraft Carrier Industrial Alliance.	DE&S

42	Reaper	Procurement and commercial	Whole Life Cost Model Reaper combat air platform supporting Peacetime requirements.	DE&S
43	Rotary Wing	Investment Appraisal	Investment Appraisal model supporting Rotary Wing Ascent capability. This was developed by UKMFTS' training provider, Ascent.	DE&S
44	RR Foundation Contract (RR)	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
45	SDP Programme and FOO WLC Model	Planning, forecasting and allocation	Whole life cost model for the proposed options supporting the Submarine Dismantling Programme.	DE&S
46	SDP Project Model	Planning, forecasting and allocation	Primary feeder model to the Submarine Dismantling Programme model.	DE&S
47	Spear Cap 3	Investment Appraisal	Whole Life Cost model to support the Spear Cap Review Note	DE&S
48	Voyager ABC Model-STAAR PT	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
49	PCM - Successor SM Model	Planning, forecasting and allocation	Platform Cost Model to support the Successor Control Point One Business Case	DE&S
50	NGNPP Cost Model-Successor Next Generation Nuclear Propulsion Plant	Planning, forecasting and allocation	Planning, forecasting and allocation cost model in respect to the Next Generation Nuclear Propulsion Plant.	DE&S
51	T26	Procurement and commercial	Joint Whole Life Cost model used for T26 class navy ship. It models risk, In-Year spend, and includes both Equipment Procurement and Support cost analysis.	DE&S
52	TCC Spearfish Smoothing	Investment Appraisal	Model to inform the Review Note submission supporting the Spearfish Torpedo Smoothing Programme.	DE&S
53	Teutates	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

54	Typhoon Support	Planning, forecasting and allocation	PSOP3-Engine Model to estimate future support costs for the Typhoon combat platform used for QRPC.	DE&S
55	Typhoon Support	Planning, forecasting and allocation	PC5 IRS Repairs Model to estimate future support costs for the Typhoon combat platform used for QRPC.	DE&S
56	Typhoon Support	Planning, forecasting and allocation	PC5 CBC-Case by Case Model to estimate future support costs for the Typhoon combat platform used for QRPC.	DE&S
57	Typhoon Support	Planning, forecasting and allocation	RDSS -Radar suite Model to estimate future support costs for the Typhoon combat platform used for QRPC.	DE&S
58	Typhoon Support	Planning, forecasting and allocation	TAS2 -Availability Model to estimate future support costs for the Typhoon combat platform used for QRPC.	DE&S
59	Typhoon Support	Planning, forecasting and allocation	Contract 1 Model to estimate future support costs for the Typhoon combat platform used for QRPC.	DE&S
60	Warrior Capability Sustainment Programme	Investment Appraisal	The WCSP cost model was initially developed to support the Main Gate Business Case for the WCSP project. Since the project passed Main Gate the model has been used mainly to support the ABC QRPC process. Moving forwards, it will continue to do this but will also support any Review Notes that are required for the project.	DE&S
61	Watchkeeper	Procurement and commercial	Model developed producing Development, Manufacture and In-Service costing and risk analysis.	DE&S
62	C130	Investment Appraisal	Investment Appraisal Model supporting the C130J Capability Obsolescence Programme	DE&S
63	AMESim	Planning	Aircraft performance estimation tool.	DSTL
64	Capability System 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
65	Close Action Environment (CAEn)	Planning	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	DSTL

			which sub-systems such as weapons, sensors, communication and other assets can be deployed.	
66	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 Airto-Air and Air-to-Ground Missions using Military Aircrew.	DSTL
67	EO Lab Tools	Planning	Bespoke lab tools to assess performance characteristics of Electro Optic (EO) threats systems - identifying vulnerabilities and weaknesses.	DSTL
68	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
69	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
70	Hubris	Planning	Maritime tactical decision aid.	DSTL
71	MPPERER	Planning	Power and thermal management systems (PTMS) tool covering mechanical systems, electrical networks, cryogenics, rocket propulsion, cooling networks and more.	DSTL
72	MRoMM	Planning	Missile flyout model designed to represent ballistic and anti-ballistic missiles.	DSTL
73	ODIN	Planning	Used to model maritime platform encounters and interactions. Includes support for underwater platforms and mines.	DSTL

74	PALETTE	Planning	Weapon lethality model for land based Hard targets.	DSTL
75	RF Propagation suite	Planning	RF propagation modelling suite used to make predictions that inform trials planning, safety management and radio spectrum use advice. The capability includes tools to prepare geographic input data.	DSTL
76	SADM	Planning	Model used to support Naval Operational Planning	DSTL
77	SALEM	Planning	A six degree of freedom missile flyout modelling software suite that can be tailored for both conceptual and specific airframe research and evaluation with differing levels of fidelity as required.	DSTL
78	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
79	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
80	SURVIVE	Planning	Survivability assessment of naval vessels, including submarines, against a variety of possible threats and weapon systems.	DSTL
81	Tarview	Planning	Weapon lethality model for land based mobile and relocatable targets.	DSTL
82	TMAP Framework	Planning	Collection of individual models used across various areas of Dstl, owned by US approved by DI. Threat Modelling and Analysis Program (TMAP) models are often altered by Dstl for bespoke requirements that provide direct support to operations and defence intelligence.	DSTL

83	UK CDM	Planning	Model provides Front Line Analysts, Targeteers and Dstl Analysts with collateral damage and risk assessments of UK weapons pre-strike.	DSTL
84	UW Lab Tools	Planning	Total Mine Simulation System (TMSS) simulates ship and mine interaction to provide platform susceptibility advice to support operational and procurement requirements.	DSTL
85	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
86	Variant CDM	Planning	Variant CDM predicts the effectiveness of weapon systems, supporting operational and decision support aspects of wider programmes.	DSTL
87	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
88	ABP Benefits Model	Forecasting & Financial Evaluation	The financial model which sets out the likely financial benefits which the ABP can expect to achieve over the life of the programme and beyond.	DIO
89	Algorithm	Forecasting tool	Forecasts staffing requirements	DIO
90	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
91	Aquatrine Package A 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.	
92	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
93	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
94	ARMADA 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
95	Army Basing Programme Financial Model (CoA5)	Financial and Schedule Forecasting	Model holding financial and schedule baseline and forecast data for 46 ABP infrastructure projects and Programme level consolidation .	DIO
96	Army Basing Programme Project Allenby Connaught Footprint Financial Model	Economic and financial case to support approvals decisions.	Model to support IGBC down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
97	Army Basing Programme Salisbury Plain Training Areas SFA Financial Model	Economic and financial case to support approvals decisions.	Model to support IGBC down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
98	Capital Infrastructure Programme (CIP) Report and Scenario Modelling Tool	Infrastructure Investment Portfolio Business Intelligence	The CIP is the top level infrastructure CDEL investment planning tool, used by both DIO and MOD. The CIP is both a BI View of all centrally funded CDEL Investment by MOD in infrastructure, primarily Capital Projects and SD Work Tasks delivered by IPs. The CIP draws upon data from IMS, provided by the 'DIP Reports' function in IMS. The CIP 'budget' data is not held anywhere else;	DIO

			so the CIP spreadsheet is the source repository for this data.	
99	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
100	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
101	Cost and demand forecasting	Forecasting	Basic forecasting model takes the consumption data recorded in 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
102	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
103	Display Energy Certificate Register	Forecasting	Maintains a record of all MOD assets that meet the qualifying criteria for holding a Display Energy Certificates, detailing asset information, certificate references and expiry dates.	DIO
104	EOM D5 - IPE	QS Summary of cost	Standard form of cost presentation	DIO
105	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
106	Fuel Subsidy Scheme (Cyprus)	Personnel Allowances & Payments	Establishes the balance between energy bills paid by the MOD for around 1000 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, or if their account is in balance.	DIO
107	Fuel Subsidy Scheme (Germany)	Personnel Allowances & Payments	Establishes the balance between energy bills paid by the MOD for around 6000 (reducing with drawdown) SFA across Germany, against energy used by these properties and monies taken from pay through F&L payments to determine if	DIO

			each SFA Occupant on the scheme owes money, is owed money, of that their account is in balance.	
108	Fuel Subsidy Scheme (UK)	Personnel Allowances & Payments	Establishes the balance between energy bills paid by the MOD for around 600 selected 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
109	Future Overseas Procurement (FOP)	Economic and financial case to support approvals decisions.	Model to support IGBC down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
110	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
111	Hestia (East) Financial Model	Economic and financial case to support approvals decisions.	Model to support IGBC down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
112	Hestia (North) Financial Model	Economic and financial case to support approvals decisions.	Model to support IGBC down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
113	Hestia (Scotland/NI) Financial Model	Economic and financial case to support approvals decisions.	Model to support IGBC down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
114	Hestia (South East) Financial Model	Economic and financial case to support approvals decisions.	Model to support IGBC down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
115	Hestia (South West) Financial Model	Economic and financial case to support approvals decisions.	Model to support IGBC down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
116	Hestia (South) Financial Model	Economic and financial case to support approvals decisions.	Model to support IGBC down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
117	Hestia (Wales and West) Financial Model	Economic and financial case to support approvals decisions.	Model to support IGBC down selection point to a preferred option. Evaluates the economic case (NPV) and financial case (affordability) of a number of options.	DIO
118	HESTIA Cost Model	Financial Evaluation	Cost Model to confirm affordability	DIO

119	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
120	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
121	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
122	The Retail Need Assessment Tool	Decision Support	Determine if Establishments are entitled to supported Retail outlets	DIO
123	TRIAD assessment	Modelling	The model developed assesses the reduction in energy demand achieved by individual sites during TRIAD warning periods against as day before/day after comparator. This is used as the basis to determine the levels of TRIAD savings achieved by each site.	DIO
124	United States Visiting Forces (USVF) Next Generation Estate Contract	Economic and financial case to support approvals decisions.	Model to support 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
125	Dismounted Situational Awareness	Planning Allocation and Forecasting	The models support the Main Gate submission and are used for VFM, affordability and funding profiles.	ISS
126	EMPORIUM	Planning Allocation and Forecasting	Model used to support the Business Case Approval submission and also used for forecasting and planning process	ISS
127	FALCON 2 Trinity	Planning Allocation and Forecasting	Model used to support the Main Gate submission and used for forecasting and planning	ISS
128	Grapevine 2 - Connectivity Services	Economic and financial cases to support approval decisions	Model to support the Main Gate submission	ISS

129	Grapevine 2 - Integrated User Services	Economic and financial cases to support approval decisions	Model to support the Main Gate submission	ISS
130	Legacy Support Programme	Procurement and commercial	Model used for forecasting and planning process	ISS
131	Legacy Support Update	Procurement and commercial	Model was used for Business Case submission and will continue to support forecasting and planning	ISS
132	MORPHEUS	Planning Allocation and Forecasting	The models support the Main Gate submission and are used for VFM, affordability and funding profiles.	ISS
133	New Style of IT (Deployed)	Procurement and commercial	Model to support the Main Gate submission	ISS
134	New Style of IT Base	Planning Allocation and Forecasting	Model used for forecasting and planning process	ISS
135	SHAMAN	Planning Allocation and Forecasting	Model used for forecasting and planning process	ISS
136	The Defence Fire and Rescue Project	Investment Appraisal	Cost model	Army
137	The Recruitment Partnering Project	Investment Appraisal	Cost model	Army
138	Manpower Models (Navy/Army/Air)	Planning	Modelling use of manning levers to achieve future personnel commitments	Head Office
139	New Employment Modelling	Forecasting	Forecasts of MOD military pay bill under New Employment Model	Head Office
140	Royal Fleet Auxiliary (RFA) Workforce Model	Planning	Modelling use of manning levers to achieve future RFA workforce commitments	Navy