### **BIS Business Critical Models – June 2016**

#### **Background**

The Macpherson review of Quality Assurance of Government models which reported in March 2013, recommended that departments consider making a list of Business Critical models publicly available.

In response to this, and to provide transparency about the most important models used by the Department for Business, Innovation and Skills, a list of 'Business Critical' models, and models likely to become 'Business Critical' in the near future is given below:

#### **Higher Education Student finance expenditure model**

The model is used to estimate Government outlay on maintenance grants and other student allowances, maintenance loans and fee loans. It is used to inform policy decisions on student support and is updated regularly throughout the year for financial management purposes.

#### **Higher Education Student Number Projections Model**

The model is used to estimate the number of students at HEFCE-funded institutions. It is used to inform policy decisions on student numbers and entrant controls through policy simulation and forecasting and outputs from the model feed into the student expenditure forecasting model.

# **Higher Education Income Contingent Student Loan Repayment Model**

The model is used to estimate the losses on income contingent repayment (ICR) loans issued to students in England. The model provides a valuation of the current ICR loan book (the stock charge) and enables budgeting to be carried out for loans yet to be issued (the RAB charge).

# Higher Education Income Contingent student loan transaction model

This model is a micro simulation model of borrowers with student loans which became due for repayment between 2002-2006 that meet the criteria for inclusion in a loan sale. The model first forecasts borrowers earnings and from this, forecasts repayments.

# **Models that Allocate Higher Education Funding**

These models are used to allocate and monitor allocations of the Higher Education Funding Council for England (HEFCE) recurrent and capital grants for Teaching and Research totalling approximately £4 billion.

#### 24+ Advanced Learning Loans Model

The 24+ Advanced Learning Loans model estimates the proportion of money lent out that will not be repaid (known as the RAB charge) on 24+ Advanced Learning Loans.

#### **Adult Skills and 16-18 Apprenticeship Allocation Calculations**

This model calculates the distribution of funding year and financial year budgets for Adult Skills and 16-18 Apprenticeships to circa 1,000 providers.

### **Advanced Propulsion Centre VfM Appraisal Model**

This model forms part of the Advanced Propulsion Centre (automotive industrial strategy) competition process. It is one step in the wider APC appraisal process and provides a value for money (VfM) assessment of individual project bids.

#### Repayable Launch Investment Levy Model

This spreadsheet models the mechanism defined in the repayment clauses of a specific launch investment contract in order to determine the payments that would be appropriate under various scenarios.

#### **Business Impact Target (BIT) Assessment Calculator**

The model is used by Government Departments to calculate net present values, Equivalent Annual Net Direct Cost to Business (EANDCB) and BIT scores for use in Regulatory Impact Assessments.

# **Business Impact Target (BIT) Assessment Calculator for Regulators**

This model is used by regulators to calculate net present values, Equivalent Annual Net Direct Cost to Business (EANDCB) and BIT scores for use in Regulatory Impact Assessments.

### Renewables Obligation and Feed-in-Tariff Compensation Model for Energy Intensive Industries

This model evaluates applicant eligibility for the scheme and calculates the amount of compensation due.

## **Energy Intensive Industries Support Schemes Forecasting Model**

This model estimates the cost of future support for energy intensive industries. It is also used to support decisions on changes to schemes relating to energy intensive industries.

#### **Green Investment Bank Valuation Model**

This model estimates the value of the strategic options potential retention and winddown value of for BIS's shareholding in the UK Green Investment Bank, and will support decisions on whether to complete a sale.

# **Models Likely to become Business Critical in 2016/17**

#### **Growth Deals – LEP Award Model**

This model will underpin the awards of the Local Growth Fund (LGF), which are made through Growth Deals to Local Enterprise Partnerships (LEPs). Once complete, it will be used to inform LGF awards to LEPs as part of the deal making process.

#### Long-term apprenticeship model

This model is being developed to understand the demands on the apprenticeship budget at different stages during the parliament primarily for the purposes of the financial control of the apprenticeship spending.

#### **Advanced Technology Institute (ATI) Value for Money Model**

The model is used to appraise the value for money of some ATI project proposals. Its use may be extended to cover a much greater proportion of proposals in the near future.

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