



Demand Estimation Sub Committee
2018/19 Demand Models

24th July 2018

Agenda

- Background, Timetable & Objective
- Summary of Industry responses to proposed EUCs and Demand Models
- Conclusions and Next Steps

Background, Timetable and Objectives of Meeting

Background – Demand Estimation

- Key industry processes require various types of gas demand estimation at NDM Supply Points. These processes include:
 - Determining Supply Point Capacity
 - Daily Nominations and Allocations i.e. NDM Supply Meter Point Demand Formula
 - Determining Annual Quantities (AQs)
- To achieve this estimation, each NDM Supply Point belongs to an End User Category (EUC)
- EUCs are used to categorise NDM Supply Points in an LDZ and are defined by reference to variables which are maintained in the Supply Point Register
- Each EUC requires an associated Demand Model which represents its gas usage characteristics e.g. weather sensitivity, consumption profile etc
- Demand Models are mathematical models which provides an estimate of gas demand for each EUC by reference to variables determined by DESC

Background – Demand Estimation

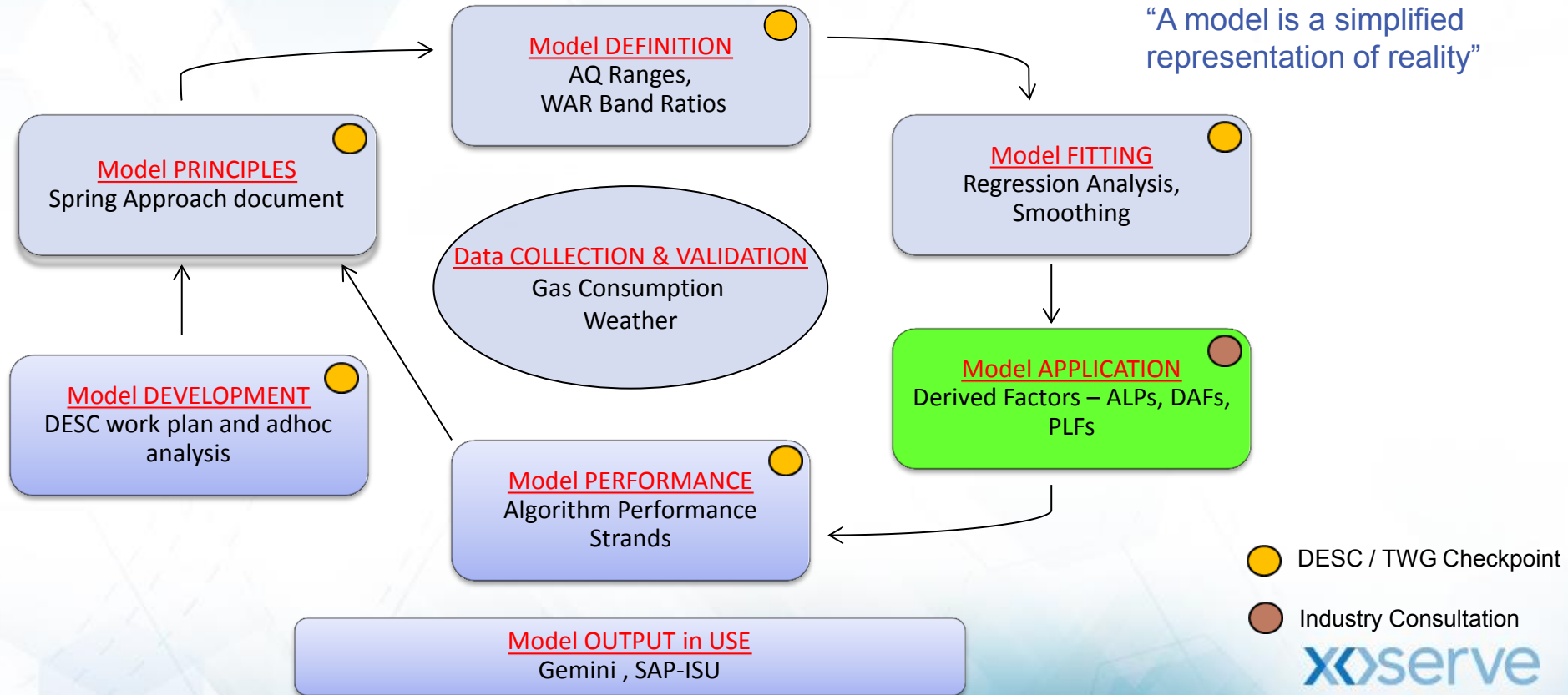
- For each Gas Year, DESC will develop or revise the definitions of the EUCs for the LDZ and the Demand Models for each EUC. The CDSP will then implement these decisions
- The annual process for determining the EUCs and Demand Models for the following gas year begins with the production of a document called the “Spring Approach”
- The Spring Approach provides an overview of the proposed EUC definitions and how the modelling shall be performed, including a reference to the sample data required in order to produce the relevant demand models
- DESC approved the latest version of the Spring Approach after its meeting in February, which included the possibility of deriving additional EUCs in Bands 1 and 2
- Section H of UNC and the NDM Demand Estimation Methodology document provides more detail of the Demand Estimation process

Background – Demand Modelling Framework

- DESC's obligation of producing a set of End User Categories and Demand Models for the next gas year has to be delivered within certain timescales:
 - The sample data collected for analysis must include the most recent Winter period (December to March), meaning the sample data collation and validation cannot start until early April
 - The Final EUCs and Demand Models must be approved and submitted to the Authority and loaded to CDSP's systems by 15th August
 - In between April and August is when the sample data validation results are reviewed, WAR Band ratios are set, single year models are developed and reviewed, model smoothing is applied, draft Derived Factors are produced and reviewed, followed by an industry consultation commencing early June
- The above explains why it is necessary to agree modelling principles and methodologies in February each year, as there is not time in the Spring/Summer to make fundamental modelling decisions and gain agreement from all DESC members

Background - EUCs and Demand Model Lifecycle

The purpose of the **EUC Demand Model** is to represent the behaviour and reactions of the **EUC Population**



Demand Estimation Timetable - 2018

High Level View of Demand Estimation Timetable 2018 - Key Checkpoints

PHASE	JAN'18	FEB'18	MAR'18	APR'18	MAY'18	JUN'18	JUL'18	AUG'18	SEP'18	OCT'18	NOV'18	DEC'18
1. MODEL PRINCIPLES												
Spring Approach 2018 Approved (DESC)		13th Feb										
2. Data COLLECTION & VALIDATION												
Sample data validated (CDSP)				13th Apr								
3. MODEL DEFINITION												
Agree Data Aggregations / WAR Band Limits (TWG)				24th Apr								
4. MODEL FITTING												
Small & Large NDM Single Year modelling review (TWG)					15th May							
5. MODEL APPLICATION												
Publication of Draft Derived Factors (CDSP)						1st June						
Derived Factors Approved for wider industry (TWG/DESC)							9th July					
Final Approval of Derived Factors (DESC)							24th July					
6. MODEL OUTPUT IN USE												
SAP-ISU and Gemini updated (CDSP)								15th Aug				
7. MODEL DEVELOPMENT												
Adhoc Work-plan approved (DESC)							24th July			8th Oct		
8. MODEL PERFORMANCE												
Strands 1 to 4 reviewed (DESC)												10th Dec

Objective:

- The final objective of the “Model Application” phase is for TWG, DESC and the industry to review the Derived Factors – ALPs, DAFs and PLFs in order to approve final versions to be used in Gemini and SAP-ISU for the new Gas Year
- Objective of today’s meeting is:
 - For DESC to review industry representations on proposals for Gas Year 2018/19
 - To gain DESC support to formally approve and finalise this year’s proposals
 - Confirm remaining activities relating to proposals for Gas Year 2018/19

Summary of Industry Responses to 2018/19 End User Categories (EUCs) and Demand Models

Industry Responses

- Following DESC approval at its meeting on 9th July, a note was issued to the industry on 10th July advising that proposals for Gas Year 2018/19 were available for review and comment – with the deadline for comments by 17th July
- One set of comments have been received, from Scottish Power. The comments were in support of this year’s models and the process followed – see below:
 - *“We support the proposed introduction of the new EUC categories being introduced into Bands 1 and 2, as this will provide more appropriate profiling for different sub-sets of customers, which should help towards minimising UIG volatility and reconciliations.”*
 - *“The approach in deriving these profiles and results are reasonable.”*
- In addition, there were comments in relation to the uplift factors proposed within the Demand Estimation Methodology document. As the debate around the factors had moved on from DESC to UNCC, Scottish Power were advised to pass their comments to the Joint Office and/or Proposer

Conclusions and Next Steps

Conclusions

- For the first time DESC has proposed a new set of End User Categories for the 2018/19 Proposals. There are 3 new EUC types – i) Non-Domestic Band 1, ii) Prepayment Band 1 and iii) Domestic Band 2
- For the avoidance of doubt these additional EUCs will not be used at the start of Gas Year 2018/19
- Once the various system changes are scheduled and approved, the CDSP will notify the industry when the new EUCs will be used and where to find the relevant data files
- Are DESC now happy to provide final approval of this years EUCs, Demand Models and Derived Factors ?

Next Steps

- w/c 23rd July
 - CDSP on behalf of DESC inform industry and Ofgem that proposals are now final
- w/c 30th July
 - CDSP will publish the final proposals to the industry and submit interface files to key systems (no later than 15th August)
 - There will need to be clear signposting of which ALPs and DAFs to use for which processes, especially if and when the factors proposed in MOD0644 are approved and/or the new EUCs are able to be used
 - DESC's views welcome on how this information should be shared / published ?

Reminder: Where to find Demand Estimation data

- Folder structure on secure website:

18. NDM Profiling and Capacity Estimation Algorithms

2018-19 Gas Year

1. Spring Approach Document

2. Demand Estimation Sample Data

3. Demand Estimation Parameters

a. End User Categories and Derived Factors

b. Demand Model Supporting Files

4. NDM Algorithms Booklet

- Folders highlighted green will contain final NDM proposals for Gas Year 2018/19
- The summary of the end to end process followed this year is available in Folder 4. NDM Algorithms Booklet