

Project Deliverable
**Forecasting
Provider Analysis**



Scottish & Southern
Electricity Networks

CGI



1. Forecasting Provider Analysis

TRANSITION is a Network Innovation Competition (NIC) project that is led by Scottish and Southern Electricity Networks (SSEN) in collaboration with several project partners (Atkins, Origami Energy, CGI and ENWL) responsible for different work packages.








The TRANSITION Project will help progress the change to a smart grid world by developing and demonstrating “Proof of Concept” platforms to test the operation of the market models being produced by the ENA Open Networks Project. The first phase of the project will develop a procurable set of requirements for these Proof of Concept Neutral Market Facilitator (NMF) and Whole System Coordination (WSC) tools, such that it will enable the Project to test the operation of a DSO market model under real network conditions. This shall include participation from market participants connected to the DNO systems.

A core function required to allow real world testing is forecasting; facilitating new markets and the coordination between electricity and wider energy system operators. The Western Power Distribution Project Electricity Flexibility and Forecasting Systems (EFFS) includes the preparation of a forecasting specification and development of a tool to allow the requirements to be actively tested. Thus, to avoid duplication and ensure optimum value for our customers money, TRANSITION proposed to adopt the EFFS forecasting output and only develop where necessitated by the trial design.

To aid adoption of the EFFS output while supporting industry development of commercially viable products, CGI and SSEN have reviewed the EFFS forecasting specification and conducted an independent review of internationally available forecasting products. The analysis, presented in Table 1, is not exhaustive and instead has focused on a selection of developed products representative of present industry forecasting solutions.



Table 1: Forecasting Provider Analysis

								
Product Name	SAS Energy Forecasting	MetrixiDR Retail			Ensek - Libra	GenStar4	Aiolos Forecast Studio	AleaDemandRetail
Market Segmentation - Cost	A	A	A, B	A, B	A, B, C	A, B, C	A, B, C, D	A, B, C
Market Segmentation - Function	A	A, B	A, B, C	A, B, C	B, C	B, C	B, C, D	B, C, D
Power	Y	Y	Y	Y	Y	Y	Y	Y
Gas	Y	Y	N- Needs development	Y	Y	N	Y	Y
Export	Y	Y	N - Needs development	-	-	N	Y	Some - wind, solar
Operational								
Automated scheduled forecasting	Y	Y	-	N	-	-	-	Y
Retail data sync	-	Y	-	N	-	-	-	? Mentions detecting new customers
Automate inbound data feeds	Y	Y	Y	N	-	-	Y	Y
Configurable exception handling	Y	-	N	-	-	-	-	-
Report function	Y- additional module	Y	-	Y	Y	Y	N	Y
Manual model configuration	Y	? suspect yes thorough use of modeling module	-	N	-	-	Y	N
Auto assign model	-	Y	-	-	-	-	-	Y
Industry algorithms supported already	Y	Y	Y	Y	Y	Y	N	N
Forecast Generation								
Top down forecast	Y	Y	Y	-	-	-	-	Y
Bottom up forecast	Y	Y	Y	-	-	-	-	Y
Forecast at group level	-	Y	-	Y	-	-	-	Y
Forecast at meter level	-	Y	-	Y	-	-	-	? Mentions customer level
Data visualisation	Y	Y	-	Y	Y	Y	-	Y
Aggregate and apportion	Y	Y	Y	Y	Y	Y	Y	Y
Issue forecast to stakeholders	Y	Y	Y	Y	-	-	-	-
Support and Implementation								
Support	Y - self help and assisted help	Y - user community, regular contact with forecast experts	Y - self help and assisted help	Y	Y - self help and assisted help	Y - self help and assisted help	Y - user forums and community	Remote
Modular implementation-	Y - vendor less likely to split	Y	N	-	Y - unknown if it can be split	Y - Genstar 4 platform	N	Y
Cost	H	M-H	M	-	-	-	L	-
Service based proposition	N	N	N	Y	N	N	N	N
Cloud/hosted solution available	Y	Y	Y	Y	N	N	Y	N
UK Based	N	N - USA	Y	Y	Y	Y	N - Sweden	N - Spain
UK Presence	Y	N	Y	Y	Y	Y	N	N
Achieved a UK implementation	Y - nPower	Y - Centrica Smartest	Y - Centrica	Y	Y - Ovo	-	N	N

Segmentation key:

A) B2B Interval, B) B2B Non-interval, C) RESI/Simple B2B Non-Interval, D) RESI/Smart

Once complete, the EFFS output will be scored against the same criteria and any requirements derived from TRANSITION trials shall be communicated in subsequent dissemination reports.

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