

ELECTRICITY FLEXIBILITY AND FORECASTING SYSTEM

Project Overview







Contents

Agenda	Concept
	Approach
	Benefits
	Project
	Key Deliverables
	Summary



Background

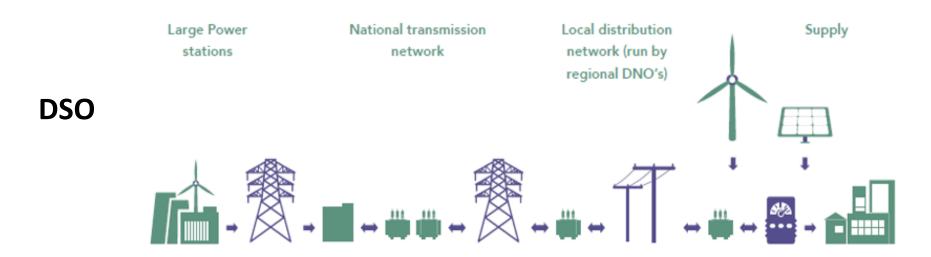
The Electricity Flexibility and Forecasting System (EFFS) Project will specify, implement and trial a system that will to support DNO-DSO industry transition. The software will forecast network demand, generation and storage using project developed algorithms.

Timeline

- Western Power Distribution (WPD) selects AMT-SYBEX as partner to prepare bid for the Low Carbon Networks Fund Network Innovation Competition.
- Initial Submission Proforma (bid) accepted by OFGEM on 4th May 2017.
- Full Submission Proforma (bid) submitted to OFGEM by WPD on 7th August 2017.
- Conditional funding approval was received from Ofgem on 30th November 2017.
 - The condition required the EFFS project to collaborate with two other DSO projects requesting innovation funding, SSE (TRANSITION) and Scottish Power (FUSION) to identify potential efficiencies and remove any operational duplication.
- Updated EFFS project documentation was submitted to Ofgem on 6th July 2018.
- Request For Further Information (RFFI) received from Ofgem on 13th August 2018.
- RFFI document issued by WPD to Ofgem 23rd August 2018.
- Ofgem approved the EFFS project on 28th Sept 2018.



Why is it needed?



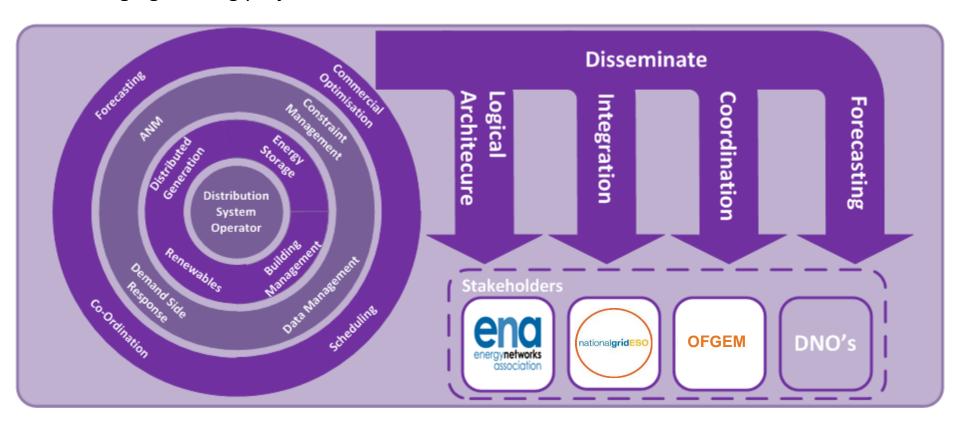
EFFS

- Incorporate requirements identified by ENA Open Networks Project
- Creating one solution that can adapt to any market model, i.e. future proof, value for money
- Encouraging standardisation
- Differing platforms mean a need to work within a common framework to ensure interoperability and value for money



The Concept

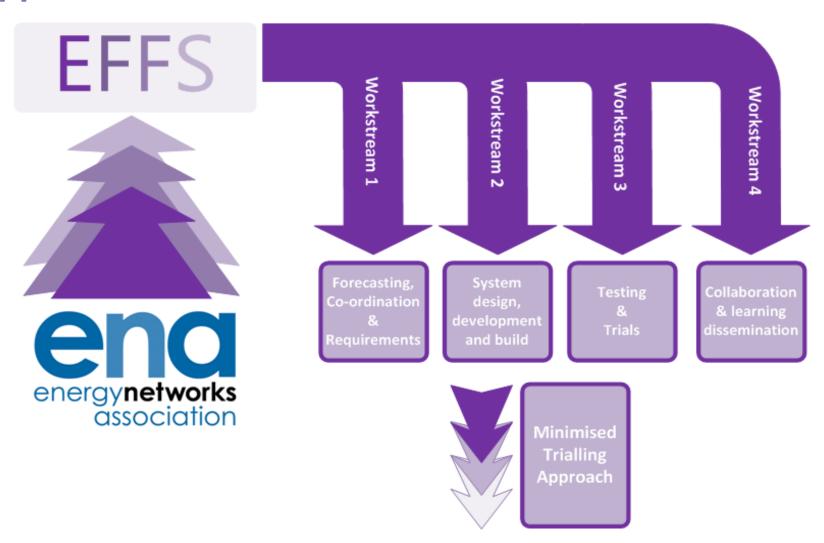
- Building and testing software to support the DSO role
- Based on agreed set of DSO functions
- Delivering a blueprint that can be used by other DNOs for cheaper, speedier transition.
- Leveraging existing projects for customer recruitment





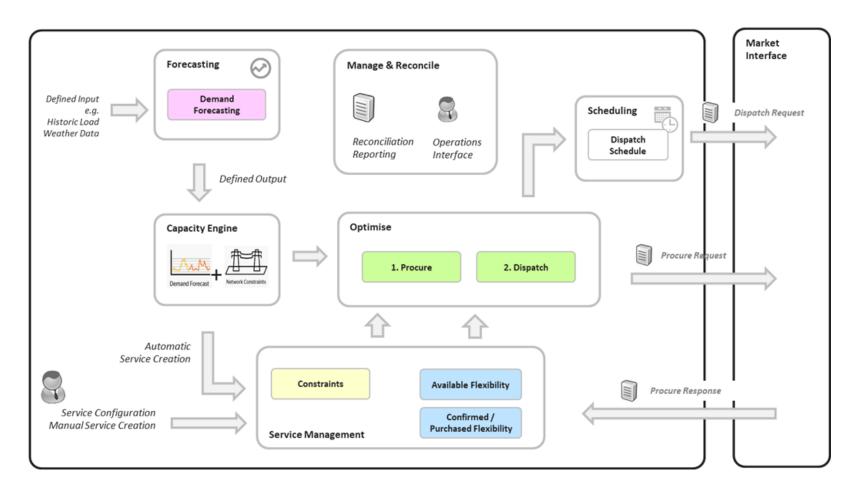
EFFS

Approach





EFFS – Enabling the transformation from DNO to DSO





The Benefits

A solution enabling networks to be actively managed through the use of flexibility services and delivering DSO capability

£242.6m*

Providing an alternative to traditional (as planned for) reinforcement**

+£m

+£m

Faster Fault Restoration Reduced Balancing Costs

+£m

Increased /
Faster
Renewables
Connections

^{*} Potential DNO savings by 2050

^{**} As included in the WPD 2014 business plan



EFFS: Key Players

OFGEM



Project Sponsor

NIC Licensee, Project Lead



Project Partner – Product Supplier,
 Delivery Management, Consultancy







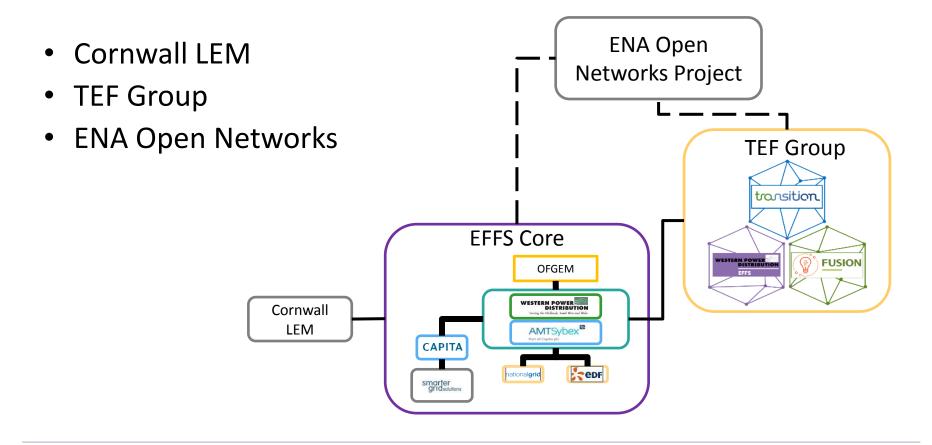


- Design Authority (Forecasting)
- Forecasting Partner
- System Operator (Trials)
- Supplier/Aggregator Testing (Trials)



EFFS: External Contributors

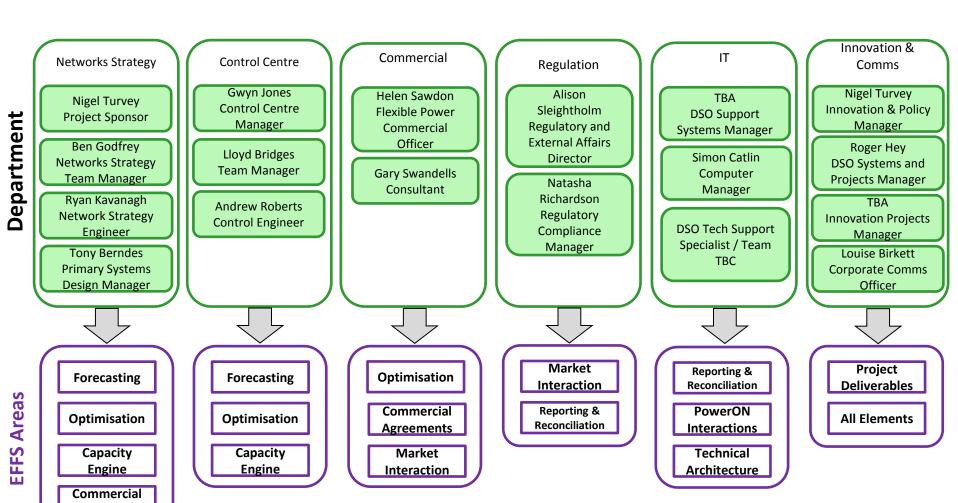
External contributors providing project inputs:





Agreements

WPD Internal Stakeholders





EFFS: Timeline

Work Type	Workstream	Description	H1 2018	H2 2018	H1 2019	H2 2019	H1 2020	H2 2020	H1 2021	H2 2021
Implementation	1	Forecasting Evaluation, Co-ordination and Requirements	Ofgem Approval		Gateway F	Review 1				
Implementation	2	System Design, AMT-SYBEX Development/ Configuration, System Test					Gateway	Review 2	Gate	way Review 3
Implementation	3	Onsite Testing, Trials and Conflict Management								
Implementation	4	Collaboration and Knowledge Dissemination							Clo	osedown Report

We are here



Key Deliverables

ID	WPD Ofgem Deliverable	Ofgem Deadline
D1	Mobilisation Exit Report	18/03/2019
D2	Gateway review 1	25/06/2019
D3	Output from the forecasting	05/07/2019
D4	Development of requirements specification for DSO functionality (EFFS)	12/07/2019
D5	Development of EFFS Design Specification document	16/10/2019
D6	Gateway review 2	19/08/2020
D7	Implementation and System Delivery	19/10/2020
D8	Completion of onsite system testing	01/02/2021
D9	Trials design and preparation	01/03/2021
D10	Trials – execution and knowledge capture	31/08/2021
D11	Gateway review 3	06/09/2021
D12	Comply with knowledge transfer requirements of the NIC Governance Document	End of project



Summary

- DNOs will need to become DSOs and this will require them to develop new capabilities.
- EFFS will provide the necessary capability to enable DNOs to manage this transition by delivering a solution enabling networks to be actively managed through the use of flexibility services.
- This capability will enable distribution networks to manage the co-ordination of services at a local level, driving greater efficiency on both the local and national system.



Contact

Jenny Woodruff (Project Manager)

jwoodruff@westernpower.co.uk

Elliot Warburton (Delivery Manager)

elliot.warburton@amt-sybex.com