

Project ID	DIP083		
Long Title	ROGER		
Short Title			
Keywords	Small; Town; Domestic; Non-domestic; Electricity; Power Quality & Grid Integration; Smart Grids; Demand Response; Active Network Management; LV Grid Monitoring; Smart Devices; Stakeholder Engagement & Behaviour Change; Energy Strategy Development;		
Location (Town, Region, Country)	Amersham	Buckinghamshire	England
Latitude and Longitude	51.68N	0.61W	
OSGB code	SU 96 98		
Status	Complete		
Start Date	2013		
End Date	2014		
Description	<p>In order for the electricity transmission grid to function correctly and provide security of supply, the amount of generation input and consumption off-take from the grid must be balanced at all times. As the generation-side of this equation moves to more volatile weather-dependant sources, additional mechanisms for achieving power balance will become more crucial.</p> <p>Demand-side management is expected to play a major role in the energy balancing mix and it will become increasingly important to be able to control the timing and levels to which households draw power from the grid for applications such as space and water heating. By having access to facilities which can adjust demand, or minimise peaks, it is believed that critical maximum temperatures in expensive assets such as transformers can be controlled, thereby extending their lives.</p> <p>Whilst large industrial loads have contributed to balancing services for many years and the theory of demand-side management and 'smart-grid' technologies have been developed, the complexities of controlling individual appliances within a domestic or SME environment has yet to be deployed into mature services. The emphasis is on controlling individual appliances in a way that does not affect their enjoyment by consumers, whilst successfully aggregating these power control functions into useful and measurable mechanisms for the grid operators.</p>		
Sectors	Domestic, non-domestic		
Funding Sources	Innovation Funding Incentive		
Budget £	£42,000		
Partners	National Grid, SSE, Reactive Technologies		
Energy vectors	Electricity		

Scale (lab/site/ small/community/region/national)	Small
Technologies demonstrated	LV grid monitoring, smart controls, demand response devices
Economic models demonstrated	Grid services, new commercial models
Other concepts demonstrated	Demand response, DNO-consumer engagement
Industry engagement	
Consumer engagement	
Project Reports (incl. links)	No closedown report http://www.smarternetworks.org/project/prj_1695/documents
Datasets (incl. links)	
Website/social media	
Information sources	http://www.smarternetworks.org/project/prj_1695