

DS3 Programme Status Update

4th June 2013

General

- The [TSOs System Services Review Recommendations Paper](#) was submitted to the RAs in April and was published on the TSOs' websites on the 24/05/2013.
- The CER held bilateral meetings with generators and the TSOs concerning RoCoF on the 09/05/2013.
- A DS3 Industry Forum was held in Belfast on 09/04/2013. A general programme status overview was given as well as presentations on System Services, RoCoF, Grid Code and Performance Monitoring and Testing. DNV KEMA presented on the findings of both their RoCoF assessment and their System Services capital costs assessment.
- The TSOs held a meeting on 19/04/2013 with industry to discuss the development of an All-Island RES Curtailment Analysis Report.
- The [Control Centre Tools and Capabilities Workstream Plan for 2013](#) was published.
- Director-level meetings were held with ESNB and NIE to discuss DS3 TSO-DSO interactions.

Status

Workstream	Commentary
Communications	<ul style="list-style-type: none"> • The new SONI website went live on the 19/03/2013 and contains a section with an overview of the DS3 programme and links to the EirGrid website. The DS3 section of the SONI website can be accessed here. • A DS3 Industry Forum was held in Belfast on 09/04/2013. There were over 60 industry representatives in attendance. All presentations were published to the EirGrid website and can be found here. • There was a DS3 stand at the EU Presidency Energy Meeting in Dublin Castle on 22/04/2013, at The Green Way (European Cleantech Cluster Forum) on 23/04/2013 at Dublin Civic Offices and at the SET-Plan conference on 07/05/2013 and 08/05/2013 at the Royal Hospital Kilmainham. • There was a DS3 presentation given at the NREL/EPRI wind workshop in Denver, Colorado on 16/05/2013.
System Services	<ul style="list-style-type: none"> • The TSOs System Services Review Recommendations Paper was submitted to the RAs in April and was published on the TSOs' websites on the 24/05/2013. All non-confidential responses to the last consultation paper were also published. • A System Services Review Industry Forum to discuss the Recommendations Paper is scheduled for 26/06/2013. • The paper is being reviewed by the RAs and it is anticipated that the SEM Committee will issue a proposed decision for consultation in the coming months.
RoCoF	<ul style="list-style-type: none"> • The CER have committed to providing an update on RoCoF in Q2. • URegNI have advised the TSOs that their timeline will broadly follow that of the CER. • The CER held bilateral meetings with generators and the TSOs concerning

	<p>RoCoF on the 09/05/2013.</p> <ul style="list-style-type: none"> • ESBN have shared their RoCoF Report with the RAs and TSOs. • NIE have supplied the TSOs with a draft note on the RoCoF capability of distribution-connected generation in Northern Ireland. The TSOs are currently reviewing the document. • The timelines as published in the RoCoF Implementation Plan are at risk.
Grid Code	<ul style="list-style-type: none"> • Both the Ireland and Northern Ireland Grid Code Review Panel meetings and the Joint Grid Code Review Panel meeting were held in Dublin on 01/05/2013. Presentations on Enhanced Performance Monitoring and Dynamic Models were provided to the JGCRP. The presentations are available here. • The Northern Ireland Wind Farm Power Station Settings Schedule has been sent to URegNI for decision. • The TSOs are currently awaiting a timeline from NIE on whether any modifications need to be included in the NIE Distribution Code regarding fault ride-through. • The Dynamic Models modification is being amended following discussions with industry. A further meeting will be held with industry prior to the modification being brought to the next GCRP meeting in September. • An internal EirGrid/SONI group has been set up to develop a plan to incorporate the European Network Code requirements into the Grid Codes. • The next ESBN DCRP meeting has been postponed until 18/06/2013 to allow further discussion on the translation of the wind farm modifications into the Distribution Code.
DSM	<ul style="list-style-type: none"> • The Demand Side Unit Grid Code modification was recommended for approval by the Ireland Grid Code Review Panel on 01/05/2013 and was sent to the CER for decision on 31/05/2013. • The Northern Ireland Demand Side Unit Grid Code modification consultation was published on the 10/05/13. The deadline for submissions to the consultation is the 07/06/13. The modification and supporting documents can be found here. • An email has been circulated to Demand Side Unit operators and prospective Demand Side Unit operators seeking topics for discussion at a workshop that EirGrid and SONI will facilitate in July/August. • SONI have been approached by a number of parties seeking to pursue a DSU application but due to ongoing license issues they are now considering operation as AGUs. • A decision has been made to trial an Internet-based Secure ICCP method of communication between a new DSU and the National Control Centre. The design has been finalised and the solution is currently being implemented and is due to be completed on schedule at the end of Q2. • A TSO-Demand Side Unit contract has been drafted and sent to both operational DSUs for review.
Voltage Control	<ul style="list-style-type: none"> • Director-level meetings were held with ESBN and NIE to discuss DS3 TSO-DSO interactions. Several other meetings have been held at a working level to progress this workstream. However, there are delays relative to the published plans. • A review of voltage control requirements set out in the ENTSO-E network codes is in progress. • The Distributed Voltage Control study to gauge the system benefit available from enhanced reactive power operational regimes for distributed generators is now complete.

Frequency Control	<ul style="list-style-type: none"> • New generic wind farm models which include governing and emulated inertia are being validated. Feedback is being provided to the vendor. • The TSOs are compiling a list of frequency and voltage sensitive protection devices used on the system. • The demonstration project with SSE / GE Wind on emulated inertia from wind farms is in progress. UCD have completed a range of studies to assess the parameters used in the testing phases of the project. UCD will now carry out further studies on a range of high SNSP scenarios to enable a decision to be made on the settings to be implemented for the trial. • The TSOs are currently investigating arrangements to initiate governor testing on wind farms. • Studies are underway in relation to Voltage Dip-Induced Frequency Dips.
Control Centre Tools & Capability	<ul style="list-style-type: none"> • The 2013 workstream plan has been published on the website here. • Work on All-Island EMS screens is continuing. A common set of categories and priorities have been agreed. • The specification document for the new wind dispatch tool has been completed and sent to Alstom for review. The tool has been designed based on the recent regulatory decision (SEM-13-10). When complete the new tool will be a key element in automating wind curtailment reporting. • Work on the new wind forecasting project is ongoing. This includes the implementation of incentives for forecasting accuracy to service providers. • The implementation of the online short circuit analysis tool in the Dublin Control Centre will be delayed. • Alstom are currently in the factory development phase of the EMS Integration Project.
Model Development & Studies	<ul style="list-style-type: none"> • New generic TSAT wind farm models which include updates for the recently approved Grid Code modifications, governing, emulated inertia and tuneable post-fault active power recovery are being validated. Feedback is being provided to the vendor. • A pilot study into the All-Island Minimum Number of Sets has been completed and will be presented at the Advisory Council meeting on 19/06/2013. • Automation for studies which take the output of Plexos and creates cases for powerflow and dynamic analysis is progressing. Working base cases for every hour of the year can now be produced automatically. • The Voltage Dip-Induced Frequency Dip study is progressing. Dynamic simulations are now being performed looking at frequency deviations with different rates of post-fault active power recovery of wind farms. • Several studies have been carried out to investigate system separation issues in both 2013 and 2020 particularly at times of high tie-line transfer. • A process for validating the all-island model against frequency events has been approved. • There was a meeting held with UCD to discuss a PV Analysis and Overcompensation Study. Work is expected to begin shortly on this study.
WSAT – Wind Security Assessment Tool	<ul style="list-style-type: none"> • An ongoing process to improve accuracy in the new frequency stability function of WSAT is underway. A significant number of updates were made in Q1 2013. • The acceptance criteria to begin using the extended features (including frequency stability function) of All-Island WSAT are being reviewed. • The All-Island TSAT Comparison versus Frequency Events Report has been compiled and is currently being reviewed. The report compares the accuracy of predicted frequency and generator active power output in TSAT to actual

	values during real frequency events on the system.
Renewable Data	<ul style="list-style-type: none"> • The All-Island Curtailment Report for 2012 has been sent to the RAs for review. • A meeting was held on 19/04/2013 with industry to discuss the development of an All-Island RES Curtailment Analysis report. A meeting to review the template is being arranged for June. • The All-Island High SNSP Summary Report 2012 has been completed. • The All-Island Renewable Connection Report - 36-Month Forecast (Q4 2012) has been published to the EirGrid website. • The process of compiling the High Wind Speed Shutdown report for 2012 has begun.
Performance Monitoring & Testing	<ul style="list-style-type: none"> • Workshops with industry on the new proposals for the Enhanced All-Island Performance Monitoring process are scheduled for Belfast on 06/06/2013 and Dublin on 11/06/13. Over 45 attendees have confirmed to date. The agenda includes presentations from industry representatives. • Meetings were held with ESB Networks and NIE to discuss the DSO-TSO interface for Enhanced Performance Monitoring. • An internal implementation plan for the roll-out of Enhanced Performance Monitoring system has been developed. • A draft harmonised testing procedure and report template for both conventional and wind generation is being developed for approval and this will form the basis for all of the harmonised test procedures.

DS3 List of Deliverables to 31 December 2013

Key: Complete Due Q3 2013 Due Q2 2013 Overdue Due date changed by Change Request

Task no.	Workstream	Work area	Decision/Deliverable/Task	Responsible	Original Due by Date	Due by
CCTC.1.2	Control Centre Tools & Capabilities	All-Island Operations	Development of all-island EMS screens	TSOs	31/12/2014	31/12/2014
CCTC.2.1	Control Centre Tools & Capabilities	Wind Dispatch Tool	Drafting business rules for wind dispatch into business requirement specification (BRS) (SEM-11-105)	TSOs	Complete	Complete
CCTC.2.2	Control Centre Tools & Capabilities	Wind Dispatch Tool	Costs and timelines for implementation of BRS (SEM-11-105)	TSOs / RAs	Complete	Complete
CCTC.3.1	Control Centre Tools & Capabilities	EMS	Implementation of online short circuit analysis tool in Dublin Control Centre	TSOs	31/05/2013	30/06/2013
CCTC.3.2	Control Centre Tools & Capabilities	EMS	Inclusion of Inertia Monitoring Capability in Control Centres	TSOs	Complete	Complete
CCTC.3.3	Control Centre Tools & Capabilities	EMS	Scoping of EMS Integration Project	TSOs	30/09/2012	30/09/2012
CCTC.6.1	Control Centre Tools & Capabilities	Wind Forecasting	Implementation of incentives for forecasting accuracy of service providers	TSOs	31/03/2013	30/09/2013
CCTC.6.2	Control Centre Tools & Capabilities	Wind Forecasting	Implementation of regional forecasting	TSOs	31/03/2013	31/03/2014
CCTC.6.3	Control Centre Tools & Capabilities	Wind Forecasting	Investigation potential of sending live wind farm signals to wind forecast service providers	TSOs	31/03/2013	31/03/2013
DSM.1.1	DSM	DSU Readiness Project	Approval of Grid Code Modification for DSU (MOD_36_10)	CER	31/12/2011	31/12/2011
DSM.1.2	DSM		Northern Ireland Grid Code Modification Consultation	TSOs / RAs	31/12/2011	31/12/2011
DSM.1.3	DSM		Northern Ireland Approval of DSU Modification	NIAUR	31/03/2012	31/03/2012
DSM.1.4	DSM		Delivering T & SC Modification	SEMC	31/03/2012	31/03/2012
DSM.1.5	DSM		System Services Consultation #1	TSOs / RAs	31/12/2011	31/12/2011
DSM.1.6	DSM		System Services Consultation #2	TSOs / RAs	10/07/2012	10/07/2012
DSM.1.8	DSM		DSU Operation (ROI Pilot)	TSOs / Industry	30/06/2012	30/06/2012
DSM.1.9	DSM		Review of System Services arrangements for DSU	TSOs	30/09/2013	30/09/2013
DSM.2.1	DSM	Contracts & Licensing	Review of licensing arrangements for AGU	RAs	30/06/2012	30/06/2012
DSM.2.2	DSM		Review of existing GASOA	TSOs	30/09/2012	30/09/2013
DSM.2.3	DSM	Contracts & Licensing	Development of regulatory contract for AGU	RAs	30/06/2012	30/06/2012
DSM.2.4	DSM	Contracts & Licensing	Decision on DSU supplier license & tie in with Bidding Code of Practice	RAs	31/12/2011	31/12/2011
DSM.2.5	DSM	Contracts & Licensing	Review if a DSU - SO contract is required	TSOs	30/09/2013	31/03/2013
DSM.3.1	DSM	DSU Commissioning & Testing	Review and analysis of appropriate communications mechanisms for aggregated units from the Control Centres	TSOs	31/12/2012	31/12/2012
DSM.3.2	DSM	DSU Commissioning & Testing	Decision on communications mechanisms from Control Centres	TSOs	31/03/2013	31/03/2013
DSM.3.2.1	DSM	DSU Commissioning & Testing	Design and implementation of new communications mechanism from Control Centres	TSOs	30/06/2013	30/06/2013
DSM.3.2.2	DSM	DSU Commissioning & Testing	Pilot of new communications mechanism from Control Centres	TSOs / Industry	30/09/2013	30/09/2013
DSM.3.3	DSM		Investigate metering mechanisms for AGU	TSOs	31/03/2012	31/03/2012
DSM.3.4	DSM	DSU Readiness Project	Develop Grid Code testing procedures for AGU/DSU	TSOs	31/03/2012	31/03/2012
DSM.3.5	DSM	DSU Readiness Project	Development of process for performance validation for DSU	TSOs	30/06/2012	31/03/2013
DSM.4.1	DSM	Grid Code	Review of Grid Code standards for AGUs and DSUs	TSOs	31/12/2012	31/12/2012
DSM.4.2	DSM	Grid Code	Bring modification to Grid Code Review Panel based on review	TSOs	31/03/2013	31/03/2013
DSM.4.3	DSM	Grid Code	Make decision on modification	RAs	30/06/2013	30/06/2013

DSM.5	DSM	Demonstration Projects	Evaluate new methods of Demand Side Participation through Demonstration Projects and the Smart Grid Innovation Hub	TSOs / Industry	31/12/2013	31/12/2013
FC.1.0	Frequency Control	DS3 Grid Code Workstream		TSOs / RAs / Industry	30/06/2012	31/12/2012
FC.1.1	Frequency Control	Operational Policy: RoCoF	Assessment of outputs from RoCoF Workstream	TSOs	31/12/2012	30/06/2013
FC.1.2	Frequency Control	Operational Policy: RoCoF	Implementation of outputs from RoCoF workstream	TSOs / DSOs	31/12/2013	31/12/2013
FC.1.3	Frequency Control	Operational Policy: RoCoF	Assessment of Renewable Data Workstream output	TSOs	31/12/2012	31/12/2012
FC.1.4	Frequency Control	Operational Policy: RoCoF	6-monthly assessment of Renewable Data Workstream output	TSOs	New Task	30/06/2013
FC.1.5	Frequency Control	Operational Policy: RoCoF	6-monthly assessment of Renewable Data Workstream output	TSOs	New Task	31/12/2013
FC.2.1	Frequency Control	Operational Policy: Frequency Response to Large Disturbances	Study the frequency response to large disturbances based on historical data	TSOs	30/06/2012	31/12/2012
FC.2.2	Frequency Control	Operational Policy: Frequency Response to Large Disturbances	Look at long-term System Services implications for inertia provision	TSOs	30/06/2012	31/12/2012
FC.2.3	Frequency Control		Derive a working all-island system model of the Power System	TSOs	30/06/2012	31/12/2012
FC.2.4	Frequency Control	Operational Policy: Frequency Response to Large Disturbances	Obtain dynamic models that include emulated inertia	TSOs	31/12/2012	30/06/2013
FC.2.4.1	Frequency Control	Operational Policy: Frequency Response to Large Disturbances	Audit / review system frequency- and voltage-sensitive protection device settings	TSOs	New Task	30/06/2013
FC.2.5	Frequency Control	Operational Policy: Frequency Response to Large Disturbances	Look at mitigation scenarios for frequency response in conjunction with wind industry	TSOs / Wind Industry	31/12/2012	30/06/2013
FC.2.5.1	Frequency Control	Operational Policy: Frequency Response to Large Disturbances	Investigate Over-Frequency Response requirement	TSOs	New Task	30/06/2013
FC.2.6	Frequency Control	Operational Policy: Frequency Response to Large Disturbances	Agree best way forward & produce a report on proposals	TSOs	31/12/2013	31/12/2013
FC.2.7	Frequency Control	Operational Policy: Frequency Response to Large Disturbances	Discuss proposals with regulators and wind industry	TSOs / Wind Industry / RAs	31/12/2013	31/12/2013
FC.3.0	Frequency Control		Derive a working all-island system model	TSOs	30/06/2012	31/12/2012
FC.3.1	Frequency Control	Operational Policy: Voltage-dip induced frequency dips	Obtain dynamic models that includes wind governing and emulated inertia	TSOs	31/12/2012	30/06/2013
FC.3.2.1	Frequency Control	Operational Policy: Voltage-dip induced frequency dips	Analyse and assess potential for voltage-induced frequency dips in short -term	TSOs	31/03/2013	30/06/2013
FC.3.2.2	Frequency Control	Operational Policy: Voltage-dip induced frequency dips	Analyse and assess potential for voltage-induced frequency dips out to 2020	TSOs	31/03/2013	30/09/2013
FC.3.3	Frequency Control	Operational Policy: Voltage-dip induced frequency dips	Make decision on how this issue needs to be progressed	TSOs	30/06/2013	30/06/2013
FC.4.1	Frequency Control	Operational Policy: Frequency Regulation	Study the frequency regulation issue / historical data / likely issues	TSOs	30/06/2012	31/10/2012
FC.4.2	Frequency Control	Operational Policy: Frequency Regulation	Look at long-term System Services implications for frequency regulation provision	TSOs	30/06/2012	30/11/2012
FC.4.3	Frequency Control	Operational Policy: Frequency Regulation	Look at mitigation scenarios in conjunction with wind industry	TSOs	31/12/2012	30/06/2013
FC.4.4	Frequency Control	Operational Policy: Frequency Regulation	Kick off governor test on wind farms	TSOs / Wind Industry	31/03/2013	31/05/2013
FC.4.5	Frequency Control	Operational Policy: Frequency Regulation	Collate information on wind farm tests on governors and assess	TSOs	30/09/2013	30/09/2013
FC.4.6	Frequency Control	Operational Policy: Frequency Regulation	Discuss wind governing proposals with regulators and wind industry	TSOs / Wind Industry / RAs	31/03/2014	31/03/2014
FC.4.7	Frequency Control	Operational Policy: Frequency Regulation	Agree best way forward and new operational policies that include wind governing	All	30/09/2014	30/09/2014
FC.5.1	Frequency Control	Operational Policy: Ramping Services	Analysis of historical data and studies on expected ramping requirements in the future	TSOs	30/06/2012	30/06/2012
FC.5.2	Frequency Control	Operational Policy: Ramping Services	Look at long-term System Services for ramping services provision	TSOs	30/06/2012	30/06/2012
FC.5.3	Frequency Control	Operational Policy: Ramping Services	Development of System Services policy	TSOs	31/12/2012	30/09/2013
FC.5.4	Frequency Control	Operational Policy: Ramping Services	Draft Ramping Operational Policy	TSOs	New Task	31/12/2013
FC.5.5	Frequency Control	Operational Policy: Ramping Services	Approved Ramping Operational Policy	TSOs	New Task	31/03/2014
GC.01.1	Grid Code	Wind farm Steady-state control modes	Follow up on Grid Code changes with performance monitoring and testing	TSOs	31/03/2012	31/03/2012
GC.01.2	Grid Code	Wind farm Steady-state control modes	Discuss WFPS voltage control modes with DSOs – and develop changes to Distribution Codes	TSOs	30/06/2012	30/06/2012

as necessary						
GC.01.2.1	Grid Code	Wind farm Steady-state control modes	Develop modification to Ireland Distribution Code and bring to Distribution Code Review Panel	ESBN	New Task	30/06/2013
GC.01.2.2	Grid Code	Wind farm Steady-state control modes	Send modification to CER for approval	ESBN	New Task	30/06/2013
GC.01.2.3	Grid Code	Wind farm Steady-state control modes	RA decision on Distribution Code modification	CER	New Task	30/09/2013
GC.01.3	Grid Code	Wind farm Steady-state control modes	Bring any further changes to GCRPs / DCRPs and RAs as appropriate	TSOs	31/12/2012	31/12/2012
GC.02.01	Grid Code	Dynamic Active and Reactive Power Response – Wind farms and Conventional Plant	Decision on WFPS Reactive Power Modes in Grid Code	CER	Complete	Complete
GC.02.02	Grid Code	Dynamic Active and Reactive Power Response – Wind farms and Conventional Plant	Draft proposal on WFPS Dynamic Reactive Power	TSOs	31/03/2012	31/03/2012
GC.02.03	Grid Code	Dynamic Active and Reactive Power Response – Wind farms and Conventional Plant	Agree all-island position on WFPS Reactive Power	TSOs	31/03/2012	31/03/2012
GC.02.04	Grid Code	Dynamic Active and Reactive Power Response – Wind farms and Conventional Plant	Draft proposal for Ireland and Northern Ireland Grid Code Review Panels and present	TSOs	30/06/2012	30/06/2012
GC.02.05	Grid Code	Dynamic Active and Reactive Power Response – Wind farms and Conventional Plant	Engagement with stakeholders	TSOs	30/06/2012	30/06/2012
GC.02.06	Grid Code	Dynamic Active and Reactive Power Response – Wind farms	Final proposal for Ireland and Northern Ireland GCRPs and RAs for approval	TSOs	30/09/2012	30/09/2012
GC.02.07	Grid Code	Dynamic Active and Reactive Power Response – Wind farms	Decision on proposals	RAs	31/12/2012	30/03/2013
GC.07.07.1	Grid Code		RA decision on approval of Northern Ireland Wind Farm Power Station Settings Schedule	UReg	New Task	30/06/2013
GC.02.08	Grid Code	Dynamic Active and Reactive Power Response – Wind farms	Discuss changes with DSOs & Plan Distribution Code Change	TSOs / DSOs	31/12/2012	31/12/2012
GC.02.09.1	Grid Code	Dynamic Active and Reactive Power Response – Wind farms	Develop modification to Ireland Distribution Code and bring to Distribution Code Review Panel	ESBN	31/03/2013	30/06/2013
GC.02.09.2	Grid Code	Dynamic Active and Reactive Power Response – Wind farms	Send modification to CER for approval	ESBN	New Task	30/06/2013
GC.02.09.3	Grid Code	Dynamic Active and Reactive Power Response – Wind farms	RA decision on Distribution Code modification	CER	New Task	30/09/2013
GC.02.10.1	Grid Code	Dynamic Active and Reactive Power Response – Wind farms	NIE to carry out review of Distribution Code prior to bringing in new standards (non-DS3 related)	NIE	New Task	31/03/2013
GC.02.10.2	Grid Code	Dynamic Active and Reactive Power Response – Wind farms	Develop modification to Northern Ireland Distribution Code and bring to Distribution Code Review Panel	NIE	New Task	30/06/2013
GC.02.10.3	Grid Code	Dynamic Active and Reactive Power Response – Wind farms	Send modification to UReg for approval	NIE	New Task	30/06/2013
GC.02.10.4	Grid Code	Dynamic Active and Reactive Power Response – Wind farms	RA decision on Distribution Code modification	UReg	New Task	30/09/2013
GC.02.11	Grid Code	Dynamic Active and Reactive Power Response – Wind farms and Conventional Plant	Draft proposals on changes to conventional/embedded generation active and reactive power response	TSOs	30/09/2013	30/09/2013
GC.02.12	Grid Code	Dynamic Active and Reactive Power Response – Wind farms and Conventional Plant	Bring proposals to industry / GCRPs / RAs as appropriate	TSOs	31/12/2014	31/12/2014
GC.03.1	Grid Code	Rate of Change of Frequency Ride-Through Ability	Bring proposal on change to RoCoF to Ireland Grid Code Review Panel	TSOs	31/12/2011	31/12/2011
GC.03.2	Grid Code	Rate of Change of Frequency Ride-Through Ability	SONI to investigate how RoCoF can be implemented in NI Grid Code	SONI	Complete	Complete
GC.03.3	Grid Code	Rate of Change of Frequency Ride-Through Ability	Present proposal to DS3 Advisory Council	TSOs	31/12/2011	31/12/2011
GC.03.4	Grid Code	Rate of Change of Frequency Ride-Through Ability	Establish DS3 Grid Code Working Group	TSOs / RAs / Industry	31/03/2012	31/03/2012
GC.03.5	Grid Code	Rate of Change of Frequency Ride-Through Ability	Discuss RoCoF with industry / stakeholders and agree a common position	RoCoF WG	30/06/2012	30/06/2012
GC.03.6	Grid Code	Rate of Change of Frequency Ride-Through Ability	Bring final proposal on RoCoF to GCRP / RAs for approval	TSOs	30/09/2012	30/09/2012
GC.03.7.1	Grid Code	Rate of Change of Frequency Ride-Through	Decision on proposals	CER	31/12/2012	31/03/2013

GC.03.7.2	Grid Code	Ability Rate of Change of Frequency Ride-Through Ability	Decision on proposals	Ureg	31/12/2012	31/03/2013
GC.03.8	Grid Code	Rate of Change of Frequency Ride-Through Ability	Discuss changes with DSOs & Plan Distribution Code Changes for RoCoF relays	TSOs / DSOs	31/12/2012	31/12/2012
GC.03.8.1	Grid Code	Rate of Change of Frequency Ride-Through Ability	Review RoCoF standard in Ireland Distribution Code	ESBN	New Task	31/03/2013
GC.03.8.2	Grid Code	Rate of Change of Frequency Ride-Through Ability	Review RoCoF standard in Northern Ireland Distribution Code	NIE	New Task	31/03/2013
GC.03.8.3	Grid Code	Rate of Change of Frequency Ride-Through Ability	Bring new RoCoF standard to Ireland Distribution Code if approved for Grid Codes	ESBN	New Task	30/06/2013
GC.03.8.4	Grid Code	Rate of Change of Frequency Ride-Through Ability	Bring new RoCoF standard to Northern Ireland Distribution Code if approved for Grid Codes	NIE	New Task	30/06/2013
GC.03.8.5	Grid Code	Rate of Change of Frequency Ride-Through Ability	Send modification to CER for approval	ESBN	New Task	30/06/2013
GC.03.8.6	Grid Code	Rate of Change of Frequency Ride-Through Ability	Send modification to UReg for approval	NIE	New Task	30/06/2013
GC.03.8.7	Grid Code	Rate of Change of Frequency Ride-Through Ability	RA decision on new Ireland Distribution Code RoCoF Standards	CER	New Task	30/09/2013
GC.03.8.8	Grid Code	Rate of Change of Frequency Ride-Through Ability	RA decision on new Northern Ireland Distribution RoCoF Code Standards	UReg	New Task	30/09/2013
GC.03.9	Grid Code	Rate of Change of Frequency Ride-Through Ability	Review and Implementation of new standards	TSOs / DSOs / Industry	31/12/2013	31/12/2013
GC.04.1	Grid Code	Waste-to-Energy	Draft internal discussion document on different approaches	TSOs	31/12/2011	31/12/2011
GC.04.2	Grid Code	Waste-to-Energy	Bring proposal to Ireland Grid Code Review Panel (Grid Code modification or derogation option)	TSOs	31/12/2011	31/12/2011
GC.04.3	Grid Code	Waste-to-Energy	Decision on Waste-to-Energy proposals that were brought to the Grid Code Review Panel	CER	31/03/2012	31/03/2012
GC.05.1	Grid Code	Dynamic Model Requirements	Look at international requirements (UK/US/Australia/Europe etc.) on dynamic models	TSOs	31/03/2012	31/03/2012
GC.05.2	Grid Code	Dynamic Model Requirements	Review current requirements and collate ideas	TSOs	30/06/2012	30/06/2012
GC.05.3	Grid Code	Dynamic Model Requirements	Draft Grid Code modification / discuss with relevant parties	TSOs	31/12/2012	31/12/2012
GC.05.4	Grid Code	Dynamic Model Requirements	Bring proposal to Ireland GCRP	TSOs	31/03/2013	31/03/2013
GC.05.4.1	Grid Code	Dynamic Model Requirements	Send modification to CER for approval	TSOs	New Task	30/06/2013
GC.05.5.1	Grid Code	Dynamic Model Requirements	RA decision on proposal	CER	New Task	30/06/2013
GC.06.1	Grid Code	Demand-side Management	Bring modifications on Demand-side unit MEC to Grid Code Review Panel	TSOs	31/12/2011	31/12/2011
GC.06.2	Grid Code	Demand-side Management	Review of Grid Code standards for DSU and AGU	TSOs	31/12/2012	31/12/2012
GC.06.3	Grid Code	Demand-side Management	Develop modification to Ireland Grid Code and bring to Grid Code Review Panel	TSOs	New Task	31/03/2013
GC.06.4	Grid Code	Demand-side Management	Develop modification to Northern Ireland Grid Code and bring to Grid Code Review Panel	TSOs	New Task	31/03/2013
GC.06.5	Grid Code	Demand-side Management	Consult on modification to Northern Ireland Grid Code	TSOs	New Task	30/06/2013
GC.06.6	Grid Code	Demand-side Management	Send modification to CER for approval	TSOs	New Task	30/06/2013
GC.06.7	Grid Code	Demand-side Management	Send modification to UReg for approval	TSOs	New Task	30/06/2013
GC.06.8	Grid Code	Demand-side Management	RA decision on proposal	CER	New Task	30/09/2013
GC.06.9	Grid Code	Demand-side Management	RA decision on proposal	UReg	New Task	30/09/2013
GC.07.3	Grid Code	Grid Code Development and New Technologies	Tentative proposals for integrating new technologies into the grid	TSOs	31/12/2013	31/12/2013
GC.08.1	Grid Code	Over-Frequency Response	Carry out a review of international best practice on Over-Frequency Response	TSOs	30/06/2012	30/06/2012
GC.08.2	Grid Code	Over-Frequency Response	Develop an appropriate modification to the Grid Code(s) to cover off this area	TSOs	31/12/2012	30/06/2013
GC.09	Grid Code	Storage Devices	Review of storage technologies	TSOs	31/12/2012	31/12/2012
GC.10.1	Grid Code	Biomass	Review of biomass technologies and characteristics	TSOs / Industry	30/09/2012	30/09/2012
GC.10.2	Grid Code	Biomass	Develop appropriate modifications to the Grid Codes to cover off this area	TSOs	31/12/2012	31/12/2012
GC.10.3	Grid Code	Biomass	Decision on proposals	RAs	30/06/2013	30/06/2013
GC.11.1	Grid Code	European Network Code	Develop plan on how to incorporate future network code requirements into Grid Codes	TSOs	New Task	30/06/2013
GC.11.2	Grid Code	European Network Code	Consult on plan with relevant stakeholders / RAs	TSOs /	New Task	30/09/2013

				Industry		
MDV.1.1	Model Development and Studies	Model Development and Validation	Develop all-island model for PSS/E / WSAT	TSOs	30/06/2012	30/06/2012
MDV.1.2	Model Development and Studies	Model Development and Validation	Develop process for Generation Excitation Model validation	TSOs	30/06/2012	30/06/2012
MDV.1.4	Model Development and Studies	Model Development and Validation	Develop streamlined process for carrying out large-scale system studies	TSOs	31/12/2012	30/06/2013
MDV.1.5	Model Development and Studies	Model Development and Validation	Implement Exciter / PSS / System Event Model Validation using PMU outputs	TSOs	New task	30/09/2013
MDV.1.6	Model Development and Studies	Model Development and Validation	Develop generic tuneable wind farm models that can represent behaviours set out in the wind farm grid code modifications	TSOs / Powertech	New task	30/09/2013
MDV.2.01	Model Development and Studies	System Studies	Frequency Response following a large disturbance	TSOs	30/06/2012	30/06/2012
MDV.2.02	Model Development and Studies	System Studies	Loss of Largest In-feed Study	TSOs	31/03/2012	31/03/2012
MDV.2.03	Model Development and Studies	System Studies	Frequency Regulation Study	TSOs	30/06/2012	31/12/2013
MDV.2.04	Model Development and Studies	System Studies	Study of Ramping Requirements	TSOs	30/06/2012	30/06/2012
MDV.2.05.1	Model Development and Studies	System Studies	Develop streamlined approach to studies: pilot version	TSOs	31/12/2012	30/06/2013
MDV.2.05.2	Model Development and Studies	System Studies	Develop streamlined approach to studies: full version	TSOs	New task	31/12/2013
MDV.2.06.1	Model Development and Studies	System Studies	Investigate voltage dip induced frequency dip in the short-term	TSOs	31/03/2013	30/06/2013
MDV.2.06.2	Model Development and Studies	System Studies	Investigate voltage dip induced frequency dip out to 2020	TSOs	31/03/2013	30/09/2013
MDV.2.07.1	Model Development and Studies	System Studies	Distributed Voltage Control and Dynamic Voltage Support Study Scoping	TSOs	2013	30/06/2013
MDV.2.07.2	Model Development and Studies	System Studies	Distributed Voltage Control and Dynamic Voltage Support Study Analysis	TSOs	New task	31/12/2013
MDV.2.08	Model Development and Studies	System Studies	PV Analysis and Overcompensation Study	TSOs	2013	30/09/2013
MDV.2.09	Model Development and Studies	System Studies	Follow-up analysis based on DSO RoCoF Report	TSOs	30/06/2013	30/09/2013
MDV.2.10	Model Development and Studies	System Studies	All-Island Minimum Generation Study	TSOs	New task	30/09/2013
MDV.2.11	Model Development and Studies	System Studies	Follow-up analysis of ramping requirements based on system services workstream output	TSOs	New task	30/09/2013
MDV.2.12	Model Development and Studies	System Studies	Analysis of wind farm locational stability and system short-circuit strength	TSOs	New task	31/12/2013
MDV.2.13	Model Development and Studies	System Studies	Metrics for assessing system security and stability	TSOs	New task	31/12/2013
PMT.1.1	Performance Monitoring and Testing	Documentation All-Island Performance Monitoring process and reports	Defining the current processes in EirGrid and SONI	TSOs	31/05/2012	31/05/2012
PMT.2.1	Performance Monitoring and Testing	All-Island Performance Monitoring Reporting	Publish all-island monthly system level Performance Monitoring statistics	TSOs	31/12/2011	31/12/2011
PMT.2.2	Performance Monitoring and Testing	All-Island Performance Monitoring Reporting	Delivery of EirGrid unit level quarterly Performance Monitoring reports	TSOs	31/12/2011	31/12/2011
PMT.2.3	Performance Monitoring and Testing	All-Island Performance Monitoring Reporting	Delivery of all-island unit level quarterly Performance Monitoring reports	TSOs	31/05/2012	31/05/2012
PMT.3.01	Performance Monitoring and Testing	Enhanced All-Island Performance Monitoring	Development of requirements for standardized Performance Monitoring on All-Island basis	TSOs	30/09/2012	30/03/2013

PMT.3.02	Performance Monitoring and Testing	Enhanced All-Island Performance Monitoring	Development of requirements for standardized Performance Monitoring for new system services products including engagement with industry	TSOs	30/09/2012	31/03/2014
PMT.3.03	Performance Monitoring and Testing	Enhanced All-Island Performance Monitoring	Implementation plan for roll-out of Enhanced Performance Monitoring system	TSOs	31/01/2013	31/03/2013
PMT.3.04	Performance Monitoring and Testing	Enhanced All-Island Performance Monitoring	Hold briefing sessions with Industry on performance monitoring approach and the high-level proposals for the enhanced Performance Monitoring system	TSOs, Industry	New Task	30/06/2013
PMT.3.05	Performance Monitoring and Testing	Enhanced All-Island Performance Monitoring	Development, Testing and Implementation of new IT Systems for enhanced performance monitoring system	TSOs	New Task	30/09/2014
PMT.3.06	Performance Monitoring and Testing	Enhanced All-Island Performance Monitoring	Roll out of data recording devices required for enhanced performance monitoring system	TSOs, DSOs	New Task	30/09/2014
PMT.3.07	Performance Monitoring and Testing	Enhanced All-Island Performance Monitoring	Documenting and publication of enhanced performance monitoring system and on new processes	TSOs	New Task	30/09/2014
PMT.3.08	Performance Monitoring and Testing	Enhanced All-Island Performance Monitoring	Testing by Industry users of enhanced performance monitoring system	Industry	New Task	30/09/2014
PMT.3.09	Performance Monitoring and Testing	Enhanced All-Island Performance Monitoring	Hold briefing sessions on enhanced performance monitoring system and on new processes	TSOs, Industry	New Task	30/09/2014
PMT.3.10	Performance Monitoring and Testing	Enhanced All-Island Performance Monitoring	All-Island enhanced Performance Monitoring rolled out	TSOs	31/03/2014	31/12/2014
PMT.4.1	Performance Monitoring and Testing	Feedback of Performance Monitoring results into Operational Policy	EirGrid System Portfolio Performance Monitoring results aggregated	TSOs	31/12/2011	31/12/2011
PMT.4.2	Performance Monitoring and Testing	Feedback of Performance Monitoring results into Operational Policy	All-Island System Portfolio Performance Monitoring results aggregated	TSOs	31/05/2012	18/07/2012
PMT.4.3	Performance Monitoring and Testing	Feedback of Performance Monitoring results into Operational Policy	Operational Policy Review	TSOs	31/05/2012	18/07/2012
PMT.4.4	Performance Monitoring and Testing	Feedback of Performance Monitoring results into Operational Policy	Enhanced System Portfolio Performance Monitoring capability aggregated	TSOs	31/05/2012	31/12/2014
PMT.5.1	Performance Monitoring and Testing	Standardised and documented All-Island testing process	Update on Industry review of Commissioning and Testing process to Joint Grid Code Review Panel (JGCRP)	TSOs	30/06/2012	30/03/2013
PMT.5.2	Performance Monitoring and Testing	Standardised and documented All-Island testing process	Documented All-Island recommendations (wind and conventional) to improve and harmonise (where possible) commissioning and testing process	TSOs	31/08/2012	31/03/2013
PMT.5.3	Performance Monitoring and Testing	Standardised and documented All-Island testing process	Implement recommendations received from workshops	TSOs	31/01/2014	31/10/2013
PMT.5.4	Performance Monitoring and Testing	Standardised and documented All-Island testing process	Develop standard processes based on new Grid Code modifications which require testing	TSOs	New Task	31/12/2013
PMT.5.5	Performance Monitoring and Testing	Standardised and documented All-Island testing process	Consideration of standardised testing processes arising from Distribution Code Modifications	DSOs	New Task	31/12/2013
RCF.1.01	RoCoF	Setting appropriate RoCoF standards on all generators	Bring RoCoF modification to the Grid Code Review Panel meeting	TSOs	31/12/2011	31/12/2011
RCF.1.02	RoCoF	Setting appropriate RoCoF standards on all generators	Identify regulatory mechanism for implementing RoCoF standard in Northern Ireland	SONI	31/12/2011	31/12/2011
RCF.1.03	RoCoF	Setting appropriate RoCoF standards on all generators	Formal response from generators and wind farms to modification	All generators	31/12/2011	31/12/2011
RCF.1.04	RoCoF	Setting appropriate RoCoF standards on all generators	Establish DS3 Grid Code Working Group	TSOs / Industry	31/03/2012	31/03/2012
RCF.1.05	RoCoF	Setting appropriate RoCoF standards on all generators	Working group develops proposals on RoCoF standards for Conventional and Wind Generators	TSOs / Industry	30/06/2012	30/06/2012
RCF.1.06	RoCoF	Setting appropriate RoCoF standards on all generators	Review of Working Group summary paper	TSOs	30/09/2012	30/09/2012
RCF.1.07	RoCoF	Setting appropriate RoCoF standards on all generators	Modification approval by GCRP	TSOs	30/09/2012	30/09/2012
RCF.1.08	RoCoF	Setting appropriate RoCoF standards on all generators	Bring modification to appropriate fora for Northern Ireland	SONI	30/09/2012	30/09/2012
RCF.1.09	RoCoF	Setting appropriate RoCoF standards on all	Approve modification to Grid Code and Distribution Code	CER	31/12/2012	30/06/2013

RCF.1.10	RoCoF	generators Setting appropriate RoCoF standards on all generators	Approve modification to appropriate regulatory instrument	NIAUR	31/12/2012	30/06/2013
RCF.1.11	RoCoF	Setting appropriate RoCoF standards on all generators	Review and Implementation of new standards	TSOs / DSOs / Industry	31/12/2013	30/06/2014
RCF.2.01	RoCoF	Ensuring appropriate RoCoF on distribution protection	Kick-off and scope TSO-DSO RoCoF working groups	TSOs / DSOs	31/12/2011	31/12/2011
RCF.2.02	RoCoF	Ensuring appropriate RoCoF on distribution protection	Examine safety implications and security impact on changes to G10, G59 protection settings including RoCoF and voltage	DSOs	30/06/2012	31/03/2013
RCF.2.03	RoCoF	Ensuring appropriate RoCoF on distribution protection	Provide written report on implications for RoCoF setting to loss of mains protection including implementation strategy	DSOs	30/06/2012	31/03/2013
RCF.2.04	RoCoF	Ensuring appropriate RoCoF on distribution protection	Decision on change to RoCoF protection settings	ESB Networks	30/09/2012	30/06/2013
RCF.2.05	RoCoF	Ensuring appropriate RoCoF on distribution protection	Decision on change to RoCoF protection settings	NIE	30/09/2012	30/06/2013
RCF.2.06	RoCoF	Ensuring appropriate RoCoF on distribution protection	Review and Implementation of new standards	TSOs / DSOs / Industry	31/12/2013	30/06/2014
RD.1.2	Renewable Data	Operational Policy (Internal Use Only)	High Wind Reports into Annual Summary Report	TSOs	31/03/2013	31/03/2013
RD.1.2.1	Renewable Data	Operational Policy (Internal Use Only)	High Wind Reports into 6-Monthly Summary Report	TSOs	30/09/2013	30/09/2013
RD.1.3	Renewable Data	Operational Policy (Internal Use Only)	High Wind Speed Shutdown Report	TSOs	30/06/2013	30/06/2013
RD.2.3	Renewable Data	System Records	Annual All-Island Wind and Fuel Mix Summary (External)	TSOs	31/03/2013	31/03/2013
RD.2.3.1	Renewable Data	System Records	6-monthly All-Island Wind and Fuel Mix Summary	TSOs	30/09/2013	30/09/2013
RD.2.4	Renewable Data	System Records	Internal Wind Records Repository	TSOs	Complete	Complete
RD.2.5a	Renewable Data	System Records	Quarterly Wind Curtailment Report	TSOs	31/03/2013	31/03/2013
RD.2.5b	Renewable Data	System Records	Quarterly Wind Curtailment Report	TSOs	30/06/2013	30/06/2013
RD.2.5c	Renewable Data	System Records	Quarterly Wind Curtailment Report	TSOs	30/09/2013	30/09/2013
RD.2.5d	Renewable Data	System Records	Quarterly Wind Curtailment Report	TSOs	31/12/2013	31/12/2013
RD.2.6	Renewable Data	System Records	Meet with industry to develop the design of an All-Island RES Curtailment Analysis Report (including content and frequency of publication)	TSOs / Industry	31/03/2013	31/03/2013
RD.2.7	Renewable Data	System Records	Publish first All-Island RES Curtailment Analysis Report	TSOs	30/09/2013	30/09/2013
RD.2.8	Renewable Data	System Records	CO2 and High Wind Correlation Report	TSOs	New task	31/03/2013
RD.2.9a	Renewable Data	System Records	6-Monthly Wind Capacity Factor Report (year-on-year comparison)	TSOs	New task	31/03/2013
RD.2.9b	Renewable Data	System Records	6-Monthly Wind Capacity Factor Report (year-on-year comparison)	TSOs	30/09/2013	30/09/2013
RD.3.1a	Renewable Data	Renewable Outlook	All-Island Renewable Connection Report – 36-Month Forecast	TSOs	31/03/2013	31/03/2013
RD.3.1b	Renewable Data	Renewable Outlook	All-Island Renewable Connection Report – 36-Month Forecast	TSOs	30/06/2013	30/06/2013
RD.3.1c	Renewable Data	Renewable Outlook	All-Island Renewable Connection Report – 36-Month Forecast	TSOs	30/09/2013	30/09/2013
RD.3.1d	Renewable Data	Renewable Outlook	All-Island Renewable Connection Report – 36-Month Forecast	TSOs	31/12/2013	31/12/2013
RD.3.2	Renewable Data	Renewable Outlook	Contribute to the National Renewable Energy Action Plan (NREAP)	TSOs	31/12/2013	31/12/2013
RD.3.3	Renewable Data	Renewable Outlook	Annual Renewable Report	TSOs	15/11/2013	15/11/2013
SS.1.01	System Services		Project establishment	TSOs	31/10/2011	31/10/2011
SS.1.02	System Services		Publish International System Services Review report	TSOs	20/01/2012	20/01/2012
SS.1.03	System Services		Studies and Analysis	TSOs	15/08/2012	15/08/2012
SS.1.04	System Services		System Services Consultation #1	TSOs	31/01/2012	31/01/2012
SS.1.05	System Services		Bilateral Meetings on System Services consultation	TSOs	29/02/2012	29/02/2012
SS.1.06	System Services		Industry workshop	TSOs	15/03/2012	15/03/2012
SS.1.07	System Services		Review of Harmonised Ancillary Services and Generator Performance Incentives since introduction	TSOs	29/02/2012	29/02/2012
SS.1.08	System Services		Development of system services product options	TSOs	15/05/2012	15/05/2012
SS.1.09	System Services		System Services Consultation #2	TSOs	31/05/2012	31/05/2012
SS.1.10	System Services		Development of final proposals	TSOs	31/08/2012	31/08/2012
SS.1.11	System Services		Final consultation	TSOs	15/11/2012	15/11/2012
SS.1.11.1	System Services		Industry consultation periods (8 weeks)	TSOs	13/02/2013	20/02/2013
SS.1.11.2	System Services		Bilateral Meetings	TSOs	New task	31/12/2012

SS.1.12	System Services		Final proposals to SEMC	TSOs	30/11/2012	31/03/2013
SS.1.13	System Services		SEMC issue Proposed Decision paper	SEM Committee	New task	03/06/2013
SS.1.14	System Services		Phase 2 Implementation Project Plan published	TSOs / RAs	New task	30/06/2013
SS.1.15	System Services		Industry consultation period (6 weeks)	Industry	New task	15/07/2013
SS.1.16	System Services		Decision by SEM committee	SEM Committee	New task	26/09/2013
SS.1.17	System Services		Detailed preliminary Phase 2 Plan prepared	TSOs	New task	10/07/2013
SS.1.18	System Services		Implementation Project initial preparatory work	TSOs	New task	30/09/2013
SS.2.0	System Services		Publish Phase II deadlines	TSOs	New task	30/06/2013
VC.01	Voltage Control		Decision: Steady state Reactive Power Control from Wind farms	TSOs / DSOs	30/09/2012	30/09/2012
VC.02	Voltage Control		Engagement between TSOs and DSOs on universal wind farm standard including dynamic reactive power provision and appropriate controls for embedded conventional plant	TSOs / DSOs	31/03/2012	31/03/2012
VC.03	Voltage Control		Grid Code and Distribution code changes brought to industry for discussion	TSOs / DSOs / All	30/06/2012	30/06/2012
VC.04	Voltage Control		Decision: Steady-state Reactive Power Control for embedded conventional plant	TSOs / DSOs	30/06/2012	31/12/2012
VC.05	Voltage Control		Decision: Dynamic Reactive Power Provision for transmission and distribution conventional plant	TSOs / DSOs	30/09/2012	30/09/2012
VC.06	Voltage Control		Decision: Dynamic Reactive Power Provision from transmission and distribution connected wind farms	TSOs / DSOs	31/12/2012	31/12/2012
VC.10.01	Voltage Control		Review of relevant ENTSO-E Network Codes	TSOs, DSOs	New task	31/03/2013
VC.10.02	Voltage Control		Review relevant legislation in Northern Ireland	SONI, NIE	31/03/2013	30/06/2013
VC.10.03	Voltage Control		Review relevant legislation in Ireland	EirGrid, ESBN	31/03/2013	30/06/2013
VC.10.04	Voltage Control		Consolidate Network Code / legislation reviews	TSOs, DSOs	31/03/2013	30/06/2013
VC.10.05	Voltage Control		Review of system voltage sensitive device settings (link to frequency control setting review)	TSOs, DSOs	New task	30/06/2013
VC.10.06	Voltage Control		Draft TSO/DSO principles for voltage/reactive power control	SONI, NIE	New task	30/06/2013
VC.10.07	Voltage Control		Draft TSO/DSO principles for voltage/reactive power control	EirGrid, ESBN	New task	30/06/2013
VC.10.08	Voltage Control		Scope 'Distributed Voltage Control and Dynamic Voltage Support Study' (link to Model Development & Studies workstream)	TSOs	New task	30/06/2013
VC.10.09	Voltage Control		Finalise TSO/DSO principles for voltage/reactive power control	SONI, NIE	New task	30/09/2013
VC.10.10	Voltage Control		Finalise TSO/DSO principles for voltage/reactive power control	EirGrid, ESBN	New task	30/09/2013
VC.10.11	Voltage Control		Develop TSOs voltage/reactive power control policy	TSOs	31/03/2014	30/06/2014
VC.10.12	Voltage Control		Draft TSO/DSO voltage/reactive power control protocol	SONI, NIE	New task	31/03/2014
VC.10.13	Voltage Control		Consideration of different network design methodologies	SONI, NIE	New task	31/03/2014
VC.10.14	Voltage Control		Consideration of different network design methodologies	EirGrid, ESBN	New task	31/03/2014
VC.10.15	Voltage Control		Draft TSO/DSO voltage/reactive power control protocol	EirGrid, ESBN	New task	31/03/2014
VC.10.16	Voltage Control		Finalise TSO/DSO voltage/reactive power control protocol	SONI, NIE	31/03/2014	31/12/2014
VC.10.17	Voltage Control		Finalise TSO/DSO voltage/reactive power control protocol	EirGrid, ESBN	31/03/2014	31/12/2014
VC.11.01	Voltage Control		Identification and scoping of reactive/voltage control demonstration projects	SONI, NIE	31/03/2013	30/09/2013
VC.11.01	Voltage Control		Identification and scoping of reactive/voltage control demonstration projects	EirGrid, ESBN	31/03/2013	30/09/2013
VC.11.02	Voltage Control		Initiation of demonstration projects	SONI, NIE	New task	31/12/2013
VC.11.02	Voltage Control		Initiation of demonstration projects	EirGrid, ESBN	New task	31/12/2013
VC.11.04	Voltage Control		Conclusion of demonstration projects	SONI, NIE	New task	31/12/2014
VC.11.04	Voltage Control		Conclusion of demonstration projects	EirGrid, ESBN	New task	31/12/2014
VC.12.1	Voltage Control		Provide 2013 workstream progress update and develop workstream plan for 2014	TSOs	New task	31/12/2013
WSAT.01.1	WSAT	All-Island EMS Snapshot	Tests of the all-island EMS generated snapshots of system to ensure accuracy	TSOs	31/10/2011	31/10/2011
WSAT.01.2	WSAT	All-Island EMS Snapshot	Developing interface between WSAT and new EMS	TSOs	31/10/2011	31/10/2011
WSAT.01.3	WSAT	All-Island EMS Snapshot	Comparison of all-island power flow against state estimator	TSOs	30/11/2011	30/11/2011
WSAT.01.4	WSAT	All-Island EMS Snapshot	Final approval of functioning new snapshots in WSAT	TSOs	31/01/2012	15/06/2012
WSAT.01.5	WSAT	All-Island EMS Snapshot	Installation of redundant server	TSOs	30/04/2012	30/06/2012
WSAT.02.1	WSAT	Merging SONI model and all-island wind forecast data into WSAT	Creating all-island dynamic and contingency files	TSOs	29/02/2012	29/02/2012
WSAT.02.2	WSAT	Merging SONI model and all-island wind	Implement All-Island system WSAT in the test server	TSOs	31/03/2012	31/03/2012

WSAT.02.3	WSAT	forecast data into WSAT Merging SONI model and all-island wind forecast data into WSAT	All-Island Wind Forecast streaming to WSAT	TSOs	30/04/2012	30/04/2012
WSAT.03.1	WSAT	Validation and tuning on-line all-island TSAT dynamic models	Dynamic model validation against PSS/e	TSOs	31/07/2012	12/10/2012
WSAT.04.1	WSAT	Implementation WSAT in CHCC	Install WSAT pre-prod monitor at near-time section in SONI	TSOs	30/04/2012	30/04/2012
WSAT.04.2	WSAT	Implementation WSAT in CHCC	Install WSAT NCC monitor in CHCC	TSOs	30/06/2012	05/10/2012
WSAT.04.3	WSAT	Implementation WSAT in CHCC	Implement and run all-island WSAT pre-prod in test mode, correct errors	TSOs	30/06/2012	31/10/2012
WSAT.04.4	WSAT	Implementation WSAT in CHCC	Establish if WSAT is performing as per SONI acceptance criteria	TSOs	31/07/2012	31/10/2012
WSAT.04.4.1	WSAT	Implementation WSAT in CHCC	All-Island WSAT Manual	TSOs	02/11/2012	02/11/2012
WSAT.04.4.2	WSAT	Implementation WSAT in CHCC	All-Island WSAT Training for CHCC Staff	TSOs	13/11/2012	13/11/2012
WSAT.04.5	WSAT	Implementation WSAT in CHCC	Install All-island WSAT at NCC server and launch monitor in CHCC	TSOs	31/08/2012	16/11/2012
WSAT.05	WSAT		Official Launch WSAT simultaneously in NCC and CHCC	TSOs	30/09/2012	16/11/2012
WSAT.06.1	WSAT	Get buy-in to approach for functionality extensions from stakeholders	Set-up Acceptance criteria for extended AI WSAT	TSOs	31/05/2013	31/05/2013
WSAT.06.2	WSAT	Get buy-in to approach for functionality extensions from stakeholders	Establish WSAT as a core system operations tool	TSOs	31/12/2013	31/12/2013
WSAT.07.1	WSAT	Validation and tuning of on-line all-island TSAT dynamic models	Update TSAT Model Comparison Process and Reports to include All-island model	TSOs	28/02/2013	28/02/2013
WSAT.07.2a	WSAT	Validation and tuning of on-line all-island TSAT dynamic models	Complete all-island TSAT comparison versus frequency events reports	TSOs	31/05/2013	31/05/2013
WSAT.07.2b	WSAT	Validation and tuning of on-line all-island TSAT dynamic models	Complete all-island TSAT comparison versus frequency events reports	TSOs	30/11/2013	30/11/2013
WSAT.07.3	WSAT	Validation and tuning of on-line all-island TSAT dynamic models	Model adjustments and cross-validation	TSOs	31/08/2013	31/08/2013
WSAT.07.4	WSAT	Validation and tuning of on-line all-island TSAT dynamic models	Model adjustments and cross-validation	TSOs	30/09/2013	30/09/2013
WSAT.08.2	WSAT	Continuous monitoring and bringing new functionality into WSAT	Update all-island dynamic files where appropriate	TSOs	31/10/2013	31/10/2013
WSAT.08.3	WSAT	Continuous monitoring and bringing new functionality into WSAT	Implement frequency criteria in AI WSAT	TSOs	31/10/2013	31/10/2013
WSAT.09.1	WSAT	Investigation of new WSAT capabilities in the test server	Develop and test reversed transfers in AI WSAT	TSOs	31/07/2013	31/07/2013
WSAT.09.2	WSAT	Investigation of new WSAT capabilities in the test server	Develop and test new transfers (forecast transfers or 2D-transfers)	TSOs	31/08/2013	31/08/2013
WSAT.09.3	WSAT	Investigation of new WSAT capabilities in the test server	Create a functional specification for further functionality extensions to WSAT	TSOs	30/11/2013	30/11/2013
WSAT.10	WSAT	WSAT Performance	Confirm that AI WSAT is performing as expected and has improved on previous WSAT version	TSOs	30/06/2013	30/06/2013
WSAT.11	WSAT		End of Phase 3 of WSAT	TSOs	31/12/2013	31/12/2013