



Delivering a **Secure Sustainable**
Electricity System

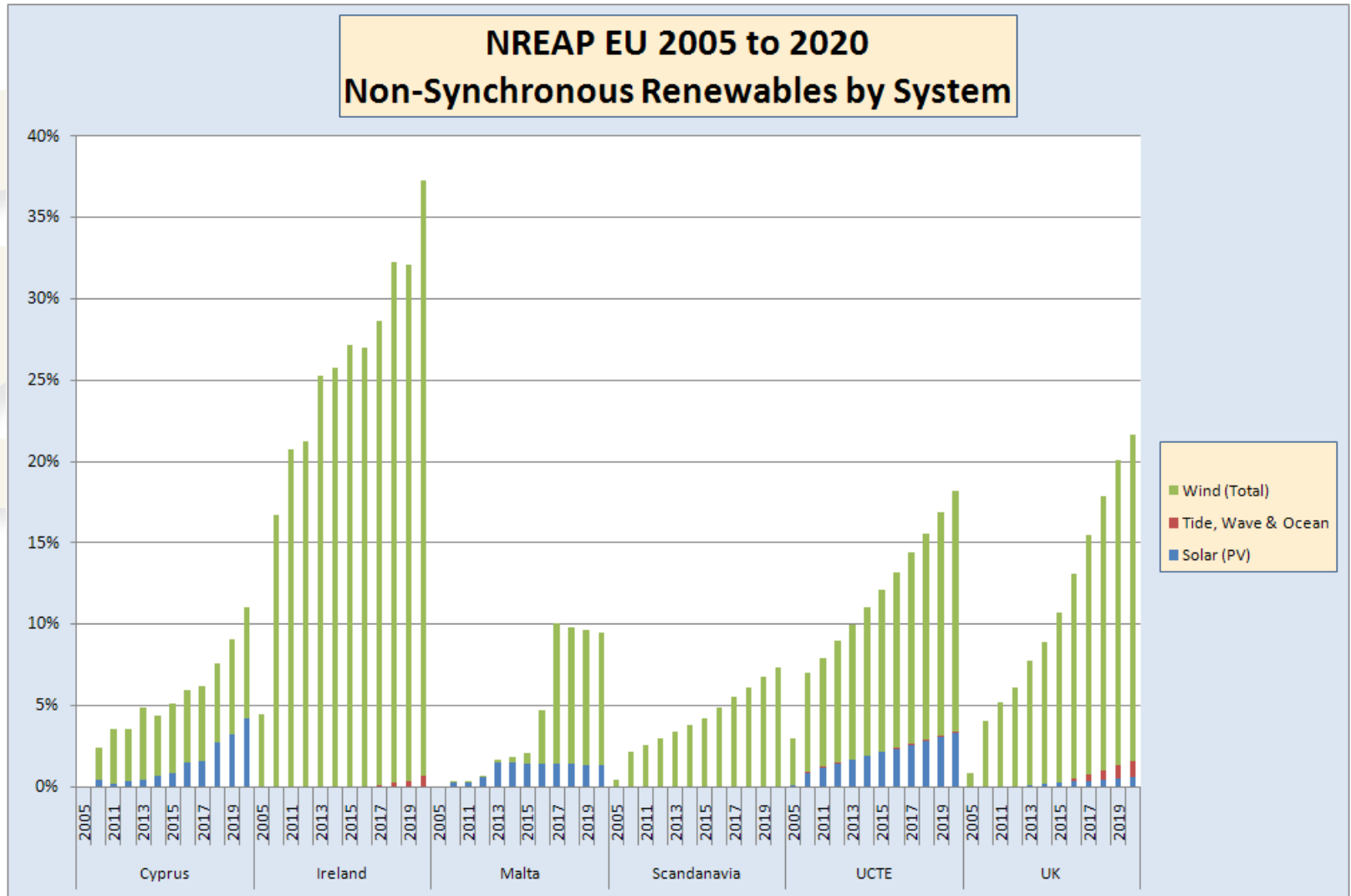
Delivering a Secure Sustainable Electricity System(DS3)

Yvonne Coughlan

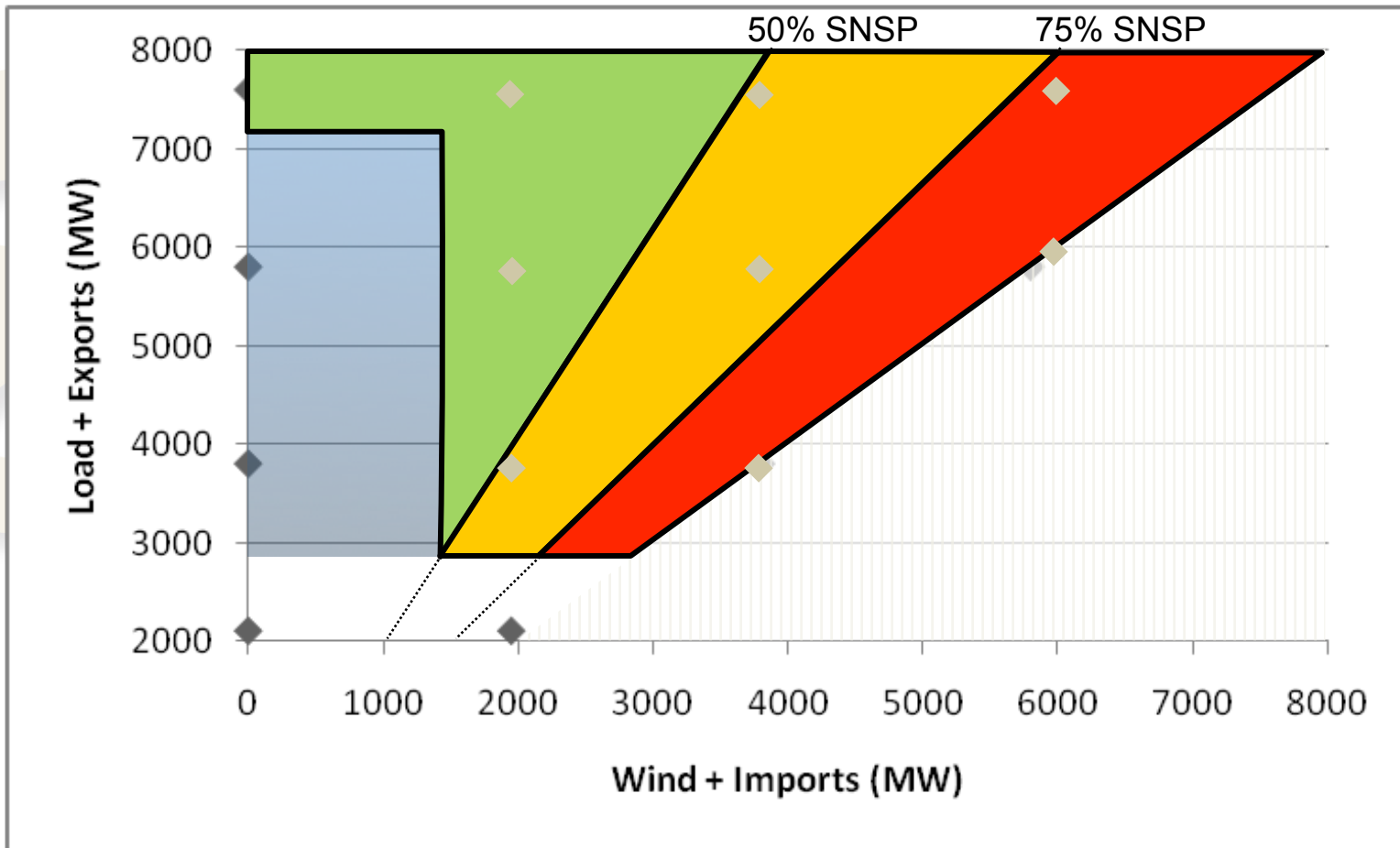
EirGrid Group Customer Conference
20th October 2011



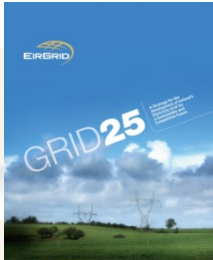
European Synchronous Systems



The Challenge



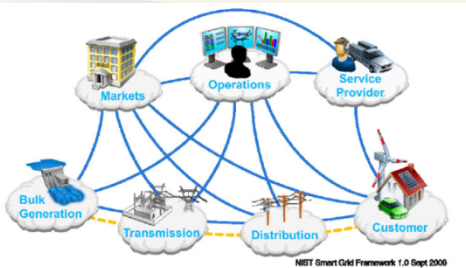
Facilitating Renewables: Four Key Elements



Grid 25 & Interconnection



Connection process: Gate 3



Smart Grid

electricity
DS³

Delivering a Secure Sustainable
Electricity System

DS3* Programme

* **DS3**: Delivering a Secure Sustainable Electricity System

Delivering a Secure Sustainable Electricity System (DS3)



System Performance

- System Services
- Performance Monitoring
- Grid Code
- Demand Side Management



System Policies

- Frequency Control
- Voltage Control



System Tools

- WSAT
- Control Centre Tools & Capabilities
- Model Development & Studies



Communications

- Industry Forums
- RAs/DSOs Engagement
- Advisory Council

DS3 Progress



System Performance

- RoCoF Grid Code Modification
- System Services Consultation
- International Review of System Services



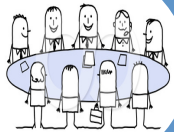
System Policies

- Ireland High Wind Analysis
- Ireland High Speed Shutdown Analysis
- Annual Renewable Report



System Tools

- Inertia Monitor for Control Centres
- WSAT All Island Model
- Wind Dispatch Tool Enhancements



Communications

- Advisory Council established
- TSOs/RAs Programme Management
- Bi – annual Industry Forums

www.CleanNI.com

DS3 Progress



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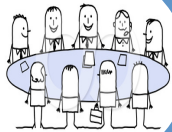
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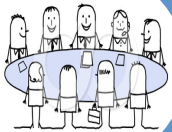
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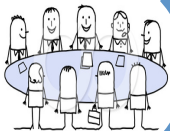
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Industry Engagement

Year	2011	2012			
	Q4	Q1	Q2	Q3	Q4
Advisory Council	▲	▲	▲		▲
Industry Forums		▲		▲	
Grid Code Review Panel		▲	▲		▲
System Services Consultation 1		■			
System Services Consultation 2			■		
RA/TSO Meetings	-----				
TSO/DSO Meetings	-----				

Key Upcoming Milestones

System Services	Timeline
Initial consultation paper issued	January 2011
Response deadline for initial consultation	February 2012
Industry engagement - bilateral meetings week	February 2012
Grid Code	Timeline
Establish a working group on Fault Ride Through & Dynamic Reactive Power provision for wind farms	December 2011
Working Group Report	August 2012
RoCoF	Timeline
DSOs Review of Loss of Mains Protection	February 2012
TSOs Examine Implications of DSOs position	May 2012
Discuss new standards for RoCoF of all generators	January 2012
Decision on Generator Standards & DSO Protection	September 2012



Thank you