



NETWORKS

Renewable Connections Work Programme Delivery 2014 – 2015

Work Programme Resourcing

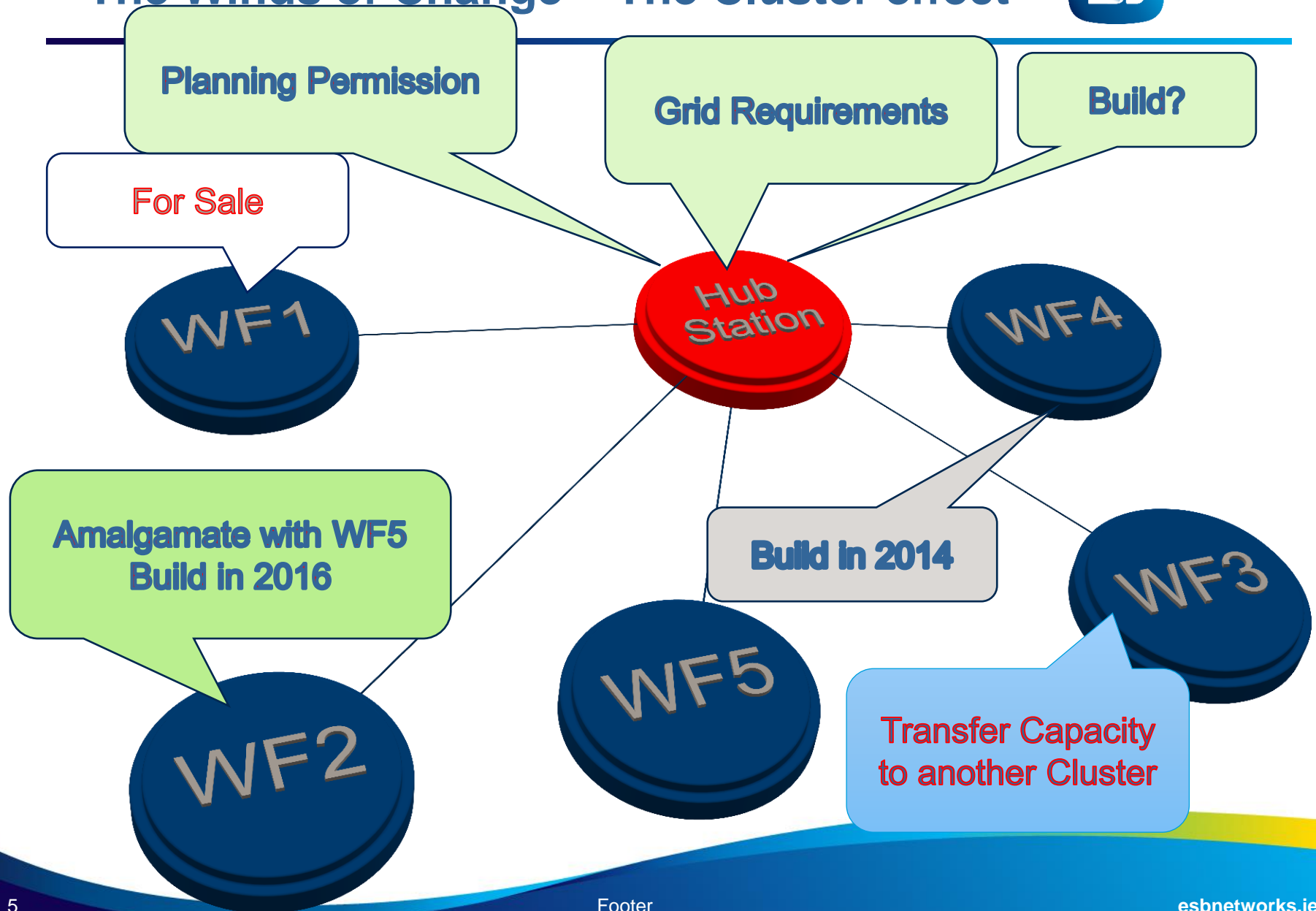
Liaison Group 4 February 2014

- **ESBN aware of the need and is committed to deliver both Generator connections and Grid 25.**
- **Group generator connections are complex.**
- **Now actively working to determine what is to be built out and when.**

- **Maintain Continuity of Supply- recent storms.**
- **PR3 delivery – fully committed to deliver by end of 2015.**
- **DSO Generator Connections.**
- **TSO connections – supported by ESNB – design review/ telecoms/ metering/ commissioning.**
- **Commercial / Domestic connections.**
- **Maintenance.**
- **Public Safety Programmes**

The Consolidation Phase

The Winds of Change – The Cluster effect



- **Section 10 of COPP sets out the rules which apply where Connection Agreements are terminated post offer acceptance**
- **However what happens where parties progress at different speeds?**
- **ESB Networks**
 - would endeavour to facilitate all parties,
 - must also ensure that the End-User risk is managed
- **A joint consultation paper to be published in the coming months**
 - the issues which we see may arise
 - how we considered the scenarios should be dealt with
 - Risks to various parties
 - Importance of co-operation within a subgroup

Story to Date?

MOUNTLUCAS 110kV STATION



Year	Number of connections	MW Connected
2013	19	344
2014	18	260
2015	24	355

Total Wind Connected end 2013 2 GW

Improved Workflow Processing

Actions Taken - 1

Process Improvement- review completed

- **Getting to Financial closure (Capital Approval) .**
- **Functional Specifications - streamlined.**
- **Information pack reviewed.**
- **Quality Control framework developed.**
- **Commissioning framework developed with a view to allowing developers of generator projects to Commission**

Improved Workflow Processing Actions Taken 2

Action and co-ordination of delivery.

- **Project Board - Asset Mgmt/ IPP Delivery/ ESBI** **Monthly.**
- **Informal / formal linkage with EirGrid** **Fortnightly.**
- **Pre Capital Approval (CA) Team in place.** **Fortnightly.**
- **CA Team to speed Financial approval** **Fortnightly.**
- **Renewables Delivery team expanded**

Gate 3 Networks Work Programme Overview

Distribution Connections	10kV	20kV	38kV	110kV	Total
	4	49	60	5	118

Total MEC 1,992 MW

Contestable – all or part

64 54%

Non-Contestable

54 46%

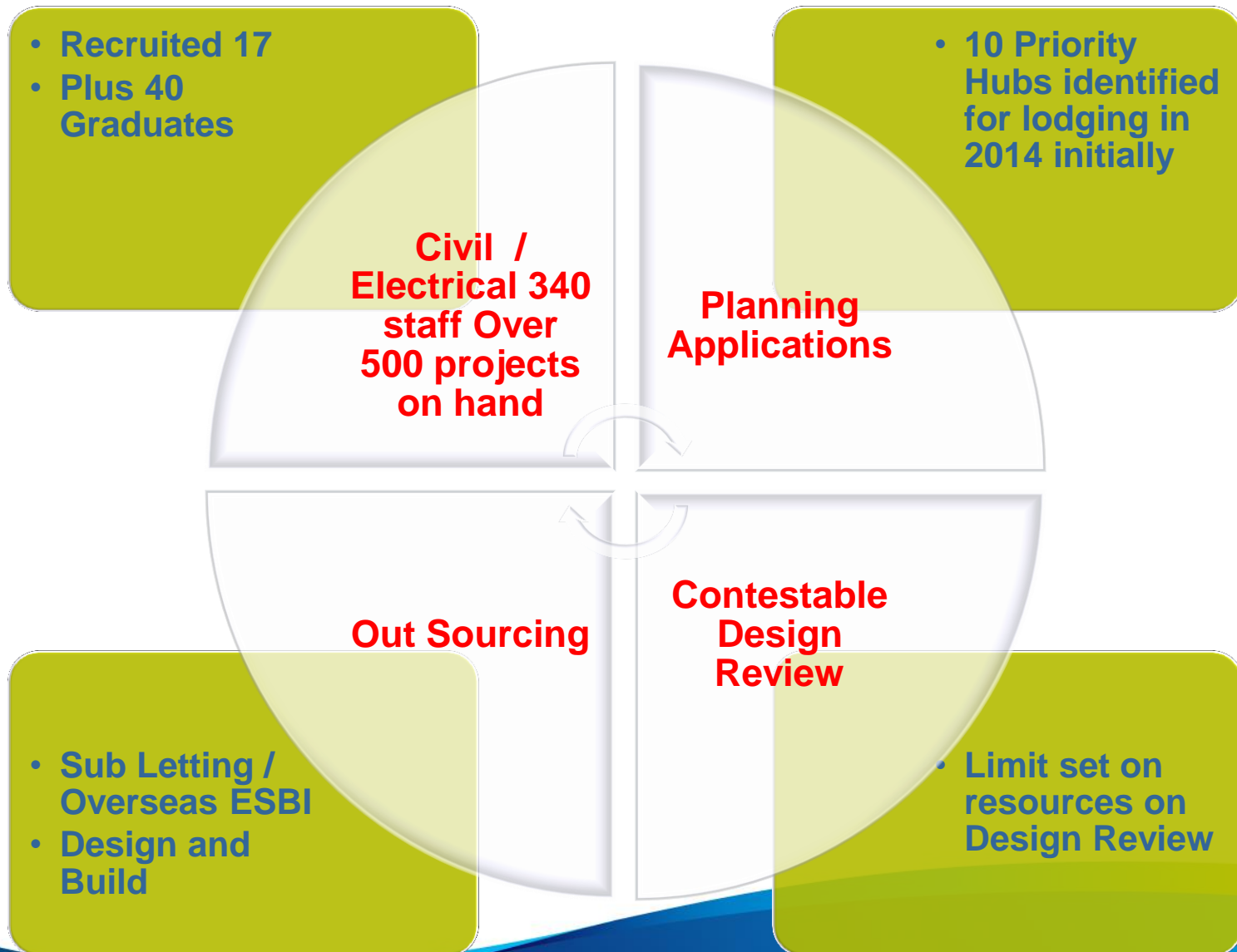
Man Years	
Design	146
Build	510
Commission	41

Getting to Design

Which Projects to focus on

-
- | | | |
|---|--------------|----|
| Hub (Clusters) Projects | Total Number | 65 |
| Connected | | 1 |
| In Design and Construction | | 10 |
| PP in Place or not needed | | 18 |
| PP Lodgement due in 2014 (top priority) | | 10 |
| PP Lodgement in 2015 | | 13 |
| Further Clarity needed | | 5 |
| Grid Customer dependant | | 2 |
| Mod in Progress | | 3 |
| On Hold | | 3 |
-

Resourcing 146 Man Years of Design



2014/15 Work Programme

- **Work Planned for 2014** **2293 Man Years**
- **Internal** **1557 Man Years**
- **Contracting resources** **736 Man Years**
- **Includes Renewable Developments already on programme.**
- **Contractor capability developed across all voltages.**
- **Framework Contracts in place.**
- **Pool of Experienced Project Managers available.**
- **Equipment Framework contracts in place.**

**Contractor resources being further ramped up
to deliver overall programme**

Telecoms

- New staff recruited and in place in Q1/ 2014.
- Early sight of work to design and deliver full workload.
- MV Design and delivery process tailored to specific project types.
- Outsourcing packages of work.
- Working with Developers on site to minimise interfaces.
- Contracts in place for equipment

Metering

- Staff resources locally- not an issue
- Contracts in place for equipment

Steps to a New Commissioning Model

- **Quality Control Plan developed with Developer and Design Consultant on an actual project.**
- **Work Group set up to develop a model and documentation for third party commissioning.**
- **Model also developed for SW stations.**

Process to approve lead commissioners SW stations	Due Date
Stage 1: Interested Parties- 6 existing framework Contractors	24/12/2013
Stage 2: Lead Commissioner CV Review	11/01/2014
Stage 3: Technical Interview	21/02/2014
Stage 4: Training on test plans (ESBN)	14/03/2014
Stage 5: On-Site Assessment	15/04/2014

Reduce Commissioning
time and scope
Quality Proof the work.

Up-skill / Training
To MV- 5
MV-HV- 5

The
Commissioning
Challenge 2015

Recruit
Difficult Market
39 now-41

Outsource
SW Stations
Contestably built work

Summary Key Messages 1

- Major overall workload on hand.
- ESNB is committed to delivering all PR3, Grid25, customer connections.
- Projects now at consolidation stage – defining what needs to be built.
- HV design and Commissioning capability – industry wide.
- Several actions being taken to address this.
- Option of Commissioning Contestably built work.
- Outage availability is limited.
- 2015 is the most difficult year.
- 2017 Refit deadline is achievable.

Summary Key Messages 2

How Developers can help?

De Risk the project along its path :

1. Set realistic timelines when getting to Financial Closure and ordering turbines etc.
2. Select Designers / Contractors / Commissioners with proven delivery experience.
3. Allow sufficient time for design.
4. Prepare a quality Control Plan and sign off along the way.

ESBN has a very strong record of delivery and is fully committed to deliver all Work Programmes.