

Consultation on Balancing Mechanism (BM) System Replacement

Shafqat Ali

Operational Forum **8 October 2008**

nationalgrid

The power of action.™

Presentation Outline

1. Background and purpose of consultation
2. System development and implementation considerations
3. How to respond



1

Background and Purpose of Consultation

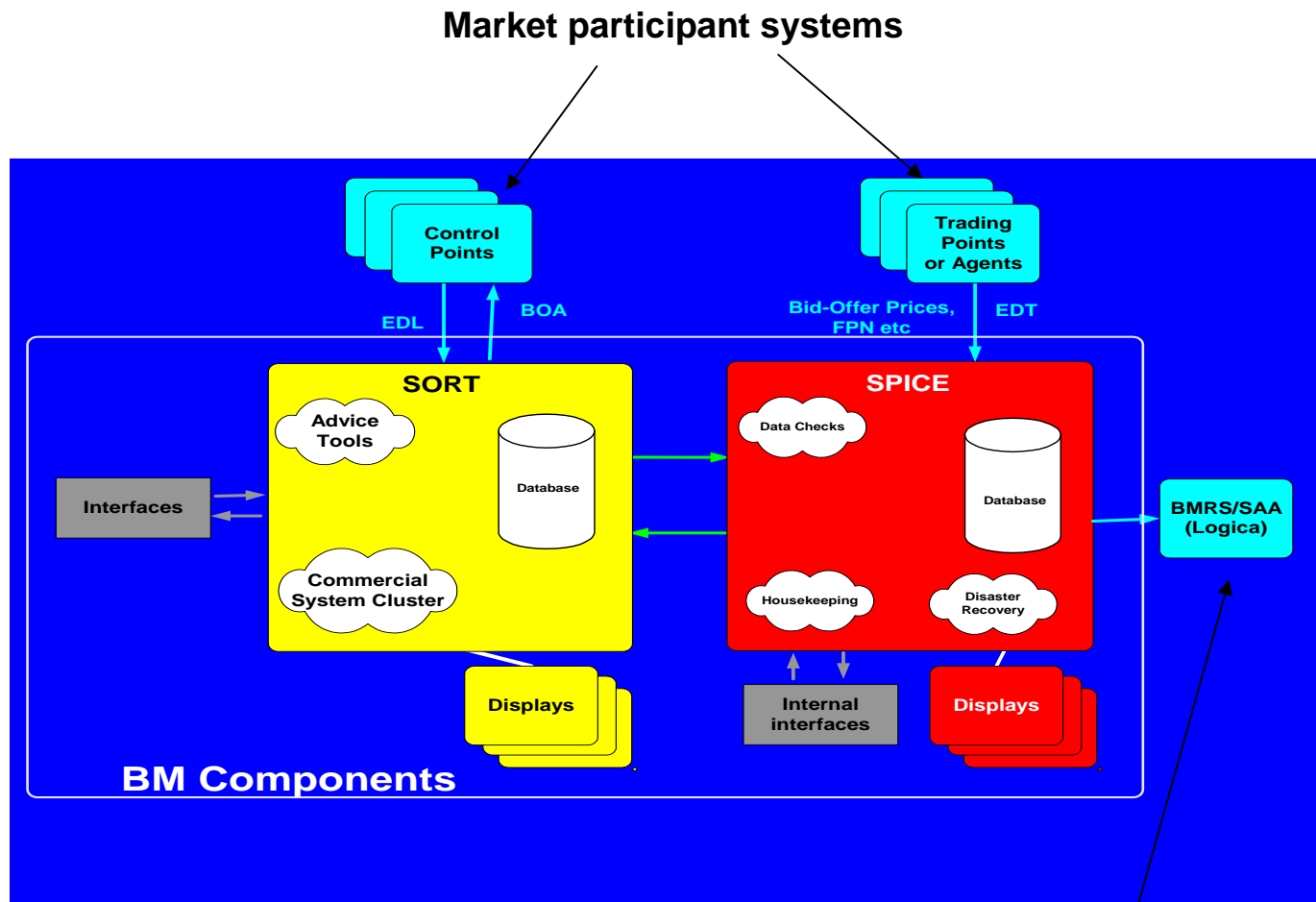
nationalgrid

The power of action.™

- Current system approaching end of lifecycle.
- Diminishing reliability and supportability
- Industry perception of system being inflexible
 - Costs and lead times
- Ongoing / future regime changes e.g.
 - Evolving generation mix
 - European legislation

Overview of Current BM System

1



- Built in 1980s
- Delivered NETA, 1-hr gate, BETTA
- Real-time and near real-time
- Old technology
- Diminishing returns from incremental improvements

Logica systems

Phased System Replacement Approach

1

Phase 1

- System replacement internal to National Grid
 - With a global best practice package



In scope

Phase 2

- Potential changes to external interfaces
- Other possible enhancements e.g. Automatic Generation Control (AGC)



Not in
scope



2

System Development and Implementation

nationalgrid

The power of action.™

Cost and Speed of Future Changes

2

- Fast pace of industry change
 - Trend likely to continue

- Need a flexible system to accommodate industry changes
 - Quickly
 - At low cost
 - Without impacting reliability

- But without compromising security of transmission system
 - Overriding criterion

➤ Automated despatch instructions

- Built-in automation functionality
- Used by System Operators around the world
 - With more frequent despatch instructions
- Potential impact and benefits to industry
- National Grid does not envisage significant change in Phase 1

➤ Other potential future improvements

- Automatic Generation Control (AGC)
- Not part of Phase 1 consultation

Some possibilities but a long way to go

Provision of Future Market Information

2

- Current BM system provides a range of market information, close to and ahead of real-time
 - E.g. forecasts of generation, demand and margin at various timescales
- New IT system should accommodate developments in future market requirements

Indicative Project Timeline - Phase 1

2

Key Task	'08	2009				2010				2011				2012			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Industry consultation	█																
Tendering and SRS*	█	█	█														
Vendor assessment / contract award				█	█												
Design						█											
Implementation							█	█	█								
Acceptance testing										█	█	█					
Training												█	█				
Functional integration & E-E testing												█	█				
Transition														█	█		
Go-live																█	

* System Requirements Specification

Project duration ≈ 4 yrs

Impact assessment of industry change: cost, time delay, robustness

- **Impact on market participant systems**
 - Re-testing of industry interfaces
 - Any other impact on market participants?

- **Changes to industry Codes**
 - No impact on Codes envisaged by National Grid
 - Industry views sought



3

How to Respond

nationalgrid

The power of action.™

Summary of Consultation Questions

3

- Consultation document available on <http://www.nationalgrid.com/uk/Electricity/Balancing/consultations/>
- Consultation questions are summarised in a proforma in Appendix 1.
 - A short feedback questionnaire in Appendix 2
- E-mail address for responses
 - balancingservices@uk.ngrid.com

Contact:

Shafqat Ali (shafqat.r.ali@uk.ngrid.com) tel:01926 65 5980

Consultation Timeline

3

- Initiate industry engagement – June '08 Ops Forum
- Consultation document published – 7 Oct '08
- Deadline for responses – 6 Nov '08
- Consultation report published – Nov/Dec '08
- Future updates on system development