

# The Electricity Balancing System (EBS)

## An update for market participants

The Electricity Balancing System (EBS) was implemented to replace the existing Balancing Mechanism (BM) Systems. The Balancing suite of systems are those used to operate the Balancing Mechanism Market. The energy landscape is changing – in generation, transportation, supply and use.

In order to adjust to these rapid changes, particularly within the energy generator landscape, NG recognised that our systems and processes needed to change to meet future needs and compliance requirements. Looking at how we balanced our system against this landscape we decided to implement the EBS to replace those parts of the BM systems which had either experienced performance issues or were unable to scale to meet anticipated market change.

At the outset of the programme EBS was intended to be in place and operational by early 2016. However it has been a much more complex IT programme than expected and the energy landscape has changed faster than anticipated, resulting in significant delays and functional delivery complications. We recognise that we have not done enough to communicate these challenges and we will need to make significant changes in our approach to keep you informed.

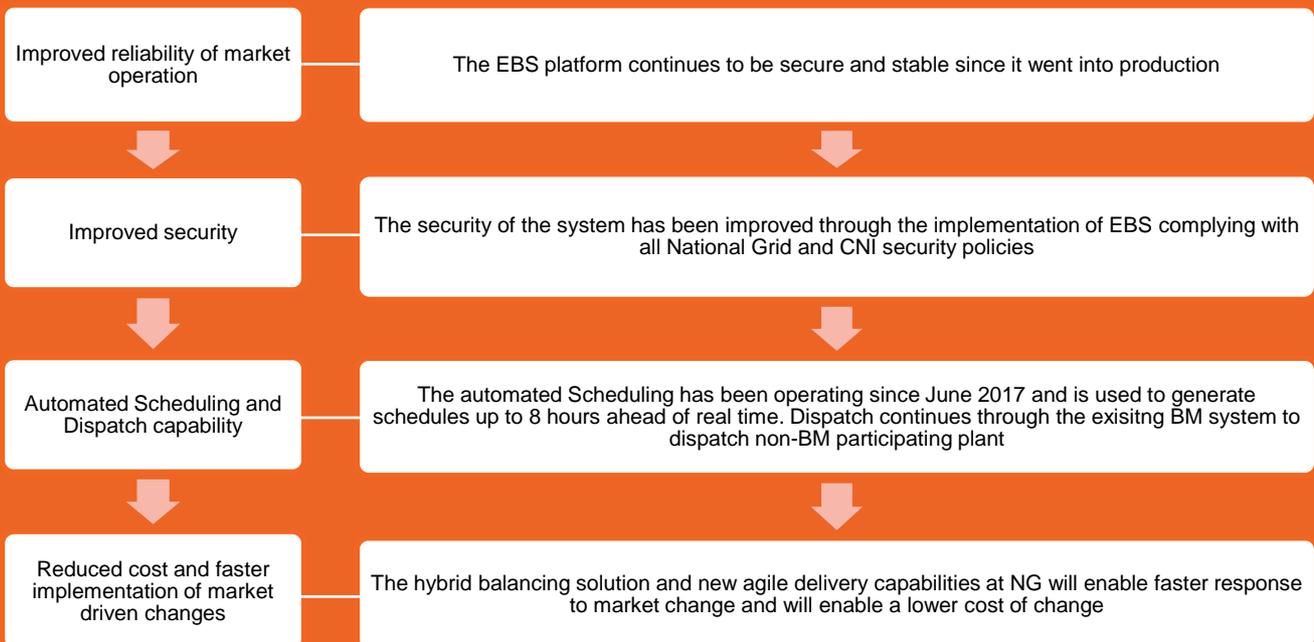


### Purpose of the EBS Programme

The EBS programme was tasked with replacing the suite of systems used to execute the balancing mechanism market.

#### These included:

#### The following points have been delivered:



### Simple Glossary

**Scheduling Activities** – Those activities undertaken to understand the generation that is going to be available on the system. We know that many generators describe this as ‘unit commitment’

**Dispatch Activities** – Those activities undertaken to understand the specific output of each unit approach and at real time

## The Balancing Programme

### Where are we now?

We have introduced a new programme, the Balancing Programme, to enhance and improve our suite of balancing tools including EBS and existing systems. The Balancing Programme has:

- **Implemented EBS** – EBS is in use at National Grid ESO where we have a mixed scheduling solution that makes use of both EBS and elements of the existing balancing systems
- **Enhanced EBS** – We continue to update EBS to improve performance and ensure it can meet the TERRE and Wider Access regulation changes by December 2019
- **Adopted a process-driven approach** – The approach focuses on delivering for consumers in partnership with customers and service providers and is managed via our newly established Design Authority
- **Set up a project to understand the market and regulatory change** – This project will explore the interaction between anticipated changes and system balancing over the next 5 years

### What's coming next?

National Grid ESO will continue to improve the performance of the EBS scheduling capability and deliver tools to balance the power system for the UK safely, securely and efficiently. We will work with you to create a plan for a robust, cost effective and scalable platform to support the effective balancing of UK power systems beyond 2020. The execution of this plan will enable us to:

- **Set the vision and strategy** for balancing and deliver the required code modifications needed in the medium term to ensure:
  - Economic market access for new market entrants; and
  - Access to the European Replacement Reserve platform
- **Facilitate cost savings** in the balancing of the power system for the UK, leading to lower costs for consumers
- **Engage with market participants** to define and determine the strategy and tooling to support balancing into the future

We are continuously monitoring our systems to ensure they can be amended in good time to comply with the upcoming regulatory changes, including ENC, TERRE and Wider Access.

## Capturing Your Feedback

You Said...

...We Did

You Said

"National Grid need to have more open communications with stakeholders on TERRE and EBS. The updates went very quiet and we were concerned as to how it was progressing."

We have started to introduce a number of initiatives to improve our communications both internally and externally (e.g. IS Change Forum & post-event surveys). We are also looking at our engagement approach going forward and how we communicate regular programme updates.

We Did

You Said

"Concerned that EBS Dispatch has not been implemented and the reasoning for this has not been provided."

The full EBS solution has been implemented, however the Dispatch function has been disabled. We are continuing with a mixed solution which will make use of EBS Scheduling and the existing BM solution for Dispatch.

We Did

You Said

"Are there other solutions you are looking at aside from EBS, considering the challenges faced in implementation?"

EBS is already being used successfully for enabled elements. Our task now is to understand market and regulatory changes and how this will impact on the balancing process. This will define our strategy for balancing going forward and the processes and tools needed to support this.

We Did

You Said

"I feel frustrated with how feedback and actions from various industry-related events are being captured and actioned."

Historically we have not formally captured feedback from various events, forums and meetings. We have introduced a new survey tool which we will use following every event / forum to formally capture, document and action feedback we receive relating to EBS.

We Did

## What can you expect from us going forward?

One of the key lessons we've learnt from this programme is the importance of communication. The changes we are making will have a significant impact on the wider energy market and we recognise we have not engaged early enough or often enough on the challenges we have faced.

Whilst progress has been made in engaging with relevant parties from a technical perspective (for example the IS Change Forum and EBS Forum), a lot more work needs to be done to bring the whole market along this journey with us. Going forward we are committed to:

- Adopting a range of communication channels to engage with various market participants
- Apply our learnings from EBS to other programmes.
- Continued in-depth engagement on the technical system details
- More detailed information on each of our programmes and how they interact with each other
- Visibility on our progress against plan, highlighting key programme risks and issues as they arise

## Our Key Milestones

