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EBS - IT

17th March 2016

Conference call details:
UK Numbers Tel: 0808 238 9819 or Tel: 0207 950 1251
Participant code: 4834 7876

https://meet.nationalgrid.com/antonio.delcastillozas/TYN7W1VT

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Agenda

1. **Introduction**

2. **Previous meeting (minutes and review of actions)**

3. **Programme Update**

4. **Industry Testing update**

5. **Transition plan**

6. **BSC Contact details**

7. **Communication plan**

8. **Closure (Any Other Business, date of next meeting)**

1. Housekeeping
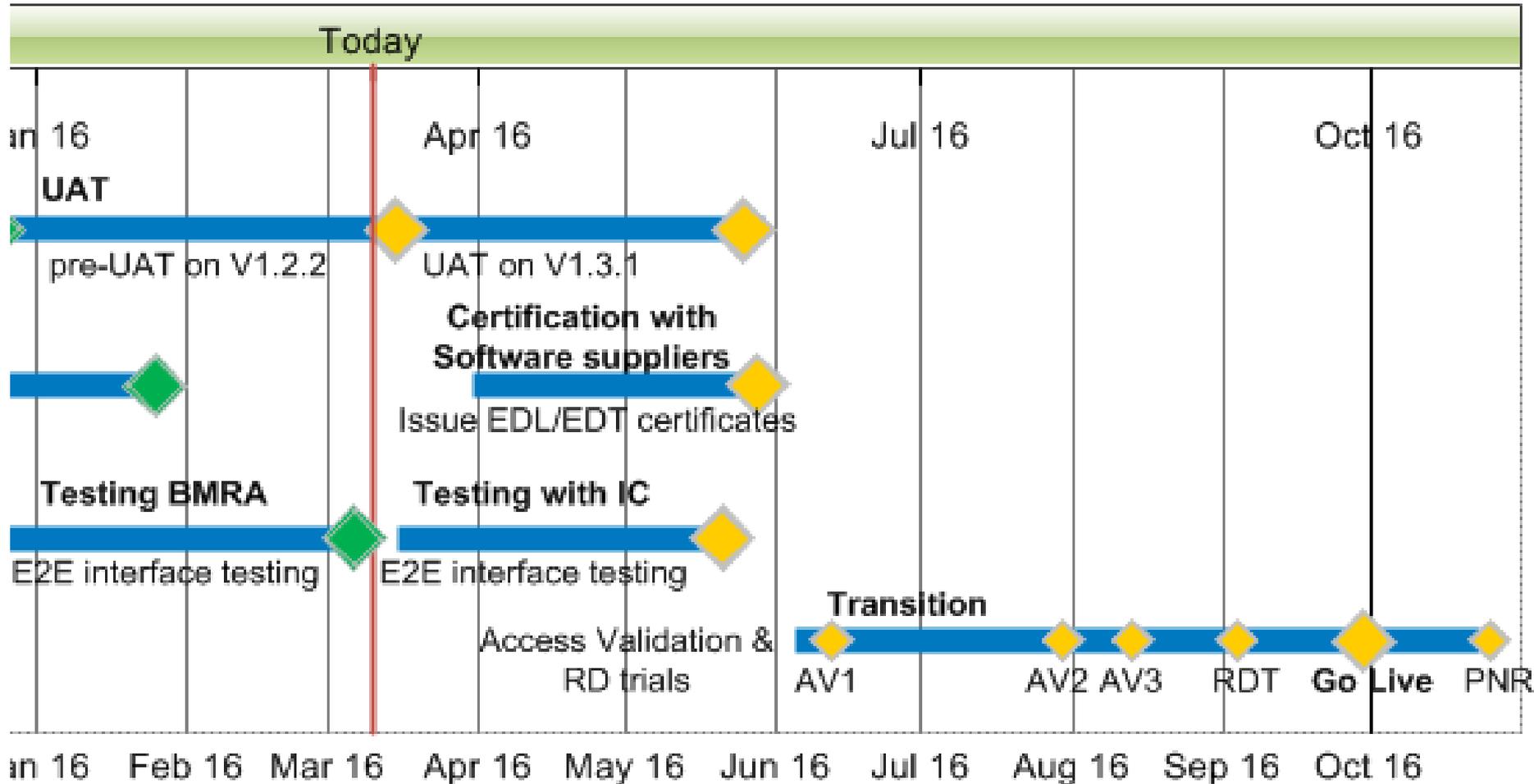
2. Previous meeting

- Comments to minutes

EBS IT Meeting 15 Minutes - 08 Dec 2015.pdf

- Review of actions

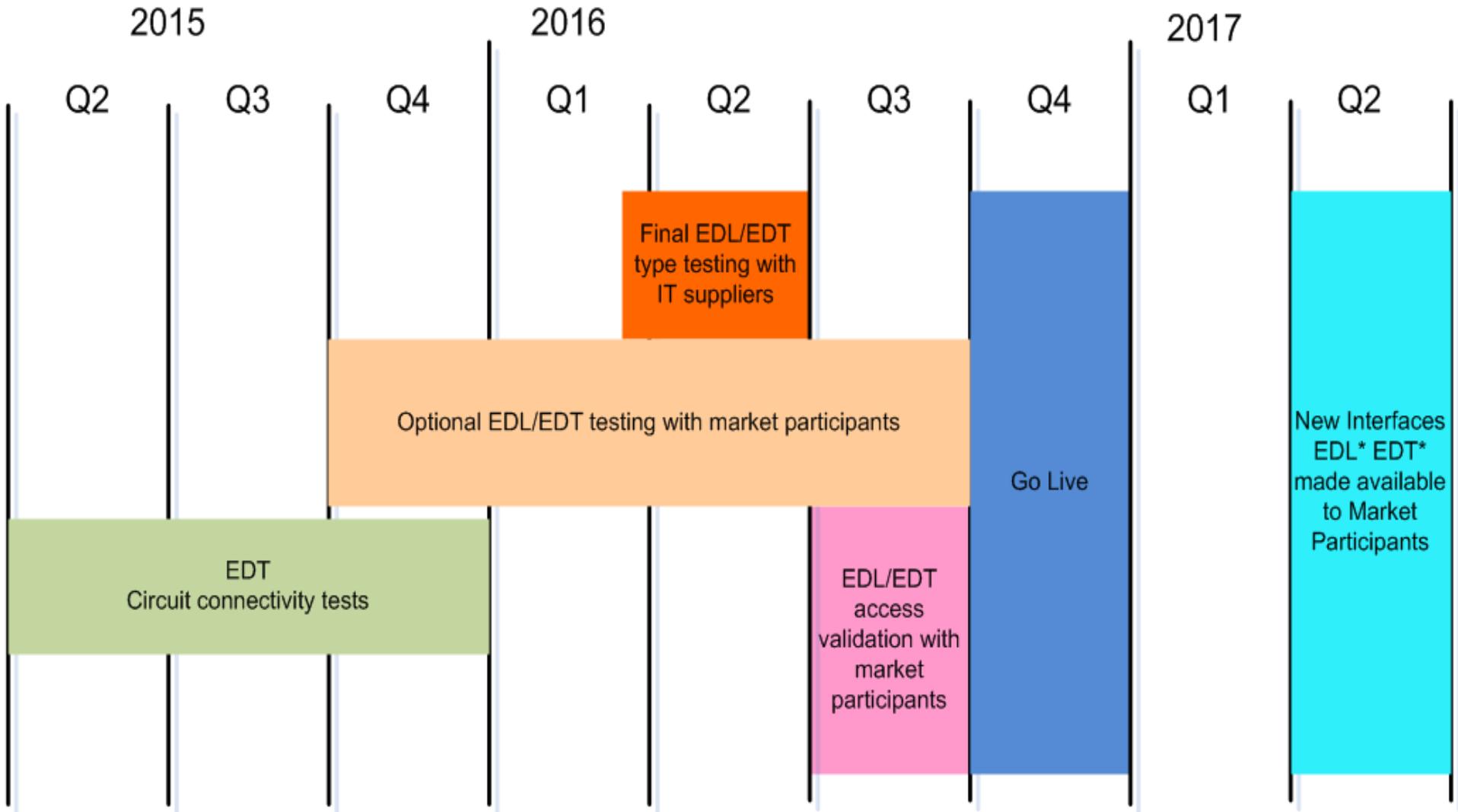EBS IT Meeting 15 Actions - 08 Dec 2015.pdf

3. EBS Programme Update

4 – Industry Testing Update

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Sarvesh Kumar

High-Level Timescales

2015			2016				2017	
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2

Final EDL/EDT type testing with IT suppliers

Optional EDL/EDT testing with market participants

EDT Circuit connectivity tests

EDL/EDT access validation with market participants

Go Live

New Interfaces EDL* EDT* made available to Market Participants

Type Test Progress

- Formal Type Test started at the end of March

- Formal EDT Type test progressing with suppliers

- Formal EDL Type Test initiated and defects raised in EBS

- EDL Type Test to continue post defects fixes have been received

- Formal type test are rerun of various informal test done with suppliers and also includes non functional elements of EBS

- The focus of the formal test will be resilience and EBS capability of multiple instructions

- National Grid will issue the fresh type test certificates on successful completion of the tests for each supplier

- National Grid will compile a new approved product register

Multiple Instructions Test

- Testing EBS capability of sending multiple instructions at the same time i.e. BOA, FRR etc.

- 6-7 instructions per BM Unit to the same Control Point

- Each instruction has the same log time

- Expect the client system to process them in the order received

- Testing completed with 3 suppliers and remainder to be scheduled as part of formal EDL type test

Update on Circuit Connectivity Tests

<u>EDL connectivity</u>

- Formal EDL circuit connectivity tests with Market Participants complete

<u>EDT connectivity</u>

- Formal EDT circuit connectivity tests with Market Participants completed successfully

<u>Ongoing changes</u>

- National Grid will provide facilities for retesting of any changes as required

Tests with other external organisations

BMRA/SAA

- E2E interface tests with CGI/Elexon completed

- P297 testing with Elexon in planning stage

    - Implementation June 2017

Interconnector

- Tests in progress

    - 2 complete, 1 in progress and 1 scheduled

- Few observations noted which are getting fixed on EBS

    - To be delivered in June

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Next Steps

- Complete the EDT Type Test

- Agree schedule & execute Formal EDL Type Test

- Complete remaining Interconnector executions

- BMRA validations planned in Q3

Summary of MP Testing Plan

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| EDL/EDT Milestone	Service	Due Date	Status
NG network changes	EDL	Q1 2014	Complete
Functional Test of EBS EDL/EDT	EDL/EDT	Q1 2014	Complete
Initial Type Test executions with IT suppliers	EDL/EDT	Q2 2014	Complete
EDL Circuit Connectivity Test with MPs	EDL	Q3 2014	Complete
NG network changes for EBS Proxies and Load Balancer	EDT	Q1 2015	Complete
Initiate EDT Circuit Connectivity test	EDT	Q2 2015	Complete
EDT Circuit Connectivity Test with MPs	EDT	Q3 2015	Complete
Re-test of defect fixes for Type Test with IT Suppliers	EDL/EDT	Q4 2015	Complete
Agree Transition plan BM to EBS change over		Q4 2015	Complete
Formal Type Test (including Non-Functional Testing) with IT suppliers	EDL/EDT	Q3 2016	Progressing
Optional testing with MPs	EDL/EDT	Q3 2016	Progressing

Summary of MP Testing Plan

EDL*/EDT* Milestone	Due Date	Status
Data Validation, Defaulting and Consistency Rules document supporting EDL*/EDT*	Q2 2013	Complete
Approve ELEXON P297 (Receipt and Publication of New and Revised Dynamic Data Items)	Q1 2014	Complete
Draft EDL*/EDT* toolkit circulated to IT Suppliers and Market Participants	Q2 2014	Complete
Establish IT Supplier's access (VPN over internet)	Q4 2015	Complete
NG network changes for EBS Proxies and Load Balancer	Q3 2016	Progressing
Functional Test EBS EDL*/EDT*	Q2 2016	Progressing
Perform E2E connectivity test for VPN with suppliers	Q3 2016	Not started
Final EDL*/EDT* toolkit circulated to IT Suppliers and Market Participants on Request	Q2 2016	Progressing
Support IT Suppliers Development and Unit Test for EDL*/EDT*	Q4 2016	Not started
Agree implementation plan for EDL*/EDT*	Q4 2016	Not started
Implement ELEXON P297 (Receipt and Publication of New and Revised Dynamic Data Items)	Q4 2016	Not started
Formal Type Test (including NFT) with IT Suppliers	Q1 2017	Not started
Start changeover of Market Participant's systems to EDL*/EDT*	Q2 2017	Not started

5 – Transition

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Pete Smith

Transition Stages (Reminder)

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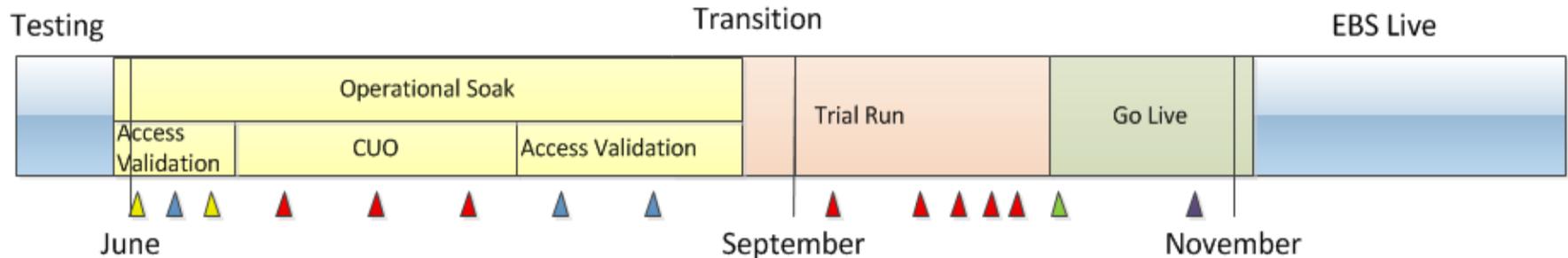
MPs activities during Transition

- Yellow - EDL Validation (handshake only)
- Blue - EDT Validation (Blank file submission)
- Red - RD / EDL Trials (sending Redecs and instructions)
- Green - EDL cutover
- Purple - EDT cutover

External Transition Plan (Summary 1)

No significant change to External Plan

- All previously discussed and agreed phases for external test and transition remain

- One minor change is to bring forward a number of Resource Despatch (RD) Trials

- A summary of the activities for external parties is to be found in the document 'EBS External Testing and Transition Overview'

External Transition Plan (Summary 2)

- Type Testing and Connectivity Tests complete before Transition Phase

  - Allows certification of Supplier software & proves physical connectivity

- Access Validation

  - Validates basic functional exchange between external production external EDT/EDL systems and production EBS

- Despatch Trials

  - Validates successful issue of instructions to control points

- Despatch – Enduring Operation

  - Allows extended EBS despatch with BM as emergency fall-back

- Cut/over & EDT Migration

  - After Point of No Return (PNR) Trading Agents begin submitting EDT direct to EBS. BMRS receives report data from EBS.

EDT Access Validation (Reminder)

E2E connection validation from Trading Agent Production Application to EBS Production Application

- Planning for EDT Validation
  - 3 designated periods (2 weeks, 1 week, 1 day)
  - Provide NG with estimated planned date
  - Required FTP credentials for EBS & BM
  - Clear Communication plan
- On the day
  - Reconfigure Trading Point System to point to EBS (IP, user, password)
  - Make an EDT submission (blank file with correct sequence number)
  - Check ACK responses (ACK responses are generated from EBS)
  - Reconfigure Trading Point System to BM (IP, user, password)
  - Reset sequence number back
  - Confirm result to National Grid (email)
  - National Grid communication channel (email, tel) available for support

EDL Access Validation (Reminder)

E2E connection validation from EBS Production Application to Control Point Production Application

- Planning for EDL Validation
    - 2 designated times, all CPs at once (2 x 1 day)
    - Clear Communication plan
- On the day
    - BM System EDL deactivated
    - EBS EDL activated
    - Handshake only mode (2 to 5 minutes)
    - No Instructions or Redecs
    - EBS EDL deactivated
    - BM System EDL reactivated and BM operation resumes
    - National Grid communication channel (email, tel) available for support
- NG Assess & resolve issues post-event
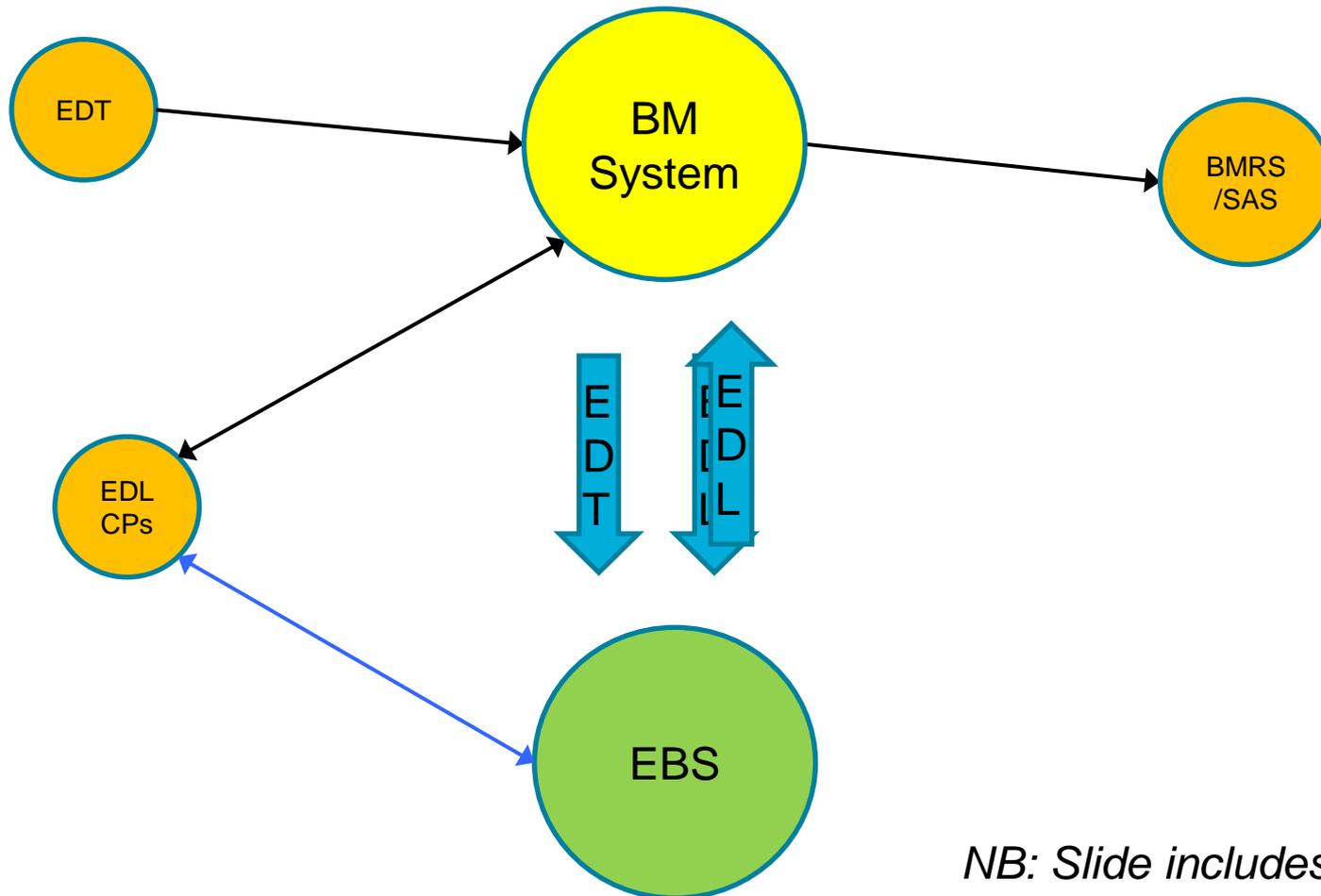
Despatch Trial Runs

- Aim

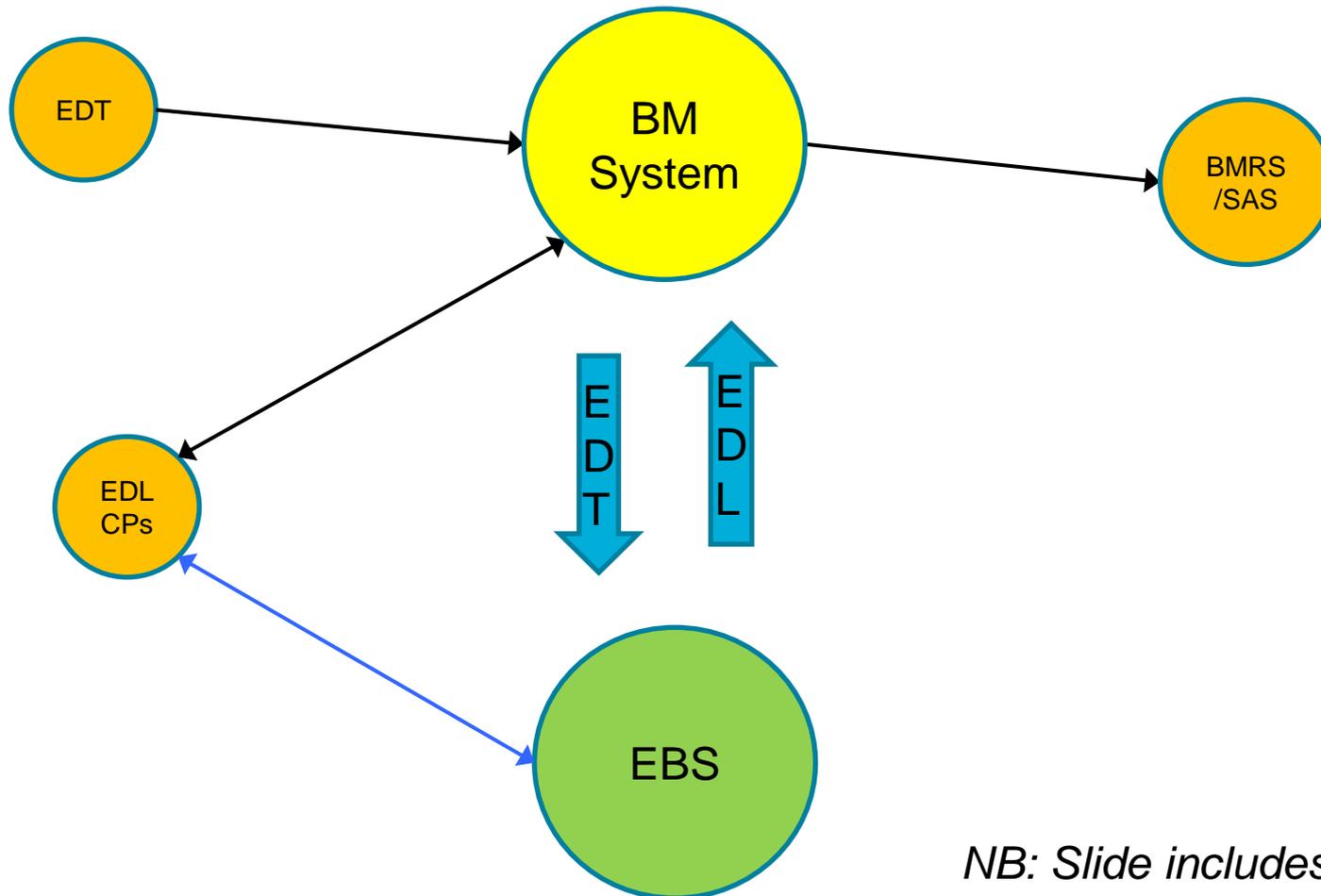 - Confirm stability of Resource Despatch (RD)

- Method

  - Exercise EBS Resource Despatch and EDL against Power System

  - BM System continues to be Master Production system

RD/EDL Trial

NB: Slide includes animation

Despatch Trial Run

- Early Despatch Trials introduced after EDL Access Validation

  - Proof and demonstration of concept

  - Refine process before extending to Control Room

- A number of Despatch Trials of increasing length

  - Timing and length of trials based on Control Room shift patterns – not technical constraints

- Lead up to Despatch Enduring Operation

  - No technical difference between Despatch Trial and Enduring Operation

Despatch Trials

- **Planning for EDL Trials (including early Trials)**

    - Pre-designated times, all CPs at once

- **On the Day**

    - BM System EDL deactivated

    - EBS EDL activated

    - Live instructions issued from EBS for defined period

    - EBS EDL deactivated

    - BM System EDL reactivated and BM operation resumes

    - National Grid communication channel (email, tel) available for support

- **NG Assess & resolve issues post-event**

    - Monitor power system behaviour

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EBS Despatch – Enduring Operation

- Enduring Despatch Operation after successful Despatch Trials

- Permits 24/7 operation on EBS whilst retaining a fall-back option to BM

- Planning for Enduring Despatch Operation

  - Start at pre-communicated time, all CPs at once

- On the Day

  - BM System EDL deactivated

  - EBS EDL activated

  - Live instructions issued from EBS

- NG Continually monitor and assess system performance

- Fall back to BM only in extreme circumstances

Point of No Return (PNR) & EDT Migration

- Decision communicated to Market in advance

- Reflects a Point of No Return with EBS becoming Master System

- On the Day

  - No action for Control Points

  - Inter-connectors reconfigure

  - BMRS/SAA reconfigured

  - EDT Trading Agents migrate to EBS

- National Grid Preference is to migrate Trading Agents as soon as possible after PNR

6. Planning for Transition

- **Audit Contact Details**

    - National Grid verifying the contact details held in Registration Database for :

        - BSC Parties

        - Trading Agents

        - Control Points

        - Software Suppliers

    - Market Participants to provide update on the contact details

7. Communication strategy

- **Transition plan dates**

  - Draft – Sept 2015 - Complete

  - Final – Dec 2015 - Complete

  - Final with dates – 4 weeks before transition (May 2016)

- **Communication channels**

  - Mainly email

  - Telephone for support when requested by the MP

7. Communication strategy

- Newsletters

  - Dec 15, Mar 16, May 16, Jul 16, Sep 16

- Weekly bulletins from 1 month before Transition

  - Plan for next week

  - Review of previous week

  - Progress of validations and trials

- Each MP activity to have a list of announcements

  - D – 10 Days

  - D day start

  - D day finish

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8. Closure

- Date of next meeting

- AOB