

DCC Operations Planned Maintenance Trial Update

January 2020



Summary of Planned Maintenance Trial : Sequence of Events

- Planned Maintenance proposal agreed in March 2019 – Implemented in April 2019, new ways of working adopted by all DCC and ALL Service Providers.
- Interim update on Planned Maintenance Trial outcomes presented to Ops Group in July, with regular updates each month. Ops Group supported the planned maintenance approach - it has been a great success.
- SECMOD process started in September, after agreeing the success of the trial to date.
- Ops Group and SEC Panel supported extension to the trial in October, which is now due to close at the end of January 2020
- SEC MOD is still in progress, currently at PA stage, aiming for March 2020, but this may take longer. There will be no additional costs associated for the SEC Modification.
- Presented update at Ops Group January 2020 with additional information around risk scoring and calculations for using High and Low Impact windows.
- December Ops Group recommended the following:
 - to either agree to a further extension, or to support the planned maintenance trial until the SEC MOD is concluded. Ops Group members in complete support.

The Request:

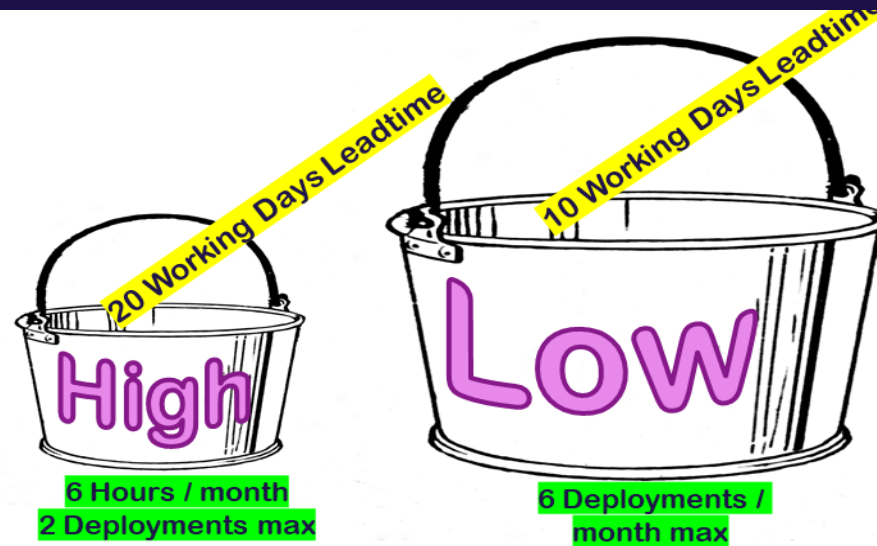
- **May we continue with the planned maintenance trial until the SEC MOD is completed or may we extend the trial until June 2020?**

Change Calculations Used For High and Low Impact Maintenance Windows

Darren Robbins DCC

The Strategy Implemented.

Split changes
into 2 types



- Allow more LOW more of the time
- Enables more focus more on HIGH when they are deployed

- Determine High vs Low by assessing:
 - Critical or non-critical service being impacted
 - Customer Impacting or non-customer impacting
 - Complex or easy
 - Downtime or no downtime

Trial it for a period of time

Review, then make the approach enduring

- In order to fully assess changes and to ensure that the correct maintenance window is selected, we use a **Change Risk Calculator**.
- The calculation:

Core Service	Customer Affecting	Low Complexity	Downtime Greater than (>)10 mins
4	10 x 2	x 5	
None Core Service	None Customer Affecting	High Complexity	Downtime Less than (<)10 mins (caters for Failovers)
1	0 x 5	x 1	

Service	Caluculator
DUIS	4
DUIS1	4
DUIS2	4
DUIS3	4
Motorway	4
SMART M2M	4
Comms Hub Manager	4
Security Validator	4
Share Point	4
DCO Application	4

Service	Caluculator
OI / OT	1
SSI	1
SSMI	1
Remedy	1
Orchestration	1
Coverage Checker	1

<ul style="list-style-type: none"> o High complexity: <ul style="list-style-type: none"> ▪ Multiple technical teams required to implement the Change ▪ Teams from different organisations required to support the Change ▪ Detailed Changes with no track record (1 of a kind Changes) o Low complexity: <ul style="list-style-type: none"> ▪ All other Changes not attributed to "High Complexity". Examples are: <ul style="list-style-type: none"> • Changes contained within a single supplier, typically a single team • A simple repeatable Change • Slightly more complex Changes that are proven, repeatable, possibly automated and well-practiced • Typically, single team implementation
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- Examples of Change Calculator in use

Service Value	Customer Affecting	Complexity	Downtime	Total Score	Lead time
1	0	2	1	2	10WD
1	0	2	5	10	10WD
1	10	2	1	110	20WD
1	10	2	5	110	20WD
1	10	5	5	110	20WD
4	10	2	1	140	20WD
4	10	5	5	140	20WD

- Examples

CRQ000000116871 - ** SUCCESSFUL** DSP - PROD Remedy Resilience - Primary SQL Server

Submitted 25/06/2019 13:28:15 - Implemented 09/07/2019 20:00:00

The above change is affecting a NON CORE system, with loss of resilience, no outage to customer – 10 WD lead time required

CRQ000000117698 - *SUCCESSFUL* DSP Prod Release 37 Sep 2019

Submitted 15/08/2019 15:13:19 Implemented 24/09/2019 20:00:00

The above change requires full outage to Motorway (CORE), affecting the customer – 20 WD lead time required