REC Update:

Late Gate Closure Messages and Missing Messages

Distribution WG – November 2022

'Late' Gate Closure

- Pre Go Live we were concerned about 'Late' Gate Closure messages – issue is within Missing Messages
  - Up until 31st August we had 150 missing messages related to Registrations
  - As at 15th October, we have had 155 missed messages related to Registrations
  - As at 7th November, we have 159 missed messages related to Registrations
  - As at 20th November, we have 171 missing messages related to Registrations
- We had set out a 'runbook' to use in the circumstances that we received Late Gate Closure messages so that we could complete processing and maintain alignment between CSS and UK Link

- Due to our concerns related to the alignment of CSS and UKL we have been proactively running a reconciliation between Pending messages (received from CSS once the Registration is first processed (and if necessary issued to the incumbent for Invitiation to Intervene (e.g. Object))
- This reconciliation highlighted 'Missing' Gate Closure messages – i.e. either missing Secured Active messages, or missing Pending Cancellations
- First instance on 24th July – was raised by DCC as a P3 (3 working day response) so we could not hold our jobs – so had to notify the Shippers and continue with UKL processing – i.e. not invoke the 'runbook' that we had established

'Missing' Gate Closure

- First ticket was raised on 24th July, and each day that we had a missing GC message a further ticket has been raised
- At 23rd November – last incidence of missing GC message was 22nd November
  - Total missing messages 164 by this point (121 missing on 2nd August)
  - NB: 9 now resolved following confirmation of Cancellation of Registration from Switching Operator

- DCC indicated a fix has been deployed 25th August that would resolve the exceptions that were causing this issue, but noted that this would take some time to work through CSS (so to expect some additional missing messages post fix date (NB: we have recorded Missing Messages post 25th August)

- We have reported 93.75% (Sub average volumes) and 80% (Average to Peak volumes) success against the REC Performance Assurance target for October of all messages being received within target each day – 4 days with missed messages
  - We believe that these have all related to Supplier-less Supply Meter Points, so expect this to be a different functional issue

Latest Position

- Statistics as at 20th November:
  - Pot 1 – 'Pending DCC Rec' incl. Server Shut Down – estimate that these will require Registration
  - Pot 2 – Server Drift - estimate that these will require Registration
  - Pot 3 – 'New' recent instances to be investigated with DCC
  - Pot 4 'Supplierless' – we believe that this is a functional issue and will require system change (and potentially REC change)
  - Resolved – 9 Cancelled Registrations – removed from UKL
- Note: all statistics and conclusions for 'pots' are subject to Reconciliation and confirmation from the Switching Operator

RCA	Count Missing SAM
PENDING	**164**
Pot 1 Pending DCC REC	31
Pot 2 Server Drift Issue	119
Pot 3 New	9
Pot 4 Isolated (Supplierless)	5
RESOLVED	**9**
(blank)	
(blank)	
Grand Total	**173**

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- We believe that the issue of Missing Gate Closure messages would have been mitigated by 'resend' functionality
  - DCC implemented this prior to CSS for Smart DSP
  - Could not be implemented for others prior to CSS Go Live without impacting Implementation Date

- We have been arguing that this is a Programme Deliverable and ELS should not be completed without this functionality being delivered
  - Potentially will be progressed as a REC Urgent Change
  - This is still being progressed Xoserve are reviewing the proposed solution with REC / DCC

- We are performing the Impact Assessment on this change (R0067) … this will **not** resolve all issues with Missing Messages as some Registrations will not be at a status to permit resend

2nd August – 'Missing Messages'

- On 2nd August we identified 122 'Missing Messages':
  - On 15th September DCC indicated that they had identified that some of this population had different characteristics to others being investigated under this issue
  - Identified that the GRDA System had rejected messages with a time related error
    - Our investigations indicate that this was because the GRDA System considered the messages for a future date or time
    - We expect that this is because server clock time drift between CSS and GRDA – and GRDA lagging behind CSS by as little as 0.5 second
    - CSS and GRDA systems are exchanging messages in millisecond timings – therefore this drift would cause this rejection
    - MS Azure clock times are guaranteed within 2 seconds – but drift is considered very unlikely

    - Our investigation attributed this error incorrectly to the CSS Missing Message issue

  - Fixes planned:
    - To allow for drift between servers – e.g. set a +/- buffer time in the validation - Deployed
    - Recording rejected messages for a short period to investigate the original message payload – we relied on the messages to be provided by Switching Operator to investigate – In progress

Next Steps

- This position has **largely** not changed from last month – we had asked DCC to focus on stopping further instances of Missing Messages:

    - Need confirmation which of the Missing Gate Closure messages were intended to result in Registration or Cancellation
        - We are still waiting for the Reconciliation position

    - Need to understand options from DCC …
        - DCC have indicated that these should be set Live, but cannot generate the Secured Active Messages to us
        - We have asked DCC to provide a notification of the Registrations that need to be set Live in lieu of the Secured Active Notification – we plan to use this as a proxy Secured Active Notification
        - UNCC accepted the proposed approach that we set the Registrations Live for the 'Server Shut Down' Issue using a proxy Secured Active Notification

    - XRN5535 was raised to determine what to do if we received a message after 03:00 on D
        - We are using this Change Proposal to assess what needs to be done for the 'missing' Registrations – we have no Retro Registration functionality so solution needs to be identified – e.g. increment Registration Effective Date and adjustment

Proposed Solution

- We plan to progress these changes as Prospective fixes – i.e. once we have developed and tested the functionality
- We will set the 'missed Registration' Live prospectively for any missed messages for Switches***
  - If there has been Registration subsequent to the CSS Effective Date, or another Registration is imminent (within **D+[5]** calendar days) – we will not process the 'missed Registration'

- Still require reconciliation from Switching Operator
- We have progressed these proposals whilst we wait for confirmation of which Registrations need to be set Live

- We are developing a system solution to generate the Registration in UKL in lieu of the Secure Active Notification from CSS
  - This should reduce risk of manual error in the process
  - Simulate the Secured Active Notification to enable UKL processes (e.g. association with Base Registration Notification) to remain as is

*** We are looking at applying the Registration in line with CSS dates for Initial Registrations (TBC)

Data Permissions Challenges

- As we are updating the Registration Prospectively this will mean that the incoming Shipper on the CSS Registration will be treated as the Prospective Shipper by the UK Link system
  - i.e. updates will have been allowed on the UKL system by the Shipper held as Registered on UKL, and the CSS Registration Shipper will not be able to update until they are recorded on UKL
- For Data Permissions should the incoming Shipper be treated as the Prospective Shipper – or the Registered Shipper?

- In some instances the Registration from the missing messages will never be recorded in UKL … do we need to define a process to make information available to the Shipper that WOULD have held the Registration?
  - IF so, for how long?
  - NB: Same question to the REC for Supplier access to data

Proposed Solution - Challenges

- If there are updates to the Supply Point from the current Shipper that have yet to become effective (e.g. future dated Capacity Changes; MRF Changes; Class Changes) these will be cancelled – this is a BAU process, we will not provide any further information to the incoming (prospective) Shipper
  - We expect that this is data related to the previous Shipper Supply Point so not required
  - If this is required, this will give us a Data Permission challenge to make a new set available to the 'Community' Shipper
- The UKL Registered Shipper has updated the Supply Point Register post the CSS Registration EFD – these will be retained in UKL (and will not be backed out)
  - If we need to provide the information related to these updates to the incoming (prospective) Shipper, we will need to identify the type of updates that are required to be provided and make reporting available
  - We have seen small numbers of accepted transactions but the type of transactions considered are:
    - Meter Readings (9); AQ Corrections (1); Class Change (1) and Meter Asset Updates (1)
    - Customer Contact Updates – if required, we could just flag that there has been an update, rather than content of update
  - If this is needed, suggest we agree release of this data explicitly through DPM
- The UKL system has rejected updates to the Supply Point Register post the CSS Registration EFD from the Prospective Incoming Shipper (i.e. CSS Registered Shipper)
  - Propose that we collate the rejected information and provide to the Incoming Shipper (to assist them to determine what activities they need to resend: MAM Updates (7); SMSO Update (3); Readings (12); Meter Asset Updates (7)
  - Propose we flag the Supply Meter Points where a Customer Contact Update has been rejected

Proposed Solution - Challenges

- Base Registration Nominations may be held in the system (these are valid for 60 days), but recommend that the Incoming Shipper generates a new BRN
  - This would supersede any BRNs in UKL and reduces risk of SP having incorrect Settlement data (or CDSP associating default Settlement data)

  - If not, we will use any valid (e.g. non expired) BRNs … Note: BRNs may reject for other reasons – e.g. Capacity Reduction Window
  - Otherwise, we would use defaults as defined in UNC TPD G Annex G-1
- Propose NOT to suppress any UKL transactions associated with the Registration
  - Outgoing files will continue to be generated – e.g. BRR; ASN; TMC; URN
  - Incoming transactions would be allowed – e.g. Opening Meter Reads

Proposed Solution - Challenges

- An Opening and Closing Meter Read will be generated for the UKL Registration Effective Date
    - This will be issued to both Shippers as per BAU process
- We could insert an estimated Meter Reading for the CSS Registration Date – this would be a CYCL (i.e. not an Opening Reading) but would be beneficial for Reconciliation (if required) and potential settlement between Shippers / Suppliers
    - Note: if this requires replacement it would require the 'old' Shipper to replace (i.e. UKL Registered Shipper) and not the CSS Registered Shipper (and replacement would not lead to notification for the CSS Registered Shipper by UKL)
    - Note: would not be recorded with an explicit reason
    - Alternatively, Shippers / Suppliers could agree and insertion by 'old' Shipper?

Further Considerations

- Assessing Invoicing position
  - Materiality is not expected to be large
  - 164 impacted Supply Meter Points, of which 162 are SSP (noting 9 confirmed Registration cancellations)

Code Considerations

- Feels like a grey area whether a Mod would be required

- Inconsistent treatment of the Shippers depending whether UKL or CSS Registered – which would be complex to define in the UNC

- Proposed insertion of a Meter Reading is not considered in the Code (but Code is not an instruction manual! ;))

- UNCC content that CDSP can act in some instances without Secured Active Registration

- Data Permission can probably covered by transitional amendments to the DPM Conditionality Document