REC Update:

Late Gate Closure Messages and Missing Messages

'Late' Gate Closure

- We have had a number of instances of 'Late' Gate Closure 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
- 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 15th October – last incidence of missing GC message was 13th October
  - Total missing messages 155 by this point (122 missing on 2nd August)

- 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 81.48% success against the REC Performance Assurance target for September of all messages being received within 20 minutes each day – 5 instances of failure from 27 days (NB: three days in September above average volumes)

CRD061

- 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

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
      - 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

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 have asked for a reconciliation position – we have been informed that 9 pending Switches that were cancelled, which leaves 146 Registrations that potentially need to be applied to UKL

  - Need to understand options from DCC …
    - DCC have indicated that these should be set Live, but cannot generate the Secured Active Messages to us
    - Resolution plan consultation with industry participants by DCC?

  - 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 and adjustment

Proposed Solution

- We plan to progress these changes as Prospective fixes – i.e. once we have developed and tested the functionality
  - For 119 continuing analysis for Prospectively applying the Registration
  - Awaiting confirmation on the remaining messages from DCC, if these are missed Registrations we expect to Prospectively apply the Registration
- We will need to look at adjustments on these registrations

- We propose a single solution for these Registrations (even for the 119 Registrations where the rejection was issued by the GRDA)

- Now that we have the proposed resolution path from the Switching Operator the impact needs to be done regarding the impacts to UNC
  - Since CSS cannot generate Secured Active messages for some of these Registrations this may require a UNC Modification as the UNC requires a Definitive Registration Notification to be issued