

# Update on Known Alert Issues (1)

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- Chatty meters generating spurious 8104/8015 alerts
  - This is caused by a defect on some Honeywell Elster ESME installed by three Suppliers and responsible for 97% of all alerts
  - New firmware which fixes the defect is available for deployment
  - Suppliers don't see these alerts but TOC have identified worst performing meters and suppliers have agreed to prioritise those – currently being monitored
- Power outage alert on firmware upgrade
  - Issue on multiple meters including one not fixable by firmware update
  - TSIRS view is that nothing in the specifications stops this and that parties should raise a SEC Modification if they wish to "ban" this behaviour, noting the issue is limited to a small sub set of one type of meter, and that going forward, manufacturers are taking steps to ensure this does not happen

# Update on Known Alert Issues (2)



- Multiple 8F3E alerts from GPF (triggered by unjoined PPMIDs) - vast majority from a few thousand Tosh and WNC CHs in Central & South
  - Fixes include:
    - Short term – suppliers rejoin PPMIDs
    - Medium term – DCC fixes the CH FW
    - Long term – PPMID mfrs sort out their FW
    - Long term – Sec Mod
  - No issue in CSP N as they have put a short term FW fix in place to throttle GPF alerts
- DNO alerts from ESME (tiny in comparison to 8F3E), mostly due to a non-mandated alert that relevant meter mfr will fix through FW upgrade

# Update on Known Alert Issues (3)

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- Issues with spurious or lost power outage/restoration alerts
- DCC/Telefonica/WPD/UKPN testing continuing
- Incorrect/no DNO certificates on meters
  - DCC close to having robust set of data. Analysis has identified up to 60 different reasons for cert issue - missing certs appear to account for 80%
  - DCC is aiming to produce guidance and share by mid-Sept
  - DCC giving Suppliers lists of meters not properly commissioned or decommissioned.
  - ENA agreed to concentrate on missing N42 alerts

# Update on Known Alert Issues (4)

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- Issues with spurious or lost power outage/restoration alerts
  - AD1 Power Outage Alert when there shouldn't be
  - No AD1 Power Outage Alert when there should be
  - No 0x8F35/6 Supply Outage Restored when there should be
- Test Results
  - Only one Meter type behaved as expected across all tests – validating specification interpretation with TSIRS
  - Some causes identified, e.g:
    - 8F35/6 not generated or sent by Meter before CH is ready and
    - Meters being power cycled during installation
  - Testing did not replicate missing AD1s but one DNO still seeing this
- DCC produced technical guidance for BEIS on correct functioning of ESMEs
- Combined defect investigations held with CSPs, Suppliers and Meter Manufacturers in week ending 30/08/2019
- Presentation on results and next steps to be given at next TSIRS

# Known Alert Issues – TSIRS & CIF



- **8F3E (unauthorised comms access attempted) during and post installation:** DCC/BEIS guidance being issued.
- **Spurious 8F12 (device log changed):** Under investigation by DCC – possibly linked to unexplained changes in NWK key
- **8F14 (Power factor threshold below), 8F15 (Power factor threshold OK), and 81BB (reverse current):** Recognised defect with specific meter model
- **8F72 (Firmware verification successful) , 8F1C (Firmware verification failed) missing:** OTA update response not received. Under investigation by DCC
- **8F1E (integrity check of content or format of command failed):** Multiple 8F3D (Trusted source authentication failure) sent per 8F1E. Under investigation by DCC
- **E21 (Communications failure – no response received from device):** Generates N13/or N23. Potentially multiple causes. Under investigation by DCC.

# Known Alert Issues – Design Release Forum

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- DRF is currently addressing
  - **Alert Storm (high talkers): 83FE** and various others (see above)
    - (8F12, 8F01, 8014, 8015, 8F3D, 81BB, 8F30, 8F3F, 8F1E and similar CHF alerts)
  - **Wrong intended remote party / Device defects: 819D & 819E** targeting ACB
  - **Business critical alerts:** Birthing, Power Outage AD1, Firmware activation
- No meeting held in August – update expected at September meeting.