

Industry Webinar: VMO2 restriction to 2G Roaming

Join the conversation:



Agenda

- Introduction to the Software (TSA)
- Webinar Opening (TSA)
- Feedback from Virgin Media O2 (VMO2)
- Industry Panel Q&A chaired by TSA
- 2G Restriction Playbook (TSA)
- Wider Q&A session (All)
- Summary and Next Steps (TSA)
- Close



Summary of Issue

Formal Announcement

• https://news.virginmediao2.co.uk/connecting-businesses-now-and-into-the-future/



Formal Announcement from VMO2

Changes to our roaming services

As part of these changes, we will be withdrawing inbound roaming services on our 2G and 3G networks on 1 October 2025.

In July, we contacted all our business customers, from small enterprises to wholesale partners, to make them aware of these plans and told them that they will need to upgrade any 2G and 3G only devices, so they can maintain seamless connectivity. We've also made our international roaming partners aware and instructed them to work with their customers to avoid disruption.

We know some organisations purchase connectivity solutions from other providers, including SIMs from overseas operators which roam on our network. Businesses should contact their connectivity provider to ensure any machines and applications that may use roaming to connect to our network, even occasionally, are upgraded to 4G / 5G or to find alternate ways to connect before October 2025.



Summary of Issue

Formal Announcement

https://news.virginmediao2.co.uk/connecting-businesses-now-and-into-the-future/

Summary of announcement

- VMO2 will be withdrawing inbound roaming services on its 2G and 3G networks on 1
 October 2025
- VMO2 made their international roaming partners aware and instructed them to work with their customers to avoid disruption.

Additional Information provided

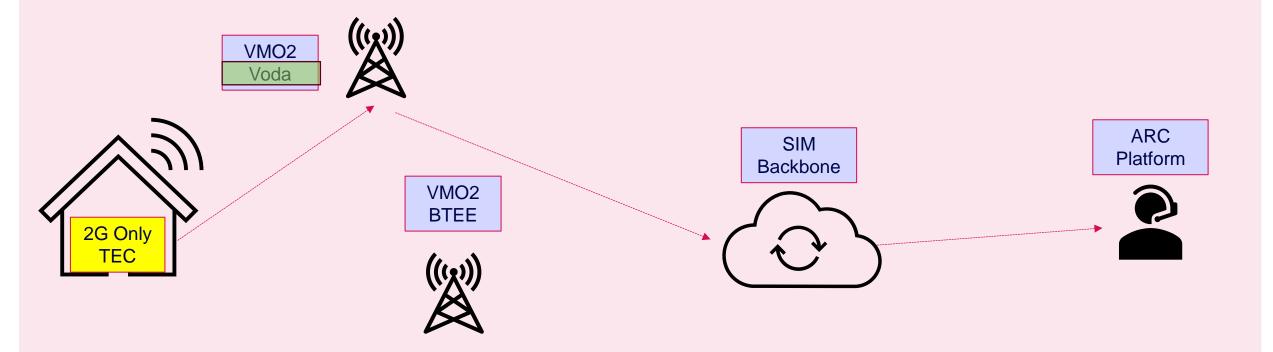
- VMO2 have cited the closure of its 3G network and its impact on smart-metering as the main reason for restricting access to 2G networks
- All Global APNs (apart from Telefonica Spain) will be switched off on 1 October 2025 –
 there will be no piloting or region by region mast restriction similar to the 3G switch off

Impact on TEC Industry



- Digital TEC devices in the UK are almost completely reliant on non-UK based MNOs for service
 - Non-UK based MNOs offer unrestricted access to all 4 UK based cellular networks
- Most Digital TEC devices sold in the UK until circa 2022/23 are (at least partially) reliant on 2G networks for communication
- The original timelines for 2G switch off were communicated as likely between 2028 and 2033 giving commissioners/buyers time to migrate away from reliance on 2G
- There are an estimated 600,000 digital TEC devices in the UK, of which circa 250,000 are reliant entirely on 2G networks
- Roaming VoLTE is not in widespread use currently so circa 350,000 devices of the 600,000 devices are reliant on 2G for voice even with a 4G chipset embedded
- VMO2 could set a precedent that could be followed by either EE or Vodafone (3UK does not operate a 2G network)

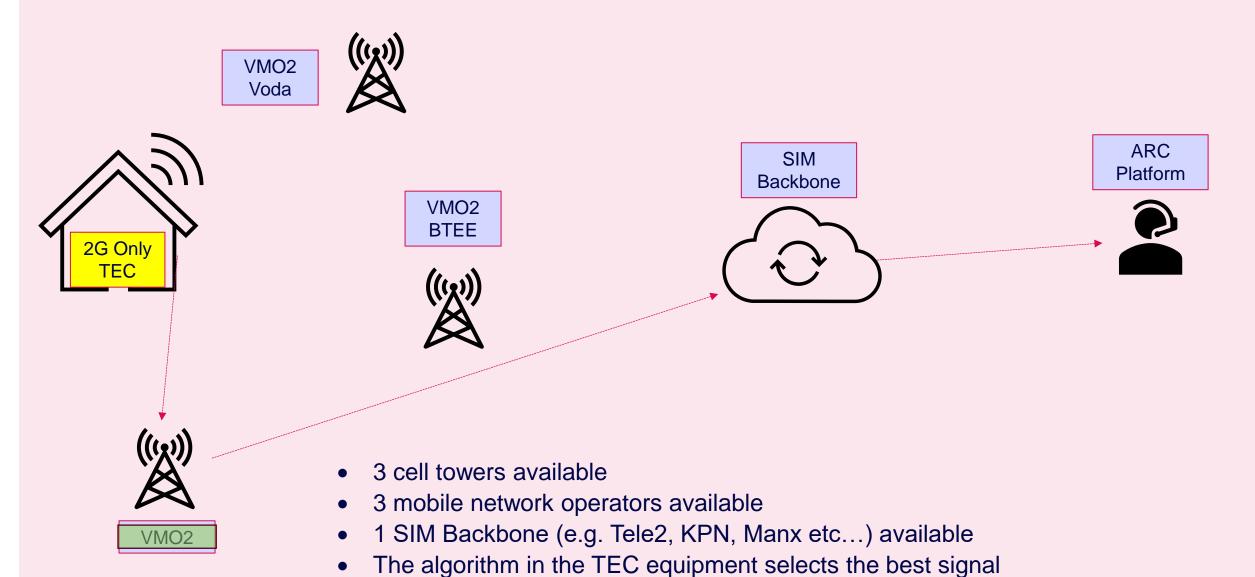
Impact on 2G Only Telecare – Current Example 1



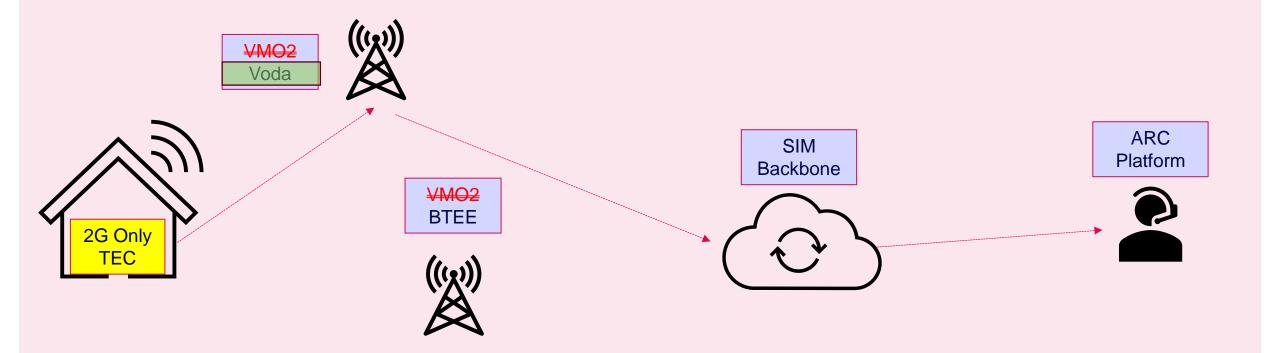


- 3 cell towers available
- 3 mobile network operators available
- 1 SIM Backbone (e.g. Tele2, KPN, Manx etc...) available
- The algorithm in the TEC equipment selects the best signal

Impact on 2G Only Telecare – Current Example 2



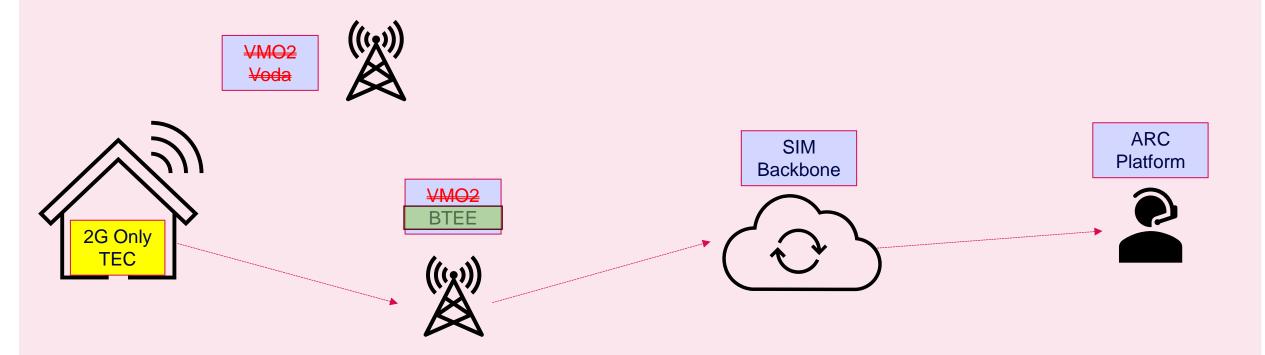
Impact on 2G Only Telecare – Remove VMO2 Example 1





- 2 cell towers available
- 2 mobile network operators available
- 1 SIM Backbone (e.g. Tele2, KPN, Manx etc...) available
- The algorithm in the TEC equipment selects the best signal
- Solution network resilience would be reduced by at least 33%

Impact on 2G Only Telecare – Remove VMO2 / Voda Outage

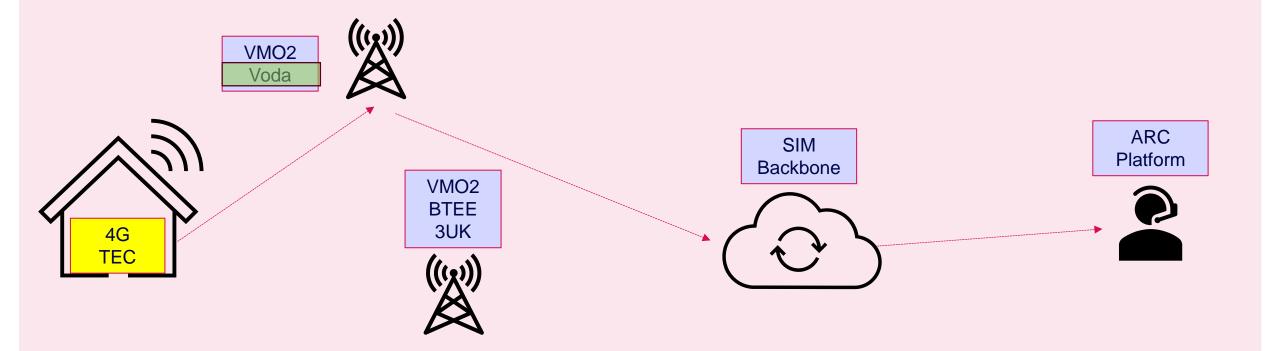




- 1 cell tower available
- 1 mobile network operator available
- 1 SIM Backbone (e.g. Tele2, KPN, Manx etc...) available
- That is the only network that could be selected by the device
- Solution network resilience would be reduced by at least 66%

Impact on 4G Telecare – VoLTE enabled

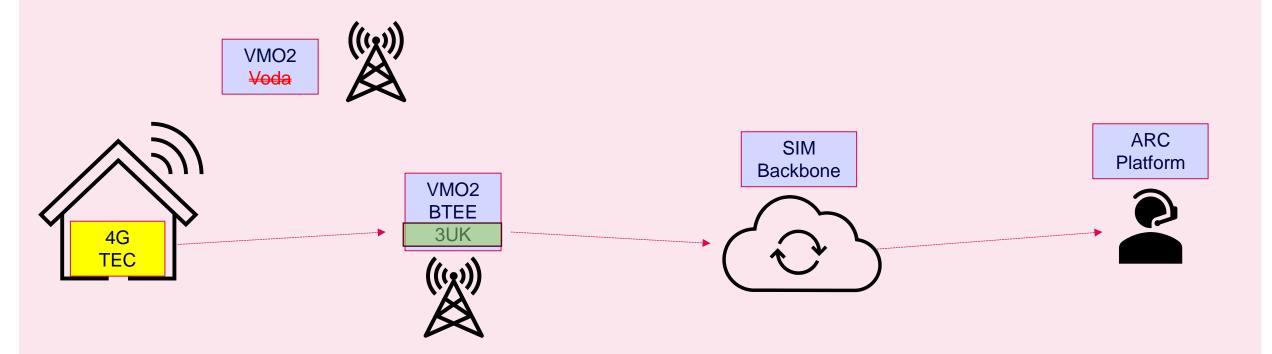






- 3 cell towers available
- 4 mobile network operators available
- 1 SIM Backbone (e.g. Tele2, KPN, Manx etc...) available
- The algorithm in the TEC equipment selects the best signal

Impact on 4G Telecare – VoLTE enabled / Voda Outage



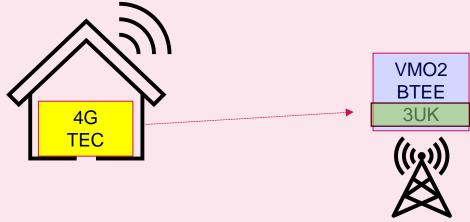


- 3 cell towers available
- 3 mobile network operators available
- 1 SIM Backbone (e.g. Tele2, KPN, Manx etc...) available
- The algorithm in the TEC equipment selects the best signal

Impact on 4G Telecare – VoLTE enabled / Backbone Outage









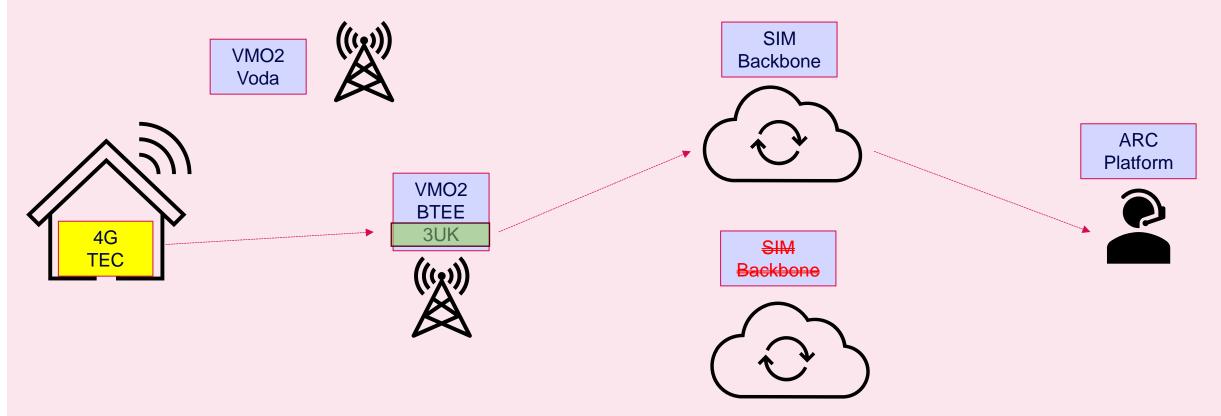




3UK

- 3 cell towers available
- 4 mobile network operators available
- SIM Backbone (e.g. Tele2, KPN, Manx etc...) unavailable
- The algorithm in the TEC equipment selects the best signal but cannot reach the ARC

Impact on 4G Telecare VoLTE enabled / Dual SIM / rSIM / Ethernet (Backbone Outage)





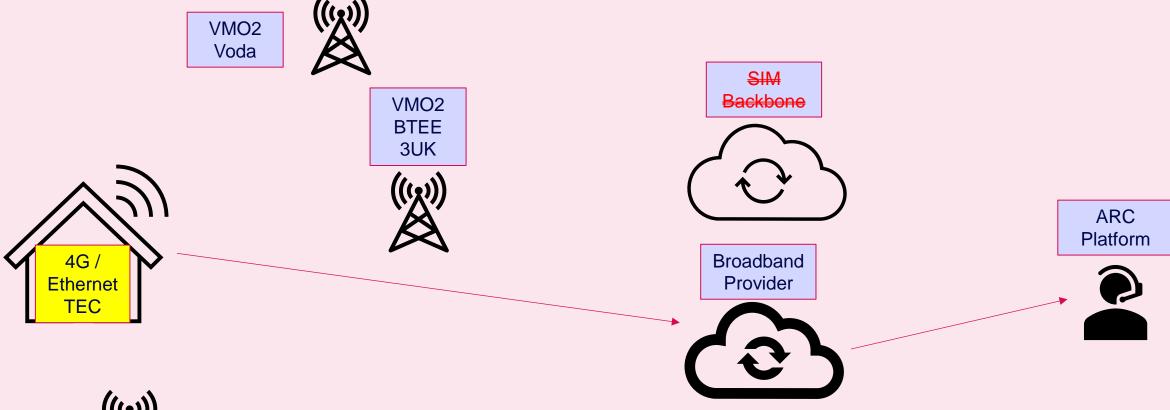
3UK

• 3 cell towers can be seen by the device

- 4 mobile network operators can be seen by the device
- 2 SIM Backbones (e.g. Tele2, KPN, Manx etc...), one still available
- The algorithm in the TEC equipment selects the best signal



Impact on 4G Telecare VoLTE enabled / Backbone Outage / Ethernet connected



- VMO2 3UK

- 3 cell towers available
- 4 mobile network operators available
- SIM Backbone (e.g. Tele2, KPN, Manx etc...) unavailable
- The algorithm in the TEC equipment selects the ethernet connection



The VMO2 Viewpoint

Jon Fawcett, Head of Head of Mobile Product, VMO2

Join the conversation:



Industry Panel Q&A

Jon Fawcett, Head of Head of Mobile Product, VMO2
Jane Walsh, Principle, Networks & Communications, OFCOM
Oliver Cox, Managing Director, Mobius Networks
Max Stevens, Head of Telecare IoT, CSL Group

Join the conversation:



Developing the 2G Restriction Playbook

Anywhere Care

Appello

Canary Care

Chiptech

Chubb

Essence

Everon

Legrand

MindMe

Join the conversation:

Possum



Planned March to June 2025

From June 2025 onwards

Anywhere Care

In the light of VMO2's decision to restrict inbound global roaming services on its 2G and 3G networks on 1 October 2025 we have identified the connectivity profile of all Anywhere Care devices to determine which individual devices may be impacted. We will continue to proactively manage the situation to minimise any impact, or potential impact for our customers.

Footprint GPS Tracker 2G

Identification of units that regularly use VMO2 network. Completed.

Testing of withdrawal of access to VMO2 network. Planned March to June 2025 From June 2025 onwards

Upgrade units to 4G device where required.

Footprint GPS Tracker 4G

 VolTE testing. Completed

 VolTE rolled out to all devices. April to June 2025

OwnFone 2G

Identification of units that regularly use VMO2 network. Completed.

Testing of withdrawal of access to VMO2 network.

Upgrade units to 4G device where required.

OwnFone 4G

 VolTE testing Completed

VolTE rolled out to all devices. April to June 2025

Appello

- Telecare 4G Unit Smart Life (Primary 4G SIM, Second 4G SIM plus ethernet and Wi-Fi connection)
 - Currently using VoIP for all calls
 - Fallback to VoLTE rolled out to all devices Q3 2025
 - Ethernet cables are supplied as standard to all customers who request them
 - Wi-Fi connection can be established by pressing 2 buttons



Canary Care

• The current Canary Care hub is 2G SIM only

- Canary Care is part of the Luxion Group, which includes Utilita Energy, whose smart meters will continue to access the VMO2 2G network beyond 2025. We are lobbying government from Group level, to encourage VMO2 to allow continued roaming access for TEC devices.
- Our analysis of the thousands of Canary Care installations, performed over the past two years, shows that 99.5% of installations have access to either Vodafone, EE or both.
- For the 0.5% that can only see the VMO2 2G network, we are exploring other SIM options with our connectivity provider.
- We are currently testing restriction of access to VMO2 for our estate, so that we can assess the real-world impact now and over the coming months.
- We also have a new version of the Canary Care hub in development, with additional connectivity options, which we aim to have available before the VMO2 2G network restriction takes effect.
- We are committed to ensuring a smooth transition and will provide updates as we progress.
 Rest assured, we are also working on a plan to address any concerns regarding equipment replacement and long-term usability of our products.

Chiptech

2G/3G EVA (SIM only)

- Successful testing of failover of 3G to 2G completed in Swedish labs in 2023 and subsequent UK based testing
- Devices retain 3G O2 until December 2025 according to current 3G sunset plans
- Chiptech will work with customers to identify units that look to have only connected to O2
- o Replacement SIM cards or supported upgrade to SEVEN to be available if required/requested

4G/2G SEVEN (Dual SIM)

- Successful VoLTE testing completed in Swedish Tele2 Labs in January 2024
- VolTE Phase 1 launched November 2024
- VoLTE roll out fleetwide January 2025
- VoLTE means devices do not rely on 2G both data and voice sent over 4G LTE networks

GO GPS Devices (unaffected, do not rely on 2G technologies)

o GO 4G - VoLTE rolled out fleetwide November 2024



Chubb Community Care

- Chubb CareUnity® Digital (4G / VoLTE SIM plus Ethernet connection*)
 - All Chubb CareUnity® Digital units in the marketplace are already 4G / VoLTE capable.
 - o VoLTE testing is already completed and operating into all major UK ARC Digital platforms...
 - Chubb Cloud Care Control, Enovation UMO, Legrand Ansalink, Appello CareNet.
 - VolTE enabled SIMs are available now for both existing & new customers.
 - Existing SIMs are already being VoLTE enabled.
 - 4G / VoLTE enabled SIMs are being "rolled out" and operating at scale now for many existing customers.
 - This is a remote action undertaken at a SIM level; SIMs do not need to be physically replaced.
 - SIMs are being VoLTE enabled for existing units on a customer-by-customer basis.
 - Contact Chubb Community Care to discuss.
 - Ethernet cables are supplied as standard with the CareUnity® Digital units.
 - * CareUnity® Digital if operating over a wired Ethernet connection, without a 4G VoLTE enabled SIM present, requires a functional voice 'landline' phone service to be available.

Essence SmartCare UK

- Essence C7000 (2,3&4G+LTE SIM only)
 - VolTE testing to be completed by January/February 2025
 - VolTE rolled out to all devices February 2025
- Essence C7000 Combo (2,3&4G+LTE SIM plus ethernet connection)
 - VolTE testing to be completed by January/February 2025
 - VolTE rolled out to all devices February 2025
 - Ethernet cables always supplied with kit.

Everon

Telecare 2G only unit

Will be decommissioned prior to VM o2 action

• Telecare 2G + 4G unit

- Has Ethernet connectivity
- Has WiFi connectivity
- VoIP Development planned
- VolTE testing to be completed by March 2025
- VolTE rolled out to all devices April-June 2025



Legrand Care

Reach IP 2G (2G SIM & Ethernet)

- O Using the Tynetec Pulse CMP and the data available to us and our customers using the built in BI Dashboard, we are able to identify which of the Reach IP 2G alarms have only ever latched on to the VMO2 2G network. We have identified that this is a small number and for the alarms using the SIM only (ie. not utilising the built in ethernet port) replacement SIM cards will be made available ensuring the alarms identified will continue to operate on the restricted VMO2 2G network
- Additionally, enabling ethernet on Reach IP 2G alarms is a **no cost** option available. Where possible, this
 feature can be enabled vis the Tynetec Pulse CMP. If connectivity to all 2G networks were to fail, the alarm
 will automatically failover and communicate over ethernet with the ARC

*an ethernet cable is required and installation is to be carried out by the service provider

Reach IP 4G (4G SIM & Ethernet)

- Successful VoLTE testing carried out
- Currently working with CSL to plan full rollout of VoLTE meaning no reliance on 2G networks for voice
- Legrand Care will push out an over air update to enable VoLTE without any service provider intervention
- Additionally, enabling ethernet on all Reach IP 4G alarms is an **no cost** option available. This feature can be enabled via the Tynetec Pulse CMP. If connectivity to all mobile networks were to fail, the alarm will automatically failover and communicate over ethernet with the ARC

*an ethernet cable is required and installation is to be carried out by the service provider

Where requested, the RSIM can be supplied giving 3 pathways to the ARC for ultimate resilience



Minder Limited t/a Mindme

- Existing 2G Devices (Wrist Alarm & Locate, Pendant Alarm & Locate) (2G SIM only)
 - Testing of withdrawal of access to VMO2 network planned for March to June 2025
 - If devices are only using VMO2 then replacement SIM cards (or devices where absolutely necessary) to be sourced from June 2025 onwards
 - 4G alternative devices available for sale in Q1 2025
- Pendant Alarm & Locate (4G SIM only)
 - 4G Pendant Alarm will be available for purchase from late January/early February with VoLTE
 - 4G Pendant Locate may need to be a Pendant Alarm with the buttons disabled until late 2025
 - Testing VoLTE in existing 4G units to be completed by March 2025
 - VolTE rolled out to all existing devices by April 2025
- Wrist Alarm & Locate (4G SIM only)
 - 4G Wrist Alarm & Locate is being tested with a goal to have it available by April 2025
 - VolTE rolled out to all devices pre-launch

Possum Ltd



Novo IP/GSM (2G SIM only)

- o Testing of withdrawal of access to VMO2 network planned for March to June 2025
 - We are currently communicating with Mobius on this and have begun initial testing
 - Identification of units that only have access to the VMO2 network as a result of testing
 - This can be supplied from the Carephone Management Platform (Business Interface Module)
- o Replacement SIM cards to be sourced if required from June 2025 onwards- To be confirmed

• Novo IP/GSM (2G SIM plus ethernet connection)

- Testing of withdrawal of access to VMO2 network planned for March to June 2025
 - We are currently communicating with Mobius on this and have begun initial testing
 - Identification of units that only have access to the VMO2 network as a result of testing
 - This can be supplied from the Carephone Management Platform (Business Interface Module)
 - Replacement SIM cards to be sourced if required from June 2025 To be confirmed
- o Ethernet cables can be supplied -Confirmed however transmission path is dependent on ARC Platform capabilities

• Novo IP/4G VoLTE Ready (4G SIM only) Note: All Novo 4G models deployed have ethernet ports available

- VolTE testing to be completed by March 2025 Completed using SCAIP (analogue protocols omitted)
- VoLTE rolled out to all devices April to June 2025 Dependant on target ARC

Novo IP/4G VoLTE Ready(4G SIM plus ethernet connection)

- VoLTE testing to be completed by March 2025 Completed using SCAIP (analogue protocols omitted)
- VolTE rolled out to all devices April to June 2025 Dependant on target ARC
- o Ethernet cables can be supplied Confirmed however transmission path is dependent on ARC Platform capabilities



Attendee Q&A

Join the conversation:



Thank you

allIP@tsa-voice.org.uk