GSMA Services Showcase Live #2

Getting VoLTE Rollout Right

Wednesday 6 April 2022

Attendee Questions

I see there are 235 VoLTE Networks launched globally. How many support VoLTE Roaming?	We do not currently collect this data. It is estimated to be circa 70 - all S8HR.
It is predicted that by 2025 there will be 5.2 billion VoLTE capable devices - does this number includes VoNR / EPSFB?	Yes, this includes both.
What is the adoption of ViLTE?	There are 16 ViLTE networks globally in 15 countries. Both QCI=2 and QCI=8 video media bearers have been seen in these deployments.
The circa 70 VoLTE Roaming operators you mentioned - are these all commercial or does this include those in a testing / pre-commercial phase?	These are commercial.
@T-Mobile – you are looking to switch off CS Voice. What does this mean for inbound roamers whose home network hasn't yet migrated to VoLTE?	We have heard all of the drivers for this on this call, and it does put us in a challenging position, to bridge that gap. We have developed a hosted VoLTE solution so that for inbound roamers whose devices are VoLTE capable with VoLTE enabled, we can host the VoLTE locally and deliver back to the home operator a TAP file that recognises the data as VoLTE but charges as per the traditional CS method – we do that conversion for them.
@Truphone – can you give some examples of what you needed to tweak or fix on your networks to get them compliant with IR.25?	We were required to change our roaming restrictions on HSS specifically in Portugal, that were preventing the IMS services. This was because we were not yet live at the time of the testing. Besides that we had some minor challenges to overcome around the SIM configuration, and our multi IMSI capabilities, along with some provisioning issues – but

	overall the testing went very smoothly and we didn't have to make any major changes to the network configuration.
What will be the prerequisite for VoLTE in roaming? What will be solution for local-break-out calling e.g. Business Numbers?	All VoLTE roaming is based on S8HR architecture. Therefore, local (VPMN) numbers need to be routed through the HPMN. For some VPMN service numbers, this means the HPMN recognising them as such and looping back the call toward the VPMN.
Is Mobileum testing with real smartphones or robots? Does that reflect true user experience?	The network is tested against a Mobileum probe / test equipment. It appears to the network as a smartphone. The probe is compliant with 3GPP standards and GSMA profiles thereof. The tests run reflect the services run on each network and therefore does reflect a true user experience.
We have implemented VoLTE roaming but have been made aware that phones that aren't IPv6-ready may not be supported for emergency calls. What is the GSMA's stance on this?	GSMA PRD IR.92 states that "The UE and the network must support both IPv4 and IPv6 for all protocols that are used: SIP, SDP, RTP, RTCP and XCAP/HTTP". There are discussions within the GSMA Networks Group about whether this should be changed to say "The UE must and the network can support both IPv4 and IPv6 for all protocols that are used: SIP, SDP, RTP, RTCP and XCAP/HTTP". The key thing is that the UE should support both versions. The problem scenario raised has been reported to the GSMA previously. So, UE supports only IPv4 and the network only supports IPv6 for emergency and thus PS emergency call is not possible - which is an issue.
What is the difference if I, as an MNO, go directly to the manufacturers? What is the added value for doing this testing with the GSMA?	Smaller MNOs might not be able to get direct access to the larger OEMs. In addition, GSMA Interoperability Testing is done by an independent third party. By having the network accredited by the GSMA, the results of the testing are promoted via GSMA channels to OEMs globally.
I have already launched VoLTE. Is it still useful to perform the testing?	Yes, there may still be some problems in the network that can be identified. Furthermore, as a result of the promotion to the OEMs, the MNO can gain access to a greater number of devices for additional testing.