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ENHANCED VOLTE S8 HOME ROUTING

Simplicity, Without Sacrificing Functionality and High Quality

VoLTE roaming covers the case of a subscriber placing or receiving VoLTE calls while roaming in another visited VoLTE network (VPMN). Mobile operators need a simple yet high quality model for servicing VoLTE roamers around the world.

VoLTE ROAMING MODEL, S8 HOME ROUTED

Your customers will doubtlessly find themselves placing or receiving VoLTE calls while roaming in another visited network. The GSMA has approved the S8 Home Routed (S8HR) roaming model as an alternative option to the Local Breakout (LBO) roaming model, which uses the LTE S8 interface to transport all roaming end-user calls to the home network (HPMN). S8HR simplifies VoLTE roaming implementation, eliminating dependency on IMS infrastructure in the visited network and the need for IMS interoperability testing between the home network and each visited network. The S8HR model is provided by iBASIS as part of iBASIS' existing S8/GRX service for LTW data roaming.

KEY BENEFITS

Accelerates time to market for global deployment of VoLTE roaming

Leverages existing LTE S8 data transport

Uses existing LTE roaming agreement for voice roaming, eliminating the need for additional contractual arrangements for VoLTE roaming

Removes dependency on IMS infrastructure within the visited network, eliminates IMS interoperability testing

Addresses S8HR challenges identified by the GSMA, as well as other challenges

VoLTE Roaming Subscriber ···· VoLTE Visited Network — SGW — iBASIS IPX with S8/GRX Service — PGW — VoLTE Home Network ···· VoLTE Roaming Subscriber

FAST TIME TO MARKET, WHILE MAINTAINING KEY FEATURES AND HIGH QUALITY

iBASIS' enhanced S8HR solution provides capabilities that address the many challenges identified by the GSMA and others (see tables 1 & 2), allowing network operators to exploit the faster time to market of S8HR, without sacrificing functionality, security and high call quality experience.

BE THERE FIRST

Looking for a customized solution?

Talk to one of our specialists at solutions@iBASIS.net.

For more information, contact us at info@iBASIS.net or give us a call at +1 781 430 7500.

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TABLE 1: HOME NETWORK-RELATED S8HR CHALLENGES AND iBASIS SOLUTIONS

S8HR Challenge	iBASIS Solution	Operator Benefit
No VPMN emergency call support	Supports emergency calls for inbound roaming end users	Compliance with local regulations
Impact to quality of regional call – all traffic goes to home network for routing	Provides local routing for regional calls	Supports good user experience
Impact to SRVCC handover performance – signaling for handover goes home first	Minimizes impact to handover performance	Optimizes call continuity
IMS level Location Information may not be readily available to the HPMN	Allows the HPMN to identify roaming partners	Enables HPMN to charge users for voice roaming services to specific countries
HPMN must obtain number translation from all VPNMs for numbers that use local special formats	Simplifies HPMN's process for receiving and updating numbering plan data for multiple VPMNs	Reduces operational costs

TABLE 2: VISITED NETWORK-RELATED S8HR CHALLENGES AND iBASIS SOLUTIONS

S8HR Challenge	iBASIS Solution	Operator Benefit
No VPMN Lawful Interception (LI)	Supports Lawful Interception in VPMN	Compliance with local regulations
VPMN has no ability for voice service troubleshooting or fraud detection	Provides voice signaling trace	Facilitates trouble isolation and minimizes fraud disputes
No interoperability between S8HR and LBO	Supports interoperability between S8HR of the Visited Network (VPMN) and LBO of the Home Network (HPMN)	Increases inbound roaming revenue opportunities for S8HR VPMN
No VPMN data retention for roamer traffic	Enables retention of inbound roaming call records by VPMN	Compliance with local regulations

CUSTOMER SUPPORT AND QUALITY ASSURANCE

Secure and scalable S8/GRX network with full global connectivity

S8HR is part of a comprehensive IPX data services solution, supporting LTE roaming via S6/Diameter signaling

The iBASIS IPX ensures flexibility by supporting both S8HR and LBO business models

AVAILABLE OVER THE iBASIS IPX

The iBASIS IPX is a single "universal" multi-service IP interconnect for LTE signaling, S8/GRX, S8 Home Routed (S8HR), VoLTE, Premium Voice, Voice over IPX (VoIPX), SMS, and SS7 signaling. It provides a robust platform for the development of new innovative mobile services.

The iBASIS IPX delivers high-quality voice and data services for fixed and mobile operators as well as ISPs, content providers, and other service providers. The network covers a growing global footprint that includes all active LTE and GSM mobile operators and provides high reliability, security and global reach through managed IP connectivity. Based on GSMA specifications, the network ensures high quality and security through physical and logical separation from the public Internet.

ABOUT iBASIS

iBASIS is the leading communications solutions provider enabling operators and digital players worldwide to perform and transform. Powered by Tofane Global, iBASIS represents an estimated USD 1+ billion in annual revenue, is the third largest wholesale voice operator, ranks as the Top 3 LTE IPX vendor with 700+ LTE destinations and serves 1,000+ customers across 18 offices worldwide. iBASIS optimizes access, connectivity, and value-added solutions, so customers achieve high return on voice, mobile data, and IoT requirements to be first in their respective markets and in the digital era.

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