HGC-IPX Service

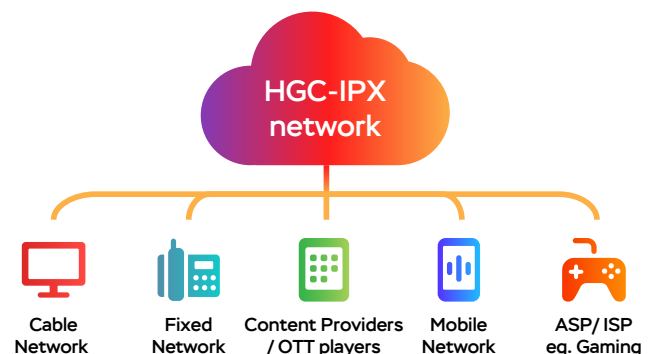## A quality-based solution for IP Interconnect

HGC-IPX has been developed with reference to specification of GSMA IR34. It is a single private IP network that interconnects fixed and mobile network operators, application service providers and content providers for the provision of multiple services such as data roaming, BlackBerry, voice and video traffic, LTE roaming and mobile signalling. Leveraging MPLS technology, the highly-secure HGC-IPX service provides QoS for multiple traffic types, allowing operators to categorize their traffic into different classes and prioritize across the IPX network to its roaming and inter-working partner.

HGC-IPX QoS – Class of Service for different traffic types

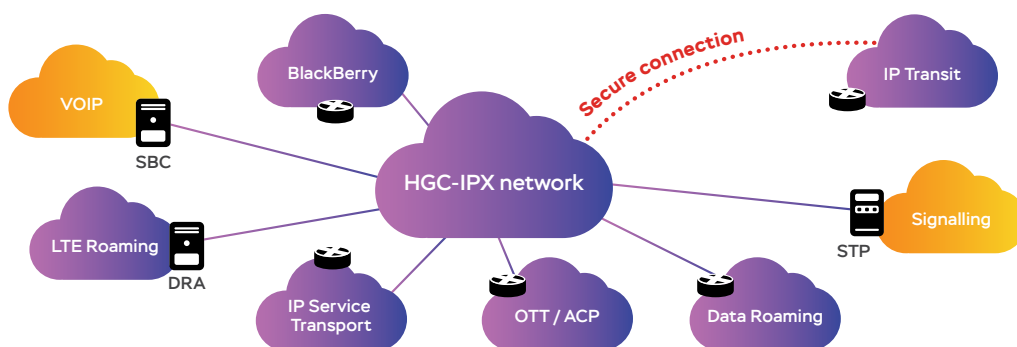| Class of Service	Traffic Type	Service Examples
■ Platinum	■ Conversational	■ VoIP, Video Conferencing
■ Gold	■ Streaming	■ Audio and Video Streaming, Online Gaming, PoC, Signalling
■ Silver	■ Interactive	■ Web Browsing, Instant Messaging
■ Bronze	■ Background	■ Email, MMS

IP services across networks

HGC-IPX provides an open connectivity platform to allow fixed and mobile operators and other service providers to exchange IP traffic. This enables unified serviced in which subscribers can access the same services with anyone at anytime and anywhere.

HGC-IPX network

Cable Network | Fixed Network | Content Providers / OTT players | Mobile Network | ASP/ISP eg. Gaming

HGC

GLOBAL COMMUNICATIONS

Converged Services Offering

HGC-IPX is designed to support the following services:

- VoIP-Delivering packetized voice to operators connected to HGC-IPX (on-net) or to any worldwide destinations (off-net) via the HGC Wholesale Voice Platform. An ENUM server has been equipped to provide address resolution from telephone numbers to IP addresses. Different signalling protocols (SIP/SIP-I) and media codes including HD voice are also supported.
- BlackBerry – Delivery of BlackBerry traffic to RIM via six connection points in Hong Kong, Singapore, Paris, Amsterdam, Chicago and Dallas
- Signalling – Signalling (via IP SIGTRAN) transit to roaming and inter-working partners
- Data Roaming – Data transport between the visited mobile network and the home network operator in roaming scenarios
- IP Service Transport – Transport of any IP services on a bilateral basis with end-to-end QoS
- LTE Roaming – Relay Diameter signalling messages to roaming partners. Support for interoperability between mobile network operators where different Diameter signalling implementations will be adopted
- IP Transit (Optional) – Internet backbone access over secure connections

Features	Benefits
■ Converged Services offering	■ Supports multiple services in a single platform
	▪ Voice and video traffic ▪ Signalling
	▪ Data roaming ▪ LTE roaming
	▪ BlackBerry ▪ IP Transit
■ Performance guarantee over MPLS network	■ Enables set up of virtual private, secure network ■ Enables customers to categorize their traffic into multiple classes and prioritize throughout the IPX network to inter-working partners ■ Provides strict SLA commitment to improve end-user experience
■ High diversity of IPX network facilities	■ Link redundancy: duplicated connections ■ Network redundancy: all IPX components are duplicated to avoid any single point of failure ■ Network diversity: IPX equipment is deployed in different geographic locations to achieve high system availability ■ Service carrier diversity: peering with multiple carriers to eliminate the service impact from an outage at a single carrier
■ Full support solution	■ Includes transcoding and signalling conversions ■ Real-time network performance monitoring reporting tool