



## **que-X Satellite Access Solution** **Ku-Band Service** **Value Offer**

The **que-X** Ku-Band satellite access service is a satellite broadband entry level access solution that provides two-way IP communication.

Quick Facts	
<b>CONNECTIVITY</b>	Remote sites in Africa to teleport in Johannesburg, South Africa.
<b>INDUSTRIES</b>	Security, IP video broadcast, Internet service providers, business & corporate.
<b>ACCESS SERVICES</b>	<ul style="list-style-type: none"> <li>Broadband Internet access</li> <li><b>HotZONE</b> Wi-Fi access services</li> <li>Corporate data networks</li> <li>Open-access integration at Teraco data center</li> </ul>
<b>FEATURES</b>	<ul style="list-style-type: none"> <li>Broadband up to 4Mbps services</li> <li>Small to medium networks (up to 100 PC's)</li> <li>Point-to-multipoint managed services</li> <li>High availability, better than 99.5%</li> <li>Customer specific network solutions</li> </ul>
<b>TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>Ku-Band</li> <li>Hellas-Sat 2 and New Dawn footprints</li> <li>iDirect DVBS2 with ACM Evolution</li> <li>Xiplink data acceleration and optimisation</li> <li>1.2m customer equipment terminals</li> </ul>
<b>SUPPORT SERVICES</b>	<ul style="list-style-type: none"> <li>Remote customer monitoring portal</li> <li>24 x 7 x 365 Monitoring</li> <li>Telephone support during office hours</li> <li>After hours standby</li> </ul>



The **que-X** Ku-platform is an ideal solution for mobile access services such as security and broadcast.



**que-X** is developed using the world leading iDirect Evolution satellite technology with DVB-S2 for efficiency and ACM for reliability.



Open-access integration between the satellite network and customer terrestrial networks are available at the Teraco data centre.

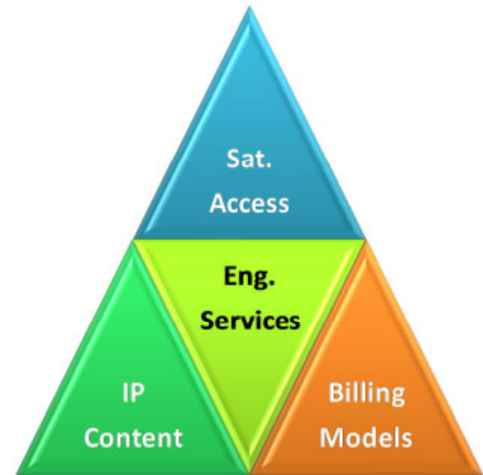
## Key Advantages and Benefits

### Solution Engineering

The **que-X** satellite access solution is the result of Q-KON's more than 10 years experience in the design, development and operation of satellite services for the African market.

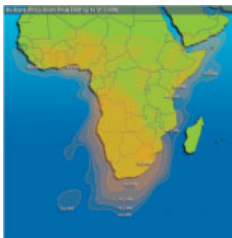
Q-KON is focused on providing customer centric solutions that are developed to meet your specific requirements and can include:-

- Flexible billing model options.
- Customer specific service profiles incl. private carriers and dedicated circuits.
- Telephony and video conferencing solutions.
- Integration with existing MPLS networks.



### Satellite Coverage

Hellas-Sat 2 which provides linear Ku-Band satellite communication services over Southern Africa. The satellite is positioned at 39° east longitude and accommodates 30 x 36MHz Ku-Band transponders.



Intelsat New Dawn which provides linear Ku-Band satellite communication services over Africa. The satellite is positioned at 33° east longitude and accommodates 8 x 73MHz & 8 x 36MHz Ku-Band transponders.



Southern Africa Ku-Band

Service Definition	Equipment Included
Ku-Band remote (up to 512kbps transmit)	1.2m Ku-Band Tx/Rx antenna; wall-mount bracket; 3W Ku-Band BUC, Ku-Band PLL LNB; 2x 30m IFL cable; iDirect Evolution X1 Satellite Router; Xiplink XA500C acceleration & compression engine ( <b>S-X</b> services only); installation & grounding material.
Ku-Band remote (up to 1Mbps transmit)	1.8m Ku-Band Tx/Rx antenna; kingpost mount; 3W Ku-Band BUC, Ku-Band PLL LNB; 2x 50m IFL cable; iDirect Evolution X3 Satellite Router; Xiplink XA500C acceleration & compression engine ( <b>S-X</b> services only); installation & grounding material.

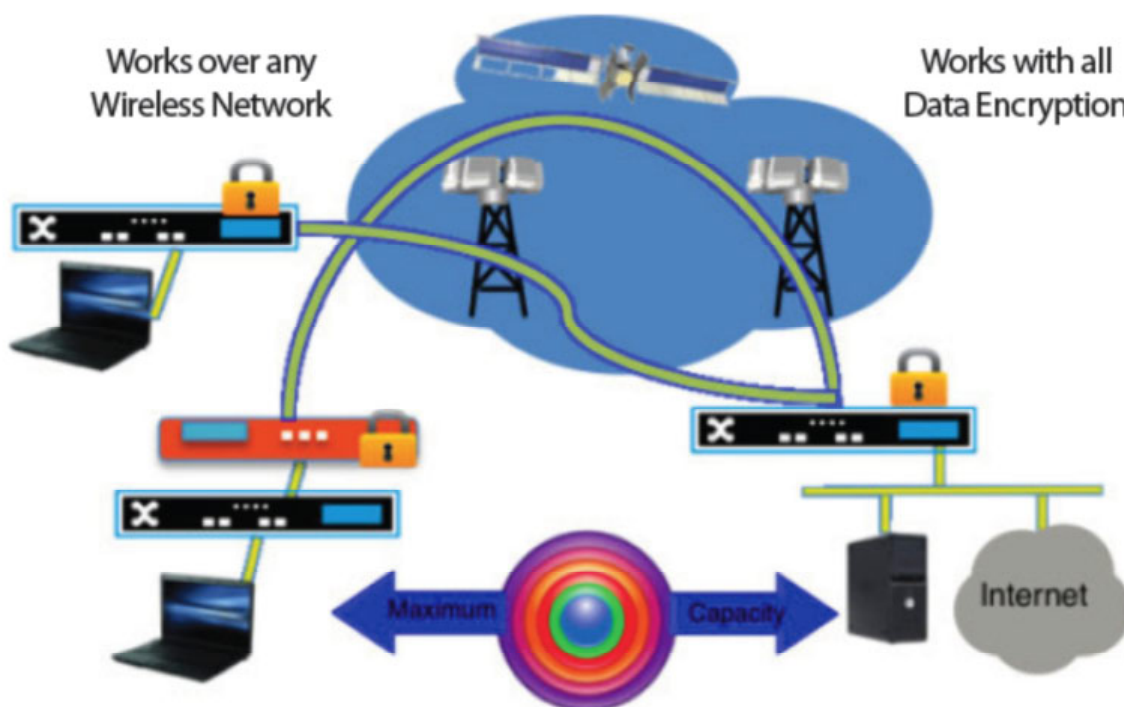
## S-X Service Acceleration Feature

S-X is a Satellite Acceleration option built into the **que-X** satellite platform which improves user response and data rates while reducing costs. The S-X option is implemented by the integration of the advanced Xiplink technology with the satellite network to offer content optimisation and service acceleration functions.



Xiplink appliances deliver the most advanced satellite optimization in easy to install appliances, right-sized for the bandwidth and number of users at each location. For small and medium sized sites, set-top-box appliances are easily installed without the need for trained IT staff. Optimisation includes a combination of protocol acceleration, streaming data compression and internet web browsing enhancements.

Performance Enhancements	
<p><b>Streaming Data Compression</b>  <i>Maximize the satellite link bandwidth</i></p> <ul style="list-style-type: none"> <li>• Delivers 2x to 10x in bandwidth gain</li> <li>• Reduces the number of packets</li> </ul>	<p><b>Security - Optimize Encrypted Data</b>  <i>Install with any type of encryption</i></p> <ul style="list-style-type: none"> <li>• Integrated IPSec VPN encryption option</li> </ul>
<p><b>Internet Optimization</b>  <i>Makes web surfing fast</i></p> <ul style="list-style-type: none"> <li>• HTTP Acceleration</li> <li>• Dynamic Web Cache hardware option</li> </ul>	<p><b>Voice Optimization</b></p> <ul style="list-style-type: none"> <li>• ROHC Header Compression</li> <li>• Packet Coalescing</li> </ul>



**S-X Satellite Network implementation using Xiplink data optimization technology**