VoLTE Evolution
The Wholesale Network is a unique project in Mexico, whose objective is to transform telecommunications in the country, close the digital way and promote competitiveness.

**¿Who is Altán?**

- Mexican company responsible for deploying and operating the Network under the terms and conditions established in the Public-Private Association (APP)

- **Main Goal:** Connect 100% of Mexicans, reduce the digital way, promote competition and provide a neutral, non-discriminatory service.

**Social Coverage**

- Unique provider with 4G in more than 60K locations.
- Unique single provider in 30K locations.

**Red Compartida has national coverage**

- Current deployment of own Population coverage: 70.66%
- Altán + Partners 2023: 94.3%

- 8.4M active end users currently.
- Presence in 87 Magic Towns.
- Coverage of more than 50% of the Social Coverage Plan.
- More than 95,000 communities with fewer than 5,000 citizens already have coverage.
How do we operate?

We convert the 700MHz spectrum into capacity, which is sold to virtual mobile operators for marketing to their end users.

- Next Generation 4.5LTE network that allows rapid evolution to 5G
- Speed up to 100Mbps per end user for a superior internet experience
- We support all the business models that an MVNO requires, from Full MVNO to resale models
We are pleased to share that the capability set out in GSMA PRD IR.25 was successfully demonstrated and the GSMA.

VoLTE Interoperability Network Test passed.

Definition of a test matrix covering all network type combinations and IMS profiles

- Type-0 – LTE launched
- Type-1 – VoLTE launched
- Type-2 – VoLTE & SMSoIP launched (CS-emergency)
- Type-3 – VoLTE & IMS Emergency call (legacy SMS)
- Type-4 – All IMS based services

<table>
<thead>
<tr>
<th>Operator Redes</th>
<th>MCC/MNC</th>
<th>Tipo de red</th>
<th>Perfil IMS</th>
<th>Fecha de finalización de la prueba</th>
<th>Certificado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altan Redes</td>
<td>334 140</td>
<td>Tipo 4 – VoLTE, SMSoIP &amp; IMS de emergencia</td>
<td>Voz y SMS-2</td>
<td>16/12/2022</td>
<td>2022-NT-4599</td>
</tr>
</tbody>
</table>

Test Overview: Test Success Details - 2022-12-15 20:00 to 2022-12-15 21:00 UTC+01:00

<table>
<thead>
<tr>
<th>Testcase</th>
<th>Test Type</th>
<th>Test Description</th>
<th>S-MeID</th>
<th>S-MSISDN</th>
<th>S-IMSI</th>
<th>S-Number</th>
<th>S-Location</th>
<th>B-MeID</th>
<th>B-MSISDN</th>
<th>B-IMSI</th>
<th>B-Number</th>
<th>B-Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMS_Register</td>
<td>2012-12-15</td>
<td>PASS</td>
<td>mr.atlan</td>
<td>3341401426804496</td>
<td>+525646585986</td>
<td>Mexico-Altan-CONEX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VoLTE_MO_External</td>
<td>2012-12-15</td>
<td>PASS</td>
<td>mr.atlan</td>
<td>3341401426904480</td>
<td>+525646585988</td>
<td>Mexico-Altan-México</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VoLTE_Emergency_Call</td>
<td>2012-12-15</td>
<td>PASS</td>
<td>mr.atlan</td>
<td>3341401426804490</td>
<td>+525646587016</td>
<td>Mexico-Altan-Hermosillo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMSoIP_MO_MTF</td>
<td>2012-12-15</td>
<td>PASS</td>
<td>mr.atlan</td>
<td>3341401426904480</td>
<td>+525646585988</td>
<td>Mexico-Altan-CONEX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VoLTE_MO_MTF</td>
<td>2012-12-15</td>
<td>PASS</td>
<td>mr.atlan</td>
<td>3341401426804490</td>
<td>+525646587016</td>
<td>Mexico-Altan-Hermosillo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Network Test Certificate

[Certificate Image]
NSX was used to fix Automatic APN configuration in Apple devices

Scenario: Apple devices have no data service or internet sharing if you don't set the APN manually.

Resolution: The APNs were uploaded on the GSMA NSX platform, Altán uploaded on April 29 and was verified and tested on June 24 in validation of Apple devices.

Apple requested to validate the fixes included in the Beta version of iOS 15.6, Altán validated calls waiting, data APNs were corrected, and internet sharing APNs were added.

Apple indicated all fixes would be included in the next release of iOS starting on September 22.

This service enabled 8% of our active fleet with automatic configuration
THANK YOU

If you have any questions, please contact us

oswaldo.montes@altanredes.com