



Nexus **ROAMER**

## Global Roaming Test Service

- ▶ A Managed Test Service giving easy access for outbound testing
- ▶ Automated global roaming tests to increase customer satisfaction
- ▶ Improves customer experiences to protect roaming revenues
- ▶ Audit and manage roaming partner Service Level Agreements
- ▶ Investigate and detect SIM boxes
- ▶ Reduce costs while maintaining customer satisfaction



**NEXUSTELECOM**  
NETWORK AND SERVICE INVESTIGATION

# Automated testing for your global Roaming Services to protect revenues

**NexusROAMER provides cloud based automated testing of global roaming subscriber service to ensure roaming service quality when your customers are visiting foreign networks. Roaming service quality assurance is a key element of Customer Experience Management. High quality, reliable service delivery is critical for pleasing your high revenue customers again and again.**

## NexusROAMER Test Service

Nexus Telecom's globally located Air probe interface network offers network operators automated service testing for their out-bound roaming mobile customers. To reduce churn and maintain high quality roaming services, mobile network operators test selected popular country destinations and international network roaming services.



## Protect roaming service revenues

- ▶ Mobile operators are able to test and verify roaming service functioning and quality in foreign countries, especially as a member of a global alliance roaming network
- ▶ Operators can detect roaming service failure or degradation through automated testing and alarming to protect and increase roaming revenues
- ▶ Foreign country roaming service tests detect SIM boxes in your network which cause degraded service quality and loss of interconnect revenue

## Managed Test Service

Nexus Telecom hosts a cloud based global Test Service accessed through a web interface. The system offers operators a user-friendly test environment without the need for CAPEX investment.

## Easy and flexible testing

With a cloud based test system, operators have no hardware deployments necessary to test roaming services and international connections globally. Users are able to change testing preferences and schedules to match their testing needs. Flexible test selection and test campaigns are scheduled in cycles, with results available for export from the NexusROAMER Test Service.



## Operator SIM cards in Zurich

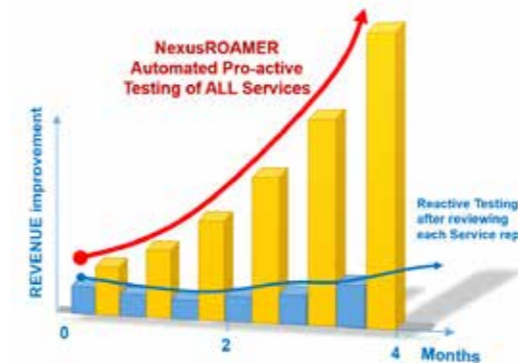
Nexus Telecom performs the requested tests globally with SIM cards stored in Zurich, Switzerland and virtually accessed by the global air interfaces in the chosen test country locations.

# E2E Quality & Performance Testing

## Use Cases

### Automated global roaming tests

Today's advanced roaming revenues benefit from automated test systems for roaming service assurance. If customers are pleased with their roaming experiences, the potential for roaming revenue growth is much higher and discourages those buying foreign SIM cards.



### Detects roaming service failures

Continuous testing at regular intervals provides early detection of out-bound roaming service quality degradation. To protect revenues and prevent customer churn, operators perform active international voice calls and data service testing in selected popular foreign mobile service providers.

### Steering of Roaming (SoR) checks

Roaming Intelligence systems detect abnormal trends of customer behavior in partner networks where SoR is active. When alerted, NexusROAMER test reports are available for SoR configuration errors, investigating roaming functions and service quality in the alarmed destination(s).

### MVNOs test call support

Mobile Virtual Network Operators (MVNOs) are able to use NexusROAMER test calls to verify the financial billing accounts received from their network infrastructure provider. The number of calls and the service connection durations are verified so that MVNOs are confident of being billed correctly for all transactions.

## Roaming Revenue Assurance

Billing departments check the number of calls and the service connection duration to verify that customer are being charged for all transactions, as well as being billed correctly. NexusROAMER generates Test Calls in selected foreign mobile service providers with your SIM cards.

## SIM Box detection

Active testing from foreign countries detects international carriers directing calls through SIM box numbers. Investigating the test calls in your network will determine the location of the SIM box. This practice is illegal in many countries and generates significant interconnect revenue losses as well as degradation of service quality.

## Outbound Roaming Testing

Automated active out-bound roaming testing uses your SIM card to perform Location Update and service connection functions to simulate your outbound roaming customers in foreign mobile operators.

## Pre-paid SIM and USSD Testing

NexusROAMER active tests include roaming for pre-paid SIM customers and USSD commands. These tests check pre-paid service capabilities that are often affected after switch SW upgrades.

## Inter Carrier Quality Testing (ICQT)

Foreign mobile service provider's choice of international carrier can affect your customer's roaming service quality. NexusROAMER's automated active voice quality testing can detect degraded service before many customers are aware.

# Return on Investment guaranteed

## Business Case

Mobile service providers invest into network infrastructure and systems to guarantee high quality service delivery.

**Example:** Roaming services to a popular tourist and business destination degrades, affecting hundreds of roaming customers.

Possible revenue loss over 1 week is significant.

NexusROAMER Test Service automatically tests previously known popular destinations (your selection) and would detect this degradation within 1 day (your programmed test interval). Potential revenue saved for such an incident easily gives an excellent ROI in the first months.

## Test Service extension for existing NexusVERIFIER

The Test Service offers an attractive extension for existing Nexus-VERIFIER customers. Your SIM cards, selected country Air EUPs (End User Probes) and a test contract are all that's required to access the global roaming testing.

Users are able to extend their home mobile services and inbound roaming testing by configuring and scheduling their own outbound test campaigns using the NexusROAMER Test Service global Air EUPs.

## Key Benefits

### Saving manpower resources

Fully automated tests and results are available with easy and immediate access. This allows for minimum manual intervention and fast execution times with 24/7 continuous test patterns and very accurate measurements that would not be possible with solutions requiring manual intervention. NexusROAMER automated testing leaves your roaming department free to plan better roaming packages and grow roaming revenues.

### Minimize global roaming outages

NexusROAMER's automated regular global roaming tests detect any global roaming service degradation.

### Easy and simple to deploy

- ▶ No hardware for Operator to deploy – only SIM cards.
- ▶ Select outbound roaming tests in over 100 countries.
- ▶ Each Operator can customize their Test Service.
- ▶ Easily add countries and test schedules as required.



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