

# Roaming Assurance

## Introduction

For most wireless operators, roaming traffic is only a small portion of the total traffic volume, but it nevertheless represents a very profitable revenue stream that contributes significantly to the total revenue. In fact, up to 20% of the overall service revenue may come from roaming (for some operators, for example in the Caribbean, this figure is actually significantly higher.)

With Jupiter, the market leading Customer Experience Management (CEM) system from Polystar, operators have access to report packages that have been specially developed for roaming analysis. Within this single tool, a large set of dashboards, reports, and KPIs (Key Performance Indicators) can be used to analyse performance for both inbound and outbound roamers. The system also provides full support for Global Roaming Quality (GRQ) reporting as specified by the GSMA (the GSM Association).



In addition to the essential customer and network aspects, Jupiter also provides functionality that will help operators to identify how if/how their roaming partners using roaming steering/anti-steering.

## Become aware with Jupiter

Polystar's roaming solutions rely on the OSIX probes to capture, non-intrusively, all relevant signalling information generated by roamers (inbound and outbound). Whether you are looking to find out where in your network inbound roamers are lost or gained, create GRQ reports, or perform detailed network monitoring, Polystar makes the roaming activity inside and outside your network visible.

## Inbound roaming

Inbound roaming traffic is a significant source of revenue for any operator. As an example, even for a fairly small country in central Europe, the total value of inbound roaming is estimated at 200M€ per annum. The competition to obtain visitors is fierce; hence it is of the utmost importance to provide a mobile network with the highest possible quality and coverage at visited spots.

In addition to information related to network performance and service quality, Jupiter provides the operator with vital marketing intelligence, such as where in the network roamers are gained, where are they lost, how long do they stay on the network, and what sort of traffic are they generating.

Last but not least, another vital piece of intelligence for inbound roamers is information that clearly identifies which roaming partners are applying Steering of Roaming (SoR) against the carrier.

## Outbound roaming

Keeping track of outbound roamers is critically important, especially for carriers focussing on the business/corporate segment. According to research by Informa Telecoms & Media, corporate customers generate approximately 65% of the total roaming revenue of the mobile telecom business. With this in mind, if the service quality does not meet expectations, an entire corporation may churn their users to a competing operator.

Furthermore, according to GSMA, all kinds of anti-SoR activities are strictly prohibited--by any visited network or the involved carriers, as it is the home operator's right to prefer or not prefer to use a roaming partner at any given time. By using the Jupiter system, the operator will be able to analyse all the signalling data exchanged between the home network and the roaming networks. The observed data is used to detect and alarm, in near-real time, all kinds of anti-SoR actions made against the HPLMN. Based on the same data, specific reports and proofs can be generated, regarding these anti-SoR activities.





## Increase roaming QoS – GRQ

Polystar has been a pioneer in the area of GRQ, and was the first quality assurance vendor in the world to go through the self-certification scheme offered by GSMA.

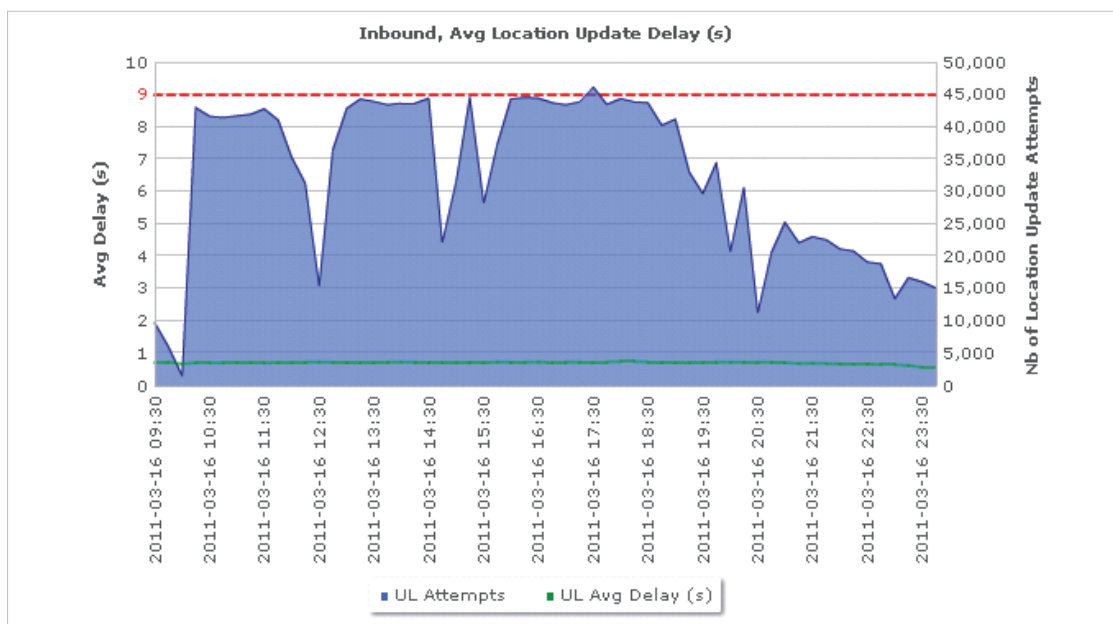
One of the prime objectives of the GRQ initiative was to define a framework to ensure that quality results could be comparable between the home and visited networks. The GRQ framework incorporates a list of 40 KPIs for voice, SMS and mobile data, covering the five service categories (Network access, Service accessibility, Connection establishment, Connection sustainability and Connection quality). The Jupiter report system automatically generates the KPIs defined by the GSMA, and presents the result in an easy-to-read graphical interface.

## Double your inbound roaming traffic using GRQ

Telenor, one of Polystar's global customers, has been using the GRQ reporting functionality from Polystar for a long time. Working in accordance with the GRQ framework, Telenor has been able to achieve some extraordinary results, providing direct revenue impact.

For inbound roamers the company is actively monitoring the perceived service quality, using the GRQ framework, for network/service accessibility and connection quality, especially on interconnect traffic.

This focus on service quality has seen the average call length increase from 2 minutes to more than 4 minutes—a traffic increase of over 100%<sup>1</sup>.



## Why Polystar?

Polystar is the premier supplier of Service Assurance, Network Monitoring and Test Solutions to leading telecom operators, service providers and network equipment manufacturers around the globe. Polystar's innovative product portfolio supports the complete lifecycle of new services and technologies—from design, pre-deployment verification and stress-testing, through roll-out, down to network assurance and service management of in-service mobile, fixed, IP or converged networks. Polystar is recognised as one of the fastest-growing companies in Sweden. Since its establishment in Stockholm in 1983, it has experienced a continuous and sustainable growth, and evolved to a global presence, serving its customers in over 50 countries.

<sup>1</sup> These results have been published by Telenor via the GSMA, and a PowerPoint document is available at the GSMA Infocenter: [https://infocentre.gsm.org/cgi-bin/securenonprdownload.cgi/grqaw1\\_01\\_grq\\_status\\_and\\_business\\_case\\_sep09\\_ic\\_286900.ppt?286900&ppt](https://infocentre.gsm.org/cgi-bin/securenonprdownload.cgi/grqaw1_01_grq_status_and_business_case_sep09_ic_286900.ppt?286900&ppt)