



# **Syniverse RoamMonitor: Operator Success Cases**



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## Introduction

Mobile phones have become indispensable tools in consumers' everyday lives, and new technologies have enabled data use to skyrocket. These two trends have given rise to the risk of bill shock, or an unexpected increase in a mobile subscriber's monthly bill, which is now seeing heightened media scrutiny, negatively affecting some mobile operators.

In the United States, a recent analysis conducted by the Federal Communications Commission (FCC) revealed that one in six mobile users have experienced bill shock. Furthermore, 84 percent said their service providers did not contact them when they were about to exceed their allowed minutes, text messages or data downloads. More than one-third of subscribers who experienced bill shock said their bills jumped by at least \$50, and 23 percent said the increase was \$100 or more.

In the European Union, bill shock risk has been addressed by a regulatory intervention effective 1 July 2010. Under the new regulation, mobile operators are obliged to offer their customers a monthly cut-off limit of €50. Other limits can be offered to the subscribers, yet customers need to make a deliberate choice in order to benefit from the higher cut-off limit. Furthermore, under this EU regulation, operators must send a warning to subscribers when they hit 80 percent of the chosen limit.

Although the terms of use are often clearly spelled out in subscribers' contracts, unexpectedly high bills generate poor user experiences, leaving operators to face the threat of losing a customer and the associated revenues. The problem is that many subscribers struggle to discern exactly how much data they're using, including:

- How many streamed videos make up a megabyte?
- Can I afford to upload vacation photos to my social networking site?
- Will I arrive at my destination using my phone's GPS navigation before incurring an overage charge?

These are the types of questions that drive subscribers to shy away from using more mobile data. Subscribers worried about the potential of receiving a huge bill yields lower ARPU for operators and creates a major concern for the flourishing mobile data ecosystem.

## The Operator Challenge

**How can operators improve subscribers' experience and reassure them they will not face a costly surprise at the end of their billing cycle?**

Subscriber data usage should be monitored in real time whether the user is on his or her home network or while roaming, and proactive alerts should be sent before the user reaches his or her pre-defined thresholds. An aware and confident subscriber will use mobile applications more comfortably, resulting in more data usage and ultimately more revenue. By providing monitoring and alerting capabilities, an operator can demonstrate its commitment to customer satisfaction and quality of service, mitigating churn and driving loyalty and ARPU.



In addition to promoting customer retention, monitoring data use in real time can help drive operator revenue by identifying heavy data users and up-sell them to premium plans. Another added benefit of real-time data monitoring is the ability to mitigate revenue leakage by alerting operators of potentially fraudulent or excessive usage, allowing operators to proactively end subscriber usage sessions before becoming too costly.

Operators also need to address the wider topic of how subscribers can personalize and manage their services on an ongoing basis. There are multiple complementary actions operators can assume to implement this strategy:

- **Empower subscribers** with the flexibility to set up their service usage thresholds via an intuitive interface. Several operators allow subscribers to update/modify their personal settings and define personalized service usage limits.
- **Allow easy and transparent access** to account information, helping subscribers understand their service usage and manage it more proactively. Many operators provide this information via an online self-service subscriber portal.
- **Provide proactive usage information** to subscribers about thresholds, including approaching monthly limits and roaming charges. Proactive notification is essential to build consumer confidence and minimize bill shock.

Real-time data monitoring allows operators to keep subscribers happy, helps maximize profits and builds loyalty, making this type of solution a must-have for operators that want to truly capitalize on the explosive growth of mobile data.

### **The Syniverse Anti-Bill Shock Solution: RoamMonitor**

RoamMonitor, the Syniverse anti-bill shock solution, minimizes operator bad debt and increases customer satisfaction and data revenues. RoamMonitor is designed to help operators reduce fraud, revenue leakages and uncollectible bills by providing real-time data usage notifications as subscribers use their data services domestically and while roaming.

RoamMonitor improves user experiences by providing information about subscriber-specific data tariffs, usage accrued and money spent with customized SMS or email alerts. These alerts help inexperienced roamers safely use their data service without the fear of unexpected charges and promote transparency between the subscriber and operator.

RoamMonitor key features are:

- **Technology-agnostic solution:** The only commercially available anti-bill shock solution that supports both GSM and CDMA operators.
- **Fully available and tested service:** Currently operational in several Tier 1 and 2 operators serving a potential market of more than 300 million mobile subscribers.
- **Flexible and fully configurable solution:** Operators can rate data based on multiple criteria (roaming and domestic usage, subscriber plan, subscriber group, service used, visited destination, or billing period).



- **Multiple notification types:** SMS, email and SNMP traps provide real-time alerts on the actual costs incurred by the subscriber.
- **Advanced reporting features and operational interface:** An advanced dashboard tool can be used by the operator's internal bill shock prevention team and customer care. An operator's supporting team will receive the alerts in real time via the RoamMonitor user-friendly graphical interface, which includes a case management tool for optimal tracking and management of high usage subscribers.
- **Highly available architecture:** Redundant platforms ensure the highest service availability and optimal disaster recovery policies.
- **Innovative business model:** As a service bureau solution, RoamMonitor's core platform is hosted at Syniverse's facilities and requires minimal or no integration with operators' systems due to it is lightweight, cost-effective and relatively simple deployment.

While offering a variety of benefits to operators' current roaming business, RoamMonitor positions operators to further capitalize on mobile data as it continues its exponential growth trajectory. Additionally, RoamMonitor supports key mobile data bill shock prevention measures required to comply with legislative demands, including those imposed by the EU and currently being considered by the FCC.

### **RoamMonitor Case 1: North American Tier 1 Operator**

RoamMonitor was deployed in June 2010 by a North American Tier 1 operator with more than 90 million subscribers to address roaming bill shock. The operator required 16 data rate plans for roaming as its domestic rate plans offer unlimited data usage for a flat monthly subscription fee. In contrast, in a roaming scenario the data usage is capped to few hundred MB and the operator charges the extra traffic with "pay-as-you-use" tariffs, causing roamers to experience bill shock. Solving the roaming bill shock issue required complex modeling of multiple roaming tariff plans, and constant synchronization between a subscriber's profile and the wide range of roaming data plans available. Via the operator customer web portal, the subscriber can set or amend his or her subscriber limits in line with personal travel plans or financial limits. The operator is then able to apply the subscriber limits to RoamMonitor via a simple and flexible provisioning interface. Moreover, by effectively using the RoamMonitor dashboard user interface, the operator fraud team can quickly identify data-heavy subscribers and activate fraud management policies to assess each case and prevent substantial losses.

Since implementing RoamMonitor, the operator has seen a 10-time reduction in the number of customers (1,500 each month) who disputed their bills, significantly improving the overall operational results and business margins. Furthermore, by using RoamMonitor, this operator is now providing an excellent data experience to its roaming customers, leading to more confident use of data plans as well as significant reduction of subscriber churn.



## **RoamMonitor Case 2: South American Tier 1 Operator**

A South American Tier 1 GSM operator with more than 50 million subscribers deployed RoamMonitor in October 2010. This operator deployed the solution primarily to address the amount of uncollected invoices generated by roaming subscribers. Secondly, the operator aimed to improve consumer confidence in the adoption and use of data services. To achieve its main objective, the operator opted for a simple configuration with a default rating plan for all subscribers and four alerting thresholds. The first alerting threshold is sent to the subscribers, providing an SMS with information of the expended money during the current bill cycle. The remaining three thresholds generate alerts (SMS and email) to the fraud and support teams, allowing them to track high-data users and to prevent potential fraud cases.

With this basic configuration, in only four months, the operator reduced the amount of uncollected invoices by 50 percent, leading to a return of the investment related to RoamMonitor's yearly service fees in as little as two months.

## **RoamMonitor Case 3: North American Tier 3 Operator**

As the result of a new data abuse policy plan, a small North American CDMA operator with slightly more than 120,000 subscribers deployed RoamMonitor in October 2010. The operator was challenged to control its roaming data expenses that surpassed the company's total data revenues during high season months. In addition, the operator faced problems with domestic data usage that affected its overall profitability. After a seven-week implementation process, the operator launched RoamMonitor for roaming and domestic traffic with a single rating and alerting plan for each scenario. In both cases, the operator defined two courtesy alerts to the subscribers and two fraud alerts for the operator's personnel to track the most likely instances that impact margins for the operator. This simple configuration allowed the operator to control its roaming data expenses by proactively tracking and taking actions with their fraudulent subscribers, enhancing the user experience for their regular data users with courtesy alerts. As a result, RoamMonitor helped the operator realize profits from data services again.

### **About Syniverse Technologies**

Syniverse Technologies makes mobile work for more than 900 mobile operators, cable and Internet providers, and enterprises in over 160 countries. With unmatched expertise and more than 20 years simplifying the complexities of roaming, messaging and networking, Syniverse serves as the force at the center of the mobile communications universe, keeping people connected today and forging new connections for tomorrow. Nobody knows mobile like Syniverse.

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