



Case Study

Orange Côte d'Ivoire

Risk Management Best Practice

Future Proofing Roaming Revenues

Orange Côte d'Ivoire is a subsidiary of the Orange Group
Mobile Subscriber Base ~4 million

We have had the opportunity to work closely with Orange Côte d'Ivoire (OCI) since 2013, when the mobile network operator looked to XINTEC for a temporary and cost-effective solution to monitor both inbound and outbound roaming traffic for potential fraud.

Over the last 18 months, we have worked closely with OCI to upgrade their Fraud Management System (FMS) and deploy a Proof of Concept (PoC) regarding our Revenue Assurance capabilities. The final product delivered to OCI was fit for purpose and provided a new level of efficiency to the company.

In this study, we will discuss the challenges and results of the implementation process.

Case Study



The Challenge

In July 2019, OCI alerted us that their current FMS tool was triggering several spontaneous alarms, and the capabilities were no longer providing the support they needed.

A steady increase in international roaming traffic coupled with changes to GSM Association guidelines prompted a tightening of overall fraud controls which, if left unchecked, could further expose OCI to emerging fraud risks, particularly in relation to international revenue share fraud (IRSF) and subscription fraud.

Any discrepancies could potentially subject OCI to reputational damage and reduced customer loyalty if commitments were not upheld.

The Goal

To provide a solution, XINTEC organized an onsite visit to discuss the full scope of the new system. Our experienced representatives visited the OCI offices in Abidjan and gained immediate visibility of the customer's concerns and expectations.

Administrative challenges were evidence that legacy systems had reached capacity limitations, and the introduction of additional controls and automated file processing and monitoring was required.

The project would include a full upgrade of XINTEC's risk management toolset with the implementation of a PoC around the reconciliation of the roaming files.

Roaming Revenue Assurance

TAP and NRTRDE files, which transfer roaming usage data records, are structurally similar to one another. However, NRTRDE files are exchanged every four hours, whereas TAP files take up to 24 hours to process and exchange, and sometimes longer. Whereas charging information is exchanged in TAP records, it is not necessarily always available in NRTRDE records. However, both files should contain identical call detail records (CDRs) to ensure a successful reconciliation.

This is the principle of roaming revenue assurance. Differences that occur in the CDRs of these files require thorough investigation. Issues can result in challenges in collecting revenues, and it can compromise the integrity of the roaming billing process. This can lead to significant regulatory compliance issues.

Discrepancies within the two file streams can also unveil any breaching of Service Level Agreements by roaming partners regarding their roaming agreement obligations. This can result in risks of fraud (from missing NRTRDE) or missing revenue (missing TAP).

By implementing the PoC, we demonstrated the distinctive value of our Revenue Assurance capabilities. To provide this, XINTEC reconciled OCI's roaming files using our latest iGenuity™ Revenue and Fraud Management platform. It was important to our team to communicate that our system would cover both fraud and revenue assurance through a single platform and graphical user interface. It would provide necessary efficiency and additional security to OCI.

The Implementation

Eliminating the number of false positives and delivering a system with higher accuracy is essential. To eradicate false positives, the new system strategically cross-references the inputted rules, learning strategies, and call patterns, whereas the old system triggered alarms based on isolated individual rules.

Moving on from upgrading the FMS system, we prepared a Revenue Assurance PoC by comparing the data between the NRTRDE and TAP files. After carefully analysing the data sets, we were able to highlight discrepancies between the two feeds. By identifying roaming partners missing in either file types, our team was able to resolve the differences and implement advancements. In the end, we were able to report our results to the Fraud and Revenue Assurance teams and the CFO to improve security.



The Results

Through our work for OCI, we were able to address their concerns and implement a new system to enhance the performance of their business. The new FMS minimized the false positive rate by 80-85%, improving both efficiency and reliability.

The PoC we delivered highlighted the roaming partners in breach of their SLAs, therefore minimizing the risks of fraud or missing revenue for OCI.

The feedback from OCI has been positive, and we have since begun to transform the PoC into a full production system. According to OCI Chief Financial Officer, Mr. Cedric Kouakou, "As a provider, I regard XINTEC as more flexible, adaptable, and better suited to our needs than the larger providers. They fully understand our business and our relationship with them over time has proven invaluable for the mitigation of risk".