

# Customer Uses New BTS Revenue-Assurance Capabilities to Triple Profits

Case Study

Dialogic® MSP 1010 Multi-Service Platform Provides Flexibility and Reliability for Intrusive and Non-Intrusive Monitoring

## CASE SUMMARY

### Challenge

Because its customers in emerging markets were increasingly plagued by a loss of revenue caused by a variety of internal and external factors, BTS decided to offer a system that included reliable uplink monitoring and reporting along with end customer identification and appropriate routing, as required. Any methods employed would also have to be unobtrusive and acceptable to local regulators.

### Solution

Using its expertise and working with Dialogic and Stratus Telecommunications, BTS introduced a revenue-assurance system that can detect and prevent revenue loss in a variety of scenarios. The Dialogic® MSP 1010 Multi-Services Platform is an important part of the BTS system, which can provide either intrusive or non-intrusive monitoring. One customer was able to triple its profit with the BTS solution.



### Challenge

Telephone systems that process many millions of minutes per month can easily lose precious revenue through flaws in a system or deliberate mischief on the part of either carriers or end customers. As a premier provider of services in the wholesale market for many years, Business Telecommunications Services (BTS) became increasingly aware of the emerging market's need to prevent revenue loss. "We realized the complexity of the problem several years ago," according to Luis Benavente, Chief Technology Officer at BTS, "and we decided to focus our energy on a new revenue-assurance system, which would work in the many different customer environments we see in emerging countries."

One advantage that BTS had was its thorough knowledge of telecommunications technology – fiber, satellite, TDM, and IP. BTS also had a great deal of experience in interconnecting its own systems with many different telecom environments all over the world and under a wide variety of regulatory situations. And, perhaps most important of all, BTS knew what kind of equipment was available on the market, how easily it could be made to work together, and how reliable it was. "With all this knowledge and expertise, revenue assurance is a great fit for us," recalls Benavente. "We just needed to work with our equipment vendors to create the basic application, choose the right hardware, and find our first customer, which was not very difficult because of the emerging market's growing need."

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## Solution

When it contracts with a new customer, BTS can face many challenges, including old or mismatched equipment. As CTO, Benavente meets these challenges with his years of experience and his confidence in the equipment he is using, which includes the Dialogic® MSP 1010 Multi-Services Platform and Stratus Telecommunications' Emerging Networks Telecommunications Infrastructure Control Environment (ENTICE™).

## How Basic Monitoring Works

In a revenue-assurance deployment, the MSP 1010 is set up to monitor the SS7 links between the local and international operators, and the ENTICE platform controls the MSP 1010 and generates Customer Detail Records (CDRs). The BTS system can then check the CDRs for every destination in a country, run reports, verify that all the carriers are showing the correct information to the regulators, and perform many other functions for the customer. "We only need to monitor the inter-operator signaling links," explains Benavente. "We don't touch the bearer channels, so voice traffic moves directly from one operator to another. We only tap the links that carry the signaling."

## Processing Can Be Non-Intrusive or Intrusive

The MSP 1010 can be used in either intrusive or non-intrusive mode. When, for example, BTS is doing billing reconciliation for operators and regulators, the MSP 1010 is configured for non-intrusive mode. It monitors the signaling links through a Digital Access Carrier System (DACS), and the ENTICE platform generates the CDRs.

"We can just connect the monitor jacks from the DSXs, so that we do not affect traffic in any way," says Benavente, "or we can have the MSP 1010 control and process the signaling traffic. This is completely unobtrusive to the carriers and regulators, but when necessary, the ENTICE platform can instruct the MSP 1010 to block calls, restrict capacities, etc., and it delivers correct CDRs, so that we can document exactly what is happening in any type of report the customer requests."

## Fulfilling Special Customer Needs

But sometimes the problems are not with the operators, but with the end users. One of BTS's recent customers had many service issues. First of all, its billing and collection system was unreliable, which made collecting charges for postpaid calls very difficult and time-consuming. The customer decided to handle all GSM mobile and international calls on a prepaid basis only.

A second problem was that the client's switches were very old, allowing little control, and putting in a new switch would have been prohibitively expensive because the customer had so many T1 lines. But for BTS, the solution was a simple variation on its now tried-and-true system. "The first thing we did," recalls Benavente, "was to install an MSP 1010 and connect every SS7 link through the MSP. The great thing was that these connections were totally unobtrusive for the operators with the multi-point-code support on the MSP 1010, and no changes in the signaling network were required. Once the signaling links were connected to MSP 1010, we added a database to authenticate all the end customers via ANI [Automatic Number Identification] and to check if they had enough funds in their accounts to allow a call to be connected. If not, we dropped the call, and connected them to a customer service center where they could replenish their accounts. This prepaid solution worked extremely well!"

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## Results

BTS's revenue-assurance system has enjoyed many successes since it was first introduced in 2006, and is now working flawlessly in a wide variety of installations around the world. "We process on average of about 50 million minutes per box per month," according to Benavente. "One of our customers was able to increase revenue by 300% and then added 10% more minutes, so profit more than tripled."

The flexibility of the MSP 1010 has been particularly valuable. "The MSP 1010 has proven its worth to us in the many difficult situations. We are especially happy with its flexibility — we can, for example, both monitor and terminate traffic on the same box. Also the seamless way it interfaces with different networks is of great value. Each time we go into a new environment, we face unique challenges. If we need a new protocol variant or a satellite link, the MSP 1010 and ENTICE always come through for us."

Another advantage for BTS is its excellent reputation for dealing with the regulators who carefully monitor the telephone installations in the countries where they have deployed systems. "Regulators are very strict about reliability and ensuring that we can comply with local regulations. The MSP 1010 is a carrier-ready platform with 'five-nines' availability that supports redundant configurations, which is critical for us. Now, as we prepare to deploy our system in Africa, we can show the regulators there how well our system has worked elsewhere, which gives both us and the regulators confidence in BTS and the MSP 1010."

## About BTS

With more than 15 years of experience in the telecommunications industry, Business Telecommunications Services (BTS) is a worldwide provider of network services for carriers. A specialist in voice termination and fraud prevention for fiber, satellite, TDM, and VoIP networks, BTS offers high-value services with an excellent return-on-investment and outstanding customer service.

For more information, visit [www.bts-usa.com](http://www.bts-usa.com).

## About Stratus Telecommunications, LLC

Stratus Telecommunications is a leading provider of VoIP and converged service solutions for telecommunications service providers around the globe. The company's ENTICE solutions are used by many of the world's largest carriers and hundreds of small and mid-sized service providers that require solutions for integrating current and emerging network technologies.

For more information, visit [www.stratustelecom.com](http://www.stratustelecom.com)

## About Dialogic Corporation

Dialogic Corporation is a leading provider of world-class technologies based on open standards that enable innovative mobile, video, IP, and TDM solutions for Network Service Providers and Enterprise Communication Networks. Dialogic's customers and partners rely on its leading-edge, flexible components to rapidly deploy value-added solutions around the world.

For more Information, visit [www.dialogic.com](http://www.dialogic.com).

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Information about BTS and StratusTelecommunications has been provided by BTS and Stratus Telecommunications for this case study.