

## *Case Study – WTL Help Italian MVNO Connect*

### **Background**

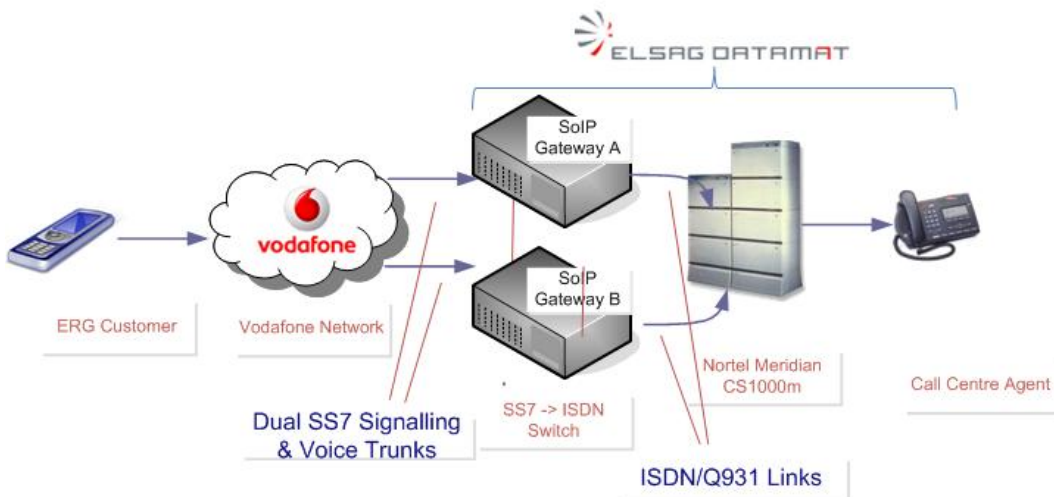
Leading Italian IT services company, Elsas Datamat has taken an MVNO license and has established a partnership with Vodafone Italia to deliver these mobile services. This has led to the need for call centre support for the Elsas Datamat customers. Elsas Datamat plan to use an existing Nortel Meridian Option 61 as the call centre platform. At this stage the solution is just required to handle inbound calls to the call centre.

The problem is that the Nortel Meridian has only ISDN Q931 signaling support whilst the Vodafone network expects to connect using SS7. Given the high profile nature of the application any solution selected had to be highly reliable and to deliver excellent quality for the customers calling in.

### **The WTL Solution**

Sintel Italia, WTL's reseller in Italy was contacted by Elsas Datamat's integrator to address the connectivity problem. Sintel worked with the customer to design a solution based on WTL SolP gateways. A fully resilient design was proposed using 2 physical units with connectivity duplicated across both SolPs. WTL's architecture allows multiple SolPs to be connected together and managed as a single "distributed" switch.

A particular requirement imposed by Vodafone was that the SS7 gateway should be able to support multiple Point Codes and operate in STP (Signaling Transfer Point) mode. As a fully-featured SS7 switch with 100s of successful network interconnects this was comfortably handled by WTL. SS7 deployment was achieved quickly and easily and passed the rigorous testing and quality control of both Elsas Datamat and Vodafone.



### **SolP Benefits**

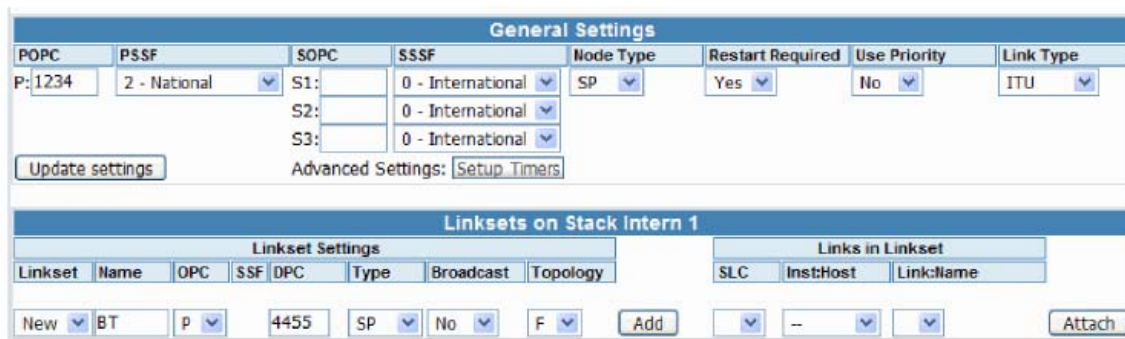
It was critical that the solution should operate in a resilient manner so that Elsas Datamat's subscribers could always have their calls answered. For this reason WTL's highly-rated distributed SS7 signalling ("DMTP3") was one of the key selection criteria. This feature allows the 2 physical links of a SS7 signalling link pair to be split across 2 different SolPs. The SolP units communicate to each other the state of their SS7 link and, in case of a

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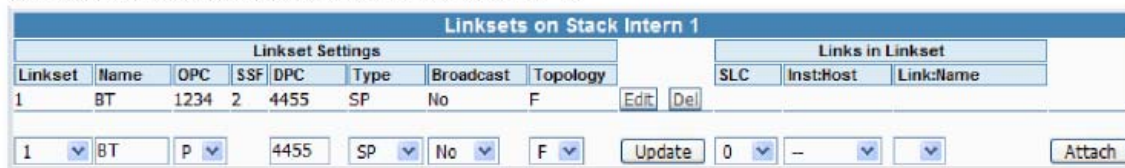
problem with the principal signalling link, the other takes over. The SoIPs are then connected to one another by Ethernet so they can be co-located or geographically split for even greater security.

Sintel Italia's Managing Director, Richard Andreelli spoke of the ease-of-use of the products: "In order to give the customer confidence it was valuable that Sintel could handle the support and installation ourselves. In a complicated application like this with different signalling connections and a bit of an unusual SS7 set up, it could have been tricky. However, WTL have created a fantastic web-based configuration tool [SW Config] which takes you through step by step and makes it really easy."



The screenshot shows the 'General Settings' section with fields for POPC (P:1234), PSSF (2 - National), SOPC, SSSF (0 - International), Node Type (SP), Restart Required (Yes), Use Priority (No), and Link Type (ITU). Below this is the 'Linksets on Stack Intern 1' section, which includes a table for Linkset Settings and a section for Links in Linkset. The Linkset Settings table has columns for Linkset, Name, OPC, SSF, DPC, Type, Broadcast, and Topology. The Links in Linkset section has columns for SLC, Inst:Host, and Link:Name. There are buttons for 'Update settings', 'Setup Timers', 'Add', and 'Attach'.

We can now see the BT linkset added as **Linkset "1"**:



This screenshot shows the 'Linksets on Stack Intern 1' section after the BT linkset has been added. The Linkset Settings table now includes a row for Linkset 1, with Name BT, OPC 1234, SSF 2, DPC 4455, Type SP, Broadcast No, and Topology F. There are buttons for 'Edit', 'Del', 'Update', and 'Attach'.

Figure 1: SW Config SS7 set-up screen

## About Eltag Datamat

Eltag Datamat is part of the Finmeccanica group, one of the world's leading industrial conglomerates. Eltag Datamat designs and develops high technology products, systems and solutions that stand out for excellent performance and reliability. Offerings in automation, security, transport, defence & space and information technology draw on expertise acquired in major projects of vital importance for "system Italy".

## About Sintel Italia

Sintel was formed in 1989 specialising in Computer Telephony and Security products. The company made rapid growth by focussing on a small number of high quality products and giving the best level of support to its resellers. The success is due to the expertise of the team, which today makes the company a first choice partner for any resellers, VARs and Systems Integrators in Converged Communication and Security Solutions. For further information on Sintel and its products, please visit [www.sintel.com](http://www.sintel.com)

## About WTL

World Telecom Labs is a Belgium-based company which has long been a leader in the provision of VoIP switches, Pre-Paid applications and signalling gateways for emerging carriers and telecom service operators. WTL has an installed base of 100,000s of voice ports with service providers worldwide switching billions of minutes of VoIP traffic using WTL equipment. For more information about WTL and its products, please visit [www.wtl.dk](http://www.wtl.dk) or email [sales@wtl.dk](mailto:sales@wtl.dk).