

Cable & Wireless and WTL Connect the South Atlantic

Background

Cable & Wireless South Atlantic serves the very remote and dispersed island settlements in their region. This includes Ascension Island, the Falkland Islands and St Helena. To maintain a high level of service for these relatively small sites C&W prefer to interconnect them and link them to the UK using SS7. A Siemens Realitis PBX is used on St Helena as the national switch as it is more cost effective than a conventional Class 5 public switch.. World Telecom Labs have supplied SS7 connectivity equipment to C&W for a number of locations around the world in the past. It was natural, therefore, that C&W should turn to them again for a project to connect St Helena to the international SS7 network. In addition, a particular problem with St. Helena is that due to the lack of an airport, it takes over a month to ship equipment there so reliability is critical.

WTL Solution

WTL worked closely with C&W to design a solution which would link the existing Q931- based Siemens Realitis PBX in St Helena to the UK and the Falkland Islands using SS7. The design had to meet the following conditions: -

- ✓ Full SS7 interoperability, transparent end to end
- ✓ Small starting configuration
- ✓ Ability to run SS7 signalling over long delay of satellite links
- ✓ Redundant design and Carrier Class reliability
- ✓ Self-install by customer
- ✓ Total remote configuration and debug capability

The solution uses a redundant pair of WTL SoIPs (combined signalling and media gateways). These support signalling conversion from Q931 to SS7 for the Siemens Realitis and direct SS7 connection to the Falklands and UK. As a bonus the flexibility of the SoIP also allowed it to operate in SS7 STP (Signalling Transfer Point) mode to give another route to the UK without needing to utilise more satellite capacity on SS7 signalling.

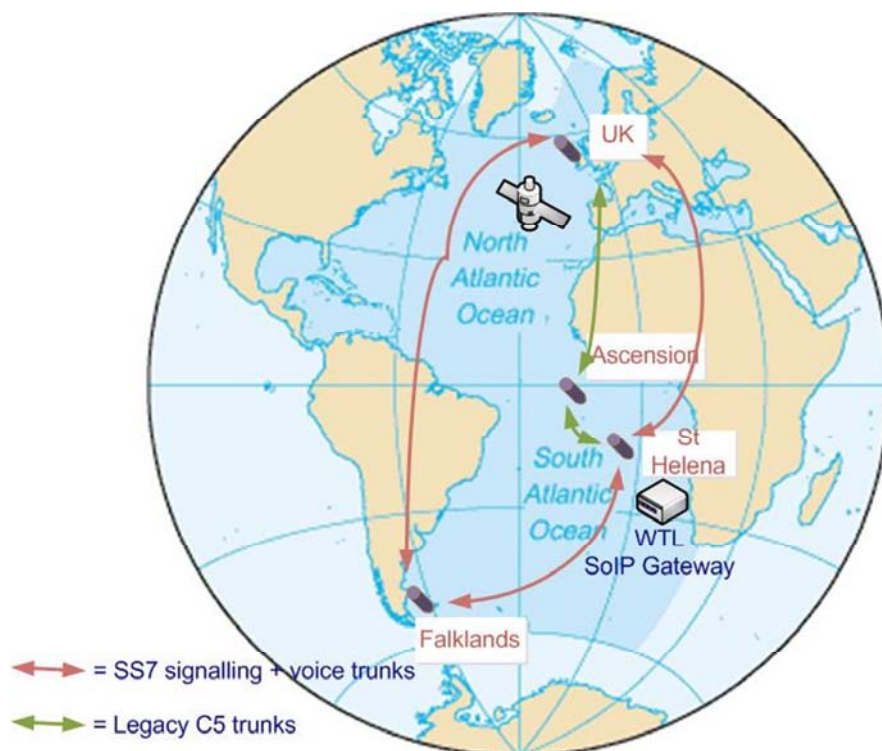
Following a comprehensive trial which covered voice, modem and real-time fax traffic, the first link back to the UK was deployed. After this had been proved the others were added successively. All were successfully tested and St Helena has now been incorporated as a live route in the C&W worldwide SS7 network.

Mark Heron, Network Design and Planning Manager Cable & Wireless South Atlantic Ltd was clearly delighted with the WTL solution, "I must express how good the support and assistance that we have received has been. This has been our first exposure to SS7 signalling and the guidance of the WTL engineers has made this transition much easier than it might have been. This gives me every confidence in the product as we move forward." Mark also added, "The solution now exceeds the original requirement and includes two direct routes (to the UK and the Falklands) and one STP route. Thanks to the WTL support team our SS7 solution is now fully implemented with a 'hot spare' configured to match the operational unit. "

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WTL Business Development Director Simon Pearson commented, "We have switches all over the world but this must be the most remote location we have ever installed. The serious side of this is that reliability must be extremely high particularly because in this project we are handling the island's main link with the outside world. Given those points, the fact that C&W chose us for this deployment is a great compliment."



About Cable and Wireless

Cable & Wireless is one of the world's leading international communications companies in 2 parts: CWI (formerly International) and Worldwide (formerly Europe, Asia & US). CWI is an owner and operator of leading regional telecoms businesses. Headquartered in London, it has four regional operations - the Caribbean, Panama, Macau and Monaco & Islands. CWI is a full service telecommunications provider offering mobile, broadband, domestic and international fixed line services, plus enterprise and managed service solutions.

Worldwide provides high quality managed IP services to the largest users of telecoms services across the world, delivering a market-leading product suite with an unparalleled customer experience.

Cable & Wireless South Atlantic is the telecommunications provider for St Helena, offering services including National and International telephone, International Direct Dialling, Internet, Broadband and television to this remote location in the middle of the South Atlantic.

For more information about Cable and Wireless visit <http://www.cw.com>

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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 signaling 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 or email sales@wtl.dk