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*Changing the Way the World Communicates* .....

### *WTL key component in Nigerian Number Portability*

#### **Background**

The Nigerian mobile space has grown to be the biggest in Africa ranked by the subscriber base and revenue and remains attractive despite the high cost of doing business. There are 4 major and many minor operators currently licensed and active.

The Nigerian Communications Commission (NCC) originally set the date for commencement of Mobile Number Portability (MNP) as long ago as May 2009. Recently the Executive Vice Chairman of the NCC, Eugene Juwah assured the country that MNP would be fully implemented before the end of the first quarter of 2013.

WTL became involved in this prestigious project in the second half of 2012. Existing customer ICN had won the contract to operate the MNP service in the country and called on a number of leading vendors to supply infrastructure and expertise.

#### **The Need for Portability**

Mobile Number Portability (MNP) is a very important concept enabling subscribers to preserve their numbers while switching to a different mobile network. This gives subscribers flexibility in the quality, price and variety of telecommunications services they choose to purchase. MNP thus promotes competition between telecommunications service providers which leads to lower telephone prices and improved quality of service. It ultimately reduces switching costs. Switching cost here can be considered to include not just the amount paid by the subscriber to switch to another operator but a broader definition including the cost of changing numbers on business cards, web sites, repainting signs and vehicles because of changed numbers, etc.

For all of these reasons, therefore, the MNP project in Nigeria is large, complex and very high profile

#### **WTL Involvement**

ICN have used SoIP Gateways for many years to give VoIP to SS7 interconnection within their voice network so were very confident about the performance and reliability of the solution.

In this application the particular role for WTL was to supply a variant of the SoIP SS7 Gateway to allow all operators to exchange SMS traffic from ported numbers. To do this WTL had to call on extensive SS7 signalling expertise to connect the IP-based Telcordia Messaging Hub to operators' legacy Mobile switches. The resulting SS7 to Sigtran gateway supports MTP3 on the TDM / legacy side and Sigtran M3UA in load sharing mode to the Message Hub. In between, an SCCP routing engine selects the destination operator from the prefixes found in the SCCP Called Party Address. The fact that the routing engine is based on tables allows processing a virtually unlimited number of prefixes. Full GTT (address manipulation) is possible, although not used in this application.

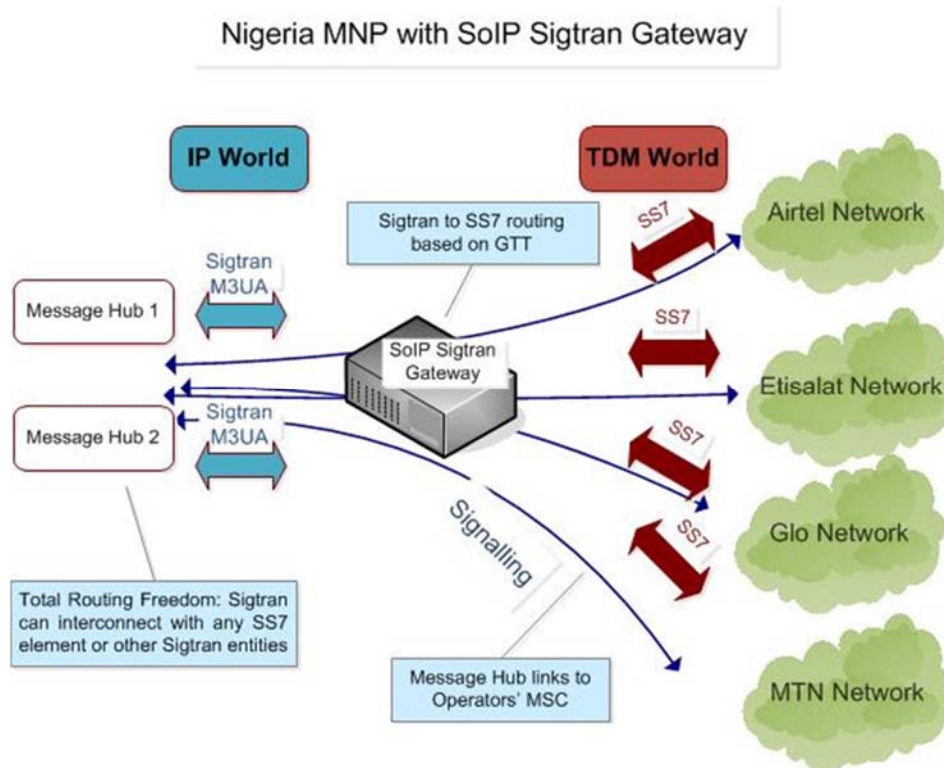
Each operator had its own particular way of wishing to connect to the Message Hub and the flexibility of the WTL SoIP catered for this. One Mobile Operator works on a different style of Network Indicators than all the others. The SoIP was able to cope with the situation by translating the MTP3

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route label as appropriate so that each side sees the NI that fits. Another of the operators had decided to provide 2 linksets for redundancy, The SoIP's SCCP routing engine supports that by allowing 2 DPCs (Destination Point Codes) to be configured per route. The DPC can be used in a primary/secondary mode or percentage load share.



ICN's project leader for MNP, Johnson Farotimi expressed his satisfaction with how the SoIP had fitted into the overall network design, "We involved WTL late in the project when we realised we had a signalling conversion / interconnect problem. We have been reliant on their equipment elsewhere in the business for many years so they were the first people we called. They reacted quickly and were a superb help in the test and debugging phase of the project. I don't think we could have been ready for the launch without them". Leigh Smith, WTL's Managing Director commented, "WTL were extremely honoured to have been chosen ahead of other major vendors active in this highly competitive market. This is a clear indication that we are being recognised as the vendor of choice for high performance IP to TDM signalling, and further proof of our commitment to the Nigerian and pan-African markets"

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### **About ICN**

Interconnect ClearingHouse Nigeria (ICN) is a company licensed by Nigeria Communications Commission (NCC) to provide and operate Interconnect Exchange Services throughout Nigeria

ICN is an independent third party, that is not in competition with the operators for subscribers and is focused on the twin issues of adequate interconnect capacity and prompt settlement of interconnect usage charges. ICN is in the best position to provide a lasting solution to interconnect issues in the Nigerian Telecom Industry. This is achieved by putting in place the necessary infrastructure, technology and business processes for effective and efficient interconnection. <http://www.interconnectnigeria.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).