One stop Shopping

Intercomms talks to Mikaël Schachne, Head of Data Product Management Belgacom International Carrier Services about the company's work with the GSMA's Open Connectivity Initiative and the launch of Belgacom ICS' Instant Roaming

Mikaël Schachne, Head of Data Product Management Belgacom International Carrier Services

Mikaël Schachne joined Belgacom in 2001 in the International Networks department.

Mikaël Schachne previously worked for Winstar Europe and Mobistar where he gains extensive expertise in the implementation of telecommunications networks in the fields of GSM, GPRS, Wireless Local Loop, IP and SS7.

After having successfully contributed to the development of mobile data services such as GRX, SMS and MMS Transit, he's now in charge of the Mobile Data product portfolio at Belgacom International Carrier Services.

He's graduated from the Brussels University Applied Science Faculty (Belgium) as a Civil Electrical Engineer specialised in Electronic and Telecommunications.

Q: What's the status of your involvement in the GSMA's Open Connectivity Initiative?
A: Over the past twelve months, we have continued to dedicate a lot of our time to the GSMA's Open Connectivity Initiative (OCI). Last year, the OCI's proof of concept was completed and this year we completed a Hubbing trial during the Summer. A large number of participants did join that trial; ten hubbing providers and about 30 mobile operators.

With the OCI, the GSMA is essentially looking for new ways to set up interconnection and relationships between mobile operators through a hub as an alternative to implementing one-to-one relationships. The OCI is reviewing current bilateral relationships to ensure that any mobile operator will be able to send customers abroad and enable them to roam on any mobile network. The OCI did also the same for SMS interworking. Thanks to the previous work achieved on SMS, any mobile subscriber is now able to exchange two way messages with other subscribers connecting via other GSM networks.

Q: The roaming hub trial had to be extended. Why was that?
A: The main reason was that there were lots of operators and hubs who wanted to join the Initiative. Consequently, complexity was increased as the number of participants grew. In addition, the technology required to set up roaming through a hub was much more complex and we had a lot of different scenarios and technologies to test. This all took much more time than we originally planned. The last exercise, prior to this was a full scale trial on SMS which required fewer testing scenarios. For roaming, you not only have voice and SMS but also GPRS roaming and CAMEL prepaid roaming. This entailed much more activity being spent on testing each roaming relationship set up through the hubs. We completed the Trial in August of this year.

Q: What were the findings from the Trial?
A: All the scenarios were successfully tested. We identified refinements that have to be made to the architecture specification and so the work is now focused on updating the technical documentation to enable the launch of live operations. The next step will be with further hubbing providers launching live services and setting up connectivity between themselves and mobile operators and signing peering agreements.

Q: What is the scope of the OCI's work on hubbing?
A: The whole OCI project is mainly concerned with the development of a roaming hubbing solution. A hubbing solution for SMS is already done. That's live and there are already more than ten SMS hub providers today, with a community of 450 mobile operators using them to exchange SMS. Work has now been done to define the roaming hub solution and the Trial was intended to test that solution.

Q: What can Belgacom ICS offer in this area?
A: The trial helped us to go through a very detailed specification of the hub to really get the technologies right. We are now promoting the launch of a roaming hub solution which will include various modules, designed to help mobile operators in setting up roaming with each other. One of those modules supports agreement management. That enables each mobile operator to only need to sign one agreement with Belgacom ICS as the hub. Then Belgacom ICS will take care of setting up the various contractual relations with the other mobile operators.

Q: Can this be done overnight?
A: You will have various stages before going from bilateral mode to a full hubbing mode. The current bilateral situation requires every operator to set up roaming relations with each other. What we have developed is a sponsored solution, where we could leverage the existing coverage of a mobile operator to enable roaming instantly for new mobile operators launching services on the market. That is the first stage of our Instant Roaming service and this is being launched as we speak, mainly designed for mobile operators with limited roaming coverage as well as new mobile operators launching a service with a new GSM license.

Q: What relationships do you have to ensure global coverage?

A: We are not a mobile operator. We have never signed a roaming agreement by ourselves in the past. We are however currently working with a partner and sponsor who has established, complete roaming coverage over the past ten years. That is the roaming coverage we are proposing to mobile operators coming on the market and who require a short to medium term solution for world-wide roaming coverage.

Q: What is the next step?

A: The next step, which is what we are proposing together with the GSMA, is to launch a complete hubbing solution, where mobile operators would only connect to the hub so you would no longer need any further mobile operators acting as a sponsor. This is the way to go and we are starting to see now the launch of Open Connectivity roaming hubs. We need to connect the entire mobile community to replicate what is available on a bilateral mode. Any mobile operator ideally needs to connect to at least one roaming hub so that we could offer them a complete roaming coverage. We won't achieve connectivity between 700 GSM networks and the roaming hubs overnight. It will take time and that is a process that is underway now. The good thing with our Instant Roaming service is that we don't need to wait the establishment of roaming hubbing connectivity with the entire mobile community before enjoying worldwide roaming coverage thanks to the sponsored option. The Instant Roaming service will in fact allow to gradually move from the sponsored roaming scenario towards a full roaming hubbing mode.

Q: Could you quantify the savings achieved by adopting a hubbing approach?

A: No longer having to negotiate and sign an approximate set of 400 bilateral roaming agreements is an area where we could see certainly some savings. This is especially true if there are very small roaming relations between two operators, not generating much traffic because of the distance, perhaps several thousand minutes per month, which is very small. In the example of a new mobile operator willing to establish effective world wide roaming coverage, to set this up, we estimated that mobile operators will have to spend approximately three years signing the required roaming relationships, negotiating contractual terms and on testing the various technologies. If all goes well it would cost EUR3m over that three year period. If a roaming hub could help him achieve the same with just one single connection and one set of testing, then it's obvious that this will provide significant savings.

Q: What are the key day-to-day logistics and management obstacles that hubbing eliminates?

A: You will have a lot of savings on the operational side for Billing, Troubleshooting, Customer Care and Reconciliation. For example, live roaming relations requires continuous exchange of billing records between roaming partners that needs to be processed by various billing systems and clearing houses You then need to have all those operators exchanging invoices and performing bi-lateral settlement before managing eventual disputes. The entire process would be drastically reduced with multilateral settlement.

Q: What's the next step for Belgacom ICS?

A: At the moment we are really pursuing the extension of our all hubbing services. SMS hubbing was launched several years ago. That is gaining traction as the hubbing mode approach is increasingly endorsed by the mobile community. We are still very busy in connecting mobile operators to the main hub and we are also extending the number of relations using this hubbing solution. This still requires a lot of resources and we are now launching our roaming hubbing solution so we will be very busy in establishing connections between ourselves and mobile operators, as well as interconnecting with roaming hubs. Besides the OCI we are also very active on other types of hubbing initiatives. For instance, we are establishing the necessary infrastructure called the IPX that will facilitate the migration from a TDM environment to an all-IP environment for mobile operators as well as non-mobile operators.

We strongly believe hubbing providers could help mobile operators extending their reach. That could be roaming or interworking and for any kind of services: voice, SMS, MMS, packetized voice, GPRS and so on. In regards to QoS, we also believe additional services could help mobile operators to better track the quality of the services on roaming and interworking. Overall, an expanded reach would increase traffic as well as increase quality for mobile users and should lead to even more benefits for mobile operators serving them.

For more information visit:
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