Northstream™

Push-to-talk over packet networks has clear advantages

STOCKHOLM - 26 June 2004. In the latest white paper from Northstream, one of the world's leading independent mobile analysts, Push-to-talk solutions for circuit switched networks are compared to solutions for packet switched networks. The estimation shows that PoC (Push-to-talk over Cellular) over GPRS is at least five times more efficient than Push-to-talk solutions over circuit switched networks from a radio resource consumption point of view. Furthermore, EGPRS shows to be 14 times more efficient.

When this is translated into cost for a sample case, dimensioned according to prevalent rules, a circuit switched solution proves to be over six times more expensive than PoC over GPRS.

PoC is a Push-to-talk solution for packet switched networks specified by OMA (Open Mobile Alliance). Even though there is support for a standardised solution, proprietary pre-standards solutions (both circuit switched and packet switched) are not ruled out by the operators at this point in time.

Both circuit switched Push-to-talk and PoC based solutions offer acceptable speech quality. A circuit switched Push-to-talk solution has the same speech quality as provided by GSM systems. PoC solutions offer somewhat lower quality in the common case, using the AMR half rate coding, but does on the other hand offer the possibility to trade resource consumption for quality.

PoC provides a faster session set-up and is from this aspect a better alternative than a circuit switched solution.

Northstream sees clear advantages with Push-to-talk solutions based on the evolving OMA specifications since these will enable:

- Interoperability between terminals and networks
- Interoperability between operators
- Native PoC client support in terminals
- Synergies in terminals and networks with other future IMS based services
- The possibility to use performance boosters such as SIGCOMP for SIP signaling and Header Compression mechanisms for RTP frames carrying speech samples

There are many attractive aspects of push-to-talk, and if positioned and priced correctly it is likely to create traffic and revenue growth. Also addressed in the report is the scepticism regarding the feasibility of providing Push-to-talk over the European GPRS networks. Northstream has studied whether the network infrastructure provided by GSM/GPRS radio technology, can meet the requirements generated by Push-to-talk services and has concluded that these can meet the Push-to-talk requirements if tuned correctly.

- We believe Push-to-talk from a business perspective has a great potential, and our studies show that it is feasible to implement it over GPRS and as packet radio networks evolve the service will improve even further from an end-user point of view, says Bo Åström, Technical advisor at Northstream. He concludes that “a standardised solution is essential to make Push-to-talk a mass market service”.

To obtain a free copy of the report, please visit www.northstream.se

About Northstream:
Northstream provides strategic technology and business advice to the global wireless industry. Northstream has assembled a multinational team with some of the world's best experts and analysts on wireless communication business and technology. Northstream's list of clients includes several of the world's leading operators and system suppliers as well as some of the leading investment banks and financial institutions.

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