

Improving Routing Efficiency with Mobile Number Portability Correction

Number portability allows end users to keep their phone numbers when they switch service providers. Regulators globally have embraced mobile number portability to promote healthy competition between mobile carriers.

Impacts on international traffic due to number portability have largely flown under the radar, despite their large and growing presence. As total traffic and the percentage of ported numbers increase, so too will the number of misrouted calls and the overall financial impact on carriers.

A GROWING CHALLENGE

The percentage of ported numbers varies by country:

Finland	58.4%	Netherlands	11.3%
USA	22.9%	Switzerland	6.5%
Belgium	17.4%	France	1.8%
Sweden	14.6%	Germany	1.3%
Italy	12.8%		

Source: "Mobile Number Portability Network Correction," Arbinet, George A. Grabowich and Jim Guy

FINANCIAL RISKS FROM MIS-ROUTED CALLS

International calls to countries with a high level of portability incur a number of painful financial impacts. Originating carriers may face transit penalties for handling calls incorrectly routed due to number portability. In addition, because there is no international transparency into who is servicing any individual number, originating carriers cannot forecast the magnitude of these penalties.

Differences in mobile termination rates (MTRs) within the destination country also deliver high, unexpected costs, or missed opportunities by overpaying for certain calls. New entrants with advanced 3G-capable voice and data networks are often un-regulated and may charge rates as much as 100% more than PTT-owned mobile carriers with lower rates.

Additionally, number portability opens up new opportunities for unscrupulous carriers to take advantage of un-sanctioned access to portability information. Both in-country and international carriers may bear significant additional costs as a result of wholesale carriers cherry-picking traffic, intentionally sending a much larger percentage of higher-cost ported calls than expected.

SOLVING THE PORTABILITY CHALLENGE

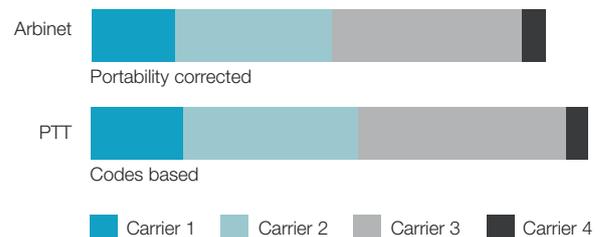
Through its expertise in intelligent routing, Arbinet has developed a suite of portability solutions designed to address the number portability challenge on a global basis.

By applying number portability intelligence to call routing, carriers avoid

the technical and financial impacts associated with ported calls and gain significant advantages, including:

- > Control over call routing from beginning to end, for enhanced quality
- > Avoidance of costly, unpredictable transit penalties
- > Application of correct network based rate – no blending and risk premiums
- > Removal of the financial risks of being cherry-picked by other carriers

COST SAVINGS OVER CODES BASED RATES



The illustration above shows a cost comparison between terminating via a Tier-1 PTT with and without the Arbinet portability corrected termination model, which removes the risk premiums and penalties.

While terminations to the high-cost mobile operator become slightly more expensive (since none of the calls will be onward routed to a lower-cost carrier) significant savings are achieved when routing to the lower-cost mobile carriers. Overall savings, in just this one market, were 4% – a significant result when compared to normal international margins.

FLOURISHING IN A NUMBER PORTABILITY WORLD

Rising levels of number portability around the world increase the strain on the current rating approaches. Arbinet's portability solutions create a competitive advantage for carriers, providing both query services for full integration into a carrier's own network, and offering correctly priced retail quality termination services. ■

For more information

For more information about global number portability please visit: www.globalnumberportability.org, an educational forum sponsored by Arbinet. To contact Arbinet directly email: sales@arbinet.com or call (UK) +44 20 7338 1200.