NICC Response to Ofcom Consultation

"Telephone Numbering – Safeguarding the future of numbers"

NICC welcomes Ofcom's consultation on the future of the UK numbering scheme. NICC members will doubtless be responding individually to the consultation, but it is appropriate that NICC comments specifically on issues relating to its work.

In Section A.3.34 of the consultation, reference is made to NICC's activity related to the potential for routeing using a central ENUM database. Within its Naming, Numbering and Addressing (NNA) subgroup, NICC has indeed been studying the long term solution for routeing of calls in Next Generation Networks. NNA has concluded that from a technical standpoint, the most appropriate architecture would be that originating UK networks query a "Carrier ENUM" using DNS technology, to receive the SIP address of the terminating line. As such, the usage of the telephone number would be restricted to being a database key to Carrier ENUM, and routeing would be accomplished using the server identity component of the SIP address. Under this model, Ofcom are correct to conclude that the linkage between numbering administration and routeing could be broken, allowing numbers to be allocated in a block size that best meets the needs of good numbering husbandry rather than network equipment capabilities.

However, NICC must stress that analysis thus far has been restricted to technical issues, and that the introduction of an architecture utilising Carrier ENUM would have to be subject to appropriate cost-benefit analysis.

It must further be highlighted that the usage of a Carrier ENUM architecture would be dependent upon originating networks having the capability to query it. At the very least, this implies that a critical mass of networks have upgraded to NGN technologies. Further, although utilisation of Carrier ENUM forms part of the IMS architecture being standardised by ETSI, it is not specified in the initial NGN interconnect standards recently approved by NICC, nor is it universally available in early releases of NGN callservers : it will, if appropriate, be implemented in later releases of the standards.

It is not for NICC to comment upon the NGN rollout plans of UK communications providers, but if Ofcom were to seek an idea of when it might be reasonable to expect the introduction of Carrier ENUM, it could do worse than use BT's planned 21CN rollout. Under the plans made publicly available, BT has stated that originating DLEs will be migrated from TDM to NGN technologies in the 2006-2011 timeframe. Following this logic, it would not be realistic to expect that the routeing/allocation linkage could be broken before 2011 at the earliest, and 2012 is probably the most realistic assessment (although we would expect Carrier ENUM to be used, but not universally, in advance of this).

This date does not remove the need for activity relating to Carrier ENUM to be progressed. There are many issues to be resolved, notably the architecture of Carrier ENUM itself, interworking with existing NP solutions and commercial arrangements.

Paul Rosbotham

Chairman, TSG / TSG NNA

Main Heading