

# News brief *special*

## IPv6: still not there?

Vilnius – The clock may be counting down on the IPv4 address space, but one thing on the Internet circuit seems to be going like clockwork: warnings about imminent depletion.

IPv6 promises far more address space, as well as security and reliability benefits. Yet, according to the latest survey, unveiled by the Number Resource Organization (NRO), the official representative of the Regional Internet Registries (RIRs) that oversee the allocation of all Internet number resources, progress towards switchover to IPv6 remains slow but at least the problem is beginning to dawn on many organizations.

### Getting to the deadline

But the survey, funded by the European Commission, found a frustrating lack of commitment in the market too. Even though only 6% of the IPv4 addresses remain available, the prospect of a complete switchover remains frustratingly far off, in spite of dire predictions that address space will be entirely depleted sometime in 2011. The NRO survey found a huge increase in awareness in the past 12 months, finding 86% of organizations – mainly ISPs–polled in 140 countries now either have IPv6 addresses or are planning to request them.

But issues remain. “There is a distinct lack of Internet traffic over the next addressing protocol,” says Axel Pawlik, Chairman of the NRO, “with not enough ISPs offering IPv6



*Patrik Fältström: “misconceptions”*

services, and 30% of ISPs saying the proportion of this traffic is less than 0.5%.” Mr Pawlik says that it is critical “that ISPs now take the next step in the global adoption effort by offering IPv6 services to their customers to help boost traffic over IPv6.” More worryingly, the survey found that there were a number of “misconceptions” about IPv6 even within the industry, with a significant number of respondents believing cost to be the biggest hurdle to overcome.

Other experts argue that the IPv6 transition should not be viewed as some sort of overflow to the IPv4 depletion, but a major critical Internet resource in its own right, offering a substantial upgrade in capability across the board for the community everywhere.

But there still seems a lack of urgency – some say a lack of awareness on the part of an otherwise savvy Internet world. IPv6 is essentially a one-of-its-kind forklift upgrade of the entire Internet system. As such, seeing how an Internet project on a planetary scale will progress should offer valu-

able lessons for future large-scale technology deployments.

But for many, it comes with a cost –and needs an education or at least, an awareness. It also raises the question, not surprisingly, of Internet governance of so-called ‘critical resources’ such as address space. Given that the Internet community has been traditionally loath to see state-sponsored involvement of any kind, it now finds itself in an awkward dilemma when there are increasingly vociferous calls for nations themselves to ensure that IPv6 transition occurs smoothly at least within their own borders.

Many countries, as far apart as India, Sweden and Germany, alarmed at what they see as sluggish progress towards the IPv6 adoption problem have taken the initiative in promoting deployment. India has taken a relatively broad approach and is targeting IPv6 across all networks, government and private by 2012. Some, such as Pakistan, have offered financial incentives, including tax rebates, to those organizations willing to take the IPv6 step. Developing countries continue to fret about their relative lack of ICT expertise, which may also be part of the problem. But ironically, it may be one area where it pays to be less developed as a country, as most difficulties seem to occur with migration issues from legacy systems.

Meanwhile, in what is clearly a constantly changing situation, there is considerable finger-pointing

