

IPv6 traffic begins to become more significant, according to ISPs

Last June, 77% of respondents to the 2012 Global IPv6 Deployment Monitoring Survey indicated to have some level of IPv6 presence today, which indicates a further uptake from 73% in 2011, and 64% in 2010. 32% of responding ISPs indicate that IPv6 traffic is now “significant” vs. 22% last year – and the survey findings confirm that emphasis shifts from “IPv6 preparedness” to real IPv6 usage.

For the fourth time since 2009, the Global IPv6 Deployment Survey generated a strong response from 1443 ISPs and other organisations involved with the Regional Internet Registries, from 105 countries around the world.

In 2012, more ISPs are confronted with customers who make some use of IPv6 (65% instead of 56% in 2011), and the amount of IPv6 traffic according to ISPs is now really beginning to increase: it is now “significant” for 32% of the providers, whereas this was indicated by 22% in 2011 and 19% in 2010. The issues that keep organisations from deployment have hardly changed since 2010, with just a slight change in priority towards information security concerns over the last years. Lack of experience with IPv6 deployment has further decreased and is now only seen as a problem with IPv6 in production by 31% of the respondents (36% in 2011 and 41% in 2010).

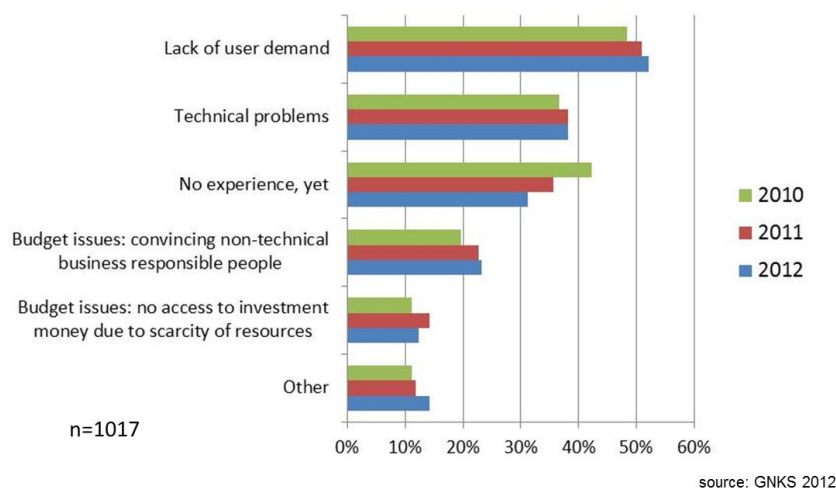


Fig.1 - Biggest problems with IPv6 in production (Q18)

The survey has been designed and conducted by GNKS Consult in collaboration with the Number Resource Organisation, which represents the collective efforts of the Regional Internet Registry organisations; AFRINIC, APNIC, ARIN, LACNIC, and RIPE NCC . The design is based on a design originally by ARIN/CAIDA in 2008, and has been carried out in 2009 with the support of RIPE NCC and APNIC, and globally, with support from AFRINIC, APNIC, ARIN, LACNIC, and RIPE NCC in 2010 and 2011. The profile of the respondents in 2012 has remained remarkably similar to the profile of those in 2010, with more non-ISPs participating in 2012 than before.

IPv6 deployment plans

The 2012 survey shows that *real use* of IPv6 has now grown, whereas the real use did not grow much since the original survey in 2009 up to 2011. Emphasis has been on increasing preparedness amongst

responding ISPs earlier. The level of preparedness seems to have stabilised right now. This is depicted in Figure 2. Preparedness means here that ISPs are implementing IPv6 capability, planning for the deployment, and preparing for the increasing demand that they expect to come from their customers soon. Both deployment and planning has improved significantly between June 2009 and June 2010, and even more so towards July 2011 – decreasing the “no plans” even further, and with clear advancement of both plans, and implementation itself.

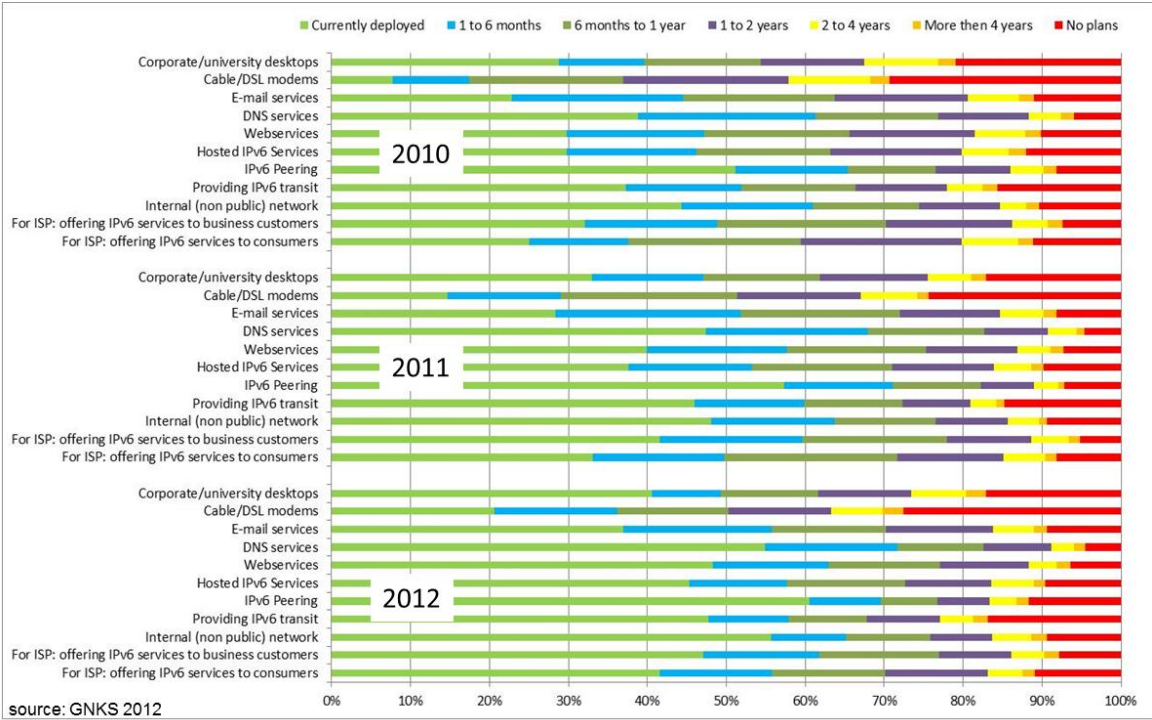


Fig. 2 IPv6 deployment and deployment planning in 2010, 2011 and 2012 (Q23)

While the “deployed today” percentage has grown over the last year (which is in line with the indications in earlier years that plans were in place to do so) the percentage of “no plans” respondents has not further decreased.

Large Scale NATs (LSN)

In order to better understand the impact of LSN (also known as: Carrier Grade NATs – CGN) on IPv6 deployment, and the other way around, we asked in 2012 about plans regarding LSN. Most respondents (85%) said they do not plan to use LSN. Of those who are or will use LSN, only 20% are planning to do so instead of using IPv6.

What drives deployment

The 2012 survey shows that there has hardly been a change in emphasis of what drives deployment and what keeps people from deploying: respondents are mostly driven by responding to the inevitability to start embracing IPv6. They either want to be ahead of the game, or want to make sure IPv6 is supported by their products, or even want to benefit from what IPv6 has to offer, sooner rather than later.

The full results are available via the RIRs. As 91% of all respondents indicated they thought it would be a good idea to continue this survey in 2013. It is the intent to do so again during June 2013.

Overall, the NRO is happy to see the positive impact of IPv6 awareness and information activities such as the Global IPv6 Deployment Survey. The NRO will continue its support of activities to promote IPv6 implementation, as this is an important priority for all the RIRs, jointly and separately.