

# Human capacity building for IPv6

Based on responses to the 2011 Global IPv6 Deployment Monitoring Survey from the global RIR community during July 2011

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#### Setting the scene

- The Internet has become a fundamental infrastructure, worldwide, for economic and social activity, and its usage continues to grow exponentially:
  - More users
  - New applications (eg mobile, RFID etc)
- The transition from IPv4 to IPv6 is the only sustainable option, in the long run.
- A smooth transition requires understanding the challenges, and a timely start.

#### Global IPv6 Deployment Monitoring Survey

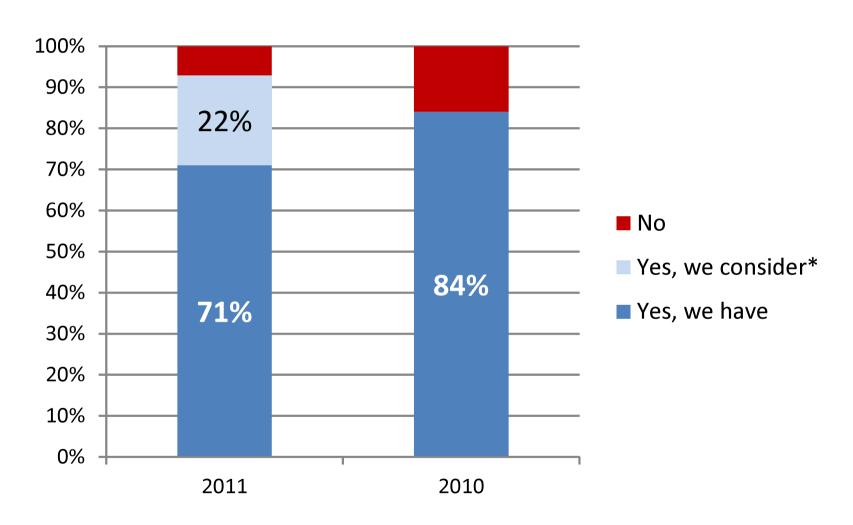
- Aim is to establish the best possible comprehensive view of present IPv6 penetration and future plans of IPv6 deployment
- Best way to establish this is to ask the Internet providers and users, basically: the RIR communities around the world
- ARIN carried out such a survey with its members in March 2008, a starting point for the currently proposed survey
- RIPE NCC and APNIC carried out this same survey in 2009. In 2010 and in 2011, all RIRs participated to the survey making it truly global:
  - Survey was prepared and carried out by GNKS in close collaboration with RIPE NCC, APNIC, ARIN, AFRINIC and LACNIC
  - Survey was kept short, and focused on essentials
  - Privacy is guaranteed
- Every year, the last question is whether the survey should take place again, next year. In 2009, 2010 and 2011 more than 90% said "yes"

### Progress on IPv6 Deployment

Key results of 2011 IPv6 Deployment Monitoring Survey

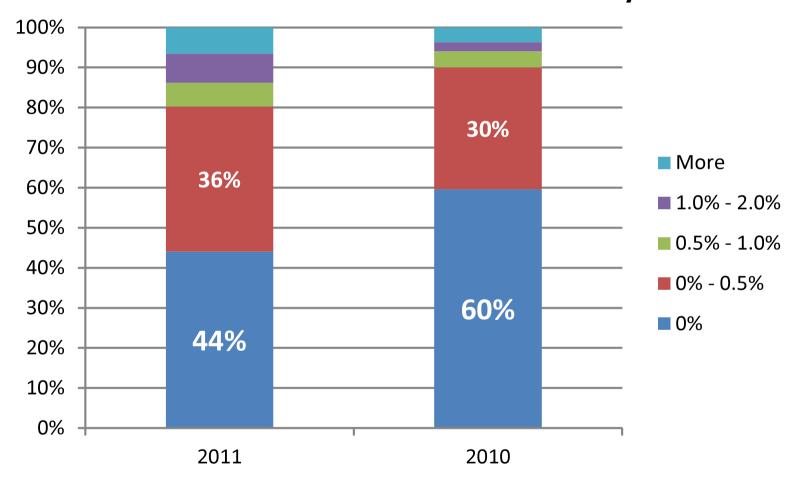


## Does your organization have, or consider having an IPv6 allocation and/or assignment?



<sup>\*</sup> Q10 responses. "consider" was not a seperate option in survey 2010 but combined in "Yes"

## ISP: What percentage of your customer base uses IPv6 connectivity?



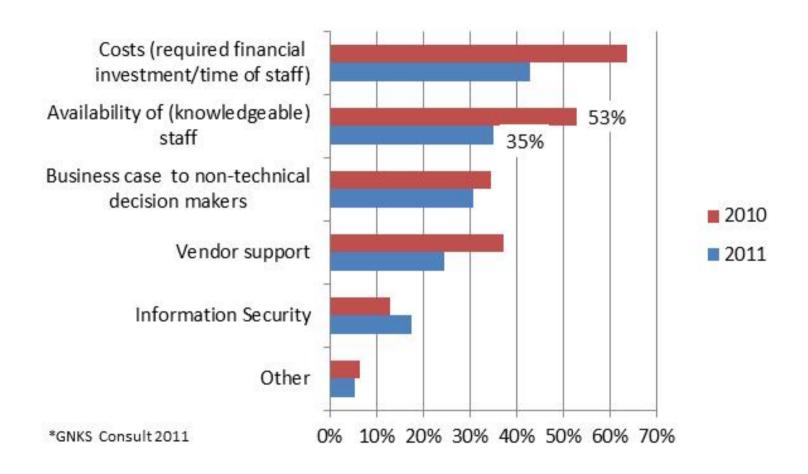
<sup>\*</sup> Q17 responses, question asked to ISPs only

### **Human Capacity Needs**

How hard will it be to implement IPv6, people-wise?

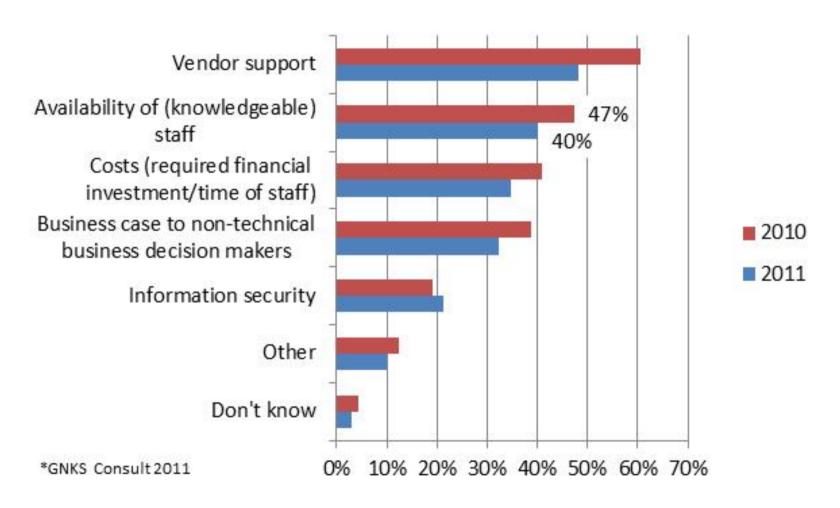


### Not considering IPv6 because ...



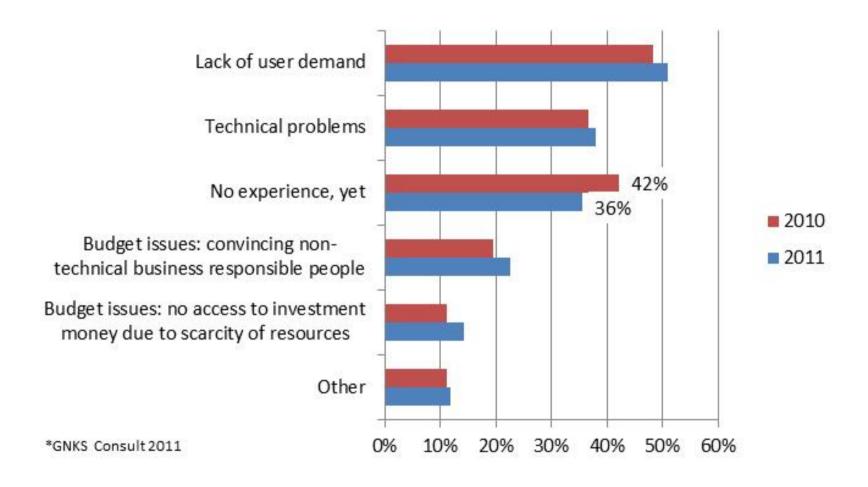
<sup>\*</sup> Responses to survey Q12 - what you expect to be the biggest hurdle(s) to your organization if you were to deploy IPv6? Only by respondents who do \*not\* have plans to implement IPv6, yet: 16% of all respondents in 2010, 7% of all respondents in 2011.

### Biggest hurdles when deploying IPv6...



<sup>\*</sup> Responses to survey Q16 - What are likely to be the biggest hurdle(s) when deploying IPv6? Based on experience with organisations who implemented IPv6 (71% in 2011) or have started planning for its implementation (22% in 2011).

### Biggest problems with IPv6 in practice



<sup>\*</sup> Responses to survey Q17 - What are the biggest problems with IPv6 in production? Based on experience with organisations who have IPv6 in production.

# We thank all respondents for their contributions!

On all points measured in this survey, progress has been made.

94% of the respondents to the question "Would you be interested to participate again to this survey in a years' time" said:

"Yes"





### Profile of respondents

Based on the responses to the survey in 2011

Overall, no significant change towards the profile of the 1st truly global survey in 2010

### The median respondent

- is a for profit (76%) ISP (53%) from the RIPE NCC region (46%) with less than 10.000 customers (61%) and less than 50 employees (43%)
- Doesn't exist, as there is a good spread across the world of respondents from all sizes.
- Overall, with more than 1600 responses, one could say it is "globally representative for active participants in RIR communities".
- The response profile is strikingly similar to the 2010 profile, which helps appreciate the differences

### Q1 – 2011 Respondents origin

• 1656 respondents from 135 countries/economies

• 15 countries > 29 respondents = 1029

• 22 countries 7 < x < 30 respondents = 356

• 29 countries 3 < x < 8 respondents = 154

• 37 countries with 2 or 3 respondents = 85

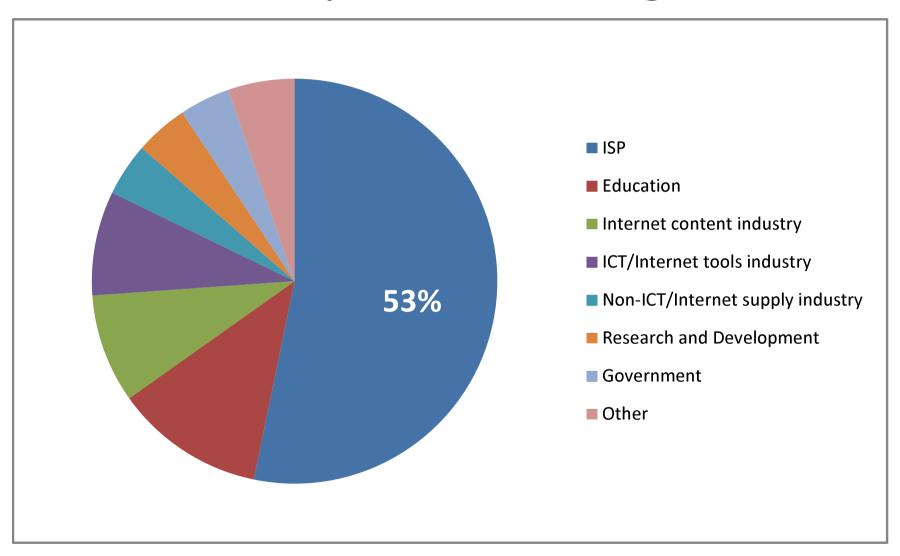
• 32 countries with 1 respondent = 32

#### Top 10 respondent countries 2011

| 1. USA       | 321 | 6. Netherlands | 60 |
|--------------|-----|----------------|----|
| 2. UK        | 81  | 7. Russia      | 56 |
| 3. Germany   | 79  | 8. France      | 46 |
| 4. Australia | 76  | 9. New Zealand | 44 |
| 5. Taiwan*   | 61  | 10. Italy*     | 42 |

\* New in Top 10

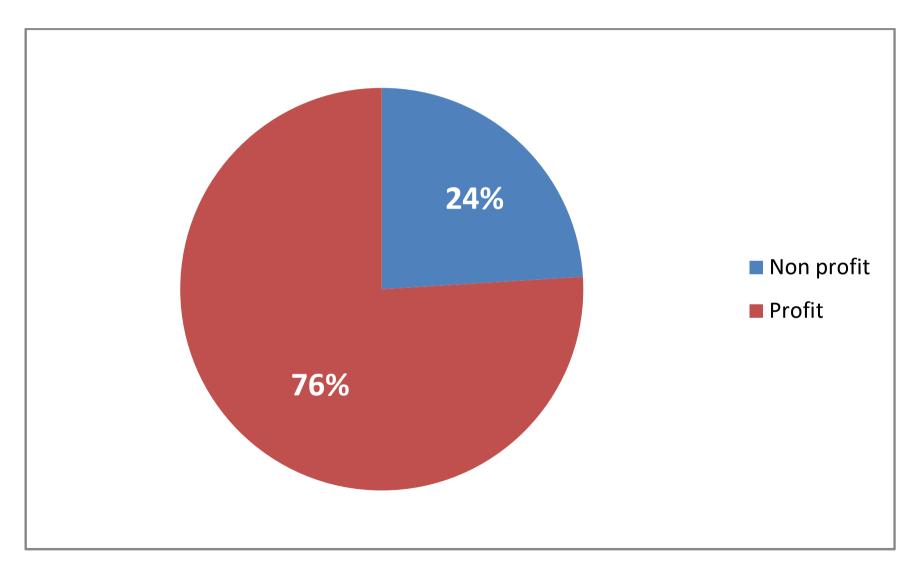
### Q2 - Respondent categories



<sup>\*</sup>slightly less ISPs as compared to 2010 (58%), further similar to 2010

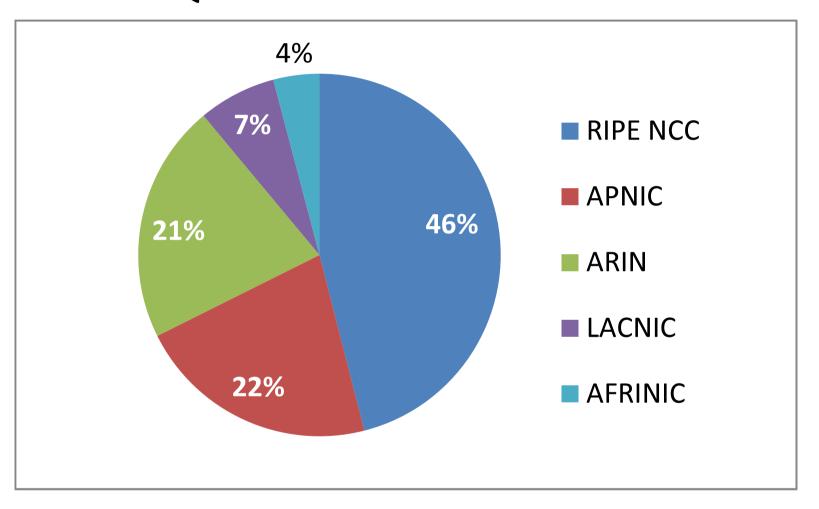
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### Q3 – Financial status



<sup>\*</sup>No significant changes as compared to 2010

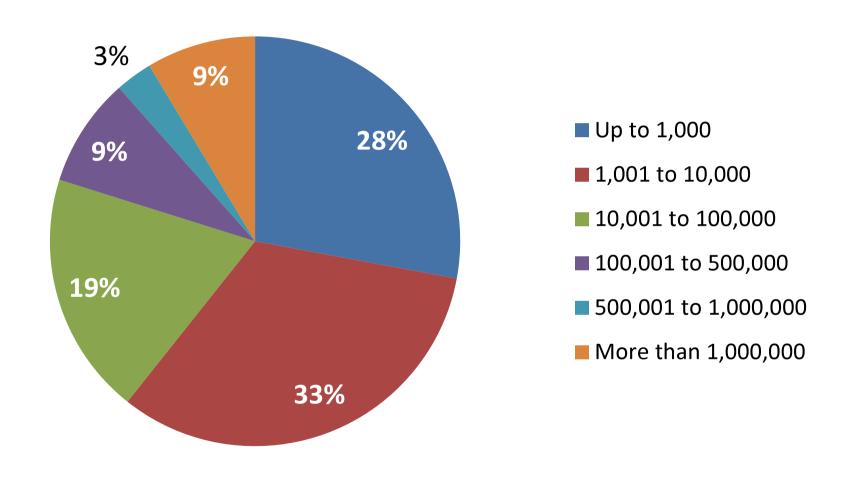
### Q4 – To which RIR ...



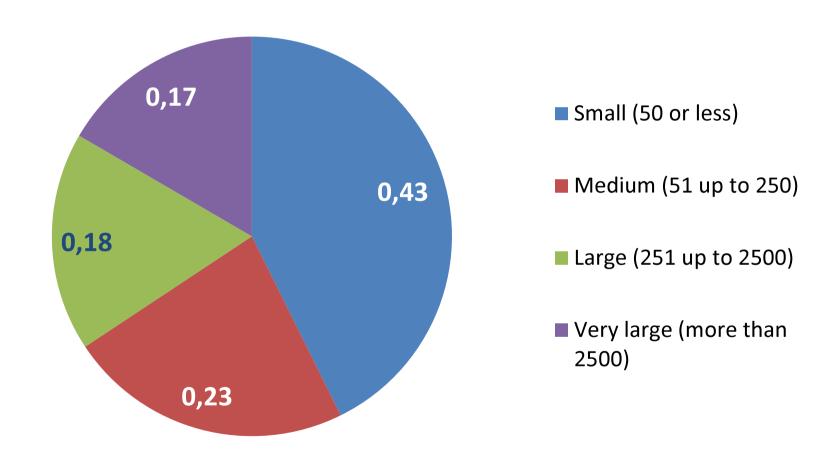
Q5 - Has your organization signed a Registration Services Agreement with your RIR? 54% says "Yes", 16% "No", 29% does not know.

<sup>\*</sup>No significant changes as compared to 2010

### Q6 – How large is your customer base



# Q9 - What is the size of your organization (employees)?



<sup>\*</sup>No significant changes as compared to 2010