RIPE

IPv6 in Saudi Arabia

Deployment project and results



History of the project

Driven by CITC: the Telecom regulator

- Include foreign IPv6 experts
 - -Gert Döring
 - Sander Steffann

- Meetings:
 - -Start with 3 or 4 per year in first years
 - Later go to twice a year in May and October



Rough timeline

•	July 2008	Kick-off meeting
---	-----------	------------------

• 2008	Propose ISP strategy
--------	----------------------

 2009 Meetin 	igs with vendors
---------------------------------	------------------

• 2010	First IPv6 DNS root server (
--------	------------------------------	--

National tunnel broker for testing

•	2012	IPv6 for	.sa

2014 Pilots for enterprise and NREN



MENOG and RIPE NCC

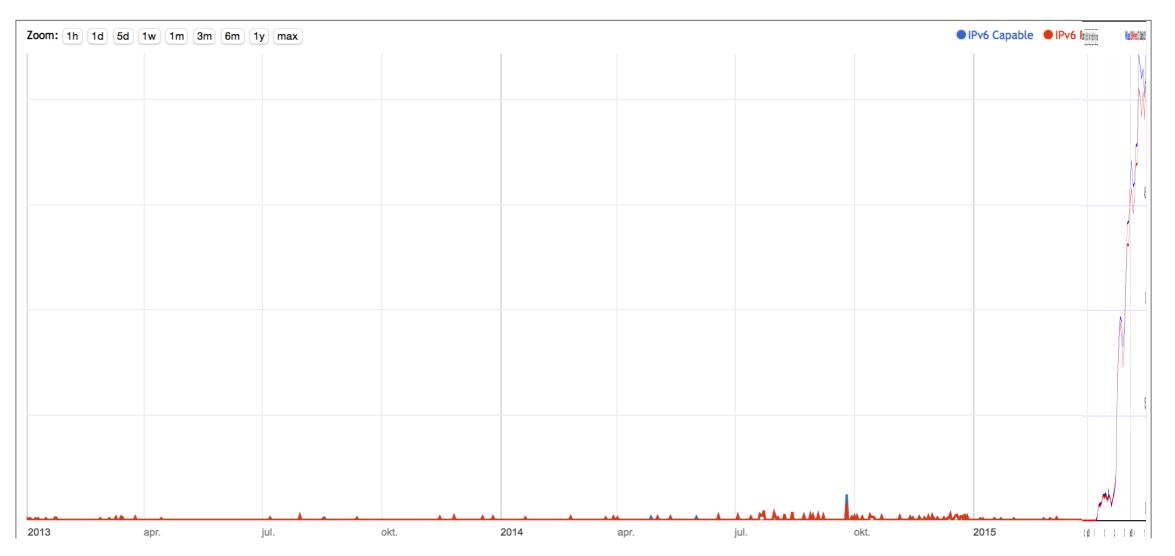
- Many IPv6 Road Shows given
 - -8 in total
 - -Between 2011 and 2014

- Initial focus on ISP
- Later focus on enterprise



2015: deployment!

 And in 2015 the Saudi Telecom Company (STC) starts deploying IPv6 on broadband

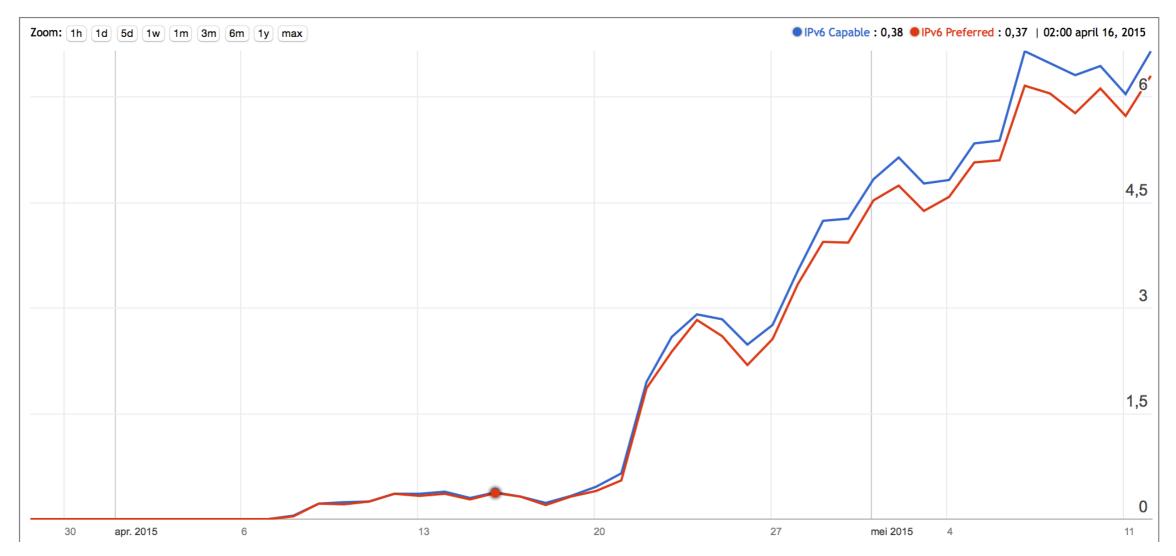


(many thanks to APNIC, George Michaelson and Geoff Huston for the measurement data)



2015: deployment!

 And in 2015 the Saudi Telecom Company (STC) starts deploying IPv6 on broadband



(many thanks to APNIC, George Michaelson and Geoff Huston for the measurement data)



Timing...

- First active users on 7 April 2015
- Because National IPv6 Forum on 7 May 2015
 - The final part of the project
 - Widely announced
 - Perfect place to show deployment and gain reputation



How fast IPv6 can grow

- Until April 2015 Saudi Arabia was invisible
- But a lot happened behind the scenes

- Good preparation » Very fast deployment
- Other operators will follow soon

- Saudi Arabia is now in the top 20 world-wide
- And will probably overtake many more countries



Effects of this deployment

- Content
 - Content providers are sceptical about IPv6
 - IPv6 deployment to eyeballs is crucial
 - Sudden uptake does wake up the sceptics

- Other ISPs and networks
 - -They now feel the pressure
 - Mobile IPv6 access will be next



Conclusions

- Saudi Arabia shows how IPv6 can benefit from
 - a good IPv6 task force
 - a good national strategy with supporting regulator
 - lots and lots of training
 - deployment by access providers

- Education
 - -There is a lot to be done for enterprises
 - RIPE policies and procedures are difficult for outsiders

