

The sixth annual IGF Meeting, 27-30 September 2011, Nairobi, Kenya
Workshop Title: Understanding IPv6 Deployment and Transition
29 September 2011 Thursday 9:00-10:30

Hello All,

I will talk about IPv6 transition in Turkey. I hope my speech will give an idea about what governmental agencies can do in a developing country.

I work in ICTA (Information and Communication Technologies Authority). We have some official missions regarding IPv6 transition. Actually, my organization is the national regulatory body for Turkish telecommunication market since 2000 but in 2009 it was given the responsibilities for IPv6 transition such as;

- raising awareness,
- preparing a road map, and
- developing measures and policy proposals.

First of all; the transition is inevitable and brings many opportunities. Being aware of these is the first step of transition. So; to **raise awareness** we organized;

- few meetings with public sector and with ISPs, and
- a workshop. In these events we informed participants about IP depletion problem and IPv6 transition methods
- and also an IPv6 conference was organized.

Second; we prepared a **road map** for transition to IPv6. This road map is for public sector only. We believed that public sector will be the initiator of transition and we thought that we have to push them to start transition works otherwise some public services may not be available to last users from IPv6-world. The plan was approved by the Ministry of Transport, then by the Prime Minister and it was published in the Official Journal last year. This plan consists of 3 phases;

- In the **first phase**;
 - all public sector organizations have to make an **inventory analysis** in terms of IPv6-compatibility of their IT infrastructure. They have to make a plan to renew items which are not compatible.
 - They have to obtain IPv6 addresses and IPv6 connections
 - They cannot invest for network software and hardware which is not IPv6-compatible after 31th of August 2012.
 - They have to ensure that their IT staff gets necessary trainings from the IPv6 education center.

This phase starts from the beginning of this year (1st of January 2011) and ends in (31th of August of next year (2012)).

- In the **second phase** of the plan;
 - Governmental agencies have to make at least one of their Internet-based services IPv6-compatible as a **pilot application** until the end of December in 2012 at latest.
- In the **third phase** of the plan;
 - Governmental agencies shall make their **all** Internet-based **services** open to public access IPv6-compatible until 31th of August 2013 at latest.

This plan is in progress now; many IT staff from public sector completed their IPv6 trainings, organizations did their analysis and made plans to upgrade their equipment which is not IPv6-compatible. I can say that the plan is successful so far in terms of implementation. We see that the number of allocated and visible IPv6 prefixes for Turkey almost doubled after this plan was published. (www.sixxs.net/tools/grh/dfp/all/?country=tr)

Apart from preparing a road map; we thought that **test beds** are needed to develop and test IPv6-based applications. So; we asked a national R&D body to develop a test bed in a two year period. Now this test bed is completed and an IPv6-based videoconference software was developed and tested on it already. We are going to open this test bed to researchers, ISPs and to all parties interested very soon.

Another activity we did was not for public directly; last year we decided to start IPv6 transition works in our own IT infrastructure because we believe that **leading by example** is essential to convince people. We observed the difficulties that can be encountered during IPv6 deployment from firsthand, so I believe our road map was more realistic. For example; although our IT staff had training before, we saw that lack of skill shortage in practice would be a great obstacle, and then training requirement was addressed in the plan.

At this stage I have to say that we achieved our missions mentioned here through a project carried out in collaboration with our “National research and education network provider” (TÜBİTAK – ULAKBİM) and with two universities (Gazi University and Çanakkale Onsekiz Mart University) because they had the necessary expertise and know-how there.

To sum up;

- For countries a transition plan is essential and unfortunately in most cases you have to push people to take actions.
- Training needs (who, when, where, how) must be addressed in the plans
- Organizing workshops and conferences are really useful tools to increase awareness

Thanks.