A technical seminar was organised on the topic "Welcome to the New Internet World: IPv6". The session was handled by Ashish Mishra, B. Tech (CSE), Cisco certified network professional & IPv6 Forum Certified Trainer, Zealot IT Solutions on 30th July 2013. The session has covered the following:

- IPv6 Introduction
- What is IPv6?
- Why IPv6?
- Why immediately required?
- Statistics of IPv6 Adoption
- Addressing Scheme
- Details of certification

Students have participated actively and requested the Department to organize such seminars in future.

Enclosed: Gazette Notification regarding IPv6
**Why IPv6?**

F. No. 1-16/RFD/2012-NT  
Department of Telecommunications  
NT Cell  
Date: 05th November 2012

Subject: National IPv6 Deployment Roadmap V-II: extension of last date of sending comments regarding draft recommendations thereof.

Kindly refer to earlier letter of even no. dated 15-10-2012 (attached for ready reference) regarding subject matter vide which it was requested to send your comments regarding draft recommendations within two weeks time to this cell. In this regard, it is kindly intimated that the competent authority has approved the extension of the last date of sending comments to **20-11-2012**. It is therefore requested to send your comments in this regard by the above date.

The comments may be sent either by email at:
1. dognnt-dot@nic.in  
2. dirnt-dot@nic.in  
3. adgnnt-hq-dot@nic.in  
or by post to:  
The ADG (NT),  
O/o DDG (NT),  
1114, Sanchar Bhawan, DoT,  
20, Ashoka Road, New Delhi-110001.  
Encl: As Above  
(S K Madhukar)  
ADG (NT)

To  
All Concerned

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F. No. 1-16/RFD/2012-NT  
Department of Telecommunications  
NT Cell  
Date: 15th October 2012  
Subject: National IPv6 Deployment Roadmap V-II: comments regarding draft recommendations thereof.

NT cell, DoT HQ has been entrusted with the responsibility of formulation of ‘National IPv6 Deployment Roadmap Version-II’ vide RFD (Results Framework Document ) of DoT for 2012-13, Accordingly a committee for the formulation of Roadmap V-II was formed.  
The committee has identified the following key stakeholders in the ecosystem  
as far as IPv6 transition is concerned:  
1) Government Organisations  
2) Service Providers  
3) Content & Application Providers  
4) Equipment Manufacturers ( Both Network Equipment and End User Devices Manufacturers)  
The draft recommendations for the above stakeholders have been prepared by the committee as attached in Annexure-‘A’.  
Since some of the above recommendations are in the nature of a mandate, I have been directed to request you to offer your comments in this regard within two weeks time to this cell. The comments may be sent either by email at:
1. ddgnt-dot@nic.in
2. dirnt-dot@nic.in
3. adgnt.hq-dot@nic.in
or by post to:

The ADG (NT),
O/o DDG (NT),
1114, Sanchar Bhawan, DoT,
20, Ashoka Road, New Delhi-
110001.
(S K Madhukar)
ADG (NT)

To,
All Concerned.

Annexure-‘A’

Draft Recommendations

The draft recommendations for the stakeholders have been prepared by the committee as follows:

1) Government Organisations :

The Government organisations should procure only ‘IPv6 Ready’ equipments and go for deployment of IPv6 ready networks.

The public / external face of all Government projects for delivery of citizen centric services to be on IPv6 (Dual Stack) latest by 01-01-2014. The readiness of Government projects in turn will act as a catalyst for private sector transition.

All new IP based services (like cloud computing, data centres etc.) to be procured by the Government organisations should be IPv6 ready with immediate effect.

The Government organisations should develop adequate skilled IPv6 trained human resources within the organisation through periodic trainings over a period of one to three years to have a seamless transition with minimum disruption.

The Government organisations should go for IPv6 based pilot projects in the area of greenfield applications like smart metering, smart grid, smart city etc.

The Government organisations should prepare a detailed transition plan for complete transition to IPv6 (dual stack) by December 2016 based on the complexity and the IPv6 readiness of their existing networks and systems. The plan should be prepared latest by December 2013 and accordingly the required budgetary provisions should be made in their demand for grant.

The IPv6 should be included in the curriculum of technical courses being offered by various institutes / colleges across the country.

2) Service Providers:

Enterprise Customers

All new enterprise customer connections (both wireless and wireline) provided by Service Providers on or after 01-01-2014 should be on IPv6 (either native IPv6 or dual stack). (Mandate through license required) Regarding the existing enterprise customers which are not IPv6 ready, the Service Providers shall educate and encourage their customers to switch over to IPv6.

Retail Customers (Wireline)

All new retail wireline customer connections provided by Service Providers on or after 01-06-2014 should be on IPv6 (either native IPv6 or dual stack).
(Mandate through license required)
The Service Providers shall target to progressively replace/ upgrade the Service Providers owned CPEs which are not IPv6 ready as per the following timelines:

- Replacement of 30% of CPEs by December 2014.
- Replacement of 60% of CPEs by December 2015.
- Replacement of 100% of CPEs by December 2016.
- Regarding the customer owned CPEs which are not IPv6 ready, the Service Providers shall educate and encourage their customers to replace/ upgrade such CPEs to IPv6 ready ones.

**Retail Customers (Wireless)**

All new LTE customer connections provided by Service Providers should be on IPv6 (either native IPv6 or dual stack). *(Mandate through license required)*

All new GSM/CDMA customer connections provided by Service Providers on or after 01-06-2014 should be on IPv6 (either native IPv6 or dual stack). *(Mandate through license required)*

**3) Content & Application Providers:**

All content and application providers should target to adopt IPv6 (dual stack) for all contents latest by 01-01-2014.

The complete financial ecosystem including payment gateways, financial institutions, banks, insurance companies, etc. should migrate to IPv6 latest by June 2013.

The new registrations on ‘.in’ domain to be compulsorily on dual stack with effect from 01st January 2014. The entire ‘.in’ domain should migrate to IPv6 latest by June 2014.

**4) Equipment Manufacturers:**

All cell phone handsets/ data card dongles/ tablets and similar devices used for internet access sold in India on or after 01-06-2014 shall be IPv6 ready. *(Mandate through incorporation in standards required)*

All wireline broadband CPEs sold in India on or after 01-01-2014 shall be IPv6 ready. *(Mandate through incorporation in standards required)*

**5) Cloud Computing / Data Centres:**

All data centres / cloud computing service providers should target to adopt IPv6 (dual stack) latest by 01-01-2014.

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