

Government of India
Ministry of Communications & IT
Department of Telecommunications
Networks and Technologies (NT) Cell

No. 2-8/IPv6-Review/2015-NT

Dated: 25-05-2016

Subject: Revision of the IPv6 Transition Timelines.

National IPv6 Deployment Roadmap v-II was released by DoT in March, 2013 for IPv6 transition in the country in a phased and time bound manner. The IPv6 transition guidelines/timelines of Roadmap v-II are attached as Annexure-I.

2. Although considerable progress has been made in IPv6 transition across various stakeholders, yet there are segments where the transition is taking longer time due to the legacy networks and complex nature of the issue.

3. Accordingly, the IPv6 transition timelines have been reviewed and revised with the approval of the competent authority as under:

3.1 Government Organisations:

There is no change in the timeline for complete transition to IPv6 (dual stack) by Government organisations which remains as December, 2017.

3.2 Service Providers:

a. Enterprise Customers:

No change has been made in the timeline for enterprise customer segment.

b. Retails Customers (Wireline):

The timeline has been revised as under:

'All new retail wireline customer connections provided by Service Providers on or after 01-01-2017 shall be capable of carrying IPv6 traffic either on dual stack or on native IPv6'.

No change has been made in other timelines of this segment related to progressive replacement/ upgradation of Service Providers owned CPEs by Dec, 2017.

c. Retails Customers (Wireless):

The timelines have been revised as under:

• *'All new LTE customer connections provided by Service Providers with effect from 01-01-2017 shall be capable of carrying IPv6 traffic either on dual stack or on native IPv6'.*

• *'All new GSM/ CDMA customer connections provided by Service Providers on or after 01-01-2017 shall be capable of carrying IPv6 traffic either on dual stack or on native IPv6'.*

3.3 Content & Application Providers:

The timelines have been revised as under:

- *'All contents (e.g. websites) and applications providers should endeavour to adopt IPv6 (dual stack) by **01-01-2017**.'*
- *'The complete financial ecosystem including payment gateways, financial institutions, banks, insurance companies etc. should endeavour to adopt IPv6 (dual stack) by **01-01-2017**.'*
- *'The entire '.in' domain should endeavour to adopt IPv6 (dual stack) by **01-01-2017**.'*

3.4 Equipment Manufacturers:

No change has been made in the timelines for this segment.

3.5 Cloud Computing / Data Centres:

The timeline has been revised as under:

*'All public cloud computing service / data centres providers should endeavour to adopt IPv6 (dual stack) latest by **01-01-2017**.'*

This is for your kind information and necessary action please.

Encl: As above

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To

- i. All Internet Service Providers (ISPs)/Content & Application Providers/ Equipment Manufacturers/Cloud Computing Service / Data Centre Providers
- ii. All Central Ministries/Departments & States/UTs.
- iii. Sr. DDG (TEC)/ Sr. DDG (TERM)/ JS (T)/ DDG (AS)/ DDG (CS)/ DDG (DS)/ DDG (Security)/ ED (C-DOT/ CEO, NIXI/ DDG (BB), USOF /DDG (IT)/ DDG (SU)/ DDG (SD)/ DDG (Training)/ DDG (IR).
- iv. COAI/ AUSPI/ISPAI/ICA

Copy to:

1. Sr. PPS to Secretary (T)
2. Sr. PPS to Member (T)
3. Sr. PPS to Member (S)

IPv6 Transition Guidelines/ Timelines of National IPv6 Deployment Roadmap v-II

Government Organisations:

- ❖ The Government organisations should prepare a detailed transition plan for complete transition to IPv6 (dual stack) by December 2017 based on the network complexity & equipment/ technological life cycles. The plan should be prepared latest by December 2013 and accordingly the required budgetary provisions should be made in their demand for grant.
For this purpose, it is recommended that a dedicated transition unit in each organisation should be formed immediately to facilitate entire transition.
- ❖ All new IP based services (like cloud computing, data centres etc.) to be provisioned for / by the Government organisations should be on dual stack supporting IPv6 traffic with immediate effect.
- ❖ The public interface of all Government projects for delivery of citizen centric services should be dual stack supporting IPv6 traffic latest by 01-01-2015. The readiness of Government projects in turn will act as a catalyst for private sector transition from IPv4 to IPv6.
- ❖ The Government organisations should procure equipments which are also IPv6 Ready (Dual Stack) and go for deployment of IPv6 ready (Dual Stack) networks with end to end IPv6 supported applications. The equipment should be either TEC certified or IPv6 Ready Logo certified.
- ❖ The Government organisations should go for IPv6 based innovative applications in their respective areas like smart metering, smart grid, smart building, smart city etc.
- ❖ 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 IPv6 should be included in the curriculum of technical courses being offered by various institutes / colleges across the country.

Service Providers:

➔ Enterprise Customers

- ❖ All new enterprise customer connections (both wireless and wireline) provided by Service Providers on or after 01-01-2014 shall be capable of carrying IPv6 traffic either on dual stack or on native IPv6.
- ❖ 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 30-06-2014 shall be capable of carrying IPv6 traffic either on dual stack or on native IPv6.
- ❖ The Service Providers shall endeavor to progressively replace/ upgrade the Service Providers owned CPEs which are not IPv6 ready as per the following timelines:
 - Replacement/ upgradation of 25% of CPEs by December 2014.
 - Replacement/ upgradation of 50% of CPEs by December 2015.

- Replacement/ upgradation of 75% of CPEs by December 2016.
 - Replacement/ upgradation of 100% of CPEs by December 2017.
- ❖ 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 with effect from 30-06-2013 shall be capable of carrying IPv6 traffic either on dual stack or on native IPv6.
- ❖ All new GSM/ CDMA customer connections provided by Service Providers on or after 30-06-2014 shall be capable of carrying IPv6 traffic either on dual stack or on native IPv6.

Content & Application Providers:

- ❖ All contents (eg. websites) and applications providers should target to adopt IPv6 (dual stack) for new contents & applications by 30-06-2014 and for existing ones latest by 01-01-2015.
- ❖ The complete financial ecosystem including payment gateways, financial institutions, banks, insurance companies, etc. should transit to IPv6 (dual stack) latest by 30-06-2013.
- ❖ 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 (dual stack) latest by June 2014.

Equipment Manufacturers:

- ❖ All mobile phone handsets/ data card dongles/ tablets and similar devices used for internet access supporting GSM/CDMA version 2.5G and above sold in India on or after 30-06-2014 shall be capable of carrying IPv6 traffic either on dual stack (IPv4v6) or on native IPv6.
- ❖ All wireline broadband CPEs sold in India on or after 01-01-2014 shall be capable of carrying IPv6 traffic either on dual stack or on native IPv6.

Cloud Computing / Data Centres:

- ❖ All public cloud computing service / data centres providers should target to adopt IPv6 (dual stack) latest by 30-06-2014.
