



Department of Telecommunications,  
Ministry of Communications and IT,  
Government of India

# India IPv6 Task Force Newsletter

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The first India IPv6 Task Force newsletter was released on 8<sup>th</sup> June, 2011, by Shri R Chandrashekhar, Secretary (T) on the occasion of the World IPv6 day, in a function organized by Department of Telecommunications, Sanchar Bhavan, New Delhi. It was attended by senior officers of DoT, TEC, BSNL & MTNL and industry representatives.

Shri R Chandrashekhar, Secretary (T) appreciated the efforts of Department of Telecommunications in the implementation of Internet Protocol version 6 (IPv6) services and said that the department is working closely with all stakeholders to ensure implementation on time as per the policy guidelines.

A Compendium on IPv6 activities compiled by Telecommunication Engineering Center (TEC) was also released by Secretary (T) in the same function. This technical compendium consists of various articles on different aspects of implementation of IPv6 protocol and will be very useful and handy for IPv6 implementation in the country.



## 1. World IPv6 day and India

The World IPv6 day was celebrated on 8<sup>th</sup> June, 2011, across India as well as globally. The aim of celebrating World IPv6 day on 8<sup>th</sup> June 2011 was to motivate organizations across the Internet industry such as web service providers, hardware vendors, operating system makers and other key players to prepare themselves for successful transition from IPv4 to IPv6.

Major Service providers and content providers across India – Tata Communications, Airtel, Reliance, Google, Yahoo and others participated in the World IPv6 day and they reported that the event proceeded ahead without any hitch, wherein no major outages or security breaches were reported.

Globally it was observed that the IPv6 traffic increased by 60% on this day. Across India multiple IPv6 Awareness Workshops and presentations were made on this day including one organized by Internet Service Providers Associations (ISPAI) in India Habitat centre, New Delhi, which has led to increased awareness of IPv6 and would help increase the IPv6 adoption across organizations.

## 2. States commit to IPv6 adoption

A meeting of the Principal Secretary (IT)/Secretary (IT) was held on July 21<sup>st</sup> 2011 at Sanchar Bhavan, 2011, to review the progress of IPv6 adoption by the various states.

Shri R Chandrashekhar, Secretary (T) addressed the gathering and requested the various states to initiate the IPv6 adoption program on priority and assured that any help required from Government of India will be extended to them. He further directed to form a core committee to look into various issues/doubts in the implementation of IPv6 adoption in Government sectors and resolving the same on regular basis.

Sh. Chandra Prakash, Member (T) informed that all major service providers are on the right track for IPv6 policy implementation and assured that they will be ready by the target date i.e. December, 2011 and further said that now Government organizations have to gear up to start the IPv6 services by March, 2012.

Various actionable points which emerged out from the meeting are as follows:

- IPv6 implementation activity sheet from States/UTs to be submitted to DoT on priority.
- DoT to empanel the consultants for providing consultancy services to Central and States Government organizations in next 3-4 months.
- Contents of the government websites to be made IPv6 compliant.
- Government websites maintained by NIC to be made dual stack.
- C DOT to take action for making Lawful Interception & Monitoring System (LIMS) IPv6 ready.
- IPv6 compliant guidelines letter issued by DoT to be reiterated again by DIT to all states.

### 3. Recent meetings and outcomes

Department of Telecommunications has been holding various meetings with key stakeholders across the IT eco-system for IPv6 adoption – Service providers, Content providers, Government sector. The key highlights of the various meeting are as below :

<i><b>Name of the meeting</b></i>	<i><b>Key highlights</b></i>
<i><b>IPv6 Standing Committee Meeting</b></i>	<ul style="list-style-type: none"> <li>• All IPv6 related activities and contents on DoT /TEC websites.</li> <li>• Up gradation from IPv4 to IPv6 : Higher charges by equipment vendors - TEC is working on it.</li> <li>• Short listing of IPv6 Consultants for Government Organizations - DoT has issued EOI for same.</li> <li>• Discussions on IPv6 Address Allocation Policy.</li> <li>• Discussions on formation National Internet Registry (NIR).</li> <li>• All Nodes of NIXI made IPv6 compliant.</li> <li>• All Government Websites to be made IPv6 ready- NIC working on it.</li> <li>• IPv6 Task Force website in DoT : Dual stack as well as only IPv6 website-NIC and IT wing DoT working on it.</li> </ul>
<i><b>Meeting with Service Providers and content providers</b></i>	<ul style="list-style-type: none"> <li>• All major service providers agreed that they will be ready by the targeted date for starting the IPv6 service as per Government Policy.</li> <li>• Google &amp; Yahoo, content providers confirmed that they will be ready in all respects by December, 2011.</li> <li>• Service providers need guidelines on some of the applications like gaming etc - the matter will be referred to application working group led by Tech Mahindra to suggest some solutions in this regard.</li> </ul>



#### 4. IPv6 adoption status – Service providers

The IPv6 adoption status and the readiness of Service providers to meet the December 2011 deadline of rolling out IPv6 services was discussed in a meeting with the major Service providers on 14<sup>th</sup> July, 2011 at Sanchar Bhavan, New Delhi. Most of the Service providers assured that they would meet the December 2011 deadline of rolling out IPv6 services. The current status of their readiness to meet the deadlines is as below:

##### STATUS OF THE MAJOR SERVICE PROVIDERS AS ON July, 2011

Sl. N.	Major Service Provider	Presence	Status as on July, 2011.	Remarks
1	BSNL	Pan India except Delhi & Mumbai	Received	Assured to Comply on time.
2	MTNL	Delhi & Mumbai	Received	Assured to Comply on time.
3	Reliance Communication Infra Ltd.	Pan India	Received	Assured to Comply on time.
4	Airtel	Pan India	Received	Assured to Comply on time.
5	Hathway	Pan India	Received	Assured to Comply on time.
6	Sify Technologies Ltd	Pan India	Received	Assured to Comply on time.
7	Data Infosys Ltd	Pan India	Received	Assured to Comply on time.
8	Beam Cable System Pvt.Ltd	Andhra Pradesh	Received	Assured to Comply on time.
9	Tata Tele Services Ltd	Pan India	Received	Assured to Comply on time.
10	Spectranet	Pan India	Received	Assured to Comply on time.
11	Ortel Communications Ltd	Orissa, West Bengal, A.P., Chattisgarh	Received	Assured to Comply on time.
12	HCL Infinet Ltd	Pan India	Received	Assured to Comply on time.
13	Ankhnet Informations Pvt.Ltd	Mumbai	Received	Assured to Comply on time.
14	Vodafone	Gujrat	Received	Assured to Comply on time.
15	Shyam Internet Services Ltd	Rajasthan	Received	Assured to Comply on time.
16	Hughes Communications India Ltd	Pan India	Received	Assured to Comply on time.
17	Tata Communications	Pan India	Received	Assured to Comply on time.
18	Southern Online Bio Technologies Ltd	Andhra Pradesh	Received	Assured to Comply on time.
19	HFCL Infotel Ltd.	Pan India	Received	Assured to Comply on time.
20	Indusind Media & Communications Ltd	Pan India	Received	Assured to Comply on time.

## 5. Major Activities of working groups

Major activities and achievements of the various working groups are as below:

<b><i>Name of the working group</i></b>	<b><i>Lead Organization</i></b>	<b><i>Key activities</i></b>
<b><i>Training and Awareness Working Group</i></b>	BSNL	<ul style="list-style-type: none"> <li>DoT in coordination with BSNL has organized IPv6 awareness workshops at:               <ul style="list-style-type: none"> <li>10<sup>th</sup> June, 2011 at Raipur</li> <li>23<sup>rd</sup> June, 2011 at Bhopal</li> <li>5<sup>th</sup> August 2011 at Kolkata</li> <li>12<sup>th</sup> August, 2011 at Chennai</li> </ul> </li> <li>Workshops are being attended by 125-150 participants from various departments/ministries of States and other stakeholders.</li> <li>Senior officers from DoT, BSNL and State Government concerned (Principal Secretaries (IT)) attended the workshops.</li> <li>Speakers were from DoT, BSNL, TEC, TechMahindra CISCO, TCL and IIT Kanpur.</li> <li>Panel discussions were held in all the workshops.</li> </ul>
<b><i>Pilot Project Working Group</i></b>	DIT	<ul style="list-style-type: none"> <li>The Pilot project working group visited Shimla, Himachal Pradesh to discuss the scope and details of the IPv6 pilot projects to be initiated in the state of Himachal Pradesh. The following projects were identified to be initiated in the state:               <ul style="list-style-type: none"> <li>IPv6 based tele-medicine</li> <li>IPv6 based Birth and death certificate</li> <li>IPv6 cloud based citizen service.</li> </ul> </li> </ul>

## 6. Upcoming events :

- Core committee meeting in September, 2011 to resolve various issues/doubts for IPv6 implementation.
- Expression of Interest (EOI) has been floated for empanelment of consultants; last date for submission of EOI is 8<sup>th</sup> September, 2011 up to 15.00 hrs and will be opened on the same day at 15.30 hrs.
- IPv6 Awareness workshop proposed at Jaipur, Shimla and Guwahati in on 9<sup>th</sup>, 16<sup>th</sup> and 23<sup>rd</sup> September, 2011 respectively.
- Oversight committee meeting proposed in the last week of Sept, 2011.
- APNIC-32 meeting in BUSAN (South Korea) from 28<sup>th</sup> August to 1<sup>st</sup> September, 2011 - Delegation from DoT will attend.



## 7. IPv6 around the world

### World IPv6 day on June 8<sup>th</sup> 2011 – A few interesting statistics

#### Number of sites with AAAA records:

- During measurement on June 1st - No: of sites with both A and AAAA record - 245 sites
- On World IPv6 day number of sites with AAAA records peaked at 491
- When the World IPv6 Day was over, the number of sites with AAAA dropped and stabilized at around 310

#### Number of sites – WWW with AAAA records:

- One day before the World IPv6 day - 116 sites had AAAA records for “www” host name that is commonly used when accessing a web site.
- The number of “www” host names with AAAA records more than tripled during the World IPv6 Day reaching 374 sites.
- The number of AAAA records for the “www” host name dropped steeply after the day and has remained around 160 sites since.
- Source: <http://tools.ietf.org/html/draft-keranen-ipv6day-measurements-01>

## 8. IPv6 forum announces – IPv6 Education Certified Certification Logo Program

The IPv6 Forum Education Logo Program Committee releases a new program; The IPv6 Education Certified Certification Logo Program. This program will certify vendor certifications that assess IPv6 expertise as per IPv6 Forum's specification with Silver & Gold Logo levels.

This newsletter is being issued by 'Networks and Technologies' (NT) cell, DoT in coordination with Application migration working group – National IPv6 Task force

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