

2-4/2010-NT

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

Dated 4th March, 2011

Minutes of Meeting

Sub: Minutes of Steering Committee Meeting for IPv6 Policy Implementation

First meeting of the Steering Committee under the India IPV6 task force was held on 28th February, 2011 in Sanchar Bhawan under the Chairmanship of Member (T), DoT. It was attended by the Steering Committee members and the Leads of all working groups. Shri R.M.Agarwal, DDG (NT), DoT welcomed all the distinguished participants and explained about the need for the meeting and it was informed to all participants that the Task force created is three layered as follows:

- a. Oversight Committee
- b. Steering Committee
- c. 10 Working Groups

He informed that this meeting has been convened to discuss the progress and plans of all the 10 working groups.

2. Sh. J Gopal, Advisor (T) mentioned that the Government had set very progressive targets for the implementation of IPV6 in the country and it would require lot of discipline and dedication from all stakeholders to achieve these targets.

3. Sh. Chandra Prakash, Member (T), Telecom Commission mentioned that this was the first meeting of the Steering Committee. This committee is expected to meet every 2 months. He stressed that only 9-10 months are left for achieving the first milestone which is Service Providers to make the Network IPV6 compliant. He mentioned that there were some key issues that were discussed in last meeting of the State and Central Nodal officers, held on 13th January 2011 at Sanchar Bhawan. These were as follows:

- a. Requirement of Training and awareness for various Central and State Govt. departments
- b. Need for Panel of Consultants for IPV6 Implementation across Government department

He further hoped that the issues are getting resolved and that this meeting will be very useful.

4. Sh. R M Agarwal then informed all that the working groups are supposed to hold internal meetings within their groups regularly once in a month. The Steering meeting is supposed to meet once every 2 months where they will review the progress and plans made by the working groups. The Oversight Committee is supposed to meet every 4 months wherein they will decide on the points already approved by the Steering Committee. Then, he invited leads of various working groups for their progress and plans.

WG9: IPV6 Implementation in the Government Sector

5. Sh. R M Agarwal, DDG (NT) then started with a presentation on WG 9 ie. IPV6 Implementation in the Government Sector, in which DoT is the lead organization.

- i. He elaborated that various meetings with different stakeholders were held at different levels and attended by all concerned.
- ii. He further mentioned that many letters have been issued by senior officials of DOT to all Central and State Government departments for IPV6 policy implementation and issues are being resolved at different stages.
- iii. In the last meeting the issue of requirement of a hardware checklist was discussed. This list was circulated and along with this the schedule of awareness training by BSNL was also issued.
- iv. With this he brought up the decisions that were taken up during the meeting on 13th January, 2011 and each of the points was discussed.
 - a. Committee has been formed to decide the scope and the eligibility criteria for the empanelment of IPV6 Consultants. This committee is to submit the report within next 3 months.
 - b. A Committee has been formed for deciding the National IPV6 Address Allocation Policy. This committee is supposed to submit its report in the next 3 months.
- v. In addition he emphasized the need for a number of review meetings with all central Government departments/state government departments and task force. A participant suggested that awareness sessions should also take into account the awareness of end users as well.

To this Sh. R M Agarwal responded that Working Group1 is created for Training and Awareness across the Government sector, service providers and industries and Working Group 8 has been created for Knowledge Resource development Group. The objective of working group 8 is to create tie up with educational institutions and make IPV6 education a part of curriculum. The responsibility of the group is also to hold workshops for public awareness.

- vi. Special meetings are proposed to be held between different stakeholders. He mentioned that the content providers are not coming up and that they should get more actively involved. Same is the issue with the Application Developers not coming up and that this is a classic example of the chicken and egg problem. A participant then commented that therefore the Government needs to promote both these groups so that they can come together on the same platform.

He further mentioned that India is among the few countries in the world to have a Government approved IPV6 Implementation Policy. We should therefore organize Annual IPV6 summits in the country to showcase our

achievements to the world and also get benefit from their experience and expertise.

WG1: Training and Awareness

6. For the Training & Awareness working Group led by BSNL, Sh. Sudeep Kumar, GM (BB) ALTTC, BSNL informed that complete proposal for approval of awareness workshops and other specialized trainings has been submitted to DoT. The cost structure for the same was also discussed among the steering committee members.

Sh. Navjot Sidhu from Ministry of defense then raised the points that if DoT can create a process for inter departmental process (for Government departments only) for transfer of funds; this would really expedite the whole process. To address this, it was finally decided that the DoT would either forecast the training requirements from various Government departments or the departments can them selves send in their requirements. Based on these forecasts the DoT would budget the cost of each training and this could then be adjusted as interdepartmental adjustments whenever training is imparted to a Government body.

To this Smt. Shikha Mathur, DDG (FEB) commented that this whole program should be considered as a separate project and budgetary provision should be made for this purpose. Advisor (T) stressed the need to resolve this issue in DoT at the earliest possible time.

WG2: IPV6 Network Implementation

7. The group led by TEC outlined a 5 step approach to carry out the Network implementation and discussed each step in detail. It was suggested by Tata Communications to divide the enterprise under the Government and Private enterprise networks and then create plans for each accordingly. It was also suggested to divide an enterprise in terms of scale, i.e. small, medium and large. It was suggested to share the questionnaire as soon as possible with the Service Providers. The MoD then suggested that the questionnaire should be shared with them also, as they know their network the best and hence will be best suited to answer the questionnaire. Further, it was discussed that this Working Group should have linkages with other groups as well. Already this Group is talking to Applications Support to look at the applications that might come into place on the network.

Sh. K K Minocha DDG (BB) then pointed out if this group is taking into consideration any pitfalls that might have occurred during earlier implementations. To this Mr Anup from Cisco informed that they are taking care of this point in the IPV6 planning and design phase. He further suggested that they don't need to consider all scenarios for the purpose of their study. Instead they would be looking into scenarios that account for 80% of cases.

WG3: Standards & Specifications

8. The group led by TEC, mentioned that the group is developing the standards for the country dependent on IPV6 Ready Logo and TEC will release IPV6 standards by March, 2011.

WG4: India6 – Networking Group

9. Tata Communications stressed the importance of IPv6 in India and how different countries like US and China were creating next generation networks with IPv6 implementations. Further, it was informed that all service operators have a back bone which is IPv6 compliant. But currently there is no IPv6 traffic. It was then clarified by Sh. RM Agarwal (referring to the India IPv6 Deployment Roadmap) that the purpose of this group was to first find out and report the extent of network that currently existed in India. Post this they would be required to do a Gap Analysis and see where there is need for expansion. He further suggested that traffic is a by product of Applications. He mentioned that there would be a discussion of the India6 network in Oversight Committee in 2-3 weeks. He then requested Tata Communications to provide the theme paper which can be taken up in Oversight Committee.

WG6: IPv6 Pilot Projects.

10. As no official from Lead Working group DIT was available, Tech Mahindra being the Co lead of this group took up the responsibility and informed the committee that there were a few Pilot Projects that have been finalized and are under different stages of proposal creation. To mention a few:

a. eHealth care in Himachal Pradesh: Under this project it is envisaged to have a central Hospital in Shimla (Indira Gandhi Medical College) and then connect this to three different areas out of the 20 available. Wherever there is no primary healthcare facility present, there would mobile vans provided with all facilities and connected to the main hospital where there would be doctors and facilities available to provide all possible help.

b. eLearning in Himachal Pradesh. This will be hosted in a central server in Shimla. Currently the Bill of Materials is being worked out and the proposal has been drafted. The same would be submitted to DoT within 2 weeks.

c. Karnataka: There are 2 Pilot Projects that are under consideration:

(i). IPv6 enable State portal

(ii). Intelligent buildings

d. In addition to this there are talks going on with other states like Gujarat, Tripura and Tamil Nadu.

On this DDG (BB) mentioned that a Wireless Broadband is soon to be deployed in Himachal Pradesh and that the Pilot Projects should look into how to utilize the same effectively.

Sh. Srinivas from Tech Mahindra also mentioned that the duration of a typical Pilot Project would be 18-24 months. Further, together with the Pilot Projects this group is also considering the Ideation Project in Colleges and Universities. Under this, ideas can be invited from the educational bodies for Pilot Projects. The top 4 ideas can be then chosen for implementation as Pilot Projects. This would help to spread IPv6 awareness across educational bodies. Post this the various funding models for the Pilot Projects was discussed very actively by the participants.

WG: 7 Applications Support

11. Tech Mahindra being the lead organization for this working group discussed the various applications possible in the IPV6 scenario for different verticals like defence, banking, health, transportation etc. It was suggested to have Data Base of all Data centre operators, web/ applications hosts for holding application innovations Conferences and Seminars. This was essential to spread awareness on IPV6 applications in various verticals. This working group also planned to submit the proposal for these applications and the expectations from Government

There were no representations from Working Group5, the experimental IPV6 working group and Working group 8, Knowledge Resource Development working group. These working groups are yet to gear up its activities as no plan and progress has been received from them. The lead organizations of these working groups are again requested to submit their plans and progress on priority within a week's time so that same can be taken up in oversight committee. The working group 10 i.e. Network Security working group is under formation. All stakeholders are requested to send nominations for this working group.

Finally, there was a vote of thanks by Sh. RM Agarwal thanking all the distinguished members who had participated in the meeting for sparing their valuable time and making the discussions more fruitful.

12. Summary of Actionable Points

- i. DDG (NT) to hold number of meetings as detailed with all concerned as Lead organization of IPV6 implementation in Government sectors.
- ii. The proposal for convening the various awareness workshops and other specialized training has been submitted to DoT by BSNL, the lead organization for training working group. DoT to take further decision on the same and make budgetary provisions for the same and fund requirements of other working groups.
- iii. The proposal for the IPV6 website is to be submitted by BSNL to DoT.
- iv. All Central and State Government Departments to send their training requirements to DoT for budgeting. In absence of the same DoT may forecast the training requirements of the Government sector and budget the same for an inter departmental adjustment later if required.
- v. TEC/Cisco to prepare a detailed technical common questionnaire for feedback from service providers.
- vi. TEC to prepare IPV6 standards and specifications by end of March 2011.
- vii. Tata Communications Limited is to carry out a study on the Pan India available Internet infrastructure owned by various Service Providers and prepare the report covering the missing link and suggesting the areas in which the network needs to be expanded. As a long term objective TCL is expected to create a report on R&D type network.
- viii. For Pilot Projects DIT as lead organization and, Tech Mahindra as Co Leads will submit the final proposal for the following states:

- a. Himachal Pradesh: eHealthcare, eLearning
 - b. Karnataka: IPV6 enabled state portal, Intelligent building
- ix. Tech Mahindra as Lead for the Applications Support Group suggested that Application Innovation Conferences should take place across the country with the various stakeholders like Content Providers, Data centre operators, Applications hosts and that the funding for such seminars would be partially obtained through sponsorships. Also it was suggested that Annual IPV6 summit should be held in India and that the proposal for the same should be submitted to DoT.
 - x. Review meetings with the various bodies in the task force are to be held as per the schedule discussed in the meeting. Also the working groups are expected to hold internal meetings regularly on monthly basis.
 - xi. Members for the Network Security group need to be nominated by all the stakeholders.



(R M Agarwal)

DDG (NT)

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Copy for Information to:

1. Secretary (T)
2. Member (T)
3. Member (F)
4. Administrator (USOF)
5. Advisor (T)
6. Advisor (F)
7. Additional Secretary (T)
8. Sr. DDG, TEC
9. All members of Oversight Committee

Copy for information and necessary action to:

1. All members of Steering Committee

2. All Lead organizations
3. All participants
4. All Telecom Associations
5. All Major Service Providers
6. Central and state Nodal Officers
7. All members of the working groups