MINUTES OF THE 3rd IPv6 TASK FORCE PHASE II MEETING

RAPPORTEUR(S): TIM CHOWN¹
MEETING DATE: APRIL 30th 2003
VERSION: 0.4 (FINAL)
DISTRIBUTION: PUBLIC
DOCUMENT NUMBER: TBD

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# Table of Contents

1. Opening of the Meeting .............................................................................................................3  
2. Participants ................................................................................................................................3  
3. Agenda ......................................................................................................................................3  
4. European Commission comments (Nicholas Nicholson)...........................................................3  
5. National TF and related activity summary (Latif Ladid)..............................................................4  
6. Phase 1 Roadmap implementation (Andre Zehl).......................................................................5  
7. IPv6 TF-SC Action List Review (Tim Chown) ...........................................................................6  
8. IPv6 Benchmarking (Jordi Palet) ...............................................................................................7  
9. CEO Initiative and Round Table (Latif Ladid) ............................................................................7  
10. TF-SC Roadmap (Andre Zehl) ...............................................................................................7  
11. Close of Meeting ....................................................................................................................8  
12. ANNEX A – 3rd IPv6 TF Phase II Meeting Attendance List ....................................................9  
13. ANNEX B - Agenda 3rd IPv6 Task Force Phase II Meeting ..................................................10  
Third IPv6 Task Force Phase II meeting

1. Opening of the Meeting

The meeting was opened by Latif Ladid, the chairman of the EU IPv6 Task Force.

Andre Zehl welcomed the attendees and gave a brief report on the German IPv6 Task Force event, which was held the day before.

2. Participants

The attendance list is shown in Annex A.

3. Agenda

The approved agenda is presented in Annex B.

4. European Commission comments (Nicholas Nicholson)

Nick gave an overview of the EC position on IPv6, including the results of meetings of the European Council and sub-Councils. The mechanism by which IPv6 technology can become considered for policy recommendations begins with an analysis phase (in our case the IPv6 Task Force first phase), then the EC proposes what it sees as priority issues to the European Council and Parliament, in the form of a Communication. The Council (or sub Councils) considers the Communications, either in general meetings or sub-councils. Their conclusions lead to policies.

The transport telecommunications council in Luxembourg, June 2002, called for the removal of obstacles to deployment of IPv6. The council is a special council of the European Council.

It made recommendations to member states (for awareness raising, to integrate research networks including GEANT, to monitor transition and offer best practice guidelines, in cooperation with the private sector and standards bodies). We need to know where we are in IPv6, what is available, and how they are functioning.

It recommended that the EC evaluate the social impact of IPv6, including e-Health implications, and to investigate security issues with IPv6.

Finally, the private sector is encouraged to integrate IPv6 infrastructures and to consider the interoperability of IPv6 services and applications, to kick-start a European-wide vendor independent training programme, and to track IPv4 address consumption and need for IP addresses, and to contribute to standards and FP6.

The eEurope 2002 initiative was seen as being successful. The goals of the 2005 initiative should be a trump card for the IPv6 TF. The development of the Information Society remains a key political priority of the EU. Members states are encouraged to do far-reaching stuff, the private
sector is to work with the EC to establish eEurope. A coordinated EU approach was confirmed as key in Lisbon.

These goals include:
- Modernising e-governance, e-health, e-learning
- Creating a dynamic e-business environment
- Being an enabler for widespread broadband access at competitive prices
- Creating a secure information infrastructure

There is a Network and Information Security Agency being set up in January 2004. It will receive €5M p.a., for 5 years. It will act as a centre of expertise for security for the EU, performing tasks such as awareness raising and running interoperability tests. Companies and universities will be able to bid to take part.

This will involve:
- New Policy measures
- Development, analysis, and exchange of Good practise
- Benchmarking of the adoption of policies.
- Coordination of existing policies

Comments:

Jose: We should track the recommendations and their implementation in the TF-SC.

Latif: The French TF is a good example of the path for national TFs to take.

Patrick: The EC recommendations made it easier to push the national activities.

Nick: The TF is close to the ground, so knows what is possible and feasible, and what is vital for which services.

Andre: We need to coordinate actions between the national TFs.

Nick: It is not as easy to introduce a policy in EU because it is many countries, unlike Japan or USA.

5. National TF and related activity summary (Latif Ladid)

The IPv6 Summit in India included a CEO round table. India is focused on the US activities, thus IPv6 is a “surprise” there, but they can see new potential markets, including “local” parts of their world including China.

Latif reviewed the statuses of the national TFs, including the North American IPv6 TF, which was created on the basis of groundwork done by the IPv6 TF-SC. IPv6 TFs have been created in many countries, e.g. France, Germany, the UK and Switzerland. [A full summary of national TF statuses can be found in Deliverable D3.2.]
The Global IPv6 Ready programme had a kick-off meeting in Madrid. It is an open programme, including TAHI, ETSI and UNH, who are agreeing a common set of tests for an initial “IPv6 Ready” logo.

Information will soon be available at www.ipv6ready.org.

The IPv6 TF will create a one-page summary of the programme and its goals and methodology. The TF should promote and support the programme.

Comments:

Patrick: The logo might be accompanied by an RFC list too.

6. Phase 1 Roadmap implementation (Andre Zehl)

The TF was pivotal in producing the document “Communication from the Commission to the Council and European Parliament”. This contained 20 recommendation points, which the TF-SC is tracking the implementation of. The recommendations were aimed at the EC, member states and industry. Not all recommendations are empirically traceable, but can still be assessed. The assessment is included in Deliverable D3.2. The recommendations will soon apply to 10 new EU countries.

It may be possible to generate a political letter to governments to get some form of national responses, in which we say we are working closely with the EC to follow up the status of implementation of Council recommendations.

Nick suggested that we add links on the IPv6TF web page to general content – e.g. the top 10 IPv6 “promotional” papers perhaps. He said we need to feedback to the EC where follow-up checks on recommendation implementations fail.

The EC will have figures on IPv6 related proposals submitted into FP6

Training is an issue. Some courses are on offer, but mainly from vendors, not independent trainers. Nick suggested we list these on the web site. Latif pointed out the Netsoc FP5 IPv6 training proposal failed.

In the address space area we need to study PI against PA address space; this issue remains to be resolved. Multihoming is a big issue – we need a briefing paper on this topic (A.19 has been added for this task). The IETF is stuck on multihoming – the Multi6 WG is not very active.

There was some discussion as to whether the EC should fund a European IPv6 stack, e.g. working with HUT, INRIA or IABG. Latif will consult Francis (added action A.20). The KAME project code is open, and can already be used or contributed to. IPv6 + IPsec + mobility = an awful lot of code – this would not be a small undertaking.

The importance of maintaining roadmaps, benchmarking deployment, and conducting or calling for appropriate market studies was agreed.

The Article 29 WG paper on IPv6 privacy has been responded to, and the WG consulted. The issue has reached a mutually agreeable solution.
7. IPv6 TF-SC Action List Review (Tim Chown)

The outstanding TF-SC actions were reviewed. A full list of actions is listed in Appendix C.

A.1 Jordi offered to assist and help investigate. The EC needs to check the required process (Nick will assist). There is also the issue of WLAN and IPv6 on commission premises? Jordi to take up.

A.2 Need to work on this. Some FP6 participation is happening, but no strategic activity. Some results from meeting, e.g. T-Systems and Japan. Latif to take up.

A.3 Jordi and Latif to take up the Global Showcase action.

A.4 Done.

A.5 Done.

A.6. Ongoing. There is little chance while equipment does not support it. Peter H will take up. ISPs are waiting for the time to be right, although it is not clear when conditions will be “right”. NRENs are able to deploy ahead of commercial need. End users can use a tunnel broker now, or can tunnel on a leased line, e.g. to the UK6X, and can use BGP. The question is, how important is native IPv6? IPv6 on DSL is the harder solution to deliver. Most telcos are experimenting, and work is being done in Euro6IX. We should encourage trials.

Patrick: we should make sample applications available to get traffic for ISPs to study. An ISP needs to know how to set up new services, how to monitor and authorise them.

There was a comment that Andrews and Arnold in the UK offer IPv6 DSL (but over a tunnel?).

A.7 This is happening, e.g. firewall products from Nokia and Checkpoint (Firewall-1). Tim will take up.

A.8 Patrick has a white paper. Contentious? New security architecture? Other NAT reasons?

A.9 Done.

A.10 The DNS issues document will be taken up by Tim

A.11 Jordi is working on it.

A.12 Peter has done a survey of issues, which has been reviewed by the TF-SC. The barriers paper should now be considered final, and ratified here.

A.13 Tim will forward minutes of collaborative meetings between the US, EU and Japanese networks regarding routing stability, and produce a one-page summary.

A.14 This has been circulated by Timo already. No feedback yet.

A.15 The INTUIT proposal covers the user-network interface. Telcos need to know what prefix to give handsets, what size prefix to get to allow static prefixes per customer. The IETF is
investigating stable addressing (in the absence of site locals). This lack of best practice knowledge is an obstacle to deployment. Peter H and Tim will take up.

A.16 Andre and Latif will work on this item.

A.17 Jordi will take this up.

The action list will continue to be tracked at each TF-SC meeting.

8. IPv6 Benchmarking (Jordi Palet)

Jordi reported that the 6MEMO project was submitted for FP6 as an SSA. The goal is to measure and monitor IPv6 to see if deployment is following expectations. There is no single "stat" to measure deployment.

9. CEO Initiative and Round Table (Latif Ladid)

A CEO roundtable event will be investigated and scheduled as appropriate later in 2003.

10. TF-SC Roadmap (Andre Zehl)

Andre listed the dates of upcoming TF events – these are detailed in Deliverable D3.2.

There was then a discussion of how to assist national TF progression and roadmaps, and what the TFs should aim to reach by mid 2004. The French TF example is perhaps the best. It has 200 members; Renater3 has IPv6 dual-stack, and has held 5 meetings already on applications, networking and sector studies (automobile industry and health). It will hold a meeting in June by ISABEL. More information can be found at www.fr.ipv6tf.org. The French TF working groups are NOMAD – naming and addressing, SECPRI – security and privacy (not yet launched) and TECOMOD – technical-business models. There will be an IPv6 Pavilion at N&I Paris, 19-21 November 2003.

A question was asked on how we influence national endeavours. Do we need a statement from the EC again? Do we repeat French WG activities in all countries? Where do we bring in international experts? Note that the Spanish TF WGs disbanded after one year to step back to understand the overall picture first. The EU TF needs to coordinate and act as a focus for the national TF groups.

Tim relayed comments from the Nav6TF on deployment barriers:

- Dual stack is as weak as weakest code – ISPs don’t want to risk SLAs when they have tight margins.
- There are no production systems.
- There are no address space demands.
- Address re-licensing is a problem – you cannot get permanent Provider Independent address space as an enterprise network.
- Government and industry do not understand IPv6 – industry is in a defensive shell because of the economic climate.
The TF-SC noted the comments, which would be considered and integrated where appropriate in the “Barriers” document (see Action A.12).

11. Close of Meeting

The meeting was closed at 4.30pm. The next meeting date is to be decided via e-mail. The TF-SC will gather in Madrid at the Summit for an hour.
12. ANNEX A – 3rd IPv6 TF Phase II Meeting Attendance List

<table>
<thead>
<tr>
<th>Attendee</th>
<th>Organisation</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tim Chown</td>
<td>University of Southampton</td>
<td>UK</td>
</tr>
<tr>
<td>Jordi Palet</td>
<td>Consulintel</td>
<td>Spain</td>
</tr>
<tr>
<td>Markus Willner</td>
<td>T-Systems</td>
<td>Germany</td>
</tr>
<tr>
<td>Andre Zehl</td>
<td>T-Systems</td>
<td>Germany</td>
</tr>
<tr>
<td>Christian Strauf</td>
<td>JOIN</td>
<td>Germany</td>
</tr>
<tr>
<td>Timo Lappinen</td>
<td>Ficora</td>
<td>Finland</td>
</tr>
<tr>
<td>Jurgen Rauschenbach</td>
<td>DFN</td>
<td>Germany</td>
</tr>
<tr>
<td>Jose Fernandes</td>
<td>EC</td>
<td>-</td>
</tr>
<tr>
<td>Wolfgang Fritsche</td>
<td>IABG</td>
<td>Germany</td>
</tr>
<tr>
<td>Latif Ladid</td>
<td>IPv6 TF-SC chairman</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>Heinrich Stuettgen</td>
<td>NEC</td>
<td>Germany</td>
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<tr>
<td>Andre Stolze</td>
<td>JOIN</td>
<td>Germany</td>
</tr>
<tr>
<td>Peter Hovell</td>
<td>BT Exact</td>
<td>UK</td>
</tr>
<tr>
<td>Hans-Peter Dittler</td>
<td>Braintec Netzwerk Consulting</td>
<td>Germany</td>
</tr>
<tr>
<td>Nicholas Nicholson</td>
<td>EC</td>
<td>-</td>
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<tr>
<td>Thomas Scheffler</td>
<td>T-Systems</td>
<td>Germany</td>
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<tr>
<td>Bosco Fernandes</td>
<td>Siemens</td>
<td>Germany</td>
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<tr>
<td>Patrick Cocquet</td>
<td>6WIND</td>
<td>France</td>
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</tbody>
</table>
13. ANNEX B - Agenda 3rd IPv6 Task Force Phase II Meeting

30th April 2003
09:00 to 17:00
T-Systems Offices, Berlin, Germany

1. Welcome and Introduction (Nicholas Nicholson, EC)
2. IPv6 TF-SC Status Report (Latif Ladid)
3. Progress Report, discussions and actions
   - Phase 1 Roadmap Implementation (Andre Zehl)
   - Progress on Briefing Papers (Tim Chown)
   - Benchmarking (Jordi Palet)
   - CEO Initiatives, Global IPv6 2005 (Latif Ladid)
   - Application Initiatives
4. Progress and Initiatives at the National / Regional IPv6 Task Forces
   - Status of National IPv6 Roadmaps
   - National IPv6 TF Case Studies
   - Unifying and Developing the European IPv6 Roadmap
5. Progress and Initiatives at the National / Regional IPv6 Task Forces
6. Thinking Ahead and Strategic Direction
7. The Next Milestones
8. Any Other Business

These actions require investigation and/or reporting towards IPv6 deployment in Europe. The IPv6 TF can make recommendations and position statements on these issues, but many are beyond the scope of the TF’s remit, and can thus only be “non binding” recommendations.

Currently of 19 actions, 6 have been completed, 2 are new, 11 are ongoing.

<table>
<thead>
<tr>
<th>Ref</th>
<th>Action</th>
<th>Responsible</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.1</td>
<td>Investigate issues for deployment of IPv6-based EC web services (accessibility to EC information over IPv6, including by dual-stack). If technical problems exist, report them back to the IETF v6ops WG.</td>
<td>Jordi</td>
<td>Ongoing</td>
</tr>
<tr>
<td>A.2</td>
<td>Consider and then publish joint research plans with Japanese IPv6 Promotion Council established after EU delegation visited Japan in December 2002</td>
<td>Latif</td>
<td>2003-04-01</td>
</tr>
<tr>
<td>A.3</td>
<td>Contribute recommendations to the Global IPv6 Showcase project</td>
<td>Latif, Jordi</td>
<td>2003-04-01</td>
</tr>
<tr>
<td>A.4</td>
<td>Track and promote the IPv6 Forum “IPv6 Ready” programme to European vendors and industry</td>
<td>Latif</td>
<td>Complete</td>
</tr>
<tr>
<td>A.5</td>
<td>The TF should draw up its recommendations to the IETF on an appropriate timescale to wind down the 6Bone experimental network</td>
<td>Jordi</td>
<td>Complete (6Bone phase-out plan finalised)</td>
</tr>
<tr>
<td>A.6</td>
<td>Methods should be considered to encourage ISPs to offer IPv6 services over existing IPv4 links, so that customers can gain native IPv6 access over the same link as their existing IPv4 access</td>
<td>Peter H</td>
<td>Ongoing</td>
</tr>
<tr>
<td>A.7</td>
<td>Encourage vendors to offer IPv6 security products, including IPv6-capable firewalls</td>
<td>Tim</td>
<td>Ongoing</td>
</tr>
<tr>
<td>A.8</td>
<td>TF position paper on best practice for deployment of secure IPv6 routers and firewalls in the absence of site NATs</td>
<td>All</td>
<td>2003-04-01</td>
</tr>
<tr>
<td>A.9</td>
<td>TF position paper on the outstanding IPv6-specific privacy and security issues, and how the privacy issues impact on EU legislation, current or future. (Max 3 pages)</td>
<td>Alberto, Jordi,  Patrick, Wolfgang</td>
<td>Complete</td>
</tr>
<tr>
<td>A.10</td>
<td>TF position paper on outstanding IPv6 DNS issues</td>
<td>Tim</td>
<td>2003-04-01</td>
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<tr>
<td><strong>A.11</strong></td>
<td>TF position paper on IPv6 PKI deployment issues (short paper)</td>
<td>Jordi</td>
<td>2003-04-01 Ongoing</td>
</tr>
<tr>
<td><strong>A.12</strong></td>
<td>TF position paper on IPv6 ISP deployment status and hurdles (one page, six key issues)</td>
<td>Peter H</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>A.13</strong></td>
<td>TF Position paper on international IPv6 routing stability issues (one page)</td>
<td>Tim</td>
<td>2003-04-01 Ongoing</td>
</tr>
<tr>
<td><strong>A.14</strong></td>
<td>Finnish TF to circulate its “IPv6 deployment issues” document to TF members</td>
<td>Timo</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>A.15</strong></td>
<td>The TF should liaise with telco operators and RIPE NCC to ensure the telcos gain the appropriate IPv6 address space for their needs, and end users get appropriate delegations (/48 or /64).</td>
<td>Peter H Tim</td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>A.16</strong></td>
<td>The TF should revise its roadmap documents on a regular basis (e.g. after each TF meeting)</td>
<td>Andre Latif</td>
<td>Ongoing</td>
</tr>
<tr>
<td><strong>A.17</strong></td>
<td>Investigate a Specific Support Action proposal under the open FP6 call, to undertake an “IPv6 Measurement” project</td>
<td>Jordi</td>
<td>Complete</td>
</tr>
<tr>
<td><strong>A.18</strong></td>
<td>Produce one page summary of IPv6 Ready programme goals and methodology</td>
<td>Latif</td>
<td>2003-07-31</td>
</tr>
<tr>
<td><strong>A.19</strong></td>
<td>Produce IPv6 Multihoming short briefing paper.</td>
<td>Tim</td>
<td>2003-07-31</td>
</tr>
<tr>
<td><strong>A.20</strong></td>
<td>Consult with appropriate European experts on the potential to develop an open source European IPv6 stack.</td>
<td>Latif</td>
<td>2003-07-31</td>
</tr>
</tbody>
</table>