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6DISS

IPv6 Dissemination and Exploitation

Instrument: SPECIFIC SUPPORT ACTION

Thematic Priority 2

D08: Report on the workshop and status of Internet connectivity in the sub-Saharan African countries

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RENATER

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Executive Summary

This deliverable is a report from the 6DISS IPv6 technical workshop that took place on 24th - 26th of October 2006 in Dakar (Senegal). This workshop specifically targeted the countries of the sub-Saharan region to which RENATER had committed to provide training on IPv6 - as well as on multicast technologies. The report includes information on the IPv6 workshop programme, the technical presentations and the hands-on training in the local and remote labs. In addition, the report includes dissemination material that has been distributed to the participants, the list of the attendees and their affiliation; summary of the feedback questionnaire, the analysis of the workshop expenditures, and information on the workshop sponsors.

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level		
PU	Public	✓
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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1. Introduction

This deliverable is a report of the 6DISS technical workshop of the sub-Saharan region, which took place on 24th - 26th of October 2006 in Dakar (Senegal). The workshop especially targeted participants from the countries of the sub-Saharan region. This report includes information on the IPv6 workshop programme, the presentation and dissemination material distributed to the participants, the attendees list and their affiliation, a summary of the feedback questionnaire attendees filled at the end of the workshop, analysis of the workshop expenditures, and information about the workshop sponsors.

The workshop public website can be accessed through the following URL: <http://www.6diss.org/workshops/ssaf/>.

This deliverable also reports on the kick-off meeting of the IPv6 Forum in Senegal under the ISOC chapter umbrella that occurred immediately before the 6DISS-training workshop (23rd of October 2006). Attendance to this meeting was mainly composed of Senegalese researchers, R&D engineers from local commercial companies and a representative of the Ministry of Communications. It gave the opportunity to the 6DISS partners to present the 6DISS project activities, discuss the IPv6 deployment roadmap in Senegal and investigate potential areas of future co-operation.

2. 6DISS workshop in Dakar (Senegal)

2.1. General Information

Most of the previous 6DISS workshop reports have summarized the 6DISS project goals and activities. Therefore, this information has not been included in this report, considering first that it is now well known and second that it is available on the 6DISS website¹.

The 6DISS workshop in Dakar was organized by two 6DISS partners in the framework of the 6DISS IST project, in particular *RENATER* (leading partner) and *ALCATEL*. The workshop was held in conjunction with the IPv6 Forum in Senegal conference prepared by *ISOC SENEGAL*, who were responsible for the logistic arrangements. The training workshop was held on 24th - 26th October 2006 and hosted in the AUF (Agence Universitaire de la Francophonie) offices, whose staff also provided the technical support. French was the official language for this workshop as all, but one, attendees were French-speaking people. This latter person understood French and since the presentation slides were written in English, it was quite easy for him to follow the tutors' explanations. Moreover, parts of the material (training sheets, logistics information) were translated into French for a better understanding of the attendees.




Figure 1: Venue

Summary of the details of the 6DISS workshop in Dakar:

<i>Date:</i>	<i>24-26 October 2006</i>
<i>Location:</i>	<i>Dakar (SENEGAL)</i>
<i>Local organiser:</i>	<i>AUF (Agence Universitaire de la Francophonie) and ISOC SENEGAL</i>
<i>Lead 6DISS partner:</i>	<i>RENATER</i>
<i>Supporting 6DISS partner:</i>	<i>ALCATEL</i>

¹ <http://www.6diss.org>

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2.2. Attendees

The attendees were mainly technical personnel of AUF branch offices from Senegal and neighbour countries, universities (Benin, Dakar and St-Louis), and national regulation authorities from four countries. Few of the organisations represented at the workshop have already started to deploy IPv6 in their network, but some were willing to experiment with IPv6 technology in the near future. There were also participants from commercial ISPs (Sonatel) that are considering offering IPv6 services to their customers. Some of the participants were in a position to influence the deployment of IPv6 technology in their region, as they were representatives of the government, or were responsible for the networking infrastructure and services in their organisation or company.

The majority of the trainees had no - or only limited - practical experience of the IPv6 technology. However, some of the participants had studied the 6DISS e-Learning module (<http://www.6diss.org/elearning/>) so there were a common basic knowledge of the IPv6 protocols and the theoretical aspects. It should be noted that most of the trainees had a good understanding of IPv4 protocols and network services. A few of them were lacking experience in network operation, as they were government administrators rather than technical people.

The list of attendees and their affiliations is the following:


6DISS training workshop participants in Dakar, Senegal				
1	DJOUF	Daoua	SONATEL	daouda.diouf@laposte.net
2	BOYANOV	Andrei	Active Solutions (AUF)	andrei@activesolutions.bg
3	LANCELOT	Jean-François	AUF	jean-francois.lancelot@auf.org
4	NOËL	Thomas	AUF	thomas.noel@auf.org
5	BIZIKI	Zoser Celdy	AUF	zoser.biziki@auf.org
6	DIAL	Sekou Amadou Gouro	AUF	sekou-amadougouro.dial@auf.org
7	SCHNEIDER	Matthieu	AUF	matthieu.schneider@auf.org
8	BARRA	Ousmane	AUF	ousmane.barra@auf.org
9	SANTINI	Jerome	AUF	jerome.santini@auf.org
10	ARMOO	Stephen Kanga	KOFFI ANNAN CENTRE OF EXCELLENCE	stephena@aiti-kace.com.gh
11	MBAYE	Mouhamadou Moustapha	UGB	mmbaye@ugb.sn
12	YACINE	Moustapha	SYGMA TECHNOL	myacine@sentoo.sn
13	TOURE	Issa	ARTP	issa.toure@artp.sn
14	RAZAFITSARA	Alisoa	Ministère des Telecom Madagascar	stpu@mtpc.gov.mg
15	SYLLA	Mouhamed Lamine	SOTELGUI	mlsylla@sotelgui.net.gn
16	KOUROUMA	MAMADY	SOTELGUI	dymama@sotelgui.net.gn
17	AMAMION	Alban	AGENTIC	amamion@gmail.com
18	SCHOMBE	Baudouin	CENTRE AFRICAIN D'ECHANGE CULTUREL	
19	EKISSI	Bene	ATCI	ekissi@atci.ci
20	DIA	Cheikh	BLAISE ELECTRONIC	cmdia@hotmail.com
21	KABER	Ould Mouhamed	SETN MAURIT	medkaber@mauritania.mr
22	BONGO	Abdoulkadri	ESMT	kader.bongo.esmt.sn
23	SALL	Djibrirou Bassirou	SETN	djibi.sall@mauritania.mr
24	DOKOUE	Kossivi	ARTP TOGO	kossivi.dokoue@artp.tg
25	D'ALMEIDA	Ayi Mawuena	BOAD	tdalmeida@boad.org
26	KALLYTH	Marc Vincent de Paul	Congo Brazzaville	kallythmarcvincent@yahoo.fr
27	TRIPONEZ	Thierry	AFRICANET	thierry@triponez.net
28	DIAKITE	Abdoulaye	UNIVERSITE DE CONAKRY	adiakite@gmail.com
29	KERE	Alain	ARTEL	ahkere@artel.bf
30	DALVA TORES	Ana Maria	ASSOCIATION DES FEMMES ENTREPRENEUR	anaa_torres@yahoo.com
31	TAMGNO	James	ESMT	james.tamgno@esmt.sn
32	SALL	Modou	SONATEL	modou.sall@sonatel.sn
33	LO	Gora	SENTEL GSM	goralo@tigo.sn

Figure 2: 6DISS training workshop attendees




2.3. Programme outline

The agenda was agreed in close collaboration with the local organisers from ISOC-SENEGAL, and dedicated set up and configuration exercises were created for this workshop. The meeting agenda and the related material was submitted in advance, so that the local organisers could decide which topics should be prioritised and manage the logistics accordingly. As was requested by most of the participating organisations, the “hands-on” sessions took more than 50% of the overall time of the training workshop. The programme of the workshop is presented in the following table:

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	October 24th - Enabling IPv6
9:00 AM	Welcome, workshop organisation and goals <i>The 6DISS Project</i>
9.30 AM	Theory: Introduction to IPv6 <i>History, The IPv6 protocol, Addressing, RENATER addressing plan, Associated protocols, Auto-configuration.</i>
11.15 AM	Break
11.30 AM	Hands-on: Enable IPv6 to local lab: Hosts <i>Presentation of the local lab, set and identify IPv6 addresses in local PCs (Linux Ubuntu).</i>
12.30 PM	Lunch
2:00 PM	Hands-on: Enable IPv6 to local lab: Hosts <i>... configuring addresses, capturing IPv6 traffic (e.g. RA/RS, NA/NS, etc.)...</i>
4.00 PM	Break
	Remote labs: Presentation and Configuration <i>Paris and Brussels Labs: Presentation, access procedures, configuring router interfaces, etc.</i>
6.00 PM	End of day 1

	October 25th - Routing
9.00 AM	Theory: routing <i>IPv6 routing protocols and configuration best practices.</i>
9.45 AM	Hands-on: routing - 1 <i>Configuration of IGP routing protocols in Paris and Brussels 6DISS labs</i>
10.30 AM	Break
10.45 AM	Hands-on: routing - 2 <i>Configuration of IGP routing protocols in Paris and Brussels 6DISS labs</i>
12.30 PM	Lunch
2.00 PM	Hands-on: routing <i>Configuration of BGP in Paris and Brussels 6DISS labs</i>
4.00 PM	Break


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4.15 PM	Hands-on: routing <i>... continue ...</i>
5.15 PM	Theory: DNS <i>IPv6 and the DNS, possible issues in the deployment, etc.</i>
5.30 PM	Theory: Transition to IPv6 <i>Transition mechanisms and deployment methodology.</i>
6.00 PM	End of day 2

	October 26th - IPv6 Application & Management
9.00 AM	Theory: IPv6 Applications <i>Porting applications to IPv6, basic and advanced applications available, etc.</i>
9.30 AM	Theory: Monitoring and network management Live Demos
10.00 AM	Hands-on: Applications and services <i>Installation of services and applications: web, ftp, videolan, DNS zone configuration</i>
10.45 AM	Break
11.00 AM	Hands-on: Applications and services <i>... continue ...</i>
12.30 PM	Lunch
2.00 PM	Hands-on: Monitoring and network management <i>Installation of monitoring applications: argus, test tools available: looking glass, AS-Path tree</i>
4.30 PM	Break
4.45 PM	Questionnaires & feedback
6.00 PM	End of day 3

All relevant information concerning the preparation of the workshop was published in advance on a wiki website created by the local organisers (AUF) and is accessible at <https://wiki.auf.org/wikiteki/Etude/IPv6/PréparationAtelierDakar2006> .

The following link hosts the presentations and the hands-on material used during the workshop: <http://www.6diss.org/workshops/ssaf/>. This link was further used to help workshop organisers in other countries or regions to build up their own programme (for instance in Rabat, Morocco, and in Guatemala City, Guatemala).

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2.4. Presentation material

The theoretical presentations were based on the available 6DISS modules which have been updated with the most recent information available on every topic. The list of modules that were used is the following:

- Introduction to IPv6
- IPv6 Associated Protocols
- IPv6 Addressing
- IPv6 Addressing case study (RENATER)
- IPv6 Autoconfiguration
- IPv6 Routing Protocols
- IPv6 DNS
- IPv6 Integration
- IPv6 Management
- IPv6 Applications

The people in charge for the technical presentations and the hand-on sessions were:

- Bernard Tuy (RENATER)
- Simon Muyal (RENATER)
- Philippe Bereski (ALCATEL)



2.5. Workshop labs

The hands-on sessions used both the local PC-based lab (Figure 3) and the 6DISS labs in Brussels and Paris (Figure 4 and Figure 5).

The local lab consisted of 20 PCs, and was used for exercises on hosts and servers. The Linux operating system “Ubuntu” was used to support the exercises related to basic IPv6 configuration, usual network services, and management tools.

The remote labs in Brussels (Figure 4) and Paris (Figure 5) were used for external (BGP) and internal (OSPFv3) routing protocols exercises (as was done for other 6DISS workshops).

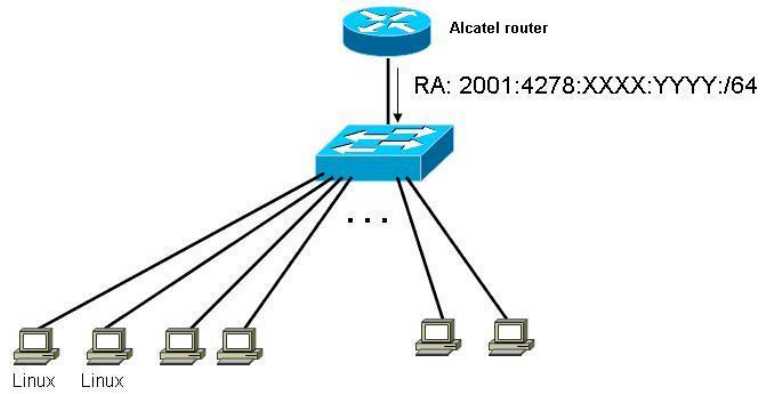


Figure 3: The local PC lab – Physical topology

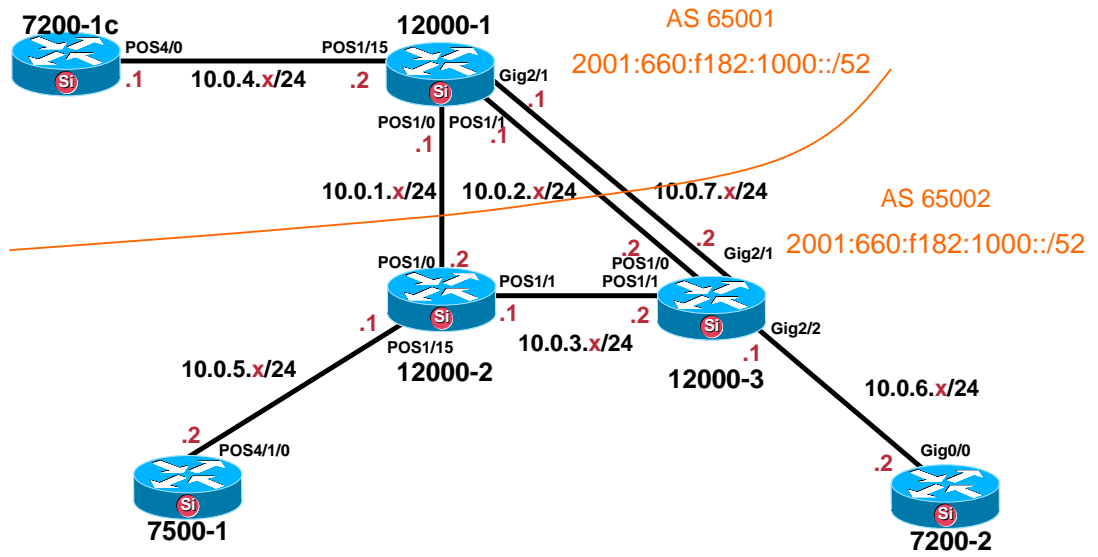


Figure 4: Lab topology in Brussels – Routing information

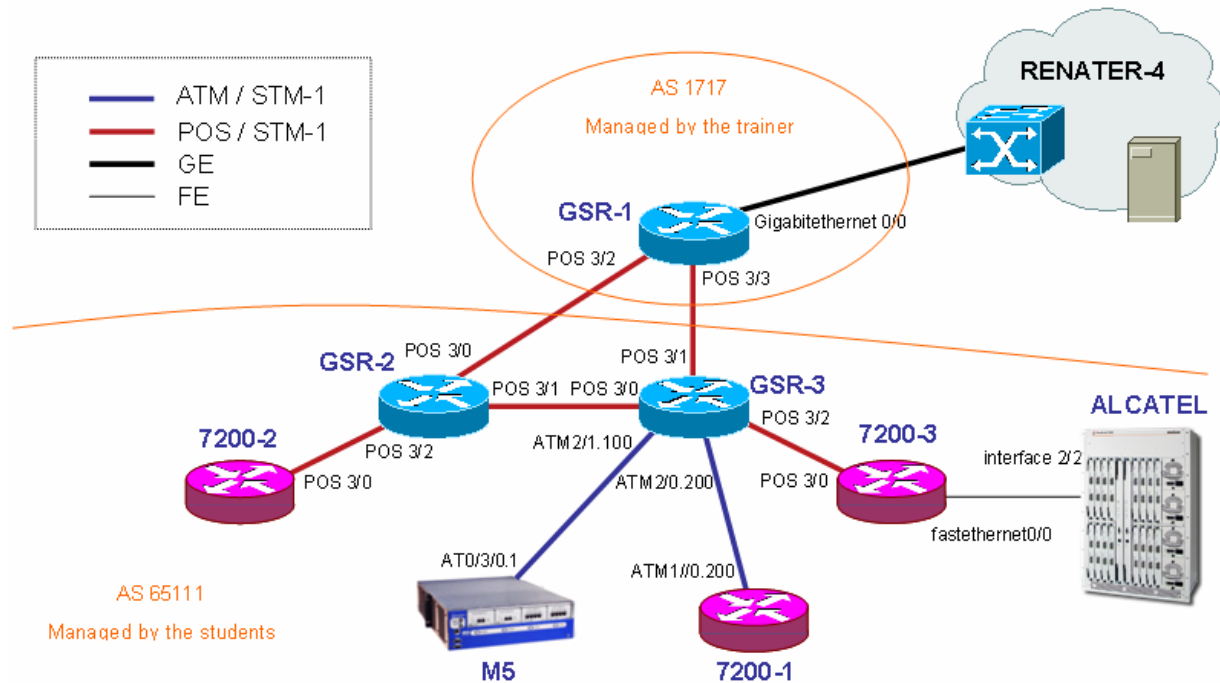


Figure 5: Lab topology in Paris – Routing information

2.6. Workshop CD-ROM and 6NET books


Multiple IPv6-related technical presentations and documents from many events that 6DISS has already contributed to, in addition to open-source IPv6-ready applications, were compiled onto a CD-ROM and freely distributed to the participants at the end of the workshop. 6DISS partners have gathered together as much IPv6 information as possible, in order to provide reference material for the engineers willing to work with IPv6 in their region, without needing to seek the relevant information across the Internet. This is particularly useful when trying to build a network, prior to having any Internet connectivity.

The contents of the 6DISS IPv6 CD-ROM included:

- Many IPv6 electronic books such as the 6NET cookbook, IPv6 ABCs by Cisco, etc.
- 6NET technical documentation (6NET deliverables), such as basic and advanced services, applications, transitioning, management, etc.
- Workshop presentations used during this workshop: Modules and “hands-on” documents
- Some pictures taken during the workshop

2.7. Sponsors

ISOC Senegal: ISOC organised the venue and provided all the logistics needs (Participant selection, etc.).

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AUF: AUF provided the material logistics: room, PCs with Linux distribution and Internet connectivity for the workshop.

2.8. Summary of Costs

The expenditure details covered by 6DISS for the organisation of this workshop and part of the IPv6 Task Force launch event are shown in the table below:

<i>Description</i>	<i>Estimation of costs (In Euros)</i>	<i>Comments</i>
<i>Organisation</i>	3'544.	Meeting rooms, local lab equipment, ...
<i>Secretariat and services</i>	2'149	Registration, transportation, simultaneous translation, ...
<i>Other</i>	2'093	Lunches, coffee breaks, ...


2.9. Workshop Dissemination

The 6DISS IPv6 workshop was organized and held in conjunction with the ISOC Senegal launch, in order to focus the event on IPv6 information and technologies. In particular, the people from ISOC Senegal and ADIE² were very important in making this set of events possible. In total, 14 countries were represented and attended the 6DISS workshop. Many of their representatives subsequently asked for a 6DISS training to be organized in their own country to help increase the IPv6 awareness.

A separate meeting was proposed and organized by the ESMT³ executive staff. Bernard Tuy attended this meeting where discussions about restarting the IPv6 collaboration with RENATER were raised. The willingness to renew the collaboration on IPv6 advanced experimentations like multicast video conferencing was clearly mentioned. The ESMT executive staff who attended this meeting will propose a Memorandum Of Understanding.

² ADIE: Agence pour le Développement de l'Informatique de l'Etat

³ ESMT: Ecole Supérieure Multi nationale de Télécommunications

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3. Report from ISOC Senegal launch event

The kick off meeting of the IPv6 Forum Senegal, under the umbrella of the Senegal ISOC chapter and the IPv6 Forum, took place immediately prior to the 6DISS workshop. Representatives from the academic world and the industry attended this event. The minister in charge of the Telecommunication in Senegal also made a short visit to the meeting.

The one-day programme consisted of presentations of speakers coming from various locations around the globe (Canada, France, Egypt, South Africa, ...). It ended with a panel session on IPv6 that gathered issues and provided answers to questions from the audience. The whole programme is attached to this report as Annex I.

4. Opportunities for further Co-operation

4.1. Follow-up actions

As with the other workshops, the attendees were informed on how to keep contact with the 6DISS partners for any questions they may have regarding IPv6 deployment, addressing plan, ... In this respect, the role of the so called *Tiger Team* was explained as being the way to submit questions. This team can be contacted via a mailing list composed by volunteers, who are available to answer (or forward) any kind of questions, requests, etc.

On the other hand, the attendees can also check the availability of the 6DISS remote labs (AUF system administrators are already interested to use them for their own workshops/training sessions, ...).


5. Analysis of the feedback Questionnaire

A questionnaire has been especially designed (and translated) to get feedback from the participants, regarding the suitability of the course material and the presenters, to convey the information, and the relevance of the information to the expectations of the attendees.

Each participant was first requested to indicate:

- his/her organisation and job responsibilities, and
- his/her plans for IPv6 deployment in his/her organisation

Then, for each theoretical presentation and “hands-on” session, each participant was requested to assess “usefulness”, “quality of presentation”, “familiarity with the topic”, “quality of the course documentation”, “general organisation”, etc.

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5.1. General Questions related to participants and IPv6

About the Participants				
<i>33 participants were present but 23 questionnaires have been returned.</i>				
Employment sector	Government	6		
	University of other higher education	7		
	Schools or further education (K19)			
	Research	1		
	Health			
	Commercial	4		
	Other (please specify)	5	ONG, bank	
Job function	Government Advisor	1		
	Senior & IT Manager	8		
	System administrator	4		
	Network administrator	8		
	Researcher / Postgraduate			
	Undergraduate			
	Other (please specify)	1	Academic	
			1 Network Engineer	
Usage of IPv6				
you use IPv6	yes	3		
	no	20		
in your organisation IPv6 is	Yes	3		
	No, but planned in the next year	8		
	No, but planned in the longer term	3		
	No, and no plans as yet	9		


5.2. Questions regarding the Workshop

About the Workshop				
usefulness of the topic				
	Very useful	useful	slightly useful	not useful
Introduction to IPv6	14	9		
IPv6 addressing	14	8		
IPv6 addressing: RENATER case study	13	8	1	
IPv6 Associated protocols	13	7	1	
Auto-configuration	14	8	1	
<i>Hands-on: Host configuration</i>	16	6	1	
<i>Hands-on: Routers configuration</i>	16	5		1
IPv6 Integration Mechanisms	14	8		
IPv6 Routing protocols	15	6		1
<i>Hands-on: IGP and EGP configuration</i>	13	6	3	1
IPv6 Networks Management	14	7	1	
IPv6 applications	13	8		1
DNS for IPv6	14	7		1
<i>Hands-on: IPv6 applications</i>	14	7	1	
<i>Hands-on: IPv6 monitoring tools</i>	14	7		
Quality of presentation				
	excellent	good	average	poor
Introduction to IPv6	11	11	1	
IPv6 addressing	8	12	3	
IPv6 addressing: RENATER case study	9	10	4	
IPv6 Associated protocols	6	14	3	
Auto-configuration	7	11	5	
<i>Hands-on: Host configuration</i>	9	11	2	1
<i>Hands-on: Routers configuration</i>	9	10	2	2
IPv6 Integration Mechanisms	7	11	4	1
IPv6 Routing protocols	6	14	2	1
<i>Hands-on: IGP and EGP configuration</i>	5	14	2	1
IPv6 Networks Management	6	12	3	
IPv6 applications	5	13	3	
DNS for IPv6	6	12	4	
<i>Hands-on: IPv6 applications</i>	7	10	5	
<i>Hands-on: IPv6 monitoring tools</i>	6	10	4	

Familiar with the topic ?	None	some	most	all
Introduction to IPv6	4	12	4	2
IPv6 addressing	7	9	3	1
IPv6 addressing: RENATER case study	14	4	3	1
IPv6 Associated protocols	9	8	3	1
Auto-configuration	13	3	3	1
<i>Hands-on: Host configuration</i>	13	5	2	1
<i>Hands-on: Routers configuration</i>	15	2	2	1
IPv6 Integration Mechanisms	13	4	2	1
IPv6 Routing protocols	11	7	2	2
<i>Hands-on: IGP and EGP configuration</i>	17	3	1	1
IPv6 Networks Management	15	4	2	1
IPv6 applications	13	4	4	1
DNS for IPv6	16	2	3	1
<i>Hands-on: IPv6 applications</i>	12	6	3	1
<i>Hands-on: IPv6 monitoring tools</i>	13	4	2	1
Quality of course documentation	excellent	5		
	good	10		
	average	3		
	poor	1		
General WS organisation	excellent	2		
	good	14		
	average	6		
	poor	0		
Recommend to your colleagues ?				
	yes	20		
	no	1		

5.3. Participants Comments

It should be noted that the participants had different technical backgrounds. For example, some were network engineers (and therefore more interested in routing protocols and troubleshooting practices) while others were system administrators (and therefore more interested in applications and monitoring tools). Depending upon their background, some of them would have preferred to spend more time on Management, Applications, “hands-on”, or to have a “hands-on” session related to security issues. It is worth mentioning that a few attendees remarked that the sessions were too short, and that they would have been happy to work much later in the evening for more “hands-on” exercises. From the tutors’ point of view, the days were exhausting, not only because of the unusual temperatures for them, but also because of the density of the sessions and the level of attention required by the very involved trainees.

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Here are some comments provided by the trainees:

== Begin of the excerpts

*Explain **more in detail** the following modules/hands-on:*

- *IPv4/IPv6 integration (6)*
- *Security (6)*
- *Applications module/services (5)*
- *IPv6 management module (4)*
- *IPv6 multicast (3)*
- *DNS (3)*
- *Routing (2)*
- *Autoconfiguration*

*Explain **more briefly** the following modules:*

- *IGP and EGP Configuration (3)*
- *IPv6 applications (2)*
- *IPv6 deployment*
- *IPv4/IPv6 integration*
- *IPv6 introduction*

It's hard to assimilate all the topics in 3 days. It would be good to plan a one week workshop (3).

The documents (understand the presentation slides) could be in English and French (3).

It would be good to have more time for the hands-on (2).

Hands-on have to be more organised: goals, etc (2)

PCs with Windows (2)

It would be worth to send the material in advance to the attendees to prepare the workshop.


Select the trainees and organise different WS according their level (N1: beginner, N2: normal, N3: advanced)

It would be good to organise a WS in Republique Democratique du Congo (RDC) and Central Africa (contacts already established)

Analyse the commercial effect for the telco operators

Thanks for this workshop (3)

End of the excerpts ==

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6. Conclusion


Workshops are a key mechanism through which information, knowledge and know-how are transferred to less experienced countries. The workshops enable to build constituencies and raise awareness; disseminate, benchmark and validate the research results from IST; promote European technologies; exchange best practices; and explain about activities related to standards and interoperability issues.

RENATER led this 6DISS workshop for the sub-Saharan region and was supported by ALCATEL.

The 6DISS technical workshop took place on 24th - 26th October, 2006 in Dakar (Senegal). ISOC and AUF organised the venue and provided the workshop with all the logistics needs. Approximately 35 network engineers, system administrators and regulators participated in the event. The topics to be presented were selected according to the participants' requirements.

The set of dissemination material included most of the issues of Internet deployment and evolution (especially IPv4-IPv6 transition/co-existence strategies), DNS, Autoconfiguration, Routing, Monitoring and Management tools, and Applications.

According to the evaluation forms and the comments from the participants at the workshop, it is clear that there is significant interest in the region for the IPv6 technology. The participants expressed positive comments on the workshop usefulness and organisation. They also "requested" 6DISS to organise more workshops in the region with more specific technical subjects. Furthermore, some of the attendees expressed interest in participating in any subsequent "Training the Trainers" courses.

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ANNEX I



Lancement du Forum IPv6 du Sénégal Sommet IPv6 de Dakar

Ordre du jour

Date : 23-26 Octobre 2006

Lieu : Hôtel Méridien – Dakar - Sénégal


Le premier jour sera consacré aux présentations et discussions concernant les derniers développements dans le monde IPv6 tandis que les trois jours suivants seront dédiés à une formation pratique :

- 23 Octobre : Sommet sur l'Economie et la Politique IPv6
- 24-26 Octobre : Atelier IPv6 animé par 6DISS

The first day will be addressing and discussing the latest developments in the IPv6 world while the second to the fourth day will be dedicated to a Hands-on training:

- Oct 23 : IPv6 Business & Policy Summit
- Oct 24-26 : 6DISS IPv6 Workshop

08:30 - 09:30	Mise en place
09:30 - 09:40	Mot de Bienvenue <u>Alex Corenthin – Président, Internet Society Sénégal</u> <u>Ndeye Maimouna Diop Diagne, Présidente, IPv6 Forum Sénégal</u>
09:40 - 10:10	Discours d'ouverture <u>S.E. Premier Ministre / Ministre des TIC</u>

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<u>10:10 - 10:55</u>	<u>IPv6 à travers le Monde</u> <u>Latif Ladid, IPv6 Forum</u>
<u>10:55 - 11:15</u>	<i>Pause Café</i>
<u>11:15 - 11:45</u>	<u>IPv6 à l'appui du développement durable et de la réduction du désastre</u> <u>Guy Weets, Commission européenne</u>
<u>11:45 - 12:15</u>	<u>Etudes de cas sur IPv6</u> <u>Patrick Grossetete, Cisco</u>
<u>12:15 - 12:45</u>	<u>Initiative IPv6 à AfriNIC</u> <u>Adiel Akplogan</u>
<u>12:45 - 13:15</u>	<u>France Telecom et le Déploiement d'IPv6</u> <u>Tayeb Ben Meriam, France Telecom</u>
	<i>Déjeuner</i>
<u>14:30 - 15:00</u>	<u>Internet et convergence d'IP en Afrique : le Facteur IPv6</u> <u>Yves Poppe</u>
<u>15:00 - 15:30</u>	<u>Le Programme de Logo Prêt IPv6 – GO4IT</u> <u>Philippe Cousin, coordonnateur du projet GO4IT</u>
<u>15:30 - 16:00</u>	<u>Projet 6DISS : un projet IPv6 européen</u> <u>Bernard Tuy - RENATER</u>
<u>16:00 - 16:30</u>	<i>Pause Café</i>
<u>16:30 - 17:00</u>	<u>IPv6 en Afrique du Sud, le passé, présent et le futur</u> <u>Andrew Alston, TENET, Afrique du Sud</u>
<u>17:00 - 17:30</u>	<u>Le Groupe de travail IPv6 en Egypte, mise à jour et leçons apprises</u> <u>Nezar Nabil Sami</u>
<u>17:30 – 18:00</u>	<u>Panel de Discussion - La suite</u> <u>Concevoir la carte routière IPv6 pour le Sénégal et l'Afrique</u>
<u>18:00 - 18:15</u>	<u>Conclusion et observations finales</u> <u>Mme Ndèye Maimouna Diop Diagne, Directrice des NTIC/MPTNTIC, Présidente IPv6 Forum Sénégal</u>