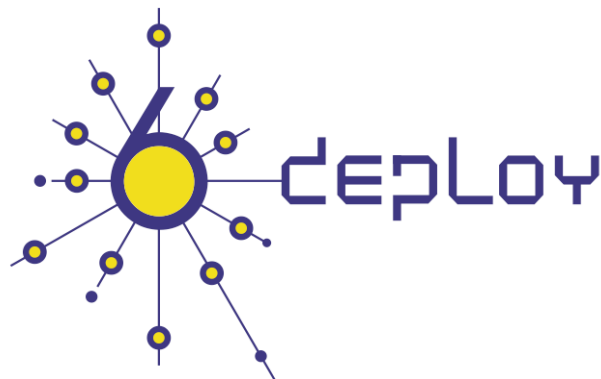




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Abstract:

This deliverable presents a report from the workshop held in Moscow (Russia) on 24th September 2008, within the RIPE NCC Regional Meeting, Moscow 2008. The presentation material is listed, the attendees and their affiliations are given and the opportunities for further co-operation and follow-up actions are described.

Keywords:

IPv6, Support, Training, Testbeds, Modules, 6DISS, 6DEPLOY, Hands-on exercises

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Revision History

The following table describes the main changes to the document since created.

Revision	Date	Description	Author (Organization)
v0.1	23/10/2008	Document creation based on Martel's model Added first content	Alvaro Vives (Consulintel)
v0.2	15/01/2009	Added list of attendees. Document Revision	Alvaro Vives (Consulintel)
v0.3	04/02/2009	Final review	Jordi Palet (Consulintel)
v0.4	05/02/2009	Document revision	Sarah Kenehan (Martel)
v0.5	05/02/2009	Document revision	Martin Potts (Martel)

Executive Summary

One of the main activities in the 6DEPLOY project is to organise workshops to train the different Internet communities in the areas of IPv6 deployment, configuration, and usage. This project is a follow up of previous project activities within and outside the Framework Programmes of the European Commission.

This deliverable presents a report from the workshop held in Moscow (Russia) on 24th September 2008, within the RIPE NCC Regional Meeting, Moscow 2008. The following is described in this report: a) the workshop attendees and their affiliations, b) the programme outline, c) the material presented and d) an assessment of the opportunities for further co-operation and follow-up actions planned.

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1. INTRODUCTION

1.1 6DEPLOY Objectives

The following comprise the 6DEPLOY objectives:

- organize workshops for the e-Infrastructure community and give practical advice and hands-on support for deploying IPv6 in their environments
- work on deployments in Europe and in developing countries; exchanging experiences and best practices;
- improve the competitiveness of European industry by sharing experiences from IPv6 deployments in other regions;
- gain expertise with which to support *more commercial* deployments in European industries (e.g. Emergency Services, Health, Broadcast, Transport, Schools, Environment, Gaming, etc.);
- help to build consensus between European researchers by enabling and exploiting synergy among related projects (e.g. GÉANT-2, SEEREN-2, SEE-GRID, EUMEDCONNECT, CLARA, ALICE);
- encourage and enhance the effectiveness of the coordination between National and pan-European e-Infrastructure initiatives by being a focal point for IPv6 activities, giving IPv6 training, and supporting IPv6 deployments;
- open up the ICT programme to the participation of third country organisations in International Cooperation Partner Countries, including countries in Africa, Asia, and Latin America, by involving organisations that influence e-Infrastructures on those continents;
- improve scientific cooperation between Europe and the declared target regions (Africa, Asia and Latin America,) by exchanging knowledge and experiences through direct practical support for deployment, training events, etc. The project therefore also helps support other Community policies, most notably the development policy. Telecommunications infrastructure and the capability to access information worldwide are key measures of a country's progress. IPv6 has been a cornerstone of European Internet policy for several years; and
- support interoperability and standards by sharing information on the latest IPv6 standards, equipment hardware and software releases, and IPv6 policies (RIRs).

One of the main activities in the 6DEPLOY project is therefore to organise workshops to

train the different Internet communities in the areas of IPv6 deployment, configuration, operation, and management. This activity is a follow up of previous projects' activities within and outside the Framework Programmes of the European Commission.

1.2 6DEPLOY Workshop Methodology

The 6DEPLOY methodology relating to the workshops is shown in the diagram below:

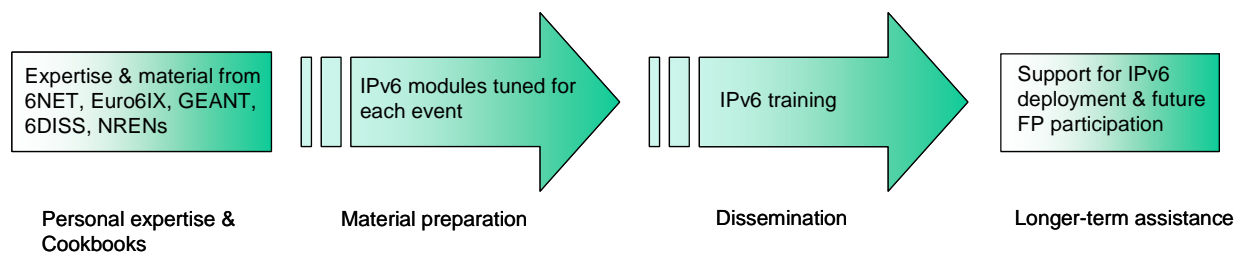


Figure 1-1: 6DEPLOY methodology (diagrammatically)

The approach is to use course material available from 6DISS and elsewhere relating to IPv6, the e-learning course, and the 6NET IPv6 Deployment Guide book as the basis of the training material. This training material is supplemented with knowledge from partners' participation in events such as IPv6 Forum meetings, IPv6 Task Force meetings, Internet2 meetings, and the IETF, and from the experience of similar activities brought to the project by the representatives of the Internet Registries in North and South America, the Asia-Pacific region, Africa, and Europe. The knowledge is disseminated through training sessions that, for practical reasons, are often held in conjunction with AfriNIC, AfNOG, APNIC, APRICOT, ISOC, LACNIC, and RIPE meetings.

After each workshop, feedback reports are collected from the participants, enabling 6DEPLOY to assess the impact of the presentations and identify any areas that need improvement.

The full set of dissemination material (including the e-learning course and 3 managed testbeds) is available from 6DISS and partners' own sources. This includes presentation slides on all issues of Internet deployment and evolution; especially IPv4-IPv6 transition strategies, DNS, DHCP, routing, QoS, MobileIP, multicast, renumbering, auto-configuration, security, monitoring and management tools, and applications. This material was described in the deliverable D1.1: "IPv6 training material and related usage procedures".

This document describes the workshop held in Moscow (Russia) on 24th September 2008, within the RIPE NCC Regional Meeting, Moscow 2008. The workshop was very well attended, including several slide-sets presentations.

Chapter 2 of this document explains the general motivation for running IPv6 workshops, and Chapter 3 describes the specific details of this workshop, in terms of the attendees, the modules that were presented, and the “hands-on” exercises that were performed.

Chapter 4 identifies opportunities for further collaboration in the region and follow up actions.

2. THE WORKSHOPS (GENERAL)

Workshops are one of the main mechanisms used by 6DEPLOY to transfer information and build collaboration.

6DEPLOY is structured to provide an ideal platform for the discussion of deployment scenarios and the exchange of best practices, thereby avoiding duplication of effort by preventing the waste of time on techniques that are known not to have been fruitful, and generally making the most efficient use of the available resources in a region. Partners in 6DEPLOY have deployed IPv6 on a production basis in their own NRENs and University networks, and have documented their experiences in Cookbooks and in IETF informational / best common practice RFCs. The manufacturer in the consortium is building IPv6 products.

The workshops are not only intended to lead to an improved quality of the Internet infrastructure in developing countries, but will also raise the competence of the attendees and, in exploiting the personal contacts made through 6DEPLOY, facilitate and encourage the participation of their organisations in future FP7 Calls and beyond.

Impacts from the workshops will include:

- a positive effect towards preventing the "brain drain" from developing countries by bringing interesting and state-of-the-art activities into these regions, thus making information and knowledge resources accessible to the scholars both locally and globally;
- an expansion of the conditions for growth by enabling the exchange of ideas, launching joint experiments and projects, disseminating RTD results, and activating market forces; all of which are substantial elements in the process of regional development;
- making European research and industrial concerns aware of the highly skilled personnel who can contribute to the urgently needed improvement of ICT infrastructures; resulting in an increase of the demand for specialized services provided by the highly skilled academics and researchers of the region; and
- the identification of IPv6 deployment activities in the region and an exchange of information about deployment experiences.

While IPv6 standards and services are quite stable, regional variations in practices and operations will require slightly different approaches for collaboration and dissemination. Therefore, the material for this workshop was collected, and the workshop schedule,

format, and contents were tailored in conjunction with the local organisers so as to suit the type of participants, the subjects to be addressed, the location, the host organisation, the sponsors, etc.

3. THE 6DEPLOY WORKSHOP IN MOSCOW (RUSSIA)

This deliverable presents a report from the workshop held in Moscow (Russia) on 24th September 2008, within the RIPE NCC Regional Meeting, Moscow 2008. The workshop is described below, in the form of the attendees and their affiliations, the programme outline, and the material that was presented.

3.1 Overview

During the RIPE NCC Regional Meeting, Moscow 2008 (<https://www.ripe.net/meetings/regional/moscow-2008/index.html>), there was an IPv6 Workshop that included two main sessions: IPv6 Security and IPv6 Deployment. The first one was delivered by a local Cisco employee, and the latter by Jordi Palet (Consulintel).

The IPv6 Deployment session introduced the reasons for IPv6, the main differences between IPv4 and IPv6, IP mobility, the advantages to IPv6, and myths surrounding IPv6. Transition technologies were explained and basic guidelines for the deployment in different scenarios were also provided.

Individuals present at the workshop included Jordi Palet (Consulintel) representing 6DEPLOY. Jordi was in charge of presenting the IPv6 modules.

3.2 Attendees

The following table is the list of registered participants:

No.	Surname	First name	Affiliation	Country
1	A Belov	Alexander	JSC Arctel	RU
2	A Zobnitsev	Evgeny	TransTelecom	RU
3	A. Kabenin	Alexander	OOO "Sovremennye setevye tekhnologii"	RU
4	A. Shaitanov	Serge	TransTelecom	RU
5	Abramov	Gennady	BPR LTD	RU
6	Afanasiev	Dmitry	Cisco Systems	RU
7	Agafonova	Tatiana	RU-CENTER	RU
8	Agaryov	Alexey	Business Sviaz Holding	RU
9	Agaryshev	Vitaliy	Sibtelecom	RU
10	Akkerhuis	Jaap	NLnetLabs	NL
11	Alatyrev	Anton	ArtChannel	RU
12	Aleksey	Burya	LLC Portal.ru	RU
13	Alexander	Pankratov	JSC Kolomna-Sviaz TV	RU
14	Alexander	Panov	Garant-Park-Telecom, Ltd.	RU
15	Alexandrov	Igor	Tver State University	RU
16	Alexeev	Andrey	COMSTAR-Direct CJSC	RU
17	Alexey	Polyakov	OJSC Arctel	RU
18	Alpay	Ozerk	CCCMOS GROUP	RU
19	Andrew	Mikhailov	prov.ru	RU
20	Andrew	Romanov	Coordination Center for TLD RU	RU

21	Andrey	Androsov	EDN Sovintel	RU
22	Andrey	Tikunov	EDN Sovintel	RU
23	Anokhin	Konstantin	NGENIX	RU
24	Arganashvili	George	JSC "Global Erty"	GE
25	Arhipov	Alexandr	Webalta	RU
26	Artamonov	Konstantin	Investelektrosviaz Ltd.	RU
27	Artyom	Emelyantsev	ISP "Firma TEL"	RU
28	Azarov	Boris	Eurasia Telecom	RU
29	B. Shpilchin	Nikolay	Portable Company LLC	RU
30	Babaylov	Aleksandr	JSC Corvette-Telecom-NEXT	RU
31	Baberkin	Timur	Garant-Park-Telecom	RU
32	Bakulev	Anton	UNPK MFTI	RU
33	Balakin	Yuriy	Online reclama	RU
34	Baranov	Alexey	Saint-Petersburg State University of Information Technologies, Mechanics and Optics	RU
35	Barkov	Konstantin	JSC "Vimpelcom"	RU
36	Belov	Victor	Comstar	RU
37	Belyaev	Sergey	Svyazintek	RU
38	Biako	Alexander	ZAO "RusSDO"	RU
39	Blokzjil	Rob	RIPE Chair	
40	Bogdanov	Roman	JSC "TEL Company"	RU
41	Borisov	Anton	Moscow Cellular Communications	RU
42	Borisov	Alexandr	Tver State University	RU
43	Bortsov	Alexander	TSC Wellnet	RU
44	Braushkin	Dmitriy	LLC "Nauka-Svyaz"	RU
45	Breivinsky	Anatoly	Altegosky	RU
46	Britvin	Eugeny	AELITA Ltd.	RU
47	Budnevitch	Sergey	Comstar-Direct CJSC	RU
48	Bulanov	Alexander	Cisco Systems	RU
49	Bunchuk	Viktoria	RU Center	RU
50	Burkov	Dmitry	RIPE NCC Executive Board	
51	Chentsov	Igor	camelot telecom	RU
52	Cherepanov	Dmitriy	National Information Technologies Joint-Stock Company	KZ
53	Chuchanov	Sergey	EURASIA TELECOM RU	RU
54	Danilenko	Dmitry	Self-employed	RU
55	Danilova	Katerina	LIDERTELECOM LTD	RU
56	de la Haye	Andrew	RIPE NCC	
57	de Ruig	Jochem	RIPE NCC	
58	Demkin	Kirill	RusComNet Ltd.	RU
59	Devin	Victor	OAO TRANSTELECOM	RU
60	Didenko	Petr	Microsoft	RU
61	Dikarev	Fedor	Rambler Telecom	RU
62	Dmitry	Dunaev	JSC Kolomna-Sviaz TV	RU
63	Dolmatov	Vasily	Cryptocom Ltd.	RU
64	Dudnik	Nikolay	JSC Peresvet-TeleCom	RU
65	Efimov	Andrei	Media Programming Group	RU
66	Elena	Sergienko	Institute for Automated Systems	RU
67	Elena	Sergienko	Institute for Automated Systems	RU
68	Emelyantsev	Artyom	ISP "Firma TEL"	RU
69	Emelyantseva	Yana	ISP "Firma TEL"	RU
70	ermakova	olga	Coordination Center for TLD RU	RU
71	Ermolaev	Artem	Ministry of Communications	RU
72	Evdokimov	Maxim	Obitelecom Limited	RU
73	Evelinskaya	Olga	DREAMLESS.RU	RU
74	Fedotov	Dmitry	Golden Telecom (Sovintel)	RU
75	Feldman	Ilya	Obitelecom Limited	RU
76	Fetisov	Yuri	Mobile TeleSystems, OJSC	RU
77	Filatov	Sergei	JSC "TRC FIORD"	RU
78	Filimonov	Nikolay	NetCare IT Services	RU
79	Filippov	Maxim	Tver State University	RU
80	Forsyuk	Tanya	Farlep-Invest OJSC	UA
81	Galanichev	Maxim	Obitelecom Limited	RU
82	Garin	Andrey	Sakha-Belcom Ltd.	RU
83	Georgievsky	George	Rusonyx, Ltd.	RU
84	Getachew	Dawit	Ethiopian Telecommunications Cor	ET
85	Gevlichev	Yaroslav	UNPK MFTI	RU
86	Gnomova	Anastasya	AGAVA	RU

87	Gorbunov	Sergey	RU-CENTER	RU
88	Gorbunova	Lyubov	TTK	RU
89	Grishin	Mikhail	MSK-IX	RU
90	Gromova	Maria	OJSC MTT	RU
91	Gugel	Yura	RUNNet	RU
92	Guryev	Andrey	ANO "RU-CENTER"	RU
93	Guschin	Dmitry	Fiord	RU
94	Igor	Ivannikov	EDN Sovintel	RU
95	Ilin	Alexander	MSK-IX	RU
96	Ilin	Alexander	Limited Liability Company NTCOM	RU
97	Isachenko	Pavel	ITST.ru	RU
98	Isavnin	Alexander	Obtelecom Limited	RU
99	Istomin	Sergey	JSC Arctel	RU
100	Ivanov	Alexey	Opticom	RU
101	Ivanov	Vlad	Ltd Leonar M	RU
102	Julia	Maksimova	EDN Sovintel	RU
103	Kader	Mikhail	CISCO	RU
104	Kalinnikov	Eugene	JSV "CenterTelecom Service"	RU
105	Kapsalov	Yaroslav	TransTelecom company	RU
106	Karetsky	Yaroslav	Garant-Park-Telecom	RU
107	Kasprzyk	Izabella	AMS-IX	NL
108	Kasyanov	Konstantin	OJSC "MegaFon"	RU
109	Kaznacheev	Kostya	VIMPELCOM	RU
110	Khakin	Alexander	Eurasia Telecom Ru	RU
111	Khitrovo	Sergey	Best Telecom ISP	RU
112	Khlebina	Yana	Sakha-Belcom Ltd.	RU
113	Khokhlova	Natalia	RIPN	RU
114	Khramtsov	Pavel	RU Center	RU
115	Khramtsov	Pavel	RU-CENTER	RU
116	Kirill	Semochkin	Severstal Infocom	RU
117	Kleptsov	Alexander	Eurasia Telecom RU	RU
118	Klimov	Dmitriy	Moscow Technical University	RU
119	Knoll	Thomas Martin	Chemnitz University	DE
120	Kogan	Semen	Orange Business Services	RU
121	Kohmanyuk	Dmitry	.	UA
122	Kokorin	Sergey	OJSC Uralsvyazinform	RU
123	Kolesnikov	Andrey	Beeline	RU
124	kondratyev	oleg	brandconsulting.ru	RU
125	Konovalova	Olga	RTComm.RU	RU
126	Kopeyko	Andrew	ANO "RU-CENTER"	RU
127	Korosteleva	Julia	Coordination Center for TLD RU	RU
128	Korotin	Anton	RIPN	RU
129	Koshkin	Ivan	SvyazAtomInform	RU
130	Koulikov	Dmitry	Deutsche Telekom AG	RU
140	Kouziev	Eduard	SIA "OPTRON"	LV
141	Kovalenko	Sergey	Golden Telecom LLC	UA
142	Kozlov	Pavel	Comcor	RU
143	Krashakov	Serge	Scientific Center in Chernogolovka of RAS	RU
144	Krashnikov	Yury	MPG Ltd.	RU
145	Krasilnikov	Eugeny	ANO RU-CENTER	RU
146	Kuhtenkov	Felix	Limited Liability Company Intercom 2000	RU
147	Kulin	Phil	dreamless.ru	RU
148	Kurbatov	Sergey	Best Telecom ISP	RU
149	Kuritsyn	Alexey	IBS	RU
150	Kuznetsov	Alexander	ANO "Regional Educational Information Centre"	RU
160	Lagutkin	Maxim	ZAO Prestige-Internet	RU
161	Lakaev	Aleksey	Transtelecom	RU
162	Laukhina	Nadezhda	ROSNIIROS Russian Institute for Public Networks	RU
163	Lesnikov	Alexei	RU-CENTER	RU
164	Linkova	Jen	Self-employed	RU
165	Lipkin	Vitaly	Transtelecom Company	RU
166	Loginov	Andrey	Astelit LLC "life:)"	UA
167	Loschyov	Oleg	Limited Liability company TomskT	RU
168	Loscutov	Evgeny	DOTmobile	RU
169	Lozbekov	Andrey	ISP "Firma TEL"	RU
170	Lukina	Galina	RIM 2000 M ltd	RU
171	Lukyantsev	Ivan	iHome JSC	RU

172	Lydmila	Lyzhina	ISP NLine	RU
173	Makhan	Sergey	Bersen	RU
174	Makhan	Sergey	IP Makhan Sergey	RU
175	Malanichev	Alexey	Intelforce GTD Ltd	RU
176	Malevanny	Anton	Bazis TeleCom Ltd.	RU
177	Markovski	Veni	ICANN	BE
178	Matveyev	Maxim	Iritec	RU
179	Matyukh	Ludmila	RU-Center	RU
180	Matyukhin	Konstantin	Vist on-line LTD	RU
181	Maydanich	Alexander	JSC Rostelecom	RU
182	Mazhugin	Sergei	DomoLAN ltd	RU
183	McSimova	Tatiana	Nauka Telecom	RU
184	Medvedev	Alexander	BSH	RU
185	Menzulskiy	Dmitry	JSC "VimpelCom"	RU
186	Meulenkamp	Arno	RIPE NCC	
187	Minakov	Sergey	LUKOIL Inform Company	RU
188	Mitronichev	Alexey	Cisco Systems	RU
189	Mokina	Maria	Coordination Center for TLD RU	RU
190	Molchanov	Vladimir	Found. for Internet Development	RU
191	Morozovsky	Dmitry	Cronyx Plus Ltd.	RU
192	Mushkat	Stanislav	Begun	RU
193	Myasoedov	Sergey	NetArt Group s.r.o.	CZ
194	NABYTNOVA	IRINA	Company TTK	RU
195	Nekhoroshikh	Anton	Hosting Telesystems, JSC	RU
196	Nikiforenko	Alexander	Rambler Telecom	RU
197	Noginov	Anton	Begun, JSC	RU
198	Novikov	Dmitry	Business Svyaz Holding	RU
199	Novikova	Tatiana	RU Center	RU
200	Novoselov	Viktor	llc "Izori"	RU
201	Nurusheva	Assel	National Information Technologies Joint-Stock Company	KZ
202	O. Savin	Valery	Mosinfocom Llc	RU
203	Obrazcov	Anton	LIDERTELECOM LTD	RU
204	Ogurtsov	Sergey	Comcor	RU
205	Okunev	Konstantin	RIM 2000 M ltd	RU
206	Oleynikov	Andrey	Institute of information & analytical technologies IIAT, Limited	RU
207	Orlova	Julia	TATA Communications	RU
208	Orlowski	Frank P	DE-CIX Management GmbH	DE
209	Osenev	Petr	ISKRATELECOM ZAO	RU
210	Osipov	Igor	OPTRON	LV
211	Ovchinnikov	Alexander	.masterhost	RU
212	Ovchinnikov	Sergey	Limited Liability Company NTCOM	RU
213	P Osiyuk	Alexey	"Tomsk Trunk Enterprise" Ltd.	RU
214	Palet Martinez	Jordi	Consulintel	ES
215	Paramonov	Alexey	OJSC Uralsvyazinform	RU
216	Paringovskaya	Yekaterina	Iritec	RU
217	Pawlik	Axel	RIPE NCC	
218	Petuhov	Anton	Limited Liability Company NTCOM	RU
219	Petukhov	Andrey	Telecom Express	RU
220	Polyansky	Konstantin	effortel	RU
221	Ponomareva	Alla	Concorde Ltd.	RU
222	Popov	Ilya	JSC "TRC FIORD"	RU
223	Popov	Vladimir	Cybernetics and Automatics Centre Ltd.	RU
224	Poyarkov	Ilya	i7.RU, Ltd.	RU
225	Prokofiev	Vladimir	3 Sails Plus	RU
226	Prozorova	Svetlana	RU-CENTER	RU
227	Prussak	Ludmila	RTComm.RU	RU
228	Pugachev	Anatoly	Sovintel EDN	RU
229	Rendek	Paul	RIPE NCC	
230	Reznikov	Andrey	Educational centre №1482	RU
231	Robachevsky	Andrei	RIPE NCC	
232	Rodionov	Konstantin	OAO TRANSTELECOM	RU
233	Romanov	Andrey	Coordination Center for TLD RU	RU
234	Romashova	Nataliya	JSC "VimpelCom"	RU
235	Rotanskiy	Oleg	SCARTEL Ltd.	RU
236	Ruslan	Botashev	Style-Com	RU
237	Rykhlevsky	Andrey	Fiord	RU
238	Rytchev	Nicolay	IBS	RU

239	S Zimin	Sergey	ROSNIROS Russian Institute for Public Networks	RU
240	Sablina	Alexandra	ELTEL	RU
241	salihu	fahad	icl computek ltd	GH
242	Samorukov	Alex	NetArt Group s.r.o.	CZ
243	Schmill	Benjamin	AdaptedMedia.com	US
244	Schneider	Moshe	AdaptedMedia.com	US
245	Schwarzinger	Franz	RIPE NCC	
246	Sedov	Stanislav	Hosting Telesystems, JSC	RU
247	Seleznev	Sergei	Nauka Telekom	RU
248	Semenyaka	Alex	OJSC MegaFon	RU
249	Semenyuk	Igor	Sovintel	RU
250	Sergeev	Andrey	AerNet Ltd.	RU
251	Shabanov	Dmitriy	JSC "Global Erty"	GE
252	SHAREEF	HAMID	TELEPHONY	AE
253	Sharov	Dmitry	Filanco, Ltd.	RU
254	Shikota	Svetlana	Scientific Center in Chernogolovka of RAS	RU
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256	ShklyaeV	Vadim	CPMS, Ltd.	RU
257	Sinodov	Yury	Roem.ru	RU
258	Skripka	Leonid	Lancom Ltd.	UA
259	Smirnoff	Gleb	Rambler Internet Holding	RU
260	Smirnova	Larisa	TelecomMedia	RU
261	Sokol	Kseniya	NetAssist LLC	UA
262	Sokolov	Roman	OAo MGTS	RU
263	Soldatov	Valeri	Best Telecom ISP	RU
264	Soldatova	Galina	Found. for Internet Development	RU
265	Sorokin	Roman	Iritec	RU
266	Sosnin	Aleksey	ZAO Linx Telecommunications CIS	RU
267	Stadnikov	Alexander	EDN Sovintel	RU
268	Stafievskaya	Svetlana	OJSC "Sibirtelecom"	RU
269	Stanislav	Gusev	ELTEL	RU
270	Stavinsky	Anton	ActiveComputers!	RU
271	Stepanyan	Armen	Open Law Ltd.	RU
272	sterin	francois	google	US
273	Strakhov	Alexander	Tata Communications	RU
274	Stupalov	Mike	Concorde Ltd.	RU
275	Suravtsov	Michael	AWAX Telecom	RU
276	Tambovtsev	Denis	Limited Liability Company Intercom 2000	RU
277	Tarassenkov	Andrey	ISKRATELECOM	RU
278	Tarasov	Alexey	Webalta	RU
279	Tchoumatchenko	Konstantin	Moscow Internet Exchange	RU
280	Telyatnikov	Alexander	NetAssist	UA
281	Tereshonok	Alexey V.	Mosinfocom Llc	RU
282	Timofeev	Jury	iTech	RU
283	Tinkovich	Alena	Mart-TS	RU
284	Tinkovich	Olga	Mart-TS	RU
285	Titarev	Yaroslav	ZERE	KZ
286	Tretyakov	Geoge	Internet-Kompanija «ELENA»	RU
287	Tretyakov	Alexandr	JSC SET	RU
288	Tsibchenko	Oksana	PLUSINFO ISP	RU
289	Tsvetkova	Margarita	RU-CENTER	RU
290	Tulyev	Max	NetAssist LLC	UA
291	Tupikin	Sergey	OOO Trivon Networks	RU
292	Tyulkin	Vitaly	Telecom Express	RU
293	Urm	Ernst	NGENIX	RU
294	V Viatkine	Vladimir	JSC Arctel	RU
295	V. Gorjuchkin	Igor	JSC Central Telecommunication Co	RU
296	V. Shubenkov	Serg	Macomnet Telecommunications Co.	RU
297	V. Yasnopolskaya	Elena	RU-Center	RU
298	Vasiliev	Pavel	Garant-Park-Telecom, Ltd.	RU
299	Vertysheva	Irina	Gascom JSC	RU
300	Vijn	Arien	AMS-IX	NL
301	Vladislav	Potapov	Institute of information & analytical technologies IIAT, Limited	RU
302	Vlasov	Alexey	Moscow Cellular Communication	RU
303	Volkov	Dmitry	VimpelCom	RU
304	Vorobiev	Andrey	RU-CENTER	RU
305	Vorobiev	Andrey	RU-CENTER	RU

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306	Voronin	Anatoliy	MnogoByte LLC	RU
307	Voronova	Olga	JSC Corvette-Telecom-NEXT	RU
308	Vovkun	Igor	EURASIA TELECOM RU CJSC	RU
309	Wilcox	Stephen	Google	IE
310	Worshevsky	Anton	Concorde Ltd.	RU
311	Y Kostin	Andrey	INET Net	RU
312	Yakubasov	Roman	OJSC Arctel	RU
313	Yakupova	Elena	Digital Networks JSC	RU
314	Yakushev	Michael	Coordination Center for TLD .RU	RU
315	Yana	Emelyantseva	ISP "Firma TEL"	RU
316	Yegorova	Darya	JSC TC Convey Plus	RU
317	Yu. Astafyev	Denis	JSC Novocom	RU
318	Yurkina	Larisa	Ru-Center	RU
319	Yushkov	Kirill	TransTelecom	RU
320	Zaitcev	Roman	Gascom JSC	RU
321	Zasurtsev	Fedor	i7.RU, Ltd.	RU
322	Zhumakassov	Baurzhan	National Information Technologies Joint-Stock Company	KZ
323	Zhurenko	Artem	Golden Telecom	RU
324	Zimin	Egor	WiLand	RU
325	Zinoviev	Anatol	United Networks Co. Ltd.	RU

Table 3-1: List of participants

In all cases, the attendees were technical people whose knowledge about IPv6 ranged from almost no knowledge at all, to a few having some experience with IPv6 deployment. Some had already performed IPv6 experiments or were planning some level of deployment at their institution. The participants represented a wide range of individuals in the ICT community.

3.3 Workshop programme

The agenda was agreed on after close collaboration with the local organisers from RIPE NCC, and tailored set up and configuration exercises were created for this workshop. The meeting agenda and the related material were submitted in advance so that the local organisers could decide which topics should be prioritised and so manage the logistics accordingly. The programme of the workshop is presented in the following table:

Date	Time	Title of session
24/09/08	15:00	IPv6 Basics
24/09/08	16:45	IPv6 Startup

Table 3-2: Programme

3.4 Presentation material

The agenda was agreed upon after close collaboration with the local organisers from

RIPE NCC, and tailored set up and configuration exercises were created for this workshop. The following material was presented:

Modules	Presented by	Affiliation
IPv6 Basics	Jordi Palet	Consulintel
IPv6 Startup	Jordi Palet	Consulintel

Table 3-3: List of modules and hands-on exercises used

3.4.1 Modules

Below is a brief description of each module's content:

- **IPv6 Basics:** This module explains the reasons for IPv6, the main differences between IPv4 and IPv6, IP mobility, the advantages of IPv6, and the myths surrounding IPv6. Transition technologies are explained and basic guidelines for the deployment in different scenarios are provided.
- **IPv6 Startup:** This module explains how to configure IPv6 on different Operating Systems (mainly on Linux, Vista and Windows XP), how link-local addresses are used and the use of ping and traceroute tools. Issues treated are configuration of static addresses, Neighbour Discovery, Autoconfiguration, Management of static routes and routing tables, and different transition mechanisms (mainly tunnelled).

3.5 Photographs taken at the event



Figure 3-1: Attendees of the workshop

4. OPPORTUNITIES FOR FURTHER CO-OPERATION

In all the workshops, the attendees were informed on how to stay in contact with the 6DEPLOY partners in case they have questions regarding IPv6 deployment, addressing plan, etc. In this respect, the role of the *helpdesk* was explained as being the way to submit questions. An e-mail to helpdesk@6deploy.org will be distributed to a mailing list composed of volunteers who are available to answer (or forward) any kind of questions, requests, etc. A web form can also be used to send requests to the project.

Additionally, the attendees (and trainers from the region) can follow the e-learning course and/or check the availability of the 6DEPLOY remote labs and use these.

5. CONCLUSIONS

Workshops are a key mechanism through which information, knowledge, and know-how are transferred to less experienced countries and participants. The workshops enable us to build constituencies and raise awareness; disseminate, benchmark, and validate the research results from the EU's Framework Programmes; promote European technologies; exchange best practices; and offer information related to standards and interoperability issues.

This 6DEPLOY workshop took place in Moscow (Russia) 24th June 2008, at the RIPE NCC regional meeting. Consulintel led this workshop, which was targeted at the region's ISPs.

Thanks to previous projects and training activities, most of the IPv6 education material needed to start the 6DEPLOY workshop training was available from the very beginning. The material included most of the issues of Internet deployment and evolution, especially IPv4-IPv6 transition/co-existence strategies, DNS, autoconfiguration, and materials on routing and applications.

During the 6DEPLOY lifetime, stakeholders will continue to enhance today's "knowledge database". The reader and interested parties are referred to the 6DEPLOY website to check for new material.

The content of the workshop has been uploaded to the 6DEPLOY Website and can be found in the Workshops section. This allows the attendees of that workshop to retrieve the information provided during the session, and other people to determine what benefits they could gain by participating in such an event.

6. REFERENCES

6DEPLOY website: <http://www.6deploy.org>

6DISS website: <http://www.6diss.org>

Paris Testbed: <http://www.renater.fr/spip.php?article439&lang=en>

Hands-on modules: <http://6diss.6deploy.org/publications/deliverables/hands-on.pdf>

How-to organise an IPv6 workshop:

<http://6diss.6deploy.org/workshops/workshop-guidelines.pdf>

Training the trainers workshop: <http://6diss.6deploy.org/workshops/ttt/>

e-learning package: <http://6diss.6deploy.org/publications/multimedia/e-learning.iso>

e-learning on-line: <http://6diss.6deploy.org/e-learning/>