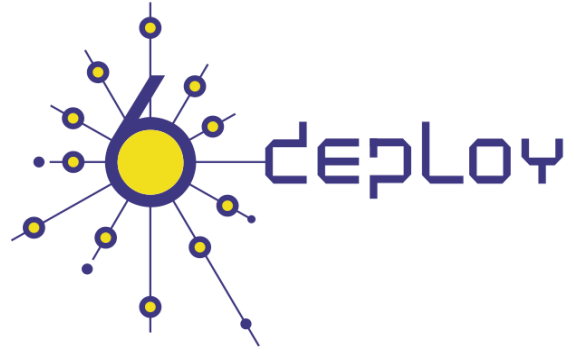




e-infrastructure



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Abstract:

This deliverable presents a report from the workshop held in Panama (Panama) on May 24th and 25th 2009. 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	23/06/2009	Document creation based on Martel's model	Alvaro Vives (Consulintel)
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v0.4	30/09/2009	Document Revision	Sarah Kenehan (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 Panama (Panama) on May 24th and 25th 2009. The following workshop details are 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 infrastructures 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 project's 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:

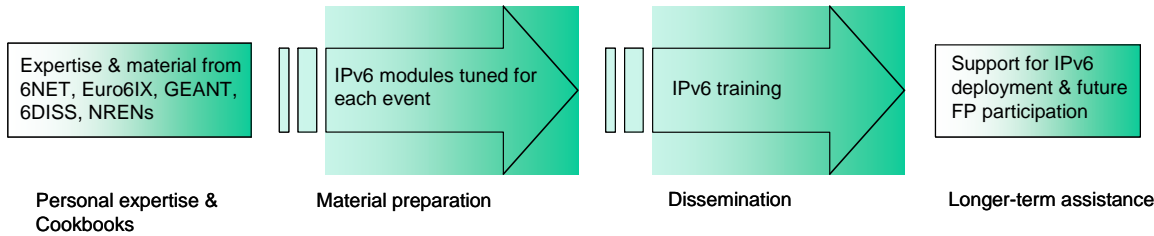


Figure 1-1: 6DEPLOY methodology (diagrammatically)

The approach is to use course material available from 6DISS and elsewhere that relates to IPv6, the e-learning course, and the 6NET IPv6 Deployment Guide book, together which will form 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, LACNIC, APNIC, AfNOG, APRICOT, and ISOC meetings.

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

The full set of dissemination materials (including the e-learning course and 2 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 deliverable presents a report from the workshop held in Panama (Panama) on May 24th and 25th 2009.

Chapter 2 of this document explains the general motivation for running IPv6 workshops, and Chapter 3 describes the specific details of the workshop, in terms of the attendees, the modules that were presented, and the “hands-on” exercises given (if appropriate). Chapter 4 identifies opportunities for further collaboration in the region and the recommended follow up actions, and Chapter 5 provides some general conclusions.

2. THE WORKSHOPS (GENERAL)

Workshops are one of the main mechanisms used by 6DEPLOY to transfer information and to 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 deprecated, 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 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 these workshops was collected, and the workshop

schedules, formats, 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 PANAMA (PANAMA)

This one and a half day workshop was conducted in Spanish in Ciudad de Panama (Panama) on the 24th and 25th of May 2009, within the LACNIC XII meeting, which was held on from the 24th to the 29th of May 2009. This workshop was part of LACNIC's IPv6 Tour 08/09. The workshop is described below, including descriptions of the attendees and their affiliations, the programme outline, and the material that was presented.

3.1 Overview

The event was organized by LACNIC. The audience included people from Internet Service Providers, universities, local companies, and governmental agencies.

Jordi Palet (Consulintel), Roque Gagliano (LACNIC) and Michael De Leo (Cisco Systems), on behalf of 6DEPLOY, were in charge of presenting the workshop.

All the presentations were conducted in Spanish in order to accommodate the local audience.

Besides the IPv6 Workshop, 6DEPLOY also actively participated, through Consulintel and LACNIC, in the preparation and deployment of other activities related to IPv6 during LACNIC XII. A description of these activities is provided below.

3.2 Attendees

Below is a list of people that attended at least one session:

No.	Surname	First name	Affiliation
1	Sanchez	Abdis	DESCA Panama
2	Santos	Adalton	CAIXA ECONOMICA FEDERAL
3	Furman	Adam	Tinet
4	Akplogan	Adiel	AfriNIC
5	Carballo	Adrian	Ministerio de Relaciones Exteriores
6	Benitez	Alberto	Universidad Tecnológica de Panamá
7	Cruz	Alberto	Telecom Internacional
8	Cruz Santos	Alejandro	UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO
9	Guzman Giraldo	Alejandro	NAP COLOMBIA - INTERNEXA SA
10	Sabolansky	Alejandro	LINTI - Universidad Nacional de La Plata
11	Tacuri Uquillas	Alex Alberto	ESCUELA SUPERIOR POLITECNICA DE CHIMBORAZO
12	García	Alexandra	ESPE
13	Mora	Amado	unellez
14	Alvarado Reyes	Amin	SECRETARIA DE ESTADO DE SALUD PUBLICA Y ASISTENCIA SOCIAL
15	Cerrud	Ananías	ASEP Autoridad Nacional de los Servicios

			Públicos
16	Thompson	Andre	The University of the West Indies
17	Gerhard	André	Universidade de São Paulo
18	Hernández	Andrés	Universidad Pedagógica Experimental Libertador
19	Castillo	Angel	Cable & Wireless Panama
20	De La Rosa	Ariadna	Desca Panamá
21	Foschetti	Bernardo	Constructora Pura Vida S.A.
22	Rosado	Brian	INDOTEL
23	Vaca Barahona	Byron Ernesto	ESCUELA SUPERIOR POLITECNICA DE CHIMBORAZO
24	Quequejeu	Camilo	Pulsus S.A.
25	Ferro Suárez	Carlos Angel	CITMATEL
26	Buenaño Pesantez	Carlos	ESCUELA SUPERIOR POLITECNICA DE CHIMBORAZO
27	Romaneli	Carlos Henrique	BC Conectividade
28	Reyes	Carlos Manuel	INFOMED
29	Neira	Carlos	LACNIC
30	Sosa Briceno	Cesar Ivan	Ministerio de Educacion Superior
31	Campos Lucena	Cesar Napoleon	Instituto Nacional de Investigaciones Agricolas (INIA)
32	Runnegar	Christine	Internet Society
33	Paz Batista	Clímaco Manuel	Cable Onda
34	Rojas	Cristian	NIC Chile
35	Rodríguez	César	Ministerio del Poder Popular para la Educación Superior
36	Brito Garcia	Daniel Antonio	Ministerio del Poder Popular para la Educación Superior
37	Gutierrez Gonzalez	Daniela Carolina	Corporacion Parque Tecnologico de Merida
38	Lopez	Darwin Christian	Constructora Pura Vida S.A.
39	Getschko	Demi	NIC.br
40	Frederic	Donck	Internet Society
41	Quintero Rincón	Doris	Fundacite Mérida
42	Balbastro	Edgar	Cooperativa Telefónica de Villa Gobernador Gálvez Ltda.
43	Albuja	Edmundo	ANDINATEL - CNT S.A.
44	De Jaen	Edna Samudio	NIC-Panama / PANNet / UTP
45	Ascenço Reis	Eduardo	NIC.br
46	Lima Comas	Eduardo Gabriel	Policia del Uruguay
47	Gomes Lites	Eduardo	Oi
48	Parajo	Eduardo	Abranet
49	Dominguez	Edwin Eduardo	Universidad Tecnologica de Panama
50	Limachi Nina	Edwin	ENTEL S.A.
51	Melendez	Elias	PUBLIC UTILITIES COMMISSION
52	Leger De Los Santos	Enmanuel	Cámara de Comercio y Producción de Santo Domingo
53	Iriarte	Erick	LACTLD
54	Majó	Ernesto	LACNIC
55	Gonzalez	Esperanza	Ministerio del PP para Obras Publicas y Vivienda
56	Marinho	Fabio	LACNIC
57	Mejía	Fabián	AEPROVI
58	Cavalcante Bandeira Do Amaral	Flavio Marcelo	Yahoo! do Brasil Internet LTDA
59	Balarezo	Francisco	AEPROVI

60	Molina	Gianni	Switch and Data
61	Aguilera D	Gregory A	UNEXPO
62	Cicileo	Guillermo	RIU - Red de Interconexion Universitaria
63	Soliño	Gustavo	NIC ARGENTINA
64	Encarnacion De La Rosa	Hector Ivan	PRIVADO
65	Arcidiacono	Hernan	CABASE
66	Leon Ardon	Hugo	ICE Costa Rica
67	Vinicius Ribeiro	Igor	REVISTA IMPRENSA
68	Griffith	Irving	Belize Telemedia Limited
69	Lora	Ivan	Secretaria de Estado de Salud Publica y Asistencia Social
70	Pascucci	Ivo	Tiscali International Network
71	Morris	Jacqueline	University of Trinidad and Tobago
72	Blanco	Jaime	CLA Direct Panama
73	Feliz Capellan	Jairo Ezequiel	Puerto Rico Telephone Company (PRTC)
74	Contreras Rodriguez	Javier Omar	Universidad de Los Andes
75	Salazar	Javier	LACNIC
76	Hountomey	Jean-robert	AfriNIC / ASO AC
77	Martinez Alfonso	Jesús	SITRANS
78	Serpa Serpa	Jhoanna	CEDIA
79	Salvarredy	Joaquin Gonzalo	Cespi - Universidad Nacional de La Plata
80	Rodriguez	Joaquin	Pulsus.SA
81	Arango	Jonatan	RED UNO S.A.
82	Lopez Cisneros	Jonathan	AMNET El Salvador
83	Martin	Jonny	Packet Clearing House
84	Palet Martinez	Jordi	Consulintel
85	Villa Hernández	Jorge Daniel	Ministerio de Educación Superior
86	Legra Alvarez	Jorge Luis	ETECSA
87	Camacho Murillo	Jorge René	Entel S.A.
88	Achurra	Jose	Universidad Tecnologica de Panama
89	Alvarado	Jose	CNTI
90	Ramirez Alba	Jose Francisco	Oficina de Planificacion del Sector Universitario
91	Delgado	Jose Manuel	Cable & Wireless Panama
92	Guzman	Jose Miguel	Google Inc
93	Luna Silva	Jose Rafael	UDO
94	Uzcategui Molina	Jose Rafael	Universidad de Los Andes - Venezuela
95	Lopez	Josmy	MINISTERIO PARA LAS OBRAS PUBLICAS Y VIVIENDA
96	Bonilla Jaramillo	José Alejandro	EPM Telecomunicaciones S.A. ESP
97	Matos Rojas	Juan Antonio	Instituto Dominicano de Aviacion Civil (IDAC)
98	Sánchez	Juan Enrique	NameAction Inc.
99	Bianucci	Juan Pablo	Telpin - Cooperativa Telefonica Pinamar Ltda
100	Pinto	Julio Cesar	IFX NETWORKS
101	Ferreira Hernandez	Justo Atawal	FUNDOEXTE
102	Smith	Kingsley	PUBLIC UTILITIES COMMISSION
103	Bautista	Linda	Private
104	Valdes	Lorenz	Cable & Wireless Panama
105	Batista	Luis	Instituto Dominicano de las Telecomunicaciones (INDOTEL)
106	Velasquez Jimenez	Luis Miguel	Privado
107	Saavedra	Luis	BT LatAm

108	Velasquez	Luis	Tinet
109	Cunha	Luiz	BRAZILIAN FEDERAL POLICE
110	Toppin	Lydia	Universidad Tecnologica de Panama
111	Pereira Velasco	Marcos Edwin	Entel S.A.
112	Capatinta	Maria	LACTLD
113	Uzcátegui Briceño	Maria Mayela	Ceidis ULA
114	Martin	Mariano Javier	UNIVERSIDAD NACIONAL DE VILLA MARIA
115	Rocha	Mariela	RIU - Red Interconexión Universitaria
116	Cardoso	Martha Patricia	COORDINACION DE LA SOCIEDAD DE LA INFORMACION Y EL CONOCIMIENTO. SCT
117	Castañeda	Marvin David	ccTLD NIC.NI
118	Peyrefitte	Michael	PUBLIC UTILITIES COMMISSION
119	Kashiwakura	Milton	NIC.BR
120	Ajwani	Naresh	APNIC
121	Rodriguez Ramirez	Nelly Margarita	Centro Nacional de Innovación Tecnológica (CENIT)
122	Quagliata	Nicolas	LACNIC
123	Aguirre	Olvenis	Cable & Wireless Panama
124	Rosas	Omar	PRIVADO
125	Torres	Oscar	Universidad Tecnologica de Panama
126	Banegas	Oswaldo	COTAS LTDA.
127	Rodriguez Romeo	Pablo Alberto	Consejo Federal de Inversiones
128	Cuello	Pablo	ANTEL
129	Valenzuela	Patricia	Nameaction Inc
130	May	Paul	privado
131	Wilson	Paul	APNIC
132	Less Andrade	Pedro	Google
133	Torres-jr	Pedro	PTT-Metro e RNP/PoP-PR
134	Calderón Moros	Rafael	Universidad de Los Andes
135	López Guerra	Rafael	Etecsa
136	Camacho	Reina	Universidad Central de Venezuela
137	Guevara Ochoa	Ricardo Jose	Universidad Tecnológica Centroamericana UNITEC
138	Sandoval Fajardo	Roberto Antonio	Ministerio del Poder Popular para la Educacion Superior
139	Gonzalez Baldonado	Roberto	Universidad Central de Venezuela
140	Padilla Verdugo	Rodrigo	Universidad de Cuenca
141	Esquivel Jiménez	Ronald	ICE
142	Farfán Torres	Ronald José	CNU - OPSU
143	García Núñez	Rosa Yamile	Ministerio de la Informática y las Comunicaciones
144	Daniel	Rudolph (rudi)	Independent Consultant & CIVIC rep
145	Bean	Russell	Cable & Wireless Panama
146	Bencivenga	Sandra	nic argentina
147	De Aza Alvarado	Santiago	SECRETARIA DE ESTADO DE SALUD
148	Leibrand	Scott	Internap / ARIN AC
149	Eck	Shaun	Belize Telemedia Ltd
150	Almeida	Sheila	Tinet
151	Dos Santos	Silvio Rogerio	SERPRO
152	Kent	Stephen	BBN Technologies
153	Corrales	Vadin	CLA Direct Panama
154	Lopez	Victor	Universidad Tecnologica de Panama
155	Ramiro	Victor	NIC Chile
156	Oliveira	Weziton	TurboSeg Proveedor de Internet Ltda

157	Castillo Quiel	Yarisol Anneris	UNIVERSIDAD TECNOLOGICA DE PANAMA
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Table 3-1: Panama Workshop list of participants

3.3 Workshop programme

The workshop programme is presented in the following table:

Date	Time	Title of session
24/51/09	14:15	Tutorial: IPv6 - Introduction and Configuration
24/05/09	15:45	Coffee Break
24/05/09	16:00	Tutorial: IPv6 - Introduction and Configuration
24/05/09	18:00	End of Session
25/05/09	9:00	Tutorial: IPv6 - Planning its deployment
25/05/09	10:45	Coffee Break
25/05/09	11:00	Tutorial: IPv6 - Planning its deployment
25/05/09	12:45	Lunch
25/05/09	14:15	Tutorial: IPv6 in the last mile
25/05/09	15:45	Coffe Break
25/05/09	16:00	Tutorial: IPv6 in the last mile
25/05/09	18:00	End of Workshop

Table 3-2: Panama Workshop programme

3.3.1 Other IPv6 Related activities

Besides the IPv6 Workshop, 6DEPLOY also actively participated, through Consulintel and LACNIC, in the preparation and deployment of other activities related to IPv6 during LACNIC XII.

- **Seventh Latin American IPv6 Forum (FLIP-6) meeting:** The aim of the Latin American IPv6 Forum is to promote the adoption of the IPv6 Protocol within the region of Latin America and the Caribbean, as well as to share experiences regarding the implementation within our region of services and applications based on IPv6. This exchange of experiences, which range from commercial to academic applications, including future development projects of

IPv6 implementation, is realised as much through the discussion list as in the Forum annual meeting, which is developed within the framework of LACNIC events. For more information and the agenda of the meeting see <http://lacnic.net/en/eventos/lacnicxii/flip62009.html>.

- **Latin America and the Caribbean IPv6 Task Force meeting:** The main objective of the IPv6 Task Force for Latin America and the Caribbean is to promote the adoption of IPv6 within the region. For more information on the LAC IPv6 TF visit <http://www.lac.ipv6tf.org>.
- **IPv6 Experiment:** During the entire week of the LACNIC XII event there was native IPv6 connectivity.

3.4 Presentation material

The following material was presented:

Modules	Presented by	Affiliation
IPv6 - Introduction and Configuration	Jordi Palet	Consulintel
IPv6 - Planning its deployment	Roque Gagliano	LACNIC
IPv6 in the last mile	Michael De Leo	Cisco Systems

Table 3-3: Panama Workshop list of modules and hands-on exercises used

3.4.1 Modules

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

- **IPv6 Introduction and Configuration:** This session, which was aimed at a broad spectrum of participants (ISPs, organizations, end users) presented a basic introduction to IPv6, the motivations that are driving its development, its differences with IPv4 protocol, some possibilities for future development, and even business opportunities. The session also allowed participants to practice some basic configurations. In addition, concepts on the transition and coexistence of IPv4 and IPv6 were presented, as well as different transition mechanisms, some of which are automatic, which is what explains the growth of IPv6 traffic that is being observed at the global level despite its low level of deployment on the part of ISPs. Recommendations will be made regarding IPv6 deployment at ISPs and corporate networks.
- **IPv6 - Planning its deployment:** Planning is the first step when thinking about an IPv6 deployment. This session addressed different aspects of the IPv6 planning strategy for both service providers and enterprise networks. The tutorial

covered the general aspects of the planning activity, the addressing plan, the routing plan, the service deployment plan, and the education plan. The tutorial finished with a discussion about the transition and the alternatives currently under development for providing Internet access after the IPv4 addresses run out.

- **IPv6 in the last mile:** This session focused on SP IPv6 deployment techniques that will help network designers/ administrators understand IPv6 operation and implementation options in native IPv4 and MPLS (6PE/6VPE) environments. This session also covered IPv6 in access networks and advanced services.

3.5 Photographs taken at the event



Figure 3-1: Michael De Leo (CISCO) Presenting



Figure 3-2: Attendees of the Panama Workshop



Figure 3-3: Roque Gagliano (LANIC) presenting



Figure 3-4: 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 plans, 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. Also a web form can 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.

This workshop was part of the successful LACNICs IPv6 Tour that is being supported by the 6DEPLOY project and that is spreading IPv6 knowledge all around the Latin American and Caribbean region. More about this project can be found on the IPv6 Tour web site: <http://lacnic.net/en/eventos/ipv6/>.

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.

The workshop held in Panama (Panama) on May 24th and 25th 2009 was organized by Consulintel and LACNIC, as 6DEPLOY representatives, collaborating with local authorities. Thanks to previous projects and training activities, most of the IPv6 education material needed to start 6DEPLOY workshop training was available from the very beginning. The material addressed most of the issues of Internet deployment and evolution, especially IPv4-IPv6 transition/co-existence strategies, DNS, Autoconfiguration, Routing and Applications.

Making the workshop within the LACNIC XII meeting made it possible to improve both the number of attendees (almost 160) and the impact on the LAC region, as the attendees were from the region. The topics presented were selected according to the participants' requirements.

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.

In summary, this workshop should be considered a success with regard to the dissemination of IPv6, though this is only the first of many steps towards the deployment of real IPv6 networks and services in the region.

6. REFERENCES

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

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

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/>