

**OPEN CITIES**



# **Pan European Observatory of digital usages: Framing and planning of the work**

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## **D5.5.41 PAN-EUROPEAN OBSERVATORY OF DIGITAL USAGES ON FTTH NETWORKS - FRAMING AND PLANNING OF THE WORKS -**

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**Dissemination Level**

P	Public	x
C	Confidential, only for members of the consortium and the Commission Services	

## Revision History

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### Statement of originality:

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## 1. INTRODUCTION

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An ambitious transformation of the European Internet infrastructures is currently undergoing. Fiber is the core component and technology of a new digital era for the EU Citizens.

Fiber Networks (also known as Fiber To The x, FTTx ) are and will be the Next Generation Networks allowing new schemes in most of our industries, a new way of teaching and learning in all schools, new products and services for all citizens and a disruptive approach in the Innovation domain.

Fiber connected cities will be able to offer a complete new digital way of life to all their inhabitants: fiber does not only allow faster connections (very low latency) than Adsl lines but also the transportation of either far more digital services simultaneously, (the bandwidth capacity of Fiber Optical Networks being up to 100x superior to the Adsl ones) or highly bandwidth consuming services like video conferencing, High Definition TV programs, High Definition Video On Demand...

The Institute Télécom proposal is to give a better and precise view of the process currently under construction, giving facts and numbers which are keys to the understanding of this important mutation.

Amsterdam, Barcelona, Berlin, and Paris will be the target of this close examination through the Pan European Observatory of digital usages on FTTH (Fiber to the Home) networks.

## 2. GOALS

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The goal of this task is to build a Pan-European observatory of the digital usages on the FTTH networks using studies, monographs, comparative analyses of usages in industrial and institutional contexts of the four partner cities: Amsterdam, Berlin, Barcelona and Paris.

These studies, led by the Institut Telecom, will be complementary to those already carried out on the Platform in the Greater Paris Region: barometric studies on the use and the equipment of the optical fiber subscribers (2300 household panel), ethnographic studies, and usage studies aimed at certain types of online services.

As a result the Pan-European observatory of the digital usages on the FTTH networks is build to help individuals, companies and institutions in their projection of what can be done with FTTH Networks and how it can be done.

None of the economical, political, technical and chronological conditions of the FTTH Networks deployment are exactly the same in the countries/cities of the Open Cities project.

Different conditions and different choices have been made or are in the process to be made by the actors involved: Authorities, both at the national and local level, Telecommunication operators, Service providers, National regulator...

This Observatory is set to analyze, compare and learn on the digital usages on the FTTH networks by sharing the Open Cities experience in this matter, for a mutual benefit.

### 3. STRUCTURE OF THE PAN EUROPEAN OBSERVATORY OF DIGITAL USAGES ON FTTH NETWORKS

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The Pan European Observatory of digital usages on FTTH Networks will be held by the (French) website of the Open Cities project: <http://paris.opencities.net>

The paris.opencities.net website is currently open (as seen on Figure 1: paris.opencities.net website sample, page 6 of this document). The section and subsections dedicated to the Pan European Observatory of digital usages on FTTH Networks are currently under construction.

It is planned to open the webpages of the Pan European Observatory of digital usages on FTTH Networks during June 2011.

A dedicated section was created, including the 3 subsections structuring the observatory itself:

#### 1) The FTTx Database

This section will use a graphical interface to navigate between the Cities of the Open Cities Project and get access to the information of reference about the current state of the art of FTTH deployment in the Open Cities.

The FTTx Database will provide 3 levels of information to the visitor:

- European level:  
generic FTTx Networks deployment information in Europe as reference.
- National level:  
National level of information on FTTx Networks deployment (National regulator, Telecommunication Operators, Internet Providers, FTTH commercial offers...)
- Open City level:  
Current status of FTTx Network deployment in the Open City, detailed with the local FTTx Internet providers offers and subscribers number, when applicable).  
Expected status of FTTx networks deployment in the Open Cities in the coming years (depending on the information available from Institutions, telecommunication operators and Internet providers).

## 2) FTTx Surveys

This section will host all the surveys on digital usages on FTTH networks. It will link to the surveys when they will be launched by the Institut Telecom and will publish their results once closed and analyzed by the researchers of the Institut Telecom. The Institut Telecom will also make available in this section any FTTH related studies driven by its researchers when the publication conditions allow it.

## 3) FTTx Glossary

This section will give to the visitors all the basic (mandatory often) information needed to understand the terminology in use when referring to Optical Fiber Networks deployment and digital usages.

Figure 1: paris.opencities.net website (sample)

The screenshot displays the website interface for 'OPEN CITIES'. At the top right, there are links for 'Sign In', 'Login', and a language dropdown set to 'English'. A search bar with a magnifying glass icon and an 'OK' button is positioned below the navigation. The main navigation menu includes 'ABOUT', 'OPENCITIES', 'BETA-TESTS', 'FTTX OBSERVATORY', 'CALL FOR PROJECTS', and 'NEWS'. The central banner features a world map with glowing nodes and the text 'Watching THE FTTX Networks'. On the left, a sidebar lists 'Open Innovation + Future Internet + Smart cities' and 'Open Cities', with a diagram showing 'Cities', 'Mechanisms', and 'Objectives' connected by a red dotted line. Below this is an 'APPLY NOW!' button. The 'ABOUT' section is highlighted in yellow and contains text describing the platform's purpose: 'The Open Cities Platform is designed for **prototyping on-line and mobile services or digital contents, and test them under "real-life" conditions** with "real" end-users in a two phases sequence :'. It details two phases: 'Technical fine-tuning' (involving installation on a managed data centre for alpha-testing) and 'Real-life experimentation' (involving European beta-testers). On the right side, there are four news categories: 'Professional news', 'First Call for Projects Opening !', 'Observatory news', and 'Betatest news'. At the bottom right, a dark button with the Twitter logo and the text 'Join the conversation' is visible.

## 4. SCHEDULE

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The schedule for the Pan European observatory of digital usages on FTTH Networks will follow two different time frames, one for each major section structuring it: The FTTx Database and the FTTx Surveys.

### 1) The FTTx Database

This section will be updated continuously based on the information available concerning the current state of deployment of FTTH networks in the cities of Amsterdam, Barcelona, Berlin and Paris.

The available data depends on information given from the parties responsible for the deployment of fiber networks, primarily (but not exclusively) the operators in each city deploying these networks and the national regulator in charge to coordinate the deployment. Consequently the database will be updated as the expected information will be made public.

Twice a year, every month of June and December (2011 and 2012) , a global update of the database will be performed to reflect the most accurate view possible on this topic at that date, and give milestones of reference.

### 2) FTTx Surveys

Every year (2011 and 2012) from September to December, the Institut Telecom will launch a survey on digital usages on FTTH Networks in the four cities of the Open Cities Project,

The survey will be closed the 31th December.

The data collected through these dedicated surveys will be analyzed by the Institut Telecom researchers during the months of January 2012 and 2013.

The results are expected to be published on the French Open Cities Website, in the dedicated section, in the first days of February 2012 and 2013.

The publication of other studies on the digital usages on the FTTH networks led by the Institut Telecom researchers in recent ("Plate-forme THD Cap Digital greater Paris Region") or current projects involving them are not to be scheduled. They will be published as the conditions will allow their availability.

The studies on digital usages on FTTH Networks made during the "Plate-forme THD Cap Digital Paris Région" project (2300 FTTH connected households) are expected to be published in the Pan-European observatory of the digital usages on the FTTH networks (French website of the Open Cities project , <http://paris.opencities.net> ), in the end of June 2011.