

# Position paper for Third W3C Web and TV Workshop

The Open Media Cluster Project  
&  
The Named Data Networking Project

## OPEN MEDIA CLUSTER PROJECT

**World's leading media innovation center for interactive and linear digital entertainment for mobile and connected-living rooms based on open innovation and open web standards.**

It is seeking global leading technical and content development partners to co-invest in leading edge R&D and other innovation activities to be centered in the Open Media Cluster in Rome, Italy.

MISSIONS: It will promote the effective convergence of media technology innovations - centered on HTML5, open web standards, free/open-source and patent-unencumbered technologies - with emerging video-centered entertainment formats based on interactivity, social participation, multidevice, immersive user experiences, interactive cinema, gaming, and more.

GOALS: It's will lead a coalition of leading Italian and European **video** content producers, broadcasters, aggregators and rights owners in a strategic alliance with global leading open media technology makers - based on [open innovation](#), [free](#) and [open-source](#) software and [open web standards](#) - and aimed at retaining and expanding their editorial control and their strategic positions in media value chains, notwithstanding the fast-expanding role of global proprietary media consumption platforms.

### TIMELINE:

Q4-2011 - OMC begins activities in 450 sq.m. Open Media Hub which will start offering discounted office and co-working facilities and open media services to Rome's and EU's micro and small media innovators.

Q2-2012 - OMC starts executive start up plans and start operation on leased office and lab facilities in the Formello Productive Zone. The project will be financed through a public-private partnership, with primarily private investment.

Q2-2012 - Telematics Park begins construction, planned to end on Q4-2013

Q4-2012 - OMC begins full scale operations

Q3-2013 - OMC moves to final new 1,800 sq.m dedicated facilities and labs within the Telematics Park.

FACILITIES AND INFRASTRUCTURE: OMC will be located in dedicated facilities which will be available for 50 years free of charge, with the right to lease up to 50% of the spaces to relevant other entities. These will include specialized production facilities, labs, training and incubation.

ACTIVITIES: research, educational activities incubation, knowledge transfer, developer community building, prototyping, user-driven innovation, testing, localization and aimed at wide-spread adoption. For example: innovative HTML5 apps, content, websites, browser plug-ins, web platform frameworks; mobile, tv-connectable, smartTVs and hybrid devices.

It will develop and manage a [Universal Audiovisual Archive](#) consisting initially of over 2,500 TB of locally-cached audiovisual and media content under public domain or open licenses, as well as over 60,000 DVD/Blu-ray Jukeboxes of Italian and foreign classics locally accessible through fiber-connected workstations (for consultation).

The center will be complemented by the **Open Media Network** which will manage year-long community building activities, an annual world-class week-long event, and smaller trimonthly events, which will provide conference, community building activities, knowledge transfer and training opportunities, and intensive developer sprints.

TECH PARTNERS: Given the objective of the interdisciplinary research center REMAP and the Telematics Park of Rome to act as leaders in interdisciplinary education, research and production, and the opportunity presented by the construction of a new research and production park in Rome to develop a mutually beneficial research collaboration, both institutions are exploring joint, cross-cultural projects, including the possibility of a *UCLA research node* in the new Park.

In addition signed partner the OMC venture are Accenture, [SAE Institute](#), [BIC Lazio Incubator](#) (the Business Incubator Center for the Lazio Region), [Qantm](#), the 3 departments of [Faculty of Communication Sciences and the Department of Computer Science and Systems \(DIS\) of the first university of Rome "La Sapienza"](#), [TheNetValue](#).

MEDIA PARTNERS: In addition to Accenture Video Solutions, we have extensive have already started encouraging discussions with major Italian telco operators, broadcaster and video producers to provide at least 2-5M€ of financing for OMC activities.

LOCATION & CONTEXT: It will be located within the upcoming **57,075 sq.m** and **€120 millions** [Telematics Media Park](#) of Rome, Italy, promoted by Tecnoconsult International Srl ("TI") on owned land that will begin construction in Spring 2012. The Open Media Cluster will be the talent pool, artistic and technological innovation engine of the [Digital Artists](#)

Labs (DAL) with its 32,866 sq.m of rich-media and video production facilities (including 23 soundstages), constitute EU's second largest video production compound. OMC will be integrated in the living creative community constituted by the Telematics Park - with its very extensive residential, hotel, entertainment facilities and traditional video production facilities.

FUNDING:

Beyond initial funding, outlined below, OMC longer term financial sustainability counts on attracting sizeable funding from Media Partners and public grants at all levels. It aims to become fully self-sustaining at the end of the 5th year of operations, except for free facilities, and discounted ICT services provided by the Telematics Park.

The project is about to secured initial funding through a public-private partnership, slated to be signed on Sept 15th 2011, by Tecnoconsult International and Municipality of Formello, which commits signing parts to the following commitment, conditional to approval of the project by Rome Province and Lazio Region:

3,8M€

To: building of 4,300 sq.m Zero Emission office and lab facilities dedicated to open media innovation activities. Of these, 2,400 sq.m spaces are used and managed at zero cost for 50 years by OMC, while an adjacent 1,900 sq.m building will be hosting public agencies in the field of open innovation (MOUs are in place with, BIC Lazio, Province School of Cinema, and La Sapienza University for Interdisciplinary Master Programs and Research Center by lead by the departments of Communication Science and Informatics).

By: Municipality of Formello in the form of mandatory extraordinary infrastructural contributions by private developers to the new European Media Pole of Formello.

4M€

To: startup fund for fundraising, executive planning, partnering, and initial operations, at the complete disposal of OMC.

By: Tecnoconsult International Srl

1,5M€

To: deployment of an open access internet backbone capable of up to 600Gigabit, and of an ultra wide band internet access in the entire Municipality of Formello, providing a catalyst of living creative community, as well as a testing and user-driven development.

In addition, the Telematics Park and Digital Artists Labs commit to provide to OMC local projects a special price for any services (including

bandwidth, apartment rentals, utilities) at just the marginal cost of providing them.

#### **PARTNERS TO DATE**

SAE Institute<sup>1</sup>, BIC Lazio Incubator<sup>2</sup> (the Business Incubator Center for the Lazio Region), Qantm<sup>3</sup>, the Faculty of Communication Sciences and the Department of Computer Science and Systems (DIS) of the first university of Rome "La Sapienza"<sup>4</sup>, TheNetValue<sup>5</sup>, The Audiovisual and Cinema Training Centre of the Lazio Region. The center will be complemented by the **Open Media Network** which will manage year-long community building activities, an annual world-class week-long event, and smaller quarterly events, which will provide conference, community building activities, knowledge transfer and training opportunities, and intensive developer sprints.

#### **NAMED DATA NETWORKING**

Recent NSF Future Internet Architecture Awards<sup>6</sup> put REMAP in a privileged position to work on an ten US campus project new internet architecture called Named Data Networking (NDN). Given the stretched initial assumptions on which IP Internet is based and the way in which users and applications work with contents, an architectural and conceptual shift from "where" to "what" is needed.

To naturally evolve embedding emerging patterns of communication NDN emphasizes data instead of its location, putting the named data as the subject. With such philosophy NDN secures the contents decoupling data from host and integrates automatic caching that lead to valuable bandwidth optimization.

The goal is to validate NDN as future internet architecture: routing scalability, fast forwarding, trust models, network security, content protection and privacy, and fundamental communication theory.

#### **AUTHORS**

**REMAP** is the **Center for Research in Engineering, Media and Performance** at the **University of California, Los Angeles (UCLA)**, a joint program of UCLA's **School of Theater, Film and Television** and **Henry Samueli School of Engineering and Applied Science**. REMAP's core projects investigate the interrelationships among community, culture and technology and how embedded and mobile computing can support community development and cultural expression. Research at REMAP has been supported by the National Science

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<sup>1</sup> [http://www.sae.edu/en-gb/news\\_overview/726/News](http://www.sae.edu/en-gb/news_overview/726/News)

<sup>2</sup> <http://www.biclazio.it>

<sup>3</sup> <http://www.qantm.com>

<sup>4</sup> <http://www.comunicazione.uniroma1.it>

<sup>5</sup> <http://www.thenetvalue.com>

<sup>6</sup> [http://www.nsf.gov/news/news\\_summ.jsp?cntn\\_id=117611&org=NSF&from=news](http://www.nsf.gov/news/news_summ.jsp?cntn_id=117611&org=NSF&from=news)

Foundation, National Endowment for the Arts, California State Parks, MacArthur Foundation, Trust for Mutual Understanding, Nokia Research Center, Intel, Cisco, and others.

Recent activities at REMAP include: (1) application team leadership for the National Science Foundation Future Internet Architecture project on "Named Data Networking," a \$7.9M program including 10 campuses lead by UCLA Computer Science and Xerox PARC; (2) a MacArthur Foundation award with LA Freewaves to place community video and location-based content on the 7000+ buses of the Los Angeles Metro bus system; (3) an ongoing collaboration with California State Parks on innovative multimedia interpretive approaches and technology for California's first urban state park.

**Tecnoconsult International srl**, is an Italian real estate and media private company, developing on owned land the Telematics Park, a €120M world-class integrated video and media production complex and technology park over 57,075 sq.m dedicated buildings for innovative linear and interactive digital entertainment content.

Adjacent to many dozens of leading audiovisual companies, already located in the Technology District of Formello with its 400,000 sq.m of offices and laboratories (including 23 soundstages), it will complete the EU's second largest video production compound.

The Studios, the Park and the many settling companies will offer the most comprehensive range of artistic, technological and story-writing services to cross-media productions, spanning from special effects, animation and stereoscopic 3D, to the development and strategic management of cross-platform applications for satellite, DVB-T, video portals, social networks, mobile, Web Tv, Ip-Tv, p2p and gaming.