

Deliverable

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D5.1.2.3 Dissemination Report

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

Abstract: This document will report on the dissemination actions performed during the first year of project. The report will be based on the sections and actions described in the first dissemination plan. In case modifications, updates have been done regarding the first dissemination plan (D5.1.2) they will be included in this second version.

Revision History

Revision	Date	Author	Organisation	Description
0.0	27/05/2014	Pau Pamplona	i2CAT	Initial ToC
0.1	28/07/2014	Pau Pamplona	i2CAT	First version to review
0.2	13/08/2014	Daniel Giribet	TVC	Final review

Disclaimer

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Statement of originality:

This document contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

1. Executive Summary

This document provides two perspectives of the dissemination activities carried out by TV-RING's partners. From one side, we can find a description of the modifications done regarding the initial dissemination plan (i.e.: adjustments, improvements or non-significant changes in what was foreseen). On the other side, we report all dissemination actions performed from M1 to M12 of the project. They have been structured according to its nature: online actions, digital and printed press, and finally on-site actions.

It is important to highlight the need of a balance between milestones in the dissemination plan (i.e.: fixed objectives, most of them set through KPIs) and a flexibility of actions in order to better adapt the project needs to the current situation in the sector.

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3. Introduction

The document is a report of all dissemination actions (i.e.: this includes communication and information about activities, results obtained, etc.) carried out during the first twelve months of the project. The report is structured in order to review all means used: online actions, printing and digital press, on-site actions (or face-to-face). In this last section, there is a separate report, based on who was the promoter of the action (i.e.: who organised the event, TV-RING or other parties).

All actions have a short description of the objectives and results obtained and are duly completed with graphic material to better show what was done and its context.

The document ends with two interesting sections: an analysis of the results obtained for each step set in the D5.1.2.2 [1] and brief conclusions.

This first main conclusion states that the project accomplished its initial objectives, but until there are no first results derived from the pilot, it is hard to increase the number and typology of actions. Hopefully, during the second period of the project, it will be possible to demonstrate the different pilots deployed in TV-RING. Another objective of this second period is to increase representation of the project at international events and formalise cooperation agreements with third parties and other projects.

4. General overview of the dissemination activities in the First Period

In this first period of the project, we can divide dissemination activities in three groups:

- A first group of actions mainly focused on the definition of the strategy to be followed and to set up all the tools and resources;
- A second group of actions based on online actions (e.g.: news section, etc.);
- And a third group focused on carrying out on-site actions (e.g.: attendance to events)

Communication is conditioned by the results obtained in the project. Consequently, the main topics addressed have been exposing the overall project and its objectives, followed by a last wave more oriented to the results gathered from the end and professional users' requirements phase.

It is necessary to highlight the first international workshop organised by TV-RING, which took place during the Mobile Web Symposium in Berlin. The event counted with more than 30 participants from different entities and countries.

Those first actions have demonstrated the potential of TV-RING and because of it, other projects and entities were able to show their interest to collaborate in future events. Another great result has been initial contacts between projects in order to plan joint actions.

5. Specific objectives for the first period

In D5.1.2 there was a three-phase action plan defining actions to be carried out in task 5.1 Dissemination. For each phase there was a set of objectives described, but only phase 1 and 2 apply to the first period. A quick overview of them can be found in the table below.

Phase	Objective	Status	Comments
1	- Define the corporate message	Done	The project has successfully created a clear message explaining what is expected from the project. The message has been adapted to different audiences (e.g.: technical and commercial).
1	- Create a project communication structure	Done	Partners have access to guidelines orienting on how to properly communicate and meet obligations in front of the EC.
1	- Identify and define stakeholders	To be updated	There is an initial segmentation of the targeted audience of TV-RING. There is a second iteration in progress to better detail stakeholders and simplify the contact process.
1	- Provide partners with resources for dissemination purposes	Done	Partners have been provided with templates for presentations, posters, leaflets (of the project and pilots). Online tools like the website and social media is fully operative. This will be updated as the project evolves.
1	- Define a time-line of dissemination actions to be performed	Done	There is a calendar of potential actions. All joint actions and regional workshops are planned for the next year.
2	- Create and make grow a critical mass of stakeholders	In progress	This action will be executed during the whole project. Dissemination actions will bring this critical mass.
2	- Raise project awareness	In progress	This action will be executed during the whole project through dissemination actions (online and offline actions).
2	- Position TV-RING at an international level	In progress	The same as for the two previous objectives.

Table 1: Objectives overview and status

5.1. Status of execution of the dissemination plan

As mentioned in previous sections, project is close to finish its first half.

Phase 1: Set up of the dissemination structure

Phase 2: Increase project awareness

Phase 3: Dissemination of the project results

	M1-M5	M6-M11	M12-M17	M18-M23	M24-M30
Phase 1					
Phase 2					
Phase 3					
TV-RING project highlights	Stakeholders forum // Workshops		Pilots execution // Stakeholders forum // Workshops		

Table 2: Phases execution timeline

6. Report of actions

6.1. Online actions report

6.1.1. Project Website

The project website has been used mainly for three different purposes: to inform about the project; to provide relevant news and events related to the project; and to deliver access to public documentation of the project (e.g.: leaflets, posters, deliverables). The project's website's news section has been automatically linked with TV-RING's Twitter profile. This has been done in order to increase impact on the project's audience.

6.1.1.1. Current status

The project's website is totally operative, but it is expected to be improved, both at content and features level (i.e.: there is an on-going process to send RSS feeds to other sites).

User's statistics are tracked using the Google Analytics (GA) framework, allowing for insightful metrics in visitor behaviour.

6.1.1.2. Quantitative Analysis report

The following GA-excerpt displays visitor consumption over the total time span since launch (2013-11-13) to the date of last month (2014-06-30). [2]

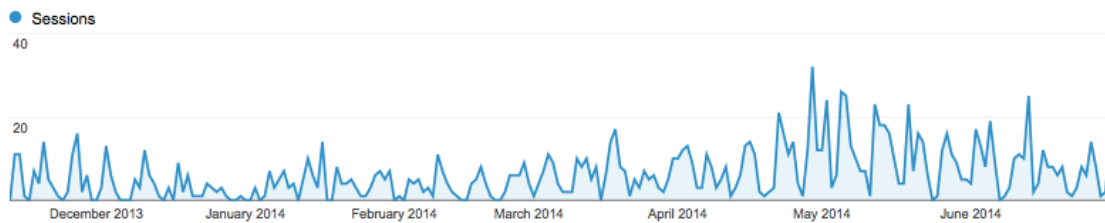


Image 1: Visiting behaviour

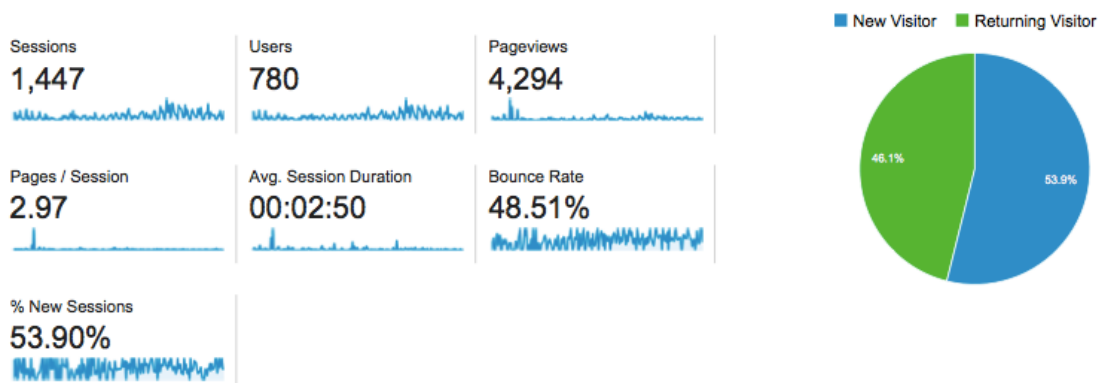
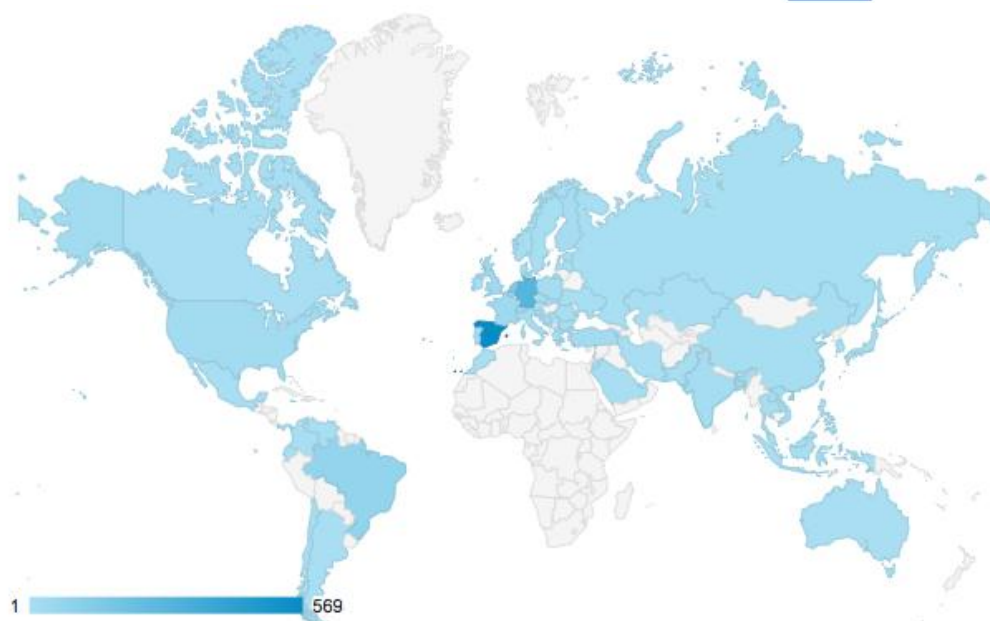


Image 2: Additive visiting behaviour











Country / Territory	Sessions	% Sessions
1.  Spain	569	39.32%
2.  Germany	283	19.56%
3.  Netherlands	120	8.29%
4.  Brazil	75	5.18%
5.  Belgium	57	3.94%
6.  France	37	2.56%
7.  United Kingdom	31	2.14%
8.  United States	24	1.66%
9.  Turkey	19	1.31%
10. (not set)	16	1.11%

Image 3: Additive visiting behaviour by territory

Page	Pageviews	% Pageviews
1. /	1,645	38.31%
2. /project	511	11.90%
3. /partners	481	11.20%
4. /documentation	400	9.32%
5. /news	309	7.20%
6. /news/15-04-2014/first-workshop-organized-tv-ring-project-“-outlook-future-hbbtv-services”	134	3.12%
7. /contact	115	2.68%
8. /partners/i2cat	83	1.93%
9. /documentation?page=1	40	0.93%
10. /news/19-05-2014/good-news-hbbtv-dash-and-nordig	36	0.84%

Image 4: Additive visiting behaviour by individual website section

Source / Medium ?	Acquisition			Behavior		
	Sessions ?	% New Sessions ?	New Users ?	Bounce Rate ?	Pages / Session ?	Avg. Session Duration ?
	1,447 <small>% of Total: 100.00% (1,447)</small>	53.90% <small>Site Avg: 53.90% (0.00%)</small>	780 <small>% of Total: 100.00% (780)</small>	48.51% <small>Site Avg: 48.51% (0.00%)</small>	2.97 <small>Site Avg: 2.97 (0.00%)</small>	00:02:50 <small>Site Avg: 00:02:50 (0.00%)</small>
1. yandex / organic	4 (0.28%)	100.00%	4 (0.51%)	100.00%	1.00	00:00:00
2. yahoo / organic	1 (0.07%)	100.00%	1 (0.13%)	0.00%	3.00	00:21:54
3. w3.org / referral	1 (0.07%)	100.00%	1 (0.13%)	0.00%	10.00	00:04:37
4. tvring.bfs-it.com / referral	4 (0.28%)	0.00%	0 (0.00%)	50.00%	4.00	00:06:55
5. tracfone.xtopoly.com / referral	1 (0.07%)	100.00%	1 (0.13%)	100.00%	1.00	00:00:00
6. t.co / referral	87 (6.01%)	62.07%	54 (6.92%)	66.67%	1.68	00:00:41
7. socialspacescuo.be / referral	7 (0.48%)	28.57%	2 (0.26%)	100.00%	1.00	00:00:00
8. semalt.semalt.com / referral	27 (1.87%)	100.00%	27 (3.46%)	100.00%	1.00	00:00:00
9. semalt.com / referral	23 (1.59%)	100.00%	23 (2.95%)	100.00%	1.00	00:00:00
10. search.tb.ask.com / referral	1 (0.07%)	100.00%	1 (0.13%)	100.00%	1.00	00:00:00

Image 5: Additive visiting behaviour by referral

6.1.1.3. Qualitative Analysis report

Based on these statistics we can draw the following conclusions:

- The number of visitors has been increased, with a peak in May.
- The most visitors are from Spain, but are overall worldwide.
- Most visitors visit the home page followed by projects' and partners' page.
- There are more new visitors than returning, although the difference is not significant.

Please see <https://support.google.com/analytics/> for a more thorough discussion on Google Analytics.

6.1.1.4. Publications

Current figures of publications made available are summarised in the following table.

Type of publication	Number	Link
News	28	http://tvring.eu/news?page=0
Documents	18 (2 leaflets, 7 deliverables, 9 presentations)	http://tvring.eu/documentation?page=0

Table 3: Current statistics on publications

6.1.1.5. Next steps

It is now being under evaluation the implementation of a module capable of distributing RSS feeds to other websites.

6.1.2. Social Media (Twitter, LinkedIN)

Current statistics from KLOUT (see [1] for further info on KLOUT) are only available for the Twitter profile.

TV-RING is following 125 profiles and has 70 followers. So far, it has been published 80 tweets. Average KLOUT score is 34¹. It will be interesting the comparison and evolution of this number in the following semesters.

6.1.3. Partners' website publications report

List of each partner's website where to find the link to a section dedicated to the TV-RING project:

- I2CAT: <http://www.i2cat.net/en/projecte/TV-RING-1>
- RBB: www.rbb-online.de/innovationsprojekte
- NPO: <http://help.npo.nl/faqs/wat-is-hbbtv>
- KU Leuven/iMinds: <http://www.socialspacescuo.be/projects/current-projects/TV-RING>

There have been also other items, explaining actions carried out in the project

Press Release from TV-RING Partners	Promoter	Link	Date
i2CAT website KOM	i2CAT	http://www.i2cat.net/en/projecte/tv-ring-1	02/10/2013
RBB website	RBB	http://www.rbb-online.de/unternehmen/der_rbb/profil/zukunft/tv-ring.html	22/08/2013
CUO Social Spaces website	KU Leuven/iMinds	http://www.socialspacescuo.be/news/tv-ring-european-project-has-started	08/11/2013
IRT website	IRT	http://www.irt.de/de/forschung/digitales-fernsehen.html#c3711	01/01/2014
NPO website	NPO	http://help.npo.nl/faqs/wat-is-hbbtv	16/01/2014
i2CAT website: multiple entries	i2CAT	http://www.i2cat.net/en/blog/catalonia-pioneer-europe-future-internet-and-innovation-through-culture http://www.i2cat.net/en/blog/i2cat-aumenta-su-proyecci%C3%B3n-internacional	

¹ By July 2014.

<http://www.i2cat.net/en/blog/i2cat-participa-la-%E2%80%9Cfuture-internet-assembly%E2%80%9D-dubl%C3%ADn>

<http://www.i2cat.net/en/blog/european-project-tv%E2%80%93ring-led-i2cat>

<http://www.i2cat.net/en/blog/tv-ring-leads-study-users-about-interactive-tv>

<http://www.i2cat.net/en/blog/tv-ring-cooperates-hackathon-ccma>

<http://www.i2cat.net/en/blog/ends-ccma-hackathon>

<http://www.i2cat.net/en/blog/i2cat-interviewed-about-tv-ring-project>

<http://www.i2cat.net/en/blog/first-workshop-organized-tv-ring-project>

<http://www.i2cat.net/en/blog/big-success-tv-ring-project%E2%80%93s-first-workshop-%E2%80%9Coutlook-future-hbbtv-services%E2%80%9D>

Table 4: Report of press releases published on partners websites.

6.2.Actions on Printing and Digital Press report

6.2.1. Press notes / press releases

7. See Annex VI – Information poster

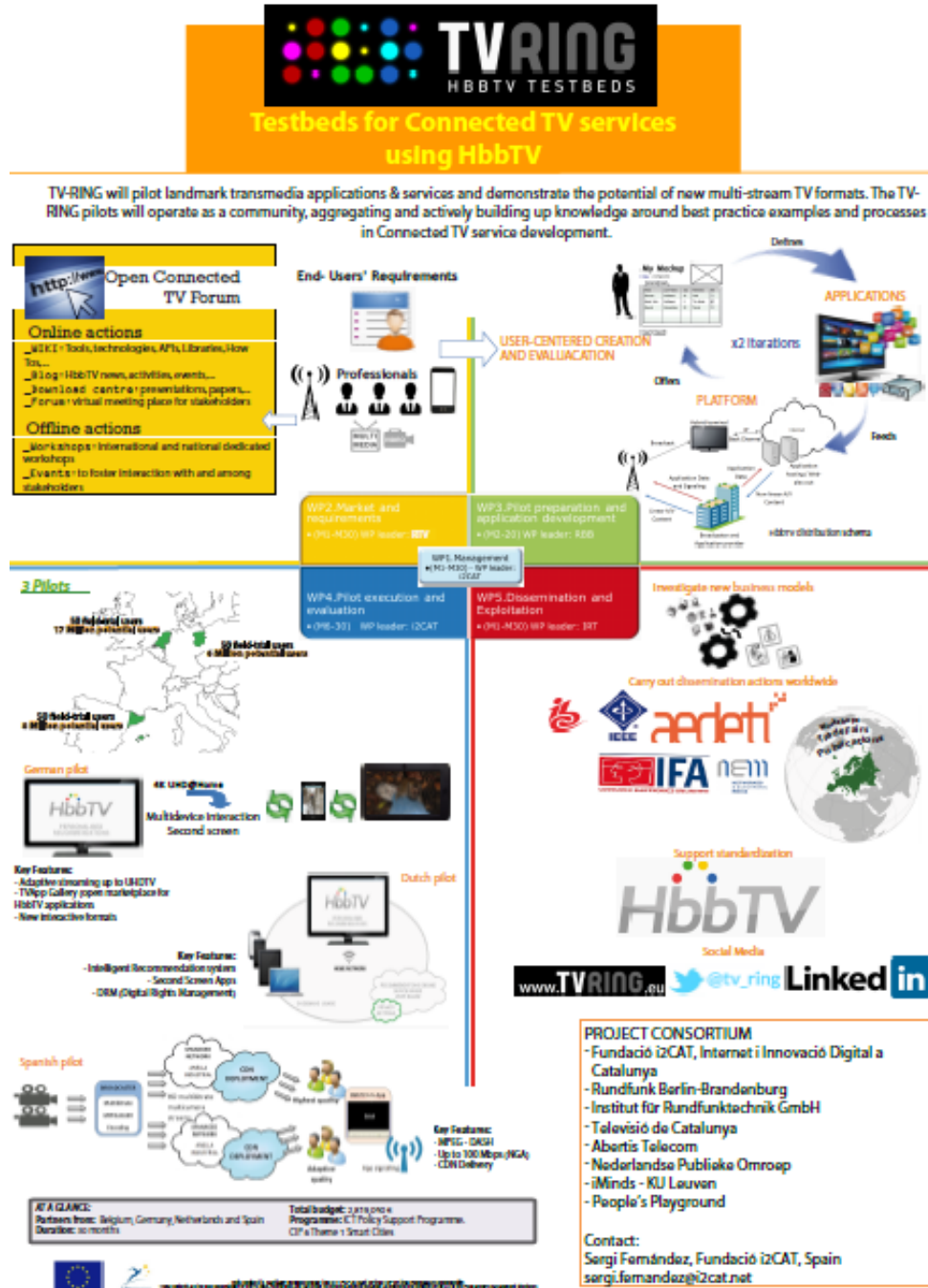


Image 29: Final version used during the Concertation meeting

Annex VII – Press releases where it is listed all the press releases related to the project.

7.1.1. TV/Radio mentions

This section does not apply for this report.

7.1.2. Leaflets and other printed material

7.1.2.1. TV-RING project leaflet

The project leaflet is a communication document which explains the project in a simple manner. It is oriented to the general public and has been distributed in most of the events in which the project has taken part.

The format adopted is an A4 six-faced flyer that provides a general project description, information about the pilots, the consortium, contact information and main topics addressed.



Image 6: Project leaflet v3.2

7.1.2.2. TV-RING pilot leaflet

This flyer was an initiative of NPO, as a consequence of the interest raised for the project. For this reason, all pilots provided an easy to understand text describing what services are delivered on each pilot of the projects.



Image 7: Pilot Leaflets

7.1.2.3. Service leaflet

Based on the information provided in **D3.1 – Service concepts description** and in **D4.1.1 – Evaluation plan** it is expected to create commercial oriented leaflets, showing what are the elements that compose those pilots. The objective is to be able to describe these elements as exploitable services (e.g.: this includes HbbTV and/or a feature such the DRM).

7.2. On-Site Actions report

During the first year of execution partners have been attending to several events, in different ways (e.g.: as general audience, as speakers, organisers, etc.). Along the whole section there is a summary of what has been done for each partner on each event. There are two main categories, the first one of those activities that TV-RING only took part as participant (for instance, invited as speaker). The second main group of activities are those directly organised by TV-RING.

7.2.1. Event Related activities

The first section compiles the reports of actions **non-organised** by partners of TV-RING, but in which they have been representing the project.

7.2.1.1. Mindtrek 2013 (Session "Media transformers") – 1st of October 2013, Tampere (Finland)

MindTrek Festival introduces three days of intensive talks, workshops and parties; it is all about discovering the trends of tomorrow. Mindtrek provides every year a platform for academicians, researchers and professionals to put forward ideas and interpretations regarding the development of Internet, interactive media, and the information society.

RBB was present and delivered ideas about new HbbTV service from RBB's R&D point of view. During its presentation RBB introduced the project ideas and objectives.



Image 8: RBB's presenting TV-RING in the auditorium of Mindtrek

7.2.1.2. V Interactive Digital TV Congress in Mallorca – 30th and 31st of October 2013, Palma de Mallorca (Spain)

The event was organised by LTIM (Laboratory of Information Technologies and Multimedia, of Maths and Computers department of University of Balearic Islands) and the Balearic Islands Government. During 2 days, broadcasters, manufactures, service providers, college professors and students could interact and discuss about the Interactive and Connected TV sector.

TVC and RTV conducted a session named “*Social TV: cerrando el círculo entre espectador, contenidos y big data*”. This session included an overview of TVC’s work on Social and Interactive TV, audience data analysis and description of current projects, including TV-RING.



Image 9: Dani Giribet from TVC introducing TV-RING

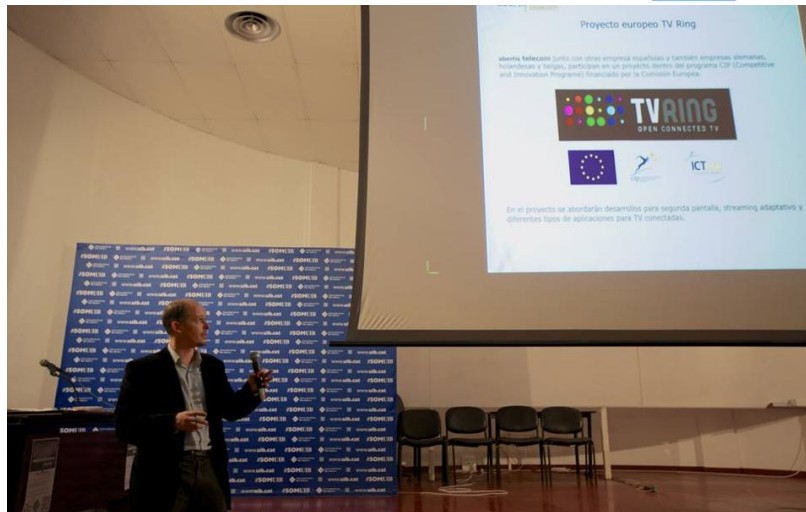


Image 10: Xavi Redon (RTV) giving details about TV-RING

7.2.1.3. ICT Vilnius 2013 - 4th to 8th of November, 2013, Vilnius (Lithuania)

Event organised by the EC that is considered one of the main reference events for big players (industry, academia, research) in digital technologies. Topics addressed during the four-day session were: cloud computing, broadband, ICT infrastructures, ICT skills, cyber security and long term visions on the future, among others. This edition gave a special focus on Digital Futures - a journey into 2050's futures and policy challenges.

I2CAT was present and held multiple meetings with other RDI projects in order to set possible collaborations with TV-RING.

7.2.1.4. IV AEDETI - 2013 - 11th of November 2013, Madrid (Spain)

AEDETI, the Spanish association of Interactive TV companies organised its 4th meeting. Amadeu Gassó from TVC, was invited as speaker in a panel oriented to broadcasters to discuss the opportunities brought by Hybrid TV. During his presentation, TVC explained their point of view regarding the challenges of HbbTV and interactive broadcasting in Spain.



Image 11: Amadeu Gassó (on the right) during the panel

It is possible to see the conference clicking on this link: http://youtu.be/aBprLCeD_RQ?t=10m25s. During the speech, it was mentioned TV-RING and the multicamera service deployed in the Spanish pilot.

A general overview is given in Spanish in the News item published by EADETI: <http://www.aedeti.es/index.php?info=YTo2OntzOjQ6Im1bnUI03M6MzoiY2FtIjtzOjU6ImFjY2FvljtzOjEyOij2ZXJfbm90aWNpYXMiO3M6MzoiZWlkljthOjI6e2k6MDtzOjE6IjQiO2k6MTtzOjI6IjEzIjt9czo0IjjaWQ03M6MjoiMTMiO3M6MTM6InZlcnNhb190YWJlbGEiO3M6Nzoib2ZmbGluZSI7czoxMDoiaWRfbm90aWNpYSI7czo0Ii3MzliO30=>

7.2.1.5. World Usability Day Slovenia 2013 – 28th of November 2013, Ljubljana (Slovenia)

World Usability Day Slovenia 2013 is the 4th conference of a series to be organized in Slovenia as a part of the global World Usability Day. Advances in ICT technologies offer an increasing potential for empowering users. Such empowerment could happen in users' working environment, at home, or in their leisure time, when using mobile devices, ubiquitous computing, among others. David Geerts from KUL took part in a session as Keynote speaker introducing preliminary results from the user observation carried out in TV-RING.



Image 12: David Geerts during his presentation

7.2.1.6. Mobile World Congress 2014 – 24th to 27th of February, Barcelona (Spain)

The GSMA Mobile World Congress² is a combination of the world's largest exhibition for the mobile industry and a conference featuring prominent executives representing mobile operators, device manufacturers, technology providers, vendors and content owners from across the world. This edition had more than 85.000 attendees from all over the world.

In this edition Abertis Telecom (RTV) presented the current on air services and demonstration services working with new adaptive standard called MPEG-DASH, using a very wide variety of systems and devices: smart phones, tablets, PCs, Set Top Boxes and Connected TVs.

RTV showed the capabilities of Hybrid TV systems through an HbbTV application developed by TVC to each of the booth attendants that were interested in that. The system took the DVB signalization from external DTT broadcasting and IP video content through 8Mbps Internet

² <http://www.mobileworldcongress.com/about/>

connection. The application was able to navigate through different pages and the user could get whatever content they wanted from TVC. As the DASH platform from TV-RING pilot was not ready yet, the demonstration was made using VoD content (not live) instead and delivered in progressive download mode.

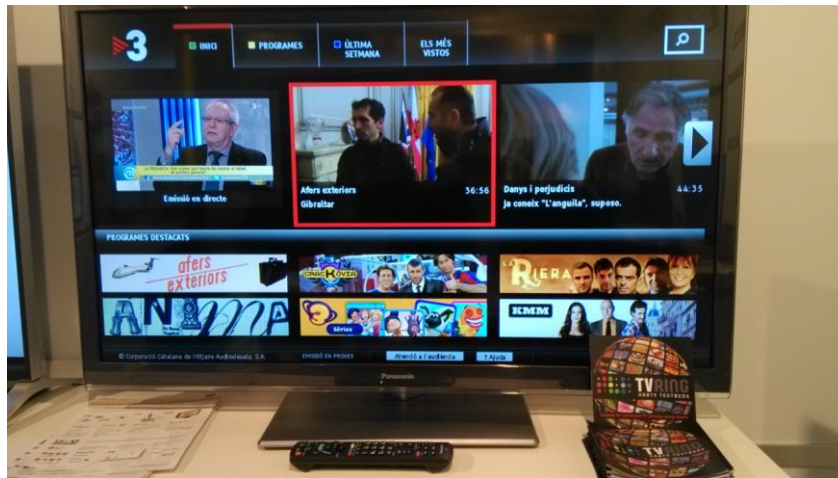


Image 13: Abertis HbbTV App and TV-RING leaflets

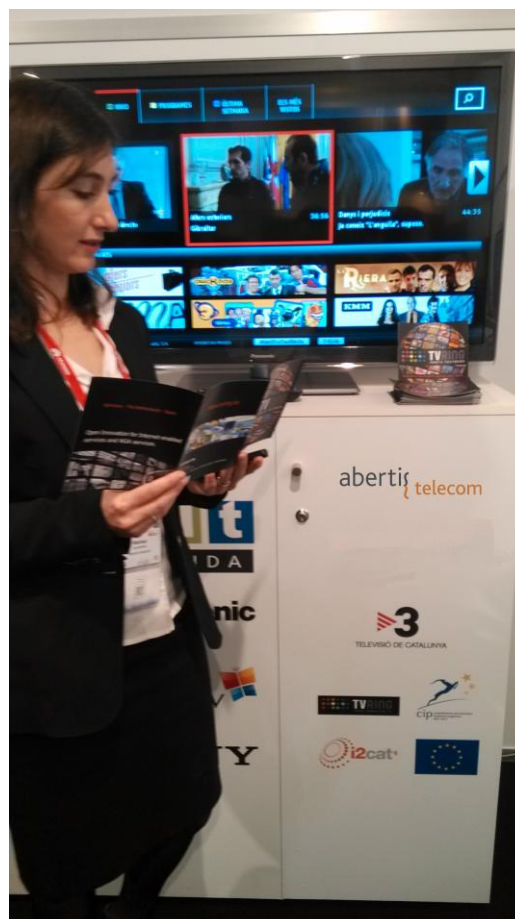


Image 14: RTV's booth at MWC 2014

7.2.1.7. FIA EVENT 2014 – 18th to 20th of March 2014, Athens (Greece)

[3] *The European Future Internet Assembly also known as FIA, is a collaboration between projects that have recognised the need to strengthen European activities on the Future Internet to maintain European competitiveness in the global marketplace. The Future Internet*



Assembly, co-organised and supported by the European Commission, works to reshape the Future Internet infrastructure for innovation.

I2CAT was present there to represent TV-RING and contact other RDI projects with similar objectives. I2CAT, represented by Sergi Fernández, scheduled different meetings with attendees and other stakeholders trying to find potential common lines of work.

7.2.1.8. HbbTV Workshop at Abertis telecom – 26th and 27th of March, Madrid (Spain)

This was an internal workshop with several broadcasters and manufacturers. One of the main objectives was to test RTV's TV-RING HbbTV MPEG-DASH App with several brand receivers like SONY, Panasonic, Samsung, VESTEL, LG, Philips, among others. Besides the technical approach given to the workshop, this was also a perfect occasion to introduce TV-RING to multiple manufacturers (as the ones previously mentioned) and broadcasters (e.g.: Radio Televisión Española, Antena3 and Euskal Irrati Telebista).

7.2.1.9. The Fourth W3C Web and TV Workshop – 12th to 13th of March 2014, Munich (Germany)

Conference about aligning European and Global HbbTV Standards and a look-out to the future of Connected TVs. "The Web is 25 years old, let's make history today! Let's put the Web and TV together!" NPO and IRT attended the event distributing TV-RING pilot leaflets to the attendees.



Image 15: The audience during the W3C

7.2.1.10. Hackathon CCMA – 2nd and 3rd of May 2014, Barcelona (Spain)

The Hackathon was a 24h non-stop developing session oriented in interactive projects. During the Hackathon TV-RING was presented to the external developer attendees, with the option to test eligible HbbTV prototypes in the TV-RING testbed. More than 90 participants (among third-party developers, SME representatives, journalists) were involved. Winners of HbbTV application category have been contacted to ascertain the possibility of testing the prototype on the TV-RING testbed.



Image 16: Participants received flyers of TV-RING during the Hackathon

7.2.1.11. BIT (Broadcast IT) – 20th to 22nd of May 2014, Madrid (Spain)

IFEMA hosted BIT 2014, one of the most relevant national event for the audiovisual industry. More than 200 companies from 25 countries and 8.150 visitors met during two days. RTV represented TV-RING, explaining the project scope, the work being done and objectives. All people who were especially interested and those who required a better knowledge (about 40 people) of the project had face-to-face meetings.

7.2.1.12. Concertation meeting – 25th of June 2014, Brussels (Belgium)

The Concertation meeting is an event organised by the EC and DG Connect. This event brings together many EU funded projects. This session had two principal objectives: one mainly oriented to facilitate to know better other projects; and secondly to group similar projects and foster cooperation among them. Sergi Fernández (i2CAT and project coordinator) was representing TV-RING. He took part in all the activities proposed and worked to find collaborations with entities or projects that attend. Also a presentation of the project was given and a newer version of the project poster prepared.

7.2.1.13. Mercat Audiovisual de Catalunya (MAC) – 4 of June 2014, Granollers (Spain)

This event is an annual event held in Catalonia in the city of Granollers. The target of this fair is mainly oriented in the media and broadcasting sector. This year, the event brought together more than 500 professionals of the sector who had the chance to attend to several conferences, presentations, discussion forums and also to a dedicated networking space. i2CAT was invited to a session named “*Programació i explotació de continguts a la carta*” (Programming and exploitation of on demand contents).

The session was devoted to reflect not-synchronous programming strategies with more capacity of impact on the audience. During the round table, speakers were dealing with aspects of the ability to exploit such content, advertising practices and initiatives related. More in detail, the session was structured in three different presentations, one of them carried out by Sergi Fernández, coordinator of the TV-RING project. He introduced the current situation of the Connected TV sector in Europe and how TV-RING will contribute to the adoption of the HbbTV standard and the services developed for the three pilots.

The presentation can be found in the following link:
<http://tvring.eu/sites/default/files/documents/TV-RING%20presentation%20%40MAC2014.pdf>

A video of the conference is also available in Catalan: <http://vimeo.com/97442415>



Image 17: Sergi Fernández during its presentations at MAC2014



Image 18: Presentation of the TV-RING consortium

7.2.1.14. Mediapark Jaarcongres – 26th of June 2014, Hilversum (The Netherlands)

Mediapark Jaarcongres (MPJC) discusses the challenges that media companies (of the present) have to face. How to reach a viewer that lives in a world where he is accustomed to getting what he wants, when and where he wants it for free. The MPJC presents a team of (inter)national keynote speakers that shows how different players deal with the current challenges in the media world. They provide sessions on various approaches and on processing the available data of products and users.

The visitors of MPJC are: cable companies, broadcasters, suppliers, user experiences experts and system integrators.

PPG was invited to give a demo about the existing apps and technologies, like HbbTV. Together with HbbTV forum we promoted the HbbTV technology by elaborating projects, like TV-RING.



Image 19: Ammar H. Tijani from PPG discussing about TV-RING and MPJC

7.2.1.15. TVX 2014: ACM International Conference on Interactive Experiences for Television and Online Video, 25th to 27th of June 2014, Newcastle (UK)

TVX 2014: TVX is the leading international conference for presentation and discussion of research into online video and TV interaction and user experience. The conference brings together international researchers and practitioners from a wide range of disciplines, ranging from human-computer interaction, multimedia engineering and design to media studies, media psychology and sociology.

WSICC: This workshop focuses on novel forms of interactive content consumption. It explores the shifting balance between lean-back passive TV and Web media consumption and lean-forward interactivity. Beyond entertainment, interactive audiovisual content has a high potential for learning and support scenarios. An interdisciplinary view on the topic shall be compiled by contributions from technical research, conceptual work, user-centric studies, industry developments, as well as experimental showcases.

This event counts with more than 200 attendees from the Industry sector, academia and broadcasters.

TV-RING, represented by KUL, took part in two sessions: 2nd International Workshop on Interactive Content Consumption (WSICC) – Jeroen Vanattenhoven & Rinze Leenheer; Main conference: Session on “Multiple Screens and Attention” – David Geerts and Rinze Leenheer. The main objective was to present results from co-design workshop with 7 households and from second screen TV show evaluation in the home. Publications were accepted and presentations were given during the WSICC workshop, and the main conference respectively.

It is important to highlight the **Honorable Mention** at the main conference for “Television Experience Insights from HbbTV” by Rinze Leenheer, David Geerts, Dirk De Grooff and **Best Paper** at the WSICC workshop for “In Front of And Behind The Second Screen: Viewer and Producer Perspectives on a Companion App” by Jeroen Vanattenhoven, David Geerts, Dirk De Grooff.

7.2.2. TV-RING specific events

7.2.2.1. Workshops at Media Web Symposium

This information is based on the deliverable D2.1 - Report on Open Connected TV Stakeholder Forum, where a deeper summary of the event is given.

The first international workshop, named “An outlook on future HbbTV-services”, was held in the framework of the 4th Media Web Symposium (also known as MWS) organized by Fraunhofer FOKUS in Berlin. The event took place on 7th of May, the day before the official start of the event and counted with more than 30 participants. This workshop was oriented to all stakeholders of the Broadcasting and Media industry. IRT led its organisation, coordinating speakers and all logistical details. Other partners contacted speakers, did dissemination or conducted the hands-on session.

There were two main topics in this activity: one focused on professional and end-user requirements for developing new HbbTV services and applications; and a second one showing current HbbTV technologies, perspectives and opportunities in the sector.



Image 20: The audience during Session#1 by David Geerts (KUL)



Image 21: i2CAT during his intervention at the 1st TV-RING workshop

7.2.2.2. Crossmedia Konferenz at Hochschule Magdeburg-Stendal – 25th of March 2014, Magdeburg (Germany)

Jointly with students and scientist (circa 15 people) from the local M.A. program Cross-Media and three engineers from broadcasting entities, RBB organised a workshop within the Crossmedia Konferenz. They opened a discussion on interactive television and RBB provided their point of view about the future of the sector. Specific topics were HbbTV and second screen. This workshop was both a co-creation event, with an initial introduction on the Hybrid TV sector and the TV-RING project.

RUNDFUNK BERLIN-BRANDENBURG
25.03.2014

Das ist TV-Ring

- EU-gefördertes R&D-Projekt „TV-Ring“
- Neue, komplexe HbbTV-Dienste
- Erfahrungsaustausch → „Ring“
- Einbinden aller Stakeholders
- Demonstration hoher Bandbreite



Image 22: Sample slide used for the workshop



Image 23: Participants during the workshop session

7.2.3. Research Publications Report

7.2.3.1. Research and other publications

- **In Front of And Behind The Second Screen: Viewer and Producer Perspectives on a Companion App**, *David Geerts, Rinze Leenheer, Dirk De Grooff, Joost Negenman, Susanne Heijstraten*, KUL & NPO, June 2014.

<http://dl.acm.org/citation.cfm?id=2602299.2602312&coll=DL&dl=ACM>

Abstract: The growing success of tablets and smartphones has shifted the focus of the interactive TV industry to the introduction of second screen applications. One example is second screen companion apps that offer extra information about a television program, often synchronized with what happens on screen. In this paper, we investigate a second screen companion app, from the perspective of the viewers and producers of such apps. Based on observations and interviews with viewers and producers, and actual usage data of a



companion app from Google Analytics, we present several insights and recommendations for how to design companion apps related to ease of use, timing, social interaction, attention and added value.

Presented at TVX 2014 and received an Honourable Mention.

- **Television Experience Insights from HbbTV, Jeroen Vanattenhoven, David Geerts, Dirk De Grooff, KUL, June 2014.**

http://wsicc.net/proceedings/wsicc2014_submission_14.pdf

In this position paper we shortly highlight the most important results from the European research project HBB-NEXT that concluded in March 2014: an ethnographically inspired user study provided many insights into the ways people use second screens; an experiment comparing gesture, voice, and remote control with Microsoft's Kinect showed that remote control still performs best, that voice looks very promising, and that gesture is useful in certain instances; an experiment with 51 participants validated four novel Social User Experience measures for the (user) evaluation of Group Recommender systems. Finally, we briefly outline our research agenda for another European research project, TV-RING, which started in September 2013. Both research projects focus on novel concepts and applications using the HbbTV Standard.

Presented at TVX 2014 and received Best Paper Award.

- **Using Overlays and Second Screen to Offer Interactivity Without Compromising Passive Consumption, Rinze Leenheer, David Geerts, KUL, June 2014**

Creating a good interactive TV experience that does not compromise the 'regular' TV experience is no simple task. This paper proposes a combination of second and first screen to offer a social-interaction stimulating, interactive experience that is completely optional. First observations and interviews have been completed. The next steps are a series of prototypes and a field pilot test in the Netherlands.

Presented at TVX 2014.

8. Calendar of Connected TV events

This section only provides a general overview of those events that partners from TV-RING considered to take part in 2014:

Event	TV-RING Representative	Date	Link
✓ ³ IBC 2013	NPO	14 th of September (Amsterdam)	http://www.ibc.org/page.cfm/Action=Visitor/VisitorID=5982
✓ Mindtrek 2013 (Session "Media transformers")	RBB	1st of October (Tampere)	http://www.mindtrek.org/2013
✓ CTVDI - 2013	RTV / TVC	30th & 31th of October (Mallorca)	http://ltim.uib.es/tvdi/index.php?lang=en
✓ ICT Vilnius 2013	i2CAT	4 th to 8 th of November (Vilnius)	Sergi Fernández (i2CAT)
IPTV - Beyond the Set-top box	NPO	6 th to 7 th of November (Amsterdam)	http://www.iptvseminar.com/
✓ AEDETI - 2013	TVC / RTV	11 th of November (Madrid)	
✓ World Usability Day Slovenia 2013	KU Leuven (CUO)	28 November (Ljubljana)	http://www.ltfe.org/wud-2013/

³ ✓ This symbol means that the event was scheduled and TV-RING was represented by at least one of its partners.

2014			
<input checked="" type="checkbox"/> Mobile World Congress	RTV	24 th to 27 th of February (Barcelona)	http://www.mobileworldcongress.com/
<input checked="" type="checkbox"/> Crossmedia Konferenz at Hochschule Magdeburg-Stendal	RBB	25 th of March (Magdeburg)	http://www.crossmedia-konferenz.de/
<input checked="" type="checkbox"/> FIA Event	i2CAT	18 th to 20 th of March (Dublin)	http://ec.europa.eu/digital-agenda/en/future-internet-assembly
tv connect (formerly known as IP&TV World Forum)	-	March	http://www.tvconnectevent.com/
SNUG - SyncNow User Group: Paris	NPO	March 17 th to 18 th (Paris)	
<input checked="" type="checkbox"/> HbbTV Workshop at abertis telecom	RTV and TVC	March 26 and 27th (Madrid)	Internal Workshop. No public URL.
Grupo de Radiodifusores para el Estudio de la Televisión Conectada en España	TVC	TBD	
IEEE International Symposium on Broadband Multimedia Systems and Broadcasting			
<input checked="" type="checkbox"/> Web & TV Convergence The Fourth W3C Web and TV Workshop	NPO, IRT	12 th to 13 th of March (Munich)	http://www.w3.org/2013/10/tv-workshop/

Television Platform Meeting EBU	NPO	End of April, 2014	
<input checked="" type="checkbox"/> CHI2014	KUL	30 th of April (Toronto)	
Connected TV & Multiscreen advertising Summit Europe	NPO	April (London)	http://www.smarttvinsider.com/advertising/
<input checked="" type="checkbox"/> Hackathon CCMA	TVC, i2Cat, RTV	2 nd to 3 rd of May (Barcelona)	http://www.digital4c.cat/lang/es/hackathonccma/
<input checked="" type="checkbox"/> 1st TV-RING Workshop	All	7 th of May (Berlin)	tbd
<input checked="" type="checkbox"/> BIT Broadcast IT	RTV	20 th to 22 nd of May (Madrid)	http://www.ifema.es/broadcast_06
BNE (Broadcast Network Europe)	RTV	Brussels	http://www.broadcast-networks.eu/members/
<input checked="" type="checkbox"/> Mercat Audiovisual de Catalunya (MAC)	i2CAT	4 th of June (Granollers ,Barcelona)	http://www.audiovisualmac.cat/
Connected TV World Summit 2014	NPO	11th to 12 th of June (London)	http://www.connectedtvsummit.com/ http://www.connectedtvsummit.com/2014-themes/
Concertation meeting (org. by the EC)	i2CAT	25 th of June (Brussels)	
<input checked="" type="checkbox"/> Mediapark Jaarcongres 2014	PPG	26th of June (Hilversum)	http://www.mediaparkjaarcongres.nl/

(MPJC)			
IEEE International Conference on Consumer Electronics		25 th to 27 th of June (Beijing, China)	http://bts.ieee.org/ieee-international-symposium-on-broadband-multimedia-systems-and-broadcasting.html
<input checked="" type="checkbox"/> TVX ACM International Conference on Interactive Experiences for TV and Online Video	KU Leuven (CUO)	25 th to 27 th of June (Newcastle upon Tyne)	http://tvx2014.com/
IEEE International Conference on Multimedia and Expo		July	http://www.icme2014.org/
TV Hackaday		20 th to 21 st of September (Berlin)	http://tvhackday.com/
IBC 2014	NPO & IRT	Sept 2014. Amsterdam	http://www.ibc.org
IFA	IRT, RBB	Sep'2014	
NEM Summit	IRT	29th September to 1st October (Brussels)	http://nem-initiative.org/

Table 5: Screening of potential events where to attend for dissemination purposes (time horizon 2013-2014)

9. Open Connected TV Stakeholders Forum

All actions related to the Open Connected TV Stakeholders Forum are detailed in D2.1. In order to summarise them, we can highlight the execution of the 1st International workshop organised by TV-RING. This has been the first main step in order to present the objectives of the *Forum* to its potential participants. The initiative has been well received and stakeholders are expecting the launch of its online version.

10. Conclusions and next steps

10.1. Short term actions

- 1) Include the project link to each partner website

All partners with corporative website, and allowed to publish specific contents, have published an item regarding TV-RING.

- 2) Improve project website
 - a) Partner descriptions

This was done by all partners.

- b) General content refinement

All partners contributed with new and refined contents.

- c) Documentation (including leaflets, poster, public deliverables, etc.)

External entities can now see all documentation made available through the project website.

- 3) Identify midterm events to attend and actions to perform

A calendar of activities was presented. 2015 is now under evaluation.

- 4) Build up the Open Connected TV Forum and start its dissemination

Many improvements have been done, and it is expected to be launched by the end of Period 1.

- 5) Feed the website and the social media with contents on a regular basis

New dynamics were defined and the consortium has increased its presence in social media.

- 6) Distribute a final version of the support graphic material

There are good dissemination and graphic material for communication purposes.

10.2. Medium term actions

- 1) Platform actions to increase the number of new visitors to the website
- 2) Take part and organize workshops and other events

The first international event was organised in 2014.

- 3) Stimulate discussions in the Open Connected TV Forum
- 4) Plan the following actions and events where the project will participate

The consortium is going to deliver a workshop at NEM Summit 2014.

- 5) Schedule meetings with stakeholders informing on the project

Consortium had several meetings with potential stakeholders of potential future collaborations.

- 6) Study corrective actions, if necessary, to improve the strategy and its results

This has been done and reflected in D5.1.2.2 – Update of the Dissemination strategy [1]

10.3. Long term actions

- 1) Encourage peer-reviewed paper submissions about the project

There are 3 papers submitted with great success and this will be increased with initial results of the pilots.

- 2) Prepare and schedule demos of the services delivered by the project
- 3) Present results of the project and its pilots
- 4) Align exploitation and dissemination actions across partners

A first version of the exploitation plan has been done.

10.4. Final conclusions

It has been stated that there is a need of results and project related contents in order to increase its attractiveness. It is expected that taking part in international events, like NEM summit, jointly with a good communication campaign, will impact on the social media presence of the project and overall project awareness. This will be very relevant for the project in order to involve stakeholders in it. It is important to highlight that initial feedback gathered from users and potential stakeholders has been really positive and encourages thinking that the growing ratio will be higher in the following months.

Another important point to highlight is the negotiations established with other related projects, trying to find out synergies and new ways to cooperate (e.g.: organising joint events, etc.). It is expected to formalise this in the second half of the project.

11. References

- [1] TV-RING, "D5.1.2.2 - Dissemination plan update," 2014.
- [2] Google, "Google analytics," 2013. [Online]. Available: <http://www.google.com/analytics/>.
- [3] Eurescom GmbH, 2014. [Online]. Available: <http://www.future-internet.eu/home/future-internet-assembly.html>.

12. Annex I – Leaflet

Germany - The Netherlands - Spain
www.tvring.eu

Open Innovation for Internet-enabled services and NGA services.

The broadcasters reference

Contact Us
 info@tvring.eu
 (+34) 93 553 25 10
 C/Gran Capità 2-4 - Edifici Nexus 1, 2ª planta, desp 203 - 08034 Barcelona

Join us

Testbeds for Connected TV services using hbbTV

TV-RING is an European Project

Objectives
TV-RING will develop and test applications and infrastructures that will shape the future internet-based television. These tests will be built around three testbeds in three European countries. Also the broadcasters industry and Connected TV stakeholders will have a meeting point where to share their thoughts and knowledge.

In addition, the project will foster the participation of users in the definition of the future of the television and the uptake of new TV paradigms.

Project Members

PROJECT CONSORTIUM

FUNDED BY

COORDINATED BY

The Project

The TV-RING project revolves around 3 different pilots, in three Countries: Germany, the Netherlands and Spain.

Each pilot will turn into a living pilot for testing advanced Connected TV scenarios based on HbbTV platforms and Next Generation Access Networks (NGA).

Each pilot will put together broadcasters, research entities, service providers and App developers to create innovative user-oriented applications and features for the Television of the Future.

Users will have access to High Definition content using massive bandwidth or to adaptive content thanks to the implementation of MPEG DASH techniques, recommended content or second screen features, among others.

All the knowledge and experience gained during the project will be shared with stakeholders of the broadcasting industry to set the following steps of the Connected TV.

Benefits of the Project

TV market is requesting of new content and new ways of consuming this content. TV-RING will demonstrate new ways to satisfy this demand, providing high quality video or allowing user to interact with the content.

The TV-RING ecosystem will increase and justify the need of better network infrastructures and tools for a better usage of this.

The potential beneficiaries of the project are 30 million people, divided in the three countries.

Open connected TV Forum

This forum will be a physical and virtual place where involved actors will meet, share, discuss, contribute and learn while sharing their opinion and knowledge. This forum also intends to extend the dissemination of benefits of the project, to inform about their activities and their potential benefits.

Pilots

Pilot 1: Germany

- Ultra High Definition and parallel services requiring massive bandwidth.
- Future highly interactive teramedia TV formats.
- Further opening HbbTV to third parties.

Pilot 2: The Netherlands

- HbbTV (in-house/ family) recommendations engine on the Central TV set.
- User interface evolution.
- Delivering protected HQ video using DRM.

Pilot 3: Spain

- Deliver an attractive video-over-IP experience.
- Multicamera and high-quality HD advanced services.
- MPEG-DASH.

Image 24: Draft of leaflet v2

13. Annex II – Presentation template

TVRING
HBBTV TESTBEDS

Main title

i2CAT Foundation, Barcelona XX June 2013



Funded by:

Coordinated by:

Partners:

1. Index

TVRING
HBBTV TESTBEDS

Funded by:

Coordinated by:

Partners:

Title

• Text

TVRING
HBBTV TESTBEDS



Funded by:

Coordinated by:

Partners:

Image 25: Template for presentations v1

14. Annex III – Poster 1

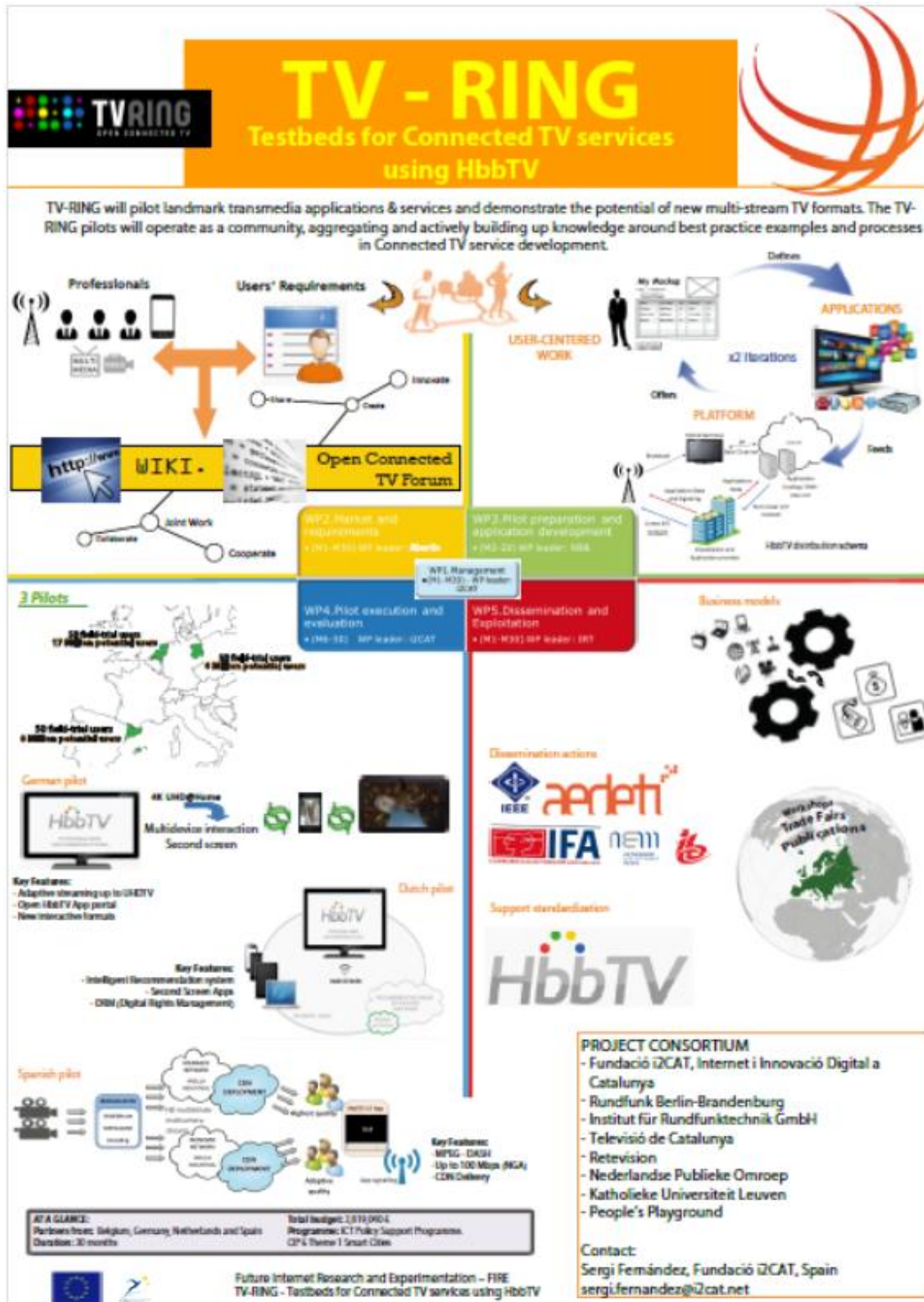


Image 26 Initial version used for the FIA Event

15. Annex IV – Poster 2

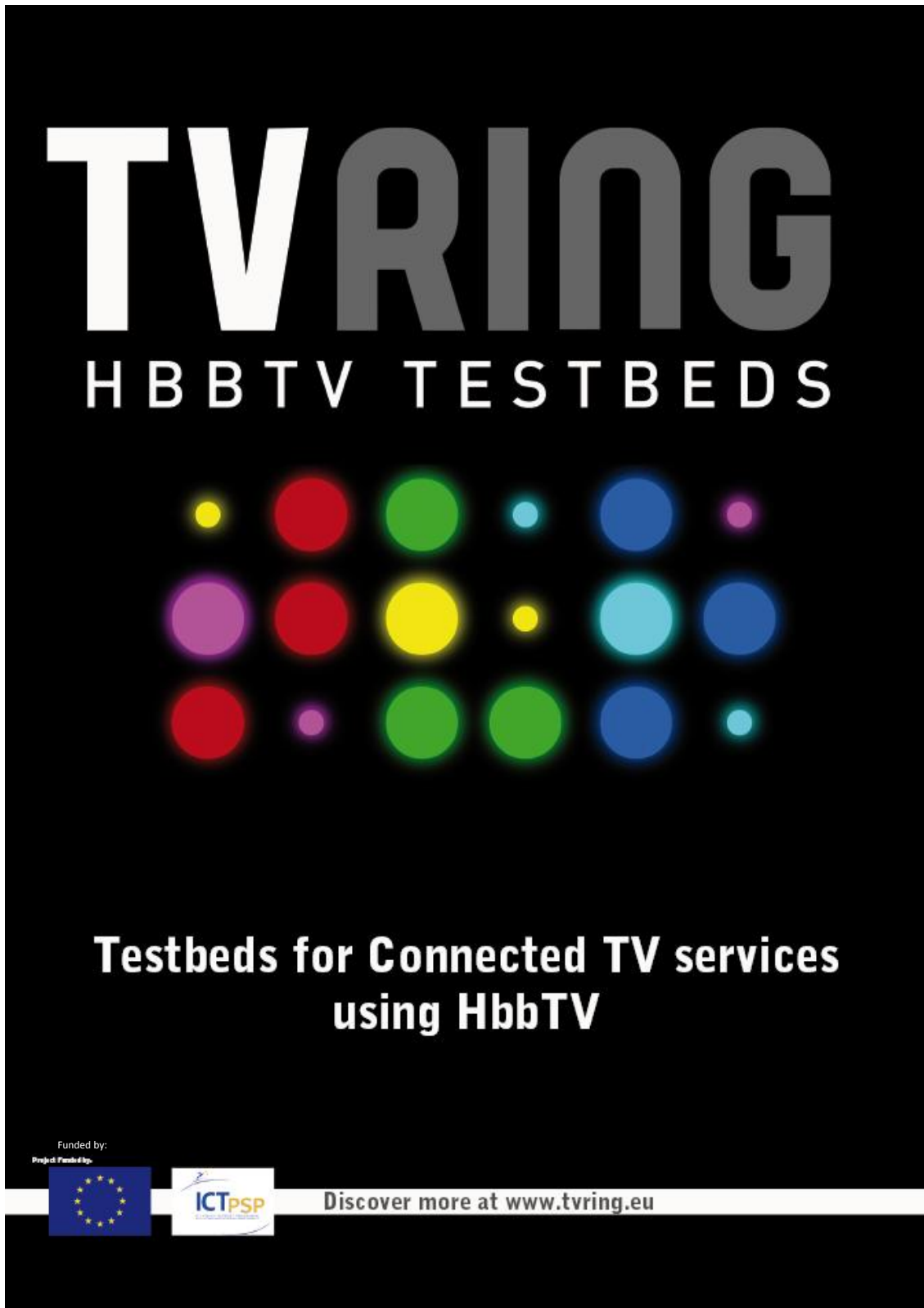


Image 27: Draft of the decorative poster

16. Annex V – Poster 3



Image 28: Dissemination poster by RTV

17. Annex VI – Information poster

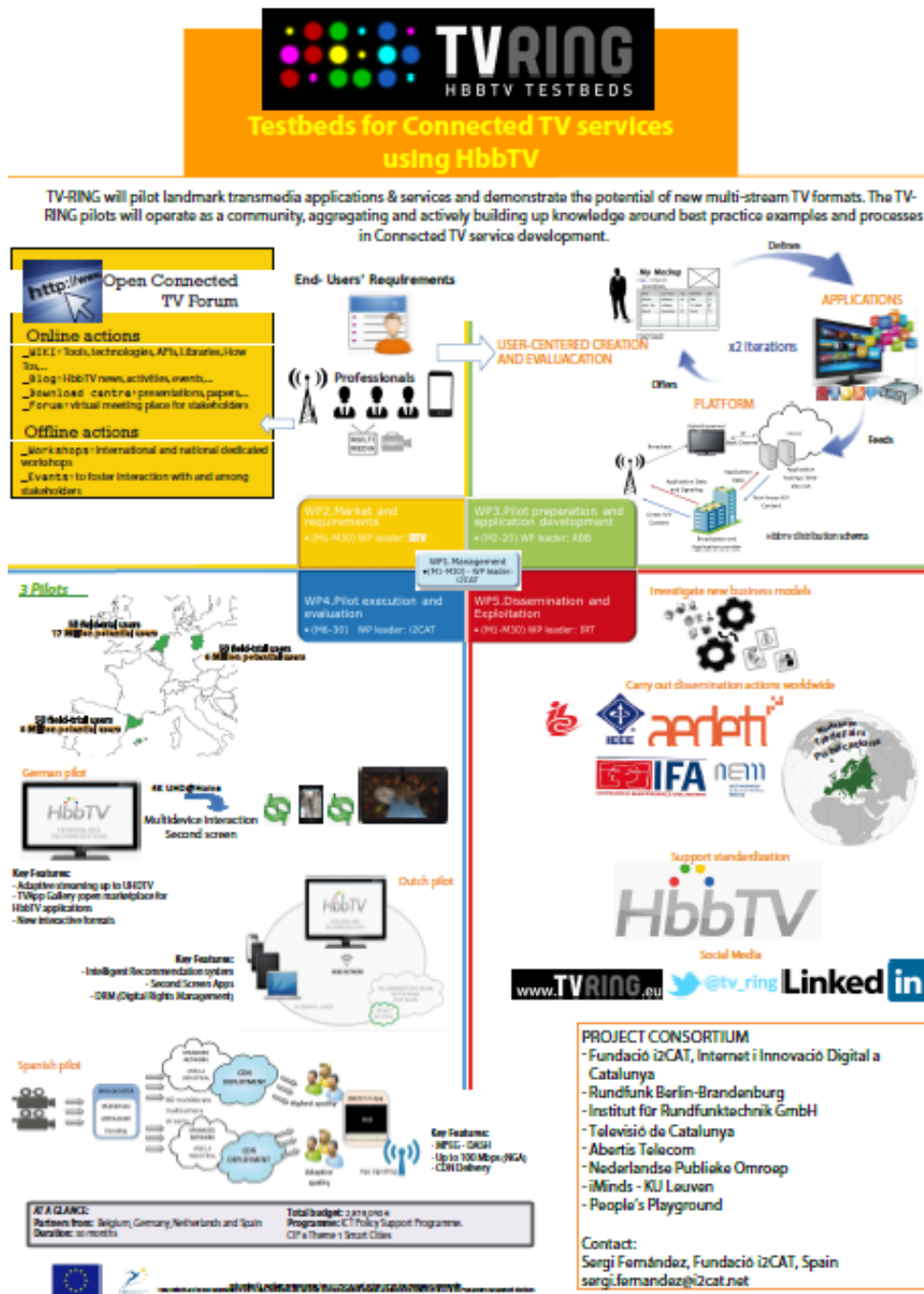


Image 29: Final version used during the Concertation meeting

18. Annex VII – Press releases

Media reports on the project TV-RING	Publisher	Link	Date	Country
La televisión híbrida se gesta en Europa con la participación de i2CAT	TICbeat	http://innovacion.ticbeat.com/televisoin-hibrida-gesta-europa-participacion-i2cat/	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	europapress	http://www.europapress.es/economia/noticia-i2cat-lidera-proyecto-europeo-televison-hibrida-futuro-tvc-abertis-20131019112725.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Telecinco	http://www.telecinco.es/informativos/economia/proyecto-europeo-televison-TVC-Abertis_0_1686825057.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	El Economista	http://www.eleconomista.es/economia/noticias/5239303/10/13/i2CAT-lidera-un-proyecto-europeo-sobre-la-televison-hibrida-del-futuro-con-TVC-y-Abertis.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	La información	http://noticias.lainformacion.com/economia-negocios-y-finanzas/equipos-de-telecomunicaciones/i2cat-lidera-un-proyecto-europeo-sobre-la-televison-hibrida-del-futuro-con-tvc-y-abertis_feDceLJwuYeGoGLcLxwXW5/	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Innova Spain	http://www.innovaspain.com/detalle_noticia.php?noticia=2788	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Invertia	http://www.invertia.com/noticias/icat-lidera-proyecto-europeo-televison-hibrida-futuro-tvc-abertis-	21/10/2013	Spain

		2913389.htm		
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Te Interesa	http://www.teinteresa.es/dinero/proyecto-europeo-television-TVC-Abertis_0_1013898861.htm	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Noticias MSN	http://noticias.es.msn.com/ultima-hora/i2cat-lidera-un-proyecto-europeo-sobre-televi%C3%B3n-h%C3%ADbrida-del-futuro-con-tvc-y-abertis	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Noticias Yahoo	http://es.noticias.yahoo.com/i2cat-lidera-proyecto-europeo-televi%C3%B3n-h%C3%ADbrida-futuro-tvc-092725564.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	La Bolsa	http://www.labolsa.com/noticias/20131019112725001/i2cat-lidera-un-proyecto-europeo-sobre-la-television-hibrida-del-futuro-con-tvc-y-abertis/	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	La voz libre	http://www.lavozlibre.com/noticias/ampliar/824874/i2cat-lidera-un-proyecto-europeo-sobre-la-television-hibrida-del-futuro-con-tvc-y-abertis	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	diario siglo XXI	http://www.diariosigloxxi.com/texto-ep/mostrar/20131019112725/i2cat-lidera-un-proyecto-europeo-sobre-la-television-hibrida-del-futuro-con-tvc-y-abertis	21/10/2013	Spain
La Fundació i2CAT lidera el projecte europeu TV-Ring	iDigital	http://www.idigital.cat/web/mobilitat/coneixement/noticies/detall/-/asset_publisher/83rF/content/noticia_tv-ring-primer-projecte-europeu-sobre-la-	21/10/2013	Spain

			televisio-interactiva		
i2CAT lidera un projecte europeu sobre la televisió híbrida del futur amb TVC i Abertis	Catalunya express		http://webcache.googleusercontent.com/search?q=cache:s6uBynEWLpIJ:www.catalunyapress.cat/cat/europa-press-noticia.php%3Flang%3Dca%26IDN%3D20131019112527+&cd=3&hl=ca&ct=clnk	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Noticias Malaga	de	http://www.noticiasdemalaga.es/n2695989_i2CAT_lidera_un_proyecto_europeo_sobre_televisi%C3%B3n_h%C3%ADbrida_del_futuro_con_TVC_y_Abertis.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Diari de girona		http://www.diariogirona.com/n2695989_i2CAT_lidera_un_proyecto_europeo_sobre_televisi%C3%B3n_h%C3%ADbrida_del_futuro_con_TVC_y_Abertis.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Diari Barcelona	de	http://www.diariobarcelona.com/n2695989_i2CAT_lidera_un_proyecto_europeo_sobre_televisi%C3%B3n_h%C3%ADbrida_del_futuro_con_TVC_y_Abertis.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Diario Extremadura	de	http://www.diarioextremadura.es/n2695989_i2CAT_lidera_un_proyecto_europeo_sobre_televisi%C3%B3n_h%C3%ADbrida_del_futuro_con_TVC_y_Abertis.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Diario Baleares	de	http://www.diariobaleares.es/n2695989_i2CAT_lidera_un_proyecto_europeo_sobre_televisi%C3%B3n_h%C3%ADbrida_del_futuro_con_TVC_y_Abertis.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC	Diario Castellon	de	http://www.diariocastellon.com/n2695989_i2CAT_lidera_un_proyecto_europeo_sobre_televisi%C3%B3n_h%C3%ADbrida_del_futuro_con_TVC_y_Abertis.html	21/10/2013	Spain

y Abertis			sobre television hibrida del futuro con TVC y Abertis.html		
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Periodico Leon	de	http://www.periodicoleon.com/n2695989_i2CAT_lidera_un_proyecto_europeo_sobre_television_hibrida_del_futuro_con_TVC_y_Abertis.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Diario Huelva	de	http://www.diariohuelva.com/n2695989_i2CAT_lidera_un_proyecto_europeo_sobre_television_hibrida_del_futuro_con_TVC_y_Abertis.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Diario Galicia	de	http://www.diariogalicia.es/n2695989_i2CAT_lidera_un_proyecto_europeo_sobre_television_hibrida_del_futuro_con_TVC_y_Abertis.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Miles Noticias	de	http://www.milesnoticias.com/noticia-i2cat-lidera-un-proyecto-europeo-sobre-television-hibrida-del-futuro-con-tvc-y-abertis/	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Pagina Noticias		http://www.paginanoticias.es/n/Economia/74w26sqlo/i2CAT-lidera-un-proyecto-europeo-sobre-televi%C3%B3n-h%C3%ADbrida.htm	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Actualidades		http://actualidades.es/noticias/i2cat-lidera-un-proyecto-europeo-sobre-la-television-hibrida-del-futuro-con-tvc-y-abertis	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	El mundo digital		http://www.elmundodigital.es/tv/i2cat-lidera-un-proyecto-europeo-sobre-la-television-hibrida-del-	21/10/2013	Spain

		eleconomista-es/		
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Mediamundi online	http://www.mediamundionline.com/noticia/i2cat-lidera-un-proyecto-europeo-sobre-televisi%C3%B3n-h%C3%ADbrida-del-futuro-con-tvc-y-abertis	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	New televisions	http://newtelevisionss.blogspot.com.es/2013/10/i2cat-leads-european-project-on-hybrid.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Noticialo	http://www.noticialo.com/ultima-hora/novedades-economicas/i2cat-lidera-un-proyecto-europeo-sobre-televisi%C3%B3n-h%C3%ADbrida-del-futuro-con-tvc-y-abertis/	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Solo hablo de economía	http://solohablodeeconomía.blogspot.com.es/2013/10/i2cat-lidera-un-proyecto-europeo-sobre.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	News Esp	http://www.newsesp.com/noticias/i2cat-lidera-un-proyecto-europeo-televisi%C3%B3n-h%C3%ADbrida-del-futuro-con-tvc-y-abertis	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Iberoamerica.net	http://www.iberoamerica.net/espana/prensa-economica/eleconomista.es/20131019/noticia.html?id=HoGL8zL	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Redes Telecom	http://www.redestelecom.es/servicios/noticias/1070476002603/aplicaciones-interactivas-televisi%C3%B3n-h%C3%ADbrida-del-futuro-con-tvc-y-abertis	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Panorama Audiovisual	http://www.panoramaaudiovisual.com/2013/10/22/fundacion-i2cat-abertis	21/10/2013	Spain

y Abertis		telecom-y-tvc-participan-en-el-proyecto-tv-ring-que-perfilara-la-television-hibrida-del-futuro/?utm_source=twitterfeed&utm_medium=twitter		
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Video Popular	http://videopopular.es/not/1830/i2cat lidera el proyecto europeo tv ring para la creacion de aplicaciones interactivas de tv/	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	AOTEC	http://www.aotec.net/noticias/noticia.asp?ent=1589	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Posicionamiento web	http://posicionamientowww.blogspot.com.es/2013/10/la-television-hibrida-se-gesta-en.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Tecnología y mas	http://teckntl.blogspot.com.es/2013/10/la-television-hibrida-se-gesta-en.html	21/10/2013	Spain
i2CAT lidera un proyecto europeo sobre televisión híbrida del futuro con TVC y Abertis	Grupo libre	http://grupolibre.net/la-television-hibrida-se-gesta-en-europa-con-la-participacion-de-i2cat/	21/10/2013	Spain
La hibridación de contenidos dominará la televisión del futuro	Tic Beat	http://www.ticbeat.com/mailings/TICbeat/Semana44/semana44_2013.html	21/10/2013	Spain
Llegan las aplicaciones interactivas para la televisión	TM Broadcast	http://www.tmbroadcast.es/index.php/llegan-las-aplicaciones-interactivas-para-la-television/	28/11/2013	Spain
Un pas endavant cap a la televisió del futur	Expliquem el futur	http://blocs.gencat.cat/blocs/AppPHP/dgtsi/2013/12/02/un-pas-endavant-cap-a-la-televisio-del-futur/#	2/12/2013	Spain

<p>La Fundación i2CAT lidera el proyecto europeo TV-Ring</p>	<p>Cine y Tele</p>	<p>http://cineytele.com/index.php?option=com_content&view=article&id=45&idnotic i=42520&Itemid=146</p>		
<p>i2CAT lidera un proyecto europeo sobre la televisión híbrida del futuro con TVC y Abertis</p>	<p>Mundo plus</p>	<p>http://www.mundoplus.tv/noticias/?seccion=tv_digital&id=10328</p>		
<p>Llegan las aplicaciones interactivas para la televisión</p>	<p>telecom KH</p>	<p>http://www.telecomkh.com/es/television/productos-y-servicios/i2cat/television-hibrida/television-interactiva/tv-ring/5712</p>		