Report from 1st open call and user feedback

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Abstract:

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Acronyms and Abbreviations

ESR   Evaluation Summary Report

IER   Individual Evaluation Report

PMT   Project Management Team

TSC   Technical Steering Committee

Executive Summary

The main target of SmartSantander is the creation of a European experimental test facility for the research and experimentation of architectures, key enabling technologies, services and applications for the Internet of Things (IoT) in the context of the smart city. The envisioned facility, which is currently being deployed, will be instrumental in ensuring European leadership in key enabling technologies for IoT and will provide the European research community with a unique-in-the-world platform for large-scale IoT experimentation and evaluation under realistic operational conditions.

During the life-time of the project, SmartSantander aims to organise two open calls for experiments to be carried out on top of its facility. For each call, a set of experiments is selected and provided with funding support to perform advanced experimentation on top of the created facility.

A first open call was organised at the end of 2011. In accordance with the "*FP7GUIDANCE NOTE for project coordinators planning a competitive call for additional beneficiaries in an ICT Integrated Project or Network of excellence",* this report documents the detailed process followed for this first open call, including its announcements, selection of reviewers, the evaluation process and its outcomes. It also provides a high level assessment of the thematic areas of the received proposals.

According to the description of work, this report also intended to capture initial user feedback from the experimenters. However given that experimenters will only join the consortium at the time when the deliverable is expected to be released, it was not feasible to capture their feedback in this report. The experimenter feedback will be therefore included in a later document IR 5.3, Final Evaluation of 1st Call Experiments.

Proposal announcement

The open call announcement phase was started early as it required substantial preparation. The announcements utilised a mix of different dissemination channels including two official physical announcement events co-organised with the FIRESTATION coordination action, announcements in print media as indicated by the EC guidelines, website announcements as well as further dissemination during other public events such as conferences or summer schools in which SmartSantander related presentations were made. Furthermore SmartSantander researchers tried to informally encourage submissions in their respective research networks.

For reasons of efficiency, the physical announcement meetings were co-organised with other FIRE projects through the help of FIRESTATION in the form of FIRE open call information day. An official open call launch event of 3 FIRE projects (BonFIRE, OFELIA and TEFIS) in Brussels during February 2011 was used as a first opportunity to disseminate initial SmartSantander call facts to the FIRE community during a plenary session. Further details were provided in a workshop on experimentation needs during the IoT week in Barcelona in June 2011, a summer school on IoT in August 2011 which hosted a first tutorial on the facility use, as well as during several national events which SmartSantander representatives attended. The official open call information day for SmartSantander was organised in Brussels during September 2011, during which a detailed overview of call scope and expectations was provided. This call was in conjunction with other FIRE proposals CREW and OPENLAB which share a similar timing. Supporting documentation for the call was prepared in advance and made available through the project website. This included a description of the call objectives, templates for submission and correspondence guidance, terms of use of the facility as well as a detailed description of the testbed facility. In addition open call announcements were placed in the IEEE Magazine as well as three national newspapers in Spain, Ireland and Denmark. The official closing date for the first open call was the 16th November 2011.

Proposal submissions

A dedicated mailing list was setup for the submission of the proposals and the successful receipt of a submission was adequately acknowledged. A helpdesk was setup that allowed proposers to clarify

questions or concern they may have concerning the experimental facility features or the open call in general.

No problems occurred during the submission process and the envisioned proposal deadline was strictly followed.

Overall 47 independent proposal submissions were received from proposers coming from 10 different countries, including non-EU countries Brazil and Australia. The overall requested funding from the received proposals was 7.5 M€ which corresponds to an oversubscription factor of around 17 for the total funding allocated for this call. Nearly half of the proposals were submitted by proposers from Spain. The majority of proposals focused on experimentation with innovative services and applications in a SmartCity environment, while the others covered evaluation of IoT middleware and protocol solutions.

Proposal evaluation

A short list of potential independent reviewers was compiled prior to the open call and suggested to the EC for approval. After the proposal deadline a careful evaluation of conflict of interest with the proposals was performed. Finally 14 evaluators were selected from the shortlist by the EC for the 47 proposals, resulting in a review load of 6 to 7 proposals per evaluator.

Evaluations were performed in accordance to the guidelines communicated through the open call announcement document to the experimenters.

Evaluators first performed an independent evaluation of the proposals in a 2 week time window. This was followed by 3 days of consensus meetings conducted through conference calls. For each proposal an individual consensus meeting was performed with the respective reviewers, during which a final score was agreed. A ranked list of proposal based on the agreed scores was created and discussed during a final consensus meeting.

Proposal selection

Based on the funding available for the experimental call, the top two proposals have been selected for funding by the consortium. In particular this included the following ones:

- City Scripts. Proposers: Centro di Ricerca, Svilupo e Studi Superiori in Sardegna, University of Reading. Requested budget: 199,466.00 €

- Soft Actuation over Cooperating Objects Middleware (SACCOM). Proposers: Warsaw Univ. of Technology, Center for Research and Technology Thessaly. Requested budget: 153,984.00 €

Both successful and unsuccessful proposers have been made aware of the evaluation outcomes. The successful proposers are now in discussion with the consortium to fine tune the experiment specification based on reviewer recommendations. A first physical meeting will take place end of February during which the proposers are officially introduced to the SmartSantander consortium.

1 Experimenting with the Internet of Things in the context of the city

The SmartSantander project announced the first Open Call for new project partners wishing to submit proposals for experimentation on top of the project's test facilities available at the first phase of the project.

SmartSantander is a consortium established to create and administer the SmartSantander testbed. The SmartSantander testbed is being deployed in the outdoors environment, designed to enable IoT related experiments run by the researchers, service developers and end users.

The complete testbed consists of several sites: Santander (the main site), Lübeck, Guildford and Belgrade. SmartSantander testbed comprises a set of interconnected components (IoT devices) and applicable network devices and communication links that enable deployment and running of the experiments as well as collection of the results. All uses of the testbed should be consistent with this high-level goal.

The best experimental facility does not make sense without users. It is of major importance for the success of this project to attract researchers to run their Future Internet experiments on this platform. In this sense, SmartSantander allocated 20% of the project budget for experiments which would be selected through an open call mechanism. Provding funding support to experimenters is a way to make it much easier and more attractive for them to deploy their experiments over the SmartSantander facility.

SmartSantander will organise two open calls during the whole duration of the project following the rules indicated by the EC.

After the selection of the winning proposals for each call, a Developers Day will be organized with the successful applicants. In this session practical cases on how a test can be created will be explained. During the implementation period, SmartSantander will provide technical support.

2 Open Call Procedure

SmartSantander, has allocated 20% of the project budget for supporting two open calls throughout the project duration. Although the first open call was scheduled in M11 (July 2011) it was delayed until M13 (September 2011) to prevent a potentially poor response due to the summer break. This was a joint decision with the Commission and the other two projects (CREW and OpenLab) which planned to have such a call during the same period.

The consortium started the preparation of the first open call during mid June 2011. The two main actions identified were:

- To prepare all the documentation required up to the call opening date. This is included:
  - Guide for applicants, guidelines of testbed use and other support documents describing the capability of the SmartSantander testbed.
  - Presentations to be provided during the open call information day held in Brussels on 14th September 2011.
  - Design of the advertisements to be published in three international newspapers and a journal close to the research community.
  - Set up of the web and helpdesk support for the potential proposers.
- To prepare all the logistics related to the evaluation procedure. In particular it is worthwhile to highlight the following documents and actions:
  - Selection of the reviewers according to the expected number of proposals.
  - Creation of the Individual Evaluation Report and Evaluation Summary Report.
  - Scheduling and conducting the individual meetings with the experts as well as the consensus meeting.

▪ Final selection of successful applicants from amongst the proposals.

In this context, the project announced its interest to receive submissions targeting:

- Innovative applications/services in the framework of the smart city supported by IoT technology.
- Middleware developments bridging applications and technologies, enabling a plug and play approach.
- Protocols/technologies for maximizing efficiency & sustainability of IoT deployments in the smart city.

The aim is to stimulate demand and establish a methodology of experimentally driven research as well as expand the service, protocol and technological possibilities of the platform directed not only towards experimentation, but also the public. This first open call was opened on the 1st of October 2011 and closed on 16th November 2011, targeting the Internet of Things and Smart City communities. The maximum budget allocated per proposal was 200 K€ according to the EC rules and the total budget was 600 K€ with a funding between 350 and 400 K€.

2.1 Preparation of the first open call announcement

In order to maximise the outreach of the open call, the consortium adopted an approach based on multiple dissemination channels:

- Official open call information days co-organised with the FIRESTATION project together with other FIRE facilities
- Public presentations from individual SmartSantander representatives at conferences, workshops or other events during which presentations regarding the project where made
- Announcements through the project website, other websites, mailing lists and social media tools
- Print media in national and international outlets
- Dissemination in personal research networks of SmartSantander partners

In the following a brief overview of these activities is provided.

FIRE Open Call information days

SmartSantander participated in two open call information events co-organised by FIRESTATION and other FIRE Call 5 projects.

The first FIRE open call information day took place in Brussels on the 9th of February 2011. The event was the official launch of the 1st open call of 3 FIRE projects (BonFIRE, TEFIS, OFELIA) that started earlier than SmartSantander. However SmartSantander was given the opportunity to present during the plenary session initial information on the call timelines and expected facility features. The event was attended by more than 50 participants and sparked good interest and discussions that continued into the afternoon of the event. The corresponding event information and details can be found on the FIRESTATION website:

http://www.ict-fire.eu/events/meetings/1st-fire-open-calls-information-day.html

A second open call information day was organised on the 14th of September 2011 in Brussels , which served as the official open call announcement event of SmartSantander. The event was carried out in conjunction with the CREW and OpenLab projects and was attended by approximately 70 persons in the morning session common to all projects. The afternoon session saw approximately 30 persons attending the SmartSantander specific session, during which more details for the open call where provided. The corresponding event information and details can be found on the FIRESTATION website:

http://www.ict-fire.eu/events/meetings/2ndfireopencallsinformationday.html

Detailed presentations of the different sessions can be found here:

- **Project overview**
  http://www.smartsantander.eu/downloads/1st%20Open%20Call/open_call_information_session_project_overview_smart_santander.pdfhttp://www.smartsantander.eu/downloads/1st%20Open%20Call/open_call_information_session_project_presentation_smart_santander.pdf.

- **Information on 1st Open Call for experiments**
  http://www.smartsantander.eu/downloads/1st%20Open%20Call/140911-smartsantander-open-call-info-day-final.pdf

Public presentations with reference to the call at other events

Wherever possible SmartSantander project partners took the opportunity to disseminate the upcoming First open call for experiments during conference or workshop visits throughout 2011 in which SmartSantander related presentation were given. Details of these national and international events are provided below:

- Workshop on IoT experimentation requirements, organised on the 8th June 2011 as part of the IoT week in Barcelona, Spain (http://www.iot-week.eu/iot-week-2011/programme-1/, approximately 60 persons attending the session

- From Smart home to Smart Cities, Key note presentation 16 June 2011, London, UK provided as part of a Technology Strategy board event in front of approximately 100 industry and academic representatives from the built environment sector, https://connect.innovateuk.org/web/smart-homes-to-smart-cities/event-details

- SenZations Summer school, in Kotor, Montenegro on the 1st September as part of a tutorial session of the SmartSantander testbed, www.senzations.net, approximately 40 students and 10 lecturers attending the session

- Sensor Technology 2011, Birmingham UK, presented on the 28th September 2011 during a seminar program at the UK trade show for sensor and smart systems with large industrial participation, http://www.sensingtechnology.co.uk/news/categoryfront.php/id/33/Knowledge_Transfer.html

- Information session, held in Santander on 24th June 2011 in which a representative from the Commission, Dr. Georgios Tselentis, provided an overview of the open call scope and the possibilities for industry and research.

Public website and open call documentation:

In this section we provide an overview of the main actions addressed up to the open call announcement. Hence, a specific space was made available on-line through the project website: http://www.smartsantander.eu/index.php/open-calls.

Following the link, access is provided to a number of guidance documents:

- The *SmartSantander 1st Open Call announcement*, containing information on the experimentation facilities (Santander, Guildford, Lübeck and Belgrade) as well as the file containing the basic information on the call:

  http://www.smartsantander.eu/downloads/1st%20Open%20Call/full_text_smartsantander-1-open-call.pdf

- The *Guide for Applicants*, with the main hints in preparing and submitting proposals, including dissemination activities:

  http://www.smartsantander.eu/downloads/1st%20Open%20Call/guide_for_applicants_smart_sant ander_final.pdf

Other online Open Call dissemination channels

External websites:
- Announcements were published on websites dedicated to the wireless sensor network and IoT community such as the WSN (http://www.wsnblog.com/)

Social media tools:
- Twitter
- Linked-In IoT professional group

Mailing lists:

- EIRC cluster mailing list
- FIRE mailing list
- Mailing list of the Real World Internet community of the Future Internet assembly

National and International print media

Following the requirement of Art II.35 of the Grant Agreement, the Call Announcement was published in the following media and dates:

- **El Mundo**, Spain, 20th of September 2011
- **The Irish Times**, Ireland, 23rd of September 2011
- **Prosabladet**, Denmark, 1st of October 2011
- **IEEE Communications Magazine**, International, 1st of October 2011

Printed proofs of the above references are provided below.

■ **Tasa de morosidad**
En %

Julio 2011:
6.937%

Dic. 2006:
0,720%

00 01 02 03 04 05 06 07 08 09 10 11

■ **Tasa de cobertura**
En %

Abril 2005:
326,24%

Julio 2011:
57,82%

00 01 02 03 04 05 06 07 08 09 10 11
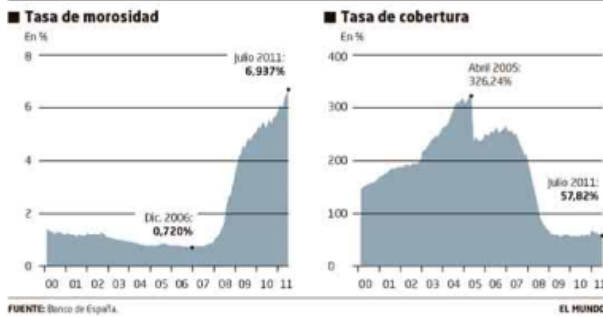
FUENTE: Banco de España.

EL MUNDO

La mora bancaria roza el 7% y el crédito se hunde

Las inmobiliarias dejan 55.000 millones de euros en activos tóxicos en las entidades, el 17,8% de los préstamos recibidos

JUAN EMILIO MAÍLLO / Madrid

La morosidad, esa gangrena que cercena lentamente la solidez del sistema financiero, sigue creciendo de forma imparable en España.

El ratio, además, se ve perjudicado porque confluyen los dos elementos que contribuyen a que empeore: un aumento de los activos dañados y un desplome de la inversión.

La tasa de morosidad de la banca española rozaba el pasado mes de julio el 7%. En concreto, se elevó hasta el 6,93%, desde el 6,69% que marcó en junio.

El ratio de créditos de dudoso cobro no alcanzaba un nivel tan alto en España desde febrero de 1995, cuando estaba en el 6,98%. Poco a poco el nivel de morosidad se acerca a las cotas registradas en la anterior crisis. Entonces el máximo llegó a principios del año 1994, con un 9,15%, tras cinco ejercicios de continuada subida.

Ahora la banca española afronta también el quinto ejercicio consecutivo de incremento de los activos morosos.

El problema para la banca es que este 2011 va camino de ser uno de los peores de la crisis. En los siete meses registrados, la tasa de morosidad ha subido 1,1 puntos. Es más que en todo 2010 (0,73 puntos), y la evolución es similar a la de 2009 (1,7 puntos en todo el ejercicio).

El volumen de créditos de dudoso cobro está ya en 124.717 millones de euros. En apenas 12 meses ha crecido en 24.190 millones de euros.

Pero unido al incremento de la morosidad, las cifras difundidas ayer por el Banco de España evidencian un notable descenso del volumen de créditos. Esta caída agrava *per se* el deterioro del ratio de morosidad.

Menos financiación

El montante de los préstamos otorgados por la banca en nuestro país alcanzaba al cierre de julio los 1,797 billones de euros. El volumen de financiación se ha reducido así hasta el nivel de marzo de 2008, antes de que la crisis estallara con toda su crudeza.

El máximo de crédito se alcanzó en noviembre de 2008. Desde entonces, la financiación de la economía española se ha reducido en casi 72.000 millones de euros.

Lo que es imposible determinar ya es cuáles son las cifras de bancos y cajas de ahorros. Tras las fusiones entre estas últimas entidades y su conversión generalizada en bancos, el supervisor ha dejado de ofrecer el desglose de datos.

Lo que sí aparece es el volumen de morosidad por segmento productivo. Las cifras evidencian que el sector inmobiliario sigue siendo el gran problema de la banca.

Las entidades financieras acumulan 54.889 millones de euros en créditos de dudoso cobro otorgados a las empresas del ladrillo.

De este modo, la tasa de morosidad de las inmobiliarias alcanza ya el 17,79%, es decir, casi uno de cada cinco créditos son tóxicos. El deterioro es constante en este apartado. En apenas 12 meses ha subido desde el 11,2%. Y el montante de los préstamos morosos ha engordado en 18.690 millones de euros.

Además de las inmobiliarias, las constructoras también continúan castigando el balance bancario. Su morosidad está ya en el 14,37%, con un montante de préstamos impagados de 15.539 millones de euros. Un año atrás el ratio ni siquiera llegaba al 10% y el volumen en situación morosa era de 12.250 millones.

Ajuste público contra la crisis

M. V.

Medio centenar de economistas y representantes de grandes empresas españolas, entre ellas Telefónica y el Santander, instaron ayer a reducir el peso de la Administración pública para recortar gastos y combatir así la crisis económica.

En una jornada organizada por la Fundación de Estudios de Economía Aplicada (Fedea) y la Fundación de Estudios Financieros (FEF), los agentes económicos criticaron el «solapamiento» de funciones en las distintas Administraciones y recordaron que la «dimensión» del sector público también debe ser «sometida a los ajustes propios del nuevo contexto de austeridad europea».

Según las empresas y economistas, la salida de la crisis requiere más «ajustes y sacrificios» y, por ello, es necesario abordar cuanto antes la reforma del mercado laboral, así como la reestructuración del sistema financiero.

Además, los ponentes, entre ellos el presidente de Telefónica Latinoamérica, Santiago Fernández Valbuena, pidieron apostar más por el euro y la educación.

AJUSTE
DE CUENTAS

JOHN MÜLLER

Las tasadoras y el caso Martín v/s Jove

Casi en la próxima Navidad, el 19 de diciembre, comenzará a dilucidarse en sede judicial la que Fernando Martín llama «la mayor demanda mercantil de la historia de la democracia». Se trata de su pleito contra Manuel Jove por los perjuicios causados a su sociedad, Martinsa, por la presunta sobrevaloración de los activos de Fadesa, compañía que adquirió en 2006 con un crédito de 5.000 millones.

Martín sostiene que Jove y **Antonio de la Morena**, quien era consejero delegado de Fadesa, urdieron un plan para adulterar el valor de la inmobiliaria aportando información falsa a la empresa que efectuó la tasación (CB Richard Ellis). El presidente de Martinsa afirma que esto le causó un daño patrimonial de 1.576 millones de euros.

Jove y De la Morena niegan las acusaciones. Martín, en cambio, sostiene que ese desfase abocó a su inmobiliaria, con 7.200 millones de deuda, a un proceso concursal que se inició en junio de 2008 y que concluyó en marzo pasado.

El Juzgado de lo Mercantil número 1 de La Coruña determinará quién tiene la razón, si Martín o Jove, pero uno de los aspectos más llamativos del asunto es el papel que las sociedades de tasación y similares han jugado en este episodio en concreto y en la formación de la *burbuja inmobiliaria* en general, al actuar como fedatarios públicos de valoraciones poco imparciales o que carecían de contrastación empírica.

Martín sostiene que Fadesa facilitó información falsa a CB Richard Ellis, que se encargó de la tasación de los activos de la compañía que, dicho sea de paso, cotizaba en Bolsa. Como es habitual, Richard Ellis incluyó en su contrato y en su informe el correspondiente *disclaimer* (traduzcamos libremente el término como «pliego de descargos») que dice: «Para la preparación de esta valoración hemos confiado en la información que nos ha facilitado Fadesa. En el caso de que dicha información sea probada incorrecta... la exactitud y fiabilidad de la valoración podrían verse afectadas».

La tasadora también confiesa que «no se han medido las superficies de las propiedades, por lo que se ha confiado en las cifras facilitadas». O que «no hemos llevado a cabo investigaciones estructurales, comprobaciones físicas...» o «no se han llevado a cabo investigaciones sobre la situación urbanística de las propiedades».

Aunque el papel de la tasadora no forma parte del proceso, nadie en su sano juicio puede dejar de preguntarse: ¿Y por qué cobraba entonces Richard Ellis? ¿Por qué pasar a limpio las conclusiones que Fadesa formulaba?

Sus cláusulas casi nos recuerdan lo sucedido con la desaparecida Arthur Andersen, que daba por buena sin mirar la contabilidad creativa de Enron. El problema es que no hemos es-

Un informe en el que no se contrasta nada es como una mala fe notarial

carmentado, y auditoras y tasadoras siguen moviéndose en un terreno en el que, como pasa con las agencias de calificación, no están delimitados los roles de cliente y supervisor. Esta es una de las más graves disfunciones de nuestros mercados y sería muy conveniente que el asunto se estudiara con serenidad.

No es raro que otra tasadora que sí acudió al terreno para medir y comprobar la situación de los activos llegara a una conclusión distinta.

john.muller@elmundo.es

Figure 1.El Mundo, Spain, 20th of September 2011

Radio

LEGAL NOTICES

FAMILY NOTICES

Recommended Cash Offer
by
Hastings Investments Ireland Limited
a wholly-owned subsidiary of
C. R. Bard, Inc.
for
ClearStream Technologies Group plc

TENDERS

Announcement for a Competitive Call for an Additional Project Partner for the European Research Project SmartSantander

Be sure to say you saw the advertisement in

THE IRISH TIMES

THE IRISH TIMES LTD.

FAMILY NOTICES

THE RAILWAY
PRESERVATION SOCIETY
OF IRELAND

Are running a Vintage Diesel trip on
SATURDAY, 1ST OCTOBER, 2011

DEATHS

IN MEMORIAM

CABLE & SATELLITE SPORT

Figure 2. The Irish Times, Ireland, 23rd of September 2011

Det bedste ved min mobile enhed

> At den altid er med
> At jeg altid har adgang til internettet
> Den er lille
> Den samler mange funktioner i ét
> Man kan costumisere den, som det passer én

Det værste ved min mobile enhed

> Manglende batteritid
> Kan for meget, jeg ikke har brug for
> Skærmen er for lille
> Man kan ikke kode ordentligt på den
> Når den bryder sammen

bruge min bærbare til, forklarer en tablet-ejer fra brugerpanelet.

– Som læseredskab til videnskabelige artikler. Som alternativ notetaking tool on the road, begrunder en anden sit behov for en tablet.

Kritiske brugere

Det er dog ikke alle, der er fuldstændig teknologibegejstrede over de mobile enheder. Som én skriver:

– Spørgsmålene i denne undersøgelse stinker langt væk af, at en eller anden teknofil person lige vil høre, om vi andre er lige så begejstrede, som han/hun er.

Flertallet i undersøgelsen er dog glade brugere af smartphones, og en enkelt nævner, at han har besvaret spørgsmålene via en smartphone. Kodeordene for de fleste er mobilitet og internet overalt.

Men de er dog ikke ukritiske over for alt, hvad deres smartphone tilbyder dem. Flere nævner den ringe mulighed for at beskytte privatlivets fred, der kommer med brugen af forskellige tredjeparts-applikationer (apps).

– Vi skal have beskyttelse af brugerne, idet meget få egentlig er klar over, hvilke informationer de frivilligt afgiver, kommenterer én.

Og mens nogle er positive over for de mange apps og mener, at det bugnende og uigennemskuelige marked vil regulere sig selv efterhånden, mener andre, at apps er en døgnflue, der før eller siden vil blive afløst af browserbaserede apps via HTML5.

– Nu er man i pc-verdenen gået væk fra at benytte programmer, og flere og flere services kører i en browser. På en smartphone går man tilbage til "gamle" tider og har behov for at have en app til hver en service. Det er træls.

– Jeg tror, en meget stor del af udviklingen vil rykke sig mod HTML5, der samtidig vil gøre cross-platform-udvikling nemmere.

Medlemmerne af brugerpanelet er ikke overraskende gladest for Android-styresystemet, men der er også andre systemer repræsenteret, især Apples iOS. De fleste kan godt lide Androids muligheder for at lave om i telefonen, som man vil. Nogle ville dog gerne have endnu flere muligheder.

– Jeg er MEGET negativ over, at man skal roote sin mobil for at få kontrol over den. Det er for ringe for noget, man har købt og ejer.

Bedre batterier

Ud over åbenlyse forbedringer som hurtigere processor, bedre batterilevetid og bedre stabilitet kan brugerpanelisternes mobile enheder i dag det meste af det, de skal kunne. Nogle savner dog blandt andet bedre flashunderstøttelse, rigtige taster, spærring af personlige data, betaling af varer og mere plads, og enkelte savner mulighed for at lave kaffe og riste brød.

– Den skal være endnu hurtigere, og den skal give lettere adgang til visse funktioner. Og så skal den styre Google Docs bedre. Måske også give bedre adgang til NemID-brug. Og gerne blokere reklamer automatisk på tunge websider. Bedre højttalere. Den må også gerne kunne lave kaffe om morgenen, men jeg vil ikke blive skuffet, hvis den ikke kan :-) ■

Prosabladets brugerpanel

Brugerpanelet er Prosabladets forum for holdninger og erfaringsdeling om it-aktuelle emner. Brugerpanelets hovedformål er at afdække holdninger og tilføre indsigt. Brugerpanelet må ikke forveksles med meningsmålinger og postulerer ikke repræsentativitet.
Meld dig til brugerpanelet og få dine meninger hørt på www.prosa.dk/brugerpanel.

Figure 3.Prosabladet, Denmark, 1st of October 2011

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BOOK REVIEWS
EDITED BY PIOTR CHOLDA

COMPUTER NETWORKS (FIFTH EDITION)
ANDREW S. TANENBAUM AND DAVID J. WETHERALL, PRENTICE HALL, 2011, ISBN 978-0-13-212695-3, HARDCOVER, 933 PAGES

REVIEWER: PIOTR WYDRYCH

The fifth edition of Computer Networks is a tutorial that guides readers through all aspects of networking, from transmission of bits to network-enabled applications. The book was updated not only by adding new content, but also by removing the technologies that lost their importance. Therefore, after four updates, the book is still current. The new material includes, among others, the techniques that appeared and gained popularity within the last few years, such as wireless networks (mobile telephony, 802.11, and RFID) or content distribution and exchange (peer-to-peer networks, CDNs, and media streaming). Additionally, much of the material has been revised.

There are eight technical chapters, each with dozens of non-trivial problems to solve; the ninth and last chapter includes a long list of recommended bibliography positions. The first chapter starts with general considerations on the applications of computer networks and on the network-enabled services offered to both business and consumers. Then, the hardware used in the networks is described and the idea of layering is carefully explained. Both OSI and TCP/IP layering models are dealt with in detail and they are compared. Moreover,

the authors explain why and how standards are prepared by bodies such as ITU, ISO, IEEE, and IETF. Chapter 2 is dedicated to the physical layer. First, the theoretical foundations (including the Fourier transform and Shannon theorem) are presented. Next, transmission media are enumerated and digital modulation as well as multiplexing schemes are given. The chapter ends with the descriptions of the three widely deployed telecommunication systems: public switched telephone network, mobile phone system, and cable television (including data-over-cable services). The next chapter, describing the data link layer, starts with considerations on the key design issues such as framing or error and flow control. Then the topic of error correction is extended by providing several algorithms. A few concepts on data link layer protocol design are presented, from a simple protocol to one applying sliding window and selective repeat. Finally, it is explained how PPP is used in SONET and ADSL networks. A separate chapter is dedicated to the medium access control sublayer. After stating the problem of channel allocation, the authors present a set of protocols (from ALOHA to CSMA/CD and MACA) which address this issue. Separate sections thoroughly describe medium access control in Ethernet, WiFi, WiMAX, Bluetooth, and RFID. Then the process of switching is explained, including spanning trees and VLANs. Chapter 5, focused on the network layer, is full of data that each and every net-

worker must have at his/her fingertip. First, the design issues and the theory of routing algorithms are studied in detail. Next, congestion control and QoS are considered. The theory is followed by practical information about the architecture of the Internet as well as intra- and inter-domain routing. Starting with the next chapter a reader can learn why the transport layer is so important. After giving the list of issues that the transport layer solves (from a connection setup, via flow and error control, to connection release), the authors describe briefly UDP and thoroughly TCP. Chapter 7 elaborates on the application layer where changes are very frequent, as new services are steadily added. First, well-established technologies such as DNS, e-mail, and HTTP are introduced. Then, the authors describe markets that are emerging now: video distribution (both live and on-demand), peer-to-peer networks, and Content Delivery Networks. Chapter 8 deals with various aspects of network security. It covers topics ranging from a general description of encryption, signatures, and Public Key Infrastructure, to security of both network (via IPsec and VPNs) and application layer (via DNSSEC, SSL, and PGP).

The book is written in a very approachable way and will be useful both for students and professors. Similarly as in the case of the four previous editions, again it is a must-have basic textbook for all networkers.

PERFORMANCE EVALUATION OF COMPUTER AND COMMUNICATION SYSTEMS
JEAN-YVES LE BOUDEC, EPFL PRESS – DISTRIBUTED BY CRC PRESS, 2010, ISBN 978-1-4398-4992-7, HARDCOVER, 404 PAGES

REVIEWER: PIOTR CHOLDA

Apart from having a new and seemingly good idea, every engineer or scientist who wants to thoroughly propose and finally deploy a new technique should prove (at least to themselves) that it is really better than the ones used before and that its behavior does not drift away from the assumptions. In communications, the involved studies are known as performance evaluation and the praised ones typically involve theoretical modeling along with simulations that verify it. A proper usage of various mathematical ideas to treat a problem or appropriate interpretation of data is almost always problematic and, being an art, is mostly a pursuit of good patterns to follow and tips on

Experimenting with Internet of Things in the city context

The FP7 SmartSantander EU project is deploying a massive IoT infrastructure which allows for experimentation in the context of a smart city. SmartSantander is seeking partners who wish to experiment on top of the IoT platform deployed in the city of Santander (Spain).

The city welcomes you to experiment on it!

Three types of experiments are suggested:
- Innovative applications and services running in the framework of the smart city paradigm supported by IoT technology.
- Middleware developments bridging applications and technologies and allowing a plug and play approach.
- Protocols and technologies for maximizing efficiency and sustainability of IoT deployments in the smart city scenario.

Further information for submitting your proposal: www.smartsantander.eu/opencalls

Call identifier:	SmartSantander-1-Open-Call.
Contact e-mail:	opencalls@smartsantander.eu
Call website:	www.smartsantander.eu/opencalls
Call open:	The call will be open for submissions from 1st October 2011
Call deadline:	The call closes 16th November 2011 at 17h00 (Brussels time)
Duration:	January 2012 to December 2012
Funding:	Up to 200,000 EUR
Language:	English
Call objective:	To expand the project's service, protocol and technology offering towards future IoT experimentation as well as the public in the context of the Smart City.

Figure 4. IEEE Communications Magazine, International, 1st of October 2011

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The final version of the Full Open Call Text was also communicated to the Project Officer on the 12th of September of 2011, and the document was uploaded to the project repository at:

https://proyectosidi.unican.es/proyectos/tlmat/SmartSantander/Shared%20Documents/WP5%20Experimentation%20Support,%20Dissemination%20and%20Sustainable%20Exploitation/Task%205.3/SmartSantander%20Open%20Call%20Guides/Final/Full_Call_Text_SmartSantander_Open_Call_1_Final.docx

Once approved, it was also made available through the project website.

The Project Officer arranged with the ICT Operations Unit to publish the Call Announcement on the ICT CORDIS website and circulated it to the ICT National Contact Points.

Finally, the call remained open for the submission of proposals for a period of more than five weeks from the date of the last publications in media mentioned above.

2.2 Regulations for the use of the facility

The **Regulations for use of the facility**, describing the appropriate network etiquette and usage rules, as well as an indication of non-acceptable activities are provided in deliverable D5.3 [1]. The acceptable use policy is defined in 7 articles, covering the main regulations for the use of the facility:

- ARTICLE 1: THE NATURE OF THE SMARTSANTANDER TESTBED. As an overlay, SmartSantander is not a "testbed" in the usual sense of a controlled environment for experiments. It consists of IoT devices placed in public and private infrastructures of Santander and other cities and providing support to both experimentation and end-user services in the context of the smart city. In this first call, the experimenters will have access to a three level architecture made of the under-the-asphalt buried sensors, repeaters and gateways. The latter are the elements connected to the backbone hence providing access to the whole infrastructure with previous authentication and experiment configuration. It also provides access to other testbeds that are interconnected with SmartSantander in a world-wide federation and allows for the deployment of experimental services that are accessible to all users of the Internet. Therefore, running an experiment on SmartSantander is fundamentally different from running it in a LAN-based lab or on an isolated wide-area testbed.

- ARTICLE 2: GENERAL GUIDANCE ON THE ACCEPTABILITY OF EXPERIMENTS. When designing an experiment it is important to bear in mind that the SmartSantander platform is concurrently supporting experimentation and city context service provision. This means that besides the traditional bandwidth constraints the experimenters have to carefully consider the implications in terms of concurrent service provision to avoid disruption of ongoing services used by the city government and citizens in general. It is their responsibility to ensure that the use of SmartSantander falls within these constraints. This means that experimenters have to debug own code in a controlled environment first, to be confident about the behaviour of the code.

  Further to this, it is not allowed to use the testbed to harm or in any other way provide false information to general public (for example using public displays that are part of the testbed).

  The rules applicable to standard network experiments, like performing systematic port scans, using more than assigned share of bandwidth as well as the number and type of IoT devices are applicable as well.

- ARTICLE 3: RESPONSIBILITY OF SITES WITH REGARD TO THEIR USERS. SmartSantander is designed to support a broad community of users (researchers, service developers and providers, citizens and city officials). As a consequence, it could indirectly support users that have not officially registered with SmartSantander, and may even be unknown to you (the resource provider). It is your responsibility as a site administrator and user (as experimenter) to ensure that your users do not cause your service to violate the terms of this Acceptable Use Policy. In particular, site administrators should

ensure that their users are not able to hijack the service and use it to attack or spam other nodes or network users.

- ARTICLE 4: STANDARDS OF NETWORK ETIQUETTE. SmartSantander is designed to support IoT experiments that can purposely probe the communication links, measurements done by the sensors or actions to be executed by the actuators. However, we expect all users to adhere to widely-accepted standards of network etiquette in an effort to minimize complaints from network administrators. Activities that have been interpreted as worm and denial-of-service attacks in the past (and should be avoided) include sending SYN packets to port 80 on random machines, probing random IP addresses, repeatedly pinging routers, overloading bottleneck links with measurement traffic, and probing a single target machine from many SmartSantander nodes.

  It is likely that individual SmartSantander sites will have their own Acceptable Use Policies. Users should not knowingly violate such local Acceptable Use Policies. Conflicts between site Acceptable Use Policies and SmartSantander's stated goal of supporting research into IoT should be brought to the attention of the SmartSantander administrators.

- ARTICLE 5: HANDLING OF COMPLAINTS. While the central SmartSantander authority is often the first point of contact for complaints about misbehaving services, it is our policy to put the complainant in direct contact with the researcher who is responsible for the service.

  To report a suspected violation of this policy, contact SmartSantander Support: support@smartsantander.eu.

- ARTICLE 6: NO GUARANTEES

  a) SmartSantander provides absolutely no privacy guarantees with regard to packets sent to/from IoT nodes. In fact, the users should assume that packets will be monitored and logged, for example, to allow other users to investigate abuse (see previous paragraph).

  SmartSantander also does not provide any guarantees with respect to the reliability of individual nodes, which may be rebooted or reinstalled at any time previous administrator authorization. Reinstalling a node implies that the disk is erased, meaning that users should not treat the local disk as a persistent form of storage.

  ANY GOODS, SERVICES, AND WRITTEN MATERIALS PROVIDED BY SMARTSANTANDER OR ITS AGENTS OR ANY MEMBER IN ANY FORM, WHETHER FURNISHED IN DRAFT OF FINAL FORM ARE PROVIDED "AS-IS WITH ALL DEFECTS" AND WITHOUT ANY WARRANTY OF ANY KIND. SMARTSANTANDER DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT.

  b) Liability limited. IN NO EVENT SHALL SMARTSANTANDER OR ANY OTHER MEMBER BE LIABLE TO ANY OTHER MEMBER OF SMARTSANTANDER FOR ANY CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR LOST PROFIT DAMAGES, OR FOR ANY DAMAGES ARISING OUT OF LOSS OF USE OR LOSS OF DATA, TO THE EXTENT THAT SUCH DAMAGES ARISE OUT OF THE ACTIVITIES OF SMARTSANTANDER OR THIS AGREEMENT OR ANY BREACH THEREOF EVEN IF MEMBER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

  Nothing contained in this Agreement shall be deemed as creating any rights or liabilities in or for third parties who are not Members of SmartSantander.

- ARTICLE 7: RULES OF USE

  a) Overall rules

  - SmartSantander should not be used for any illegal enacted by any law or regulation.
  - SmartSantander may be used for industrial innovation activities as well as for research and educational purposes.
  - Access rights granted to SmartSantander exclude any rights to sublicense, including to affiliates, unless expressly stated otherwise.

- Access rights granted to SmartSantander don't give the rights to accede to any other SmartSantander platform that is not federated with SmartSantander.
- While SmartSantander is federated with other testbeds, access rights to those testbeds may be restricted by those testbeds or by agreements between SmartSantander and those testbeds.

b) IoT node usage rules

- Use existing security mechanisms.
- Do not circumvent accounting and auditing mechanisms. This means you must associate your identity with the SmartSantander account in which your service runs, and you must not do anything to obfuscate the audit trail.
- No hacking attempts of the SmartSantander nodes. This includes "red team" (hacker test) experiments. All access is non-root.
- Causing physical damage or tampering with the nodes (including casing, power supply, etc.) is not allowed.
- Avoid spin-wait for extended periods of time. If possible, do not spin-wait at all.

c) Network usage rules

- Do not use your SmartSantander account to gain access to any hosting site resources that you did not already have.
- Do not use one or more SmartSantander nodes to flood a site with so much traffic as to interfere with its normal operation. Use congestion-controlled flows for large transfers.
- Do not do systematic or random port or address block scans. Do not spoof or sniff traffic.

d) Consequences

- Violation of this Section "Acceptable Use Policy" may result in any of the following:
- disabling the account;
- removing the Site from SmartSantander ;
- informing the organisation's administration.

To report a suspected violation of this policy, contact SmartSantander Support: support@santander.eu

In case of any breach with this acceptable use S3C shall terminate this Membership Agreement at any time and without written notice as provided with the Section Terms and Conditions of Membership, Article 1.

3   List of received proposals

On the 16th November at 17:00 the first open call submission window was closed. We received a total of 47 proposals which is a record so far in the whole FIRE initiative. The total budget requested was around 7.5 M€ which means an oversubscription factor around 17. The title of each proposal as well as the geographical spread is shown below.

Proposal Number	Title Proposal	Country
1	S'Spare (Sensor-Satellite-Systems: Performance Acceleration and Resource Efficiency)	Italy

2	ParkMeUp (Smart Search of Parking Space considering Real Time Urban Traffic Predictions)	Spain
3	SmartSantander	Spain
4	NEORIS-SMART SANTANDEROpenCall	Spain
5	CityScripts	Italy, UK
6	Luby Transform Codes to improve reprogramming over the air	Spain
7	IP v6	Spain
8	SmartSantander ITS add-on	Italy
9	Smart Urban Splly Chain. Such	Spain
10	Soft Actuation over Cooperating Objects Middleware (SACCOM)	Poland; Greece
11	Implementing an IXP in SmartSantander Core Network	Brazil
12	AgorasSantander	Spain
13	Real approach to the impact of urban mobility in economic activities	Spain
14	Intelligent Parking Guidance System for Greener Cities (IPGS)	Spain
15	S PARK: Experimentation with Smart Parking Meters over SmartSantander'sInfraestructure	Spain
16	RECYCLingcontainErs- Automated SmArt Pick-up (RECYCLE-ASAP)	Spain
17	I-Transport Intelligent Transport in Smart Grid Environment	Switzerland
18	SFEP- SmartSantander Secure Facility Extension Procedure	Spain

19	SmartMoNet: Urbarn Traffic information aggregation and control testbed using SmartSantander facilities	UK
20	SmartSantander	Germany
21	CALIMER: CALIbration of raw MEasurement	Serbia
22	Glowbal SmartSantander	Spain
23	Smart Sewerage, Mobility and Security	Sweden
24	Network Coding	Spain
25	People Behaviour	Spain
26	Mobitrans	Spain; Italy
27	SmartBikes	Spain
28	ATRIUM: Automatic Traffic Characterization Experiment based on Mobile Unit Movement Sensing	Serbia
29	SENSOC: univyingSENsor and SOCial information for supporting smart city services	Greece
30	SmartSantander	Spain, Poland
31	Power Saving in WSN	Spain
32	Urban Traffic Management	Spain
33	EMMELIA: Experimental Middleware for large scale IoT autonomic services	Greece
34	Advanced applications enabled by existing SmartSantander lage scale sensor networks and extension of experimental capabilities by mobile nodes (SantanderPos)	Germany
35	Keeping people in the Loop	Italy
36	SoLin4SmartSantander	Germany

37	SmartTrident	Italy, Australia
38	Santander Energy and Health Optimizer (SENTHO)	Spain
39	SmartSantander	Italy
40	Smart LBA	Switzerland
41	Environmental Data and Traffic Management	Poland; Greece
42	Real Time Parking Assistant Application	Belgium
43	SMARTBAY: an innovative systems of Monitoring and Data Acquisition Systems coupled with a High Resolution Forecasting Model for the Bay of Santander	Spain
44	SmartCityLiftShare	UK
45	SmarS	Spain
46	PEOPLE CENTRIC SMART SANTANDER Introducing Mobile Phone People Centric Participatory Sensing Services to SmartSantander	Switzerland
47	The Customized Urban Exploitation	Italy

TABLE 1.   LIST OF PROPOSALS RECEIVED

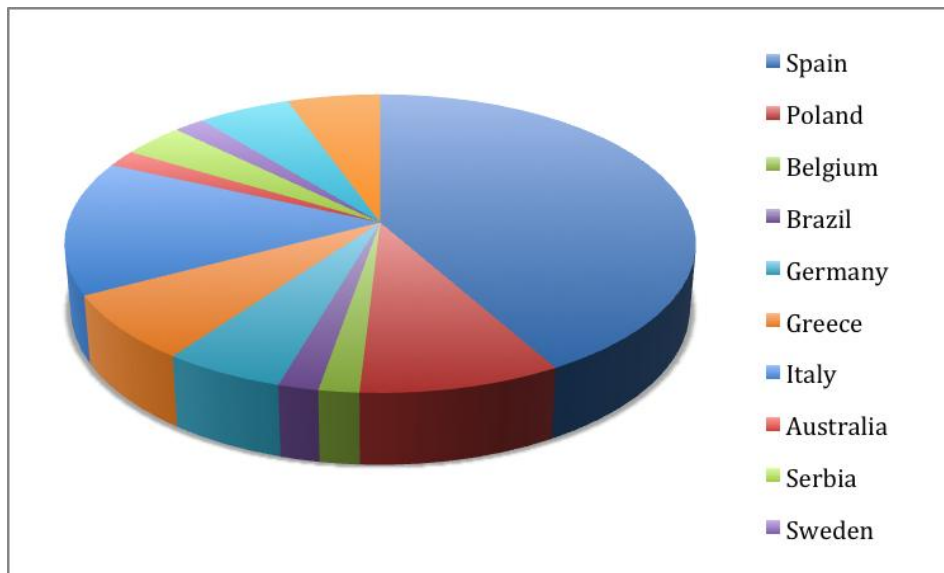Below, some statistics summarizing the origin of the proposals is shown:

Figure 5. Proposals received by country

4 Evaluation process

4.1 Experts involved in the evaluation

To carry out the evaluation process, ensuring at least two different assessment reports were available for each one of the 47 proposals, 14 reviewers were required. The final list is provided below and is made up of 5 experts belonging to the industrial sector and 9 from the research community:

- Konrad Wrona (NATO, The Netherlands)
- Prof. Ignas Niemegeers (DelftUniversity, The Netherlands)
- Prof. Theodore Zahariadis (T.E. Institute Chalkida, Greece)
- Prof. Rui L. Aguiar (University of Aveiro, Portugal)
- Prof. Ralf Toenjes (Hochschule Osnabrück, Germany)
- Prof. Natividad Martínez (Reutlingen University, Germany)
- Prof. Ingrid Moerman (IBBT, Belgium)
- Prof. Djamal Zeghlache (INT, France)
- Dr. Hans-Peter Schwefel (FTW, Switzerland)
- Dr. Antonio Ruzelli (UCD, Ireland)
- Phillip Cousin (eGlobalMark, ETSI, France)
- Monique Calisti (Martel Consulting, Switzerland)
- Dr. Daniel Tapias (Sigma Technologies, Spain)
- Prof. Ralf Seepod (Univ. Konstanz, Germany)

After providing the proposed evaluators with the general conditions to participate as reviewers of the proposals, and before distributing the proposals among them, all the experts were asked to provide in advance a signed declaration of non-existence of any Conflict of Interest as well as short CV (see annex I).

The work to be carried out by the reviewers was to provide the IER for each assigned proposal and participate in the meetings for editing the corresponding ESR as well as the consensus meetings. The template of the IER is included in Annex III. We allocated between 23rd November and 7th December for the remote reading and IER generation. For the edition of the ESR we organized phone conference consensus meetings according to the following schedule:

Figure 6. Consensus meetings PhC schedule

Six or seven proposals were allocated to each reviewer, and 3-3½ hour PhC's were assigned for each set of proposals. A total of 7 phone conferences were scheduled with the seven different pairs of reviewers. Finally, on 14th December afternoon the final ranking consensus meeting was held.

5 Outcome of the 1st Open Call

5.1 Selected applicants

The process of evaluating the proposals received in the 1st Open Call finished on 14th December 2011. It was a tough exercise to maintain such an intensive cycle of consecutive PhC sessions to get through each and every one of the 47 proposals received. The PMT was thankful to the reviewers for the excellent work done. The process ended successfully in the last PhC held by the organizers along with the 14 reviewers. In this meeting, a completely democratic consensus was finally reached in a very efficient and straightforward discussion.

The two proposals to be funded are:

- City Scripts. Proposers: Centro di Ricerca, Svilupo e Studi Superiori in Sardegna, University of Reading. Requested budget: 199,466.00 €

- Soft Actuation over Cooperating Objects Middleware (SACCOM). Proposers: WarsawUniv. of Technology, Center for Research and Technology Thessaly. Requested budget: 153,984.00 €

Every proposal was first evaluated by two different reviewers in a blind way. Every two reviewers met for the first time at the first consensus PhC to produce an agreed ESR. Once this first cycle was completed for all the proposals, the final consensus meeting was held with all the reviewers, providing all them with the 8 best ranked proposals and their ESRs. This was the first time they all met together and had access to other peers' proposals. They then were given some time (20 min.) to get through the other proposals, and then the first reviewing team had the opportunity to highlight their main arguments for the score. A discussion was held for each one of the 4 best ranked proposals. As a result of this discussion, the necessity was suggested to break the deadlocked tie among the three proposals which had scored 12.5. The reviewers, considering the pros and cons of each one of these proposals, were able to settle the arguments and sort them into the stated ranking.

According with the available budget, the project will be able to fund the two proposals with the highest scores.

5.2 Non-selected applicants

Although it would be difficult to think of supporting more experimental activity while the testbed is being enlarged, and without compromising our commitments for this second year period, the consortium will try to do so to the extent of its capabilities. Some of the proposers of this first call are companies that will also address the next calls for tenders for supplying equipment, so they will have the opportunity to show their real interest by providing competitive offers in order to benefit from the SmartSantander popularity. In contrast, research and academic institutions will probably not carry out the proposed experiments if they are not financed. In any case, most of the current proposers are expected to try again for the 2nd Open Call.

Apart from the applicants to this 1st Open Call, there are also a number of groups preparing proposals for FP7 Call 8. The project is currently receiving a number of requests for support letters from projects that would like to use the existing facility.

6 User feedback

One of the important sources of feedback provided by the open calls, and in particular by those experiments budgeted, is related to the friendliness and usability of the SmartSantander platform. In this sense we will rely on the questionnaire guidelines provided by the FIRESTATION project.

6.1 User Feedback on the use of SmartSantander

The work to create input to the future of FIRE in Work Program 2013 and Horizon 2020 will require a good understanding of the added value of FIRE experimental facilities, the value perceived by experimenters and an understanding of what is lacking in the existing facilities both to support improved usage and to identify technologies not covered in existing facilities. The FIRESTATION support action would welcome feedback from the users of the various facilities available in FIRE. The feedback requested does not have the purpose of evaluating the facility or the experiments as such, but to understand which features and methods have been found useful, federation aspects and collect suggestions for new features or improvements.

To this end, the successful applicant's partners from "City Scripts" and "SACCOM" will be asked to complete a questionnaire (Section **¡Error! No se encuentra el origen de la referencia.**) after completing experiments on the SmartSantander facility.

6.2 The User Feedback form

General questions

- User name and affiliation/project ………………………………….

  User Name …………………………………..

  Affiliation and Project (web site if applicable) ………………………………….

- Facilities used ………………….

  The usage period(s)   ………………………………….

Single facility assessment

- The facility name   ………………………………….
- The usage period   ………………………………….

Overall assessment

1. What was your research goal and did you achieve your research goal with your experiment(s)?

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2. Was the experiment performed to support product development or a standardisation effort? Has the experiment lead to any scientific publication(s)?

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3. How much effort was required to understand the facility and to implement your experiment and, was it reasonable?

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4. What obstacles and benefits did you have in your experience with and of the communication with the facility?

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5. Why did you use a FIRE facility instead of implementing your own (experiment funding and cost of facility implementation are evident factors but there could be others as well).

    How did you find the right type of FIRE facility?

    How could the FIRE test facility be improved?

    Please also provide suggestions for improvement.

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Service specific questions

6.   Were the services up to the expected level/standards? Yes/No

      (Was the availability and reliability of the services at the right level?
Was equipment up to date and described enough?)

      Please explain further and if possible provide suggestions for improvement:

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7.   Would you have expected a Service Level Specification?   Yes/No
Would you have expected a Service Level Agreement?   Yes/No
And for which services?
Please explain further and if possible provide suggestions for improvement:

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8.   Were you able to manage your testing environment properly? Yes/No
Was extensive user support from the facility needed? Yes/No
Did the facility support enough monitoring capabilities? Yes/No

Please explain further and if possible provide suggestions for improvement:

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9. Were there gaps in the operational management of the service? Yes/No
    Please explain further and if possible provide suggestions for improvement:

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10. What results of your project were achieved and to what extent did the facility's services support this? Would you judge your experiment as "value for money"?

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11. Were the isolation arrangements between other experiments (if running in parallel) satisfactory? Yes/No

12. Was it possible to obtain enough time for your experiment? Yes/No

13. Did your experiment involve end users? If yes, was that supported by the facility? Yes/No

14. Was connectivity to Commodity Internet connectivity available?   Yes/No
    Please explain further and if possible provide suggestions for improvement:

    ```


    ```

15. What other services should be provided by the facility? What services are lacking in the FIRE experimental facility portfolio?

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16. Was the physical connectivity towards the facility service
    easy to implement? Yes/No/not applicable
    Please explain further and if possible provide suggestions for improvement:

    ```


    ```

Federation related questions

- Did you use implicitly or explicitly, more than one facility *at the same time*

                                                              yes/no

If yes, please state

    - which facilities   …………………………………………..

    - period of use   …………………………………………..

    - reason for use (please elaborate below)

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    - elaborate on its possible benefits, complexity and issues

    …………………………………………..

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7 Conclusions

The purpose of this deliverable is to give a detailed report about the preparation and conduction of the first open call for experiments of the SmartSantander project. The preparations and actions taken, especially regarding the dissemination of the open call, have been outlined in the beginning of this document (Section 2). The list of received proposals has been presented and the evaluation process has been explained in detail (Sections 3 and 4 respectively). Due to the high number of received proposals and the short time frame the review process was very challenging. We would like to acknowledge our reviewers again for their excellent and productive work. The outcome of the evaluation has been shown in Section 5. The methodology of collecting user feedback on utilizing and experimenting in SmartSantander platform is described in Section 6. Finally, annexes present the short CVs of the reviewers, the evaluation form used to rank the proposals and the letters sent to successful and unsuccessful proposers.

From the whole procedure of the first open call for experiments, several concluding remarks can be made:

- The primary goal of the SmartSantander consortium, regarding the 1st open call for experiments, was to gain significant attention amongst the academic community and industry. Keeping in mind the large number of received proposals, all of them having excellent scientific and technological characteristics and most of them submitted by academic-industry collaboration consortiums, shows that our primary objective has been fulfilled.

- For achieving the aforementioned goal SmartSantander consortium placed substantial effort in announcing the 1st open call for experiments through different dissemination chanels like: special announcement events co-located with FIRESTATION events, print media, online media, scientific mailing lists and bullting boards, other public events such as conferences or summer schools in which SmartSantander related presentations were made and to several national and international project consortia and research networks affiliated with each SmartSantander consortium member.

- Overall 47 independent proposal submissions were received from proposers coming from 10 different countries, including non-EU countries Brazil and Australia. The overall requested funding from the received proposals was 7.5 M€ which corresponds to an oversubscription factor of around 17 for the total funding allocated for this call. The majority of proposals focused on experimentation with innovative services and applications in a SmartCity environment, while the others covered evaluation of IoT middleware and protocol solutions. From these facts, we conclude that the SmartSantander facility has become the center of interest in IoT and Future Internet researchers and industries seeking experimentation at such large scales and in the city context characteristics that our platform offers. This interest and intense interaction with these stakeholders (researchers and industry) will give useful feedback to the SmartSantander consortium in order to enhance and evolve the characteristics of the facility.

- The SmartSantander consortium has announced interest in receiving proposals in different areas: applications/services for the SmartCity based on IoT, middleware developments for IoT and protocol technologies. The majority of the received proposals targeted the application/service area. This again shows the success of the unique SmartSantander approach which aims to provide an experimental research platform but at the same time valuable services for citizens, companies and local authorities.

- A formal and strict evaluation procedure has been followed in order to guarantee transparency and the most valuable proposals to be selected. A short list of potential independent reviewers was compiled prior to the open call and suggested to the EC for approval. Careful evaluation of conflict of interest with the proposals was performed. Overall 14 evaluators have been finally selected from the shortlist by the EC for the 47 proposals. Evaluations were performed in accordance with the guidelines communicated to the applicants through the open call announcement document. Evaluators first performed an independent evaluation of the proposals in a 2 week time window. After that 3 days of consensus meetings were conducted through conference calls. For each proposal an individual consensus meeting was performed with the respective reviewers, during which a final score was agreed. A ranked list of proposal based on the agreed scores was created and discussed during a final consensus meeting. Both successful and unsuccessful proposers have been made aware of the evaluation outcomes.

- Based on the funding available for the experimental call, the top two proposals were selected for funding by the consortium. These were:
    - City Scripts. Proposers: Centro di Ricerca, Svilupo e Studi Superiori in Sardegna, University of Reading. Requested budget: 199,466.00 €
    - Soft Actuation over Cooperating Objects Middleware (SACCOM). Proposers: WarsawUniv. of Technology, Center for Research and Technology Thessaly. Requested budget: 153,984.00 €

  The successful proposers are now in discussion with the consortium to fine tune the experiment specification based on reviewer recommendations. A first physical meeting will take place end of February during which the proposers are officially introduced to the SmartSantander consortium.

- Last but not least, the methodology for collecting the feedback has been shown and the feedback itself will be contained in IR 5.3.

8 References

[1] S. Krco, L. Munoz, E. Theodoridis: "SMART SANTANDER Regulations for use of experimental facility", SmartSantander deliverable D5.3, 2011 http://www.smartsantander.eu/downloads/Deliverables/d_5_3_regulations_for_use_of_the_facility.pdf

Annex I – Reviewers short CVs

Konrad Wrona currently holds a Senior Scientist position at the NATO C3 Agency in The Hague, The Netherlands. He has nearly fifteen years of work experience in an industrial (Ericsson Research and SAP Research) and in an academic (RWTHAachenUniversity, Media Lab Europe, and RutgersUniversity) research and development environment. He has received his M.Eng. in Telecommunications from Warsaw University of Technology, Poland in 1998, and his Ph.D. in Electrical Engineering from RWTH Aachen University, Germany in 2005. He is an author and a co-author of over thirty publications, as well as a co-inventor of several patents. The areas of his professional interests include security in communication networks, wireless and mobile applications, distributed systems, applications of sensor networks, and electronic commerce. Konrad Wrona is a Senior Member of the IEEE, Senior Member of the ACM and a member of IACR. He was also awarded several professional certifications, including CISSP, CBCI, PMP, and Common Criteria Evaluator.

Ignas G. M. M. Niemegeers has been Scientific Director of the Centre for Telematics and Information Technology (CTIT) of the University of Twente. Since May 2002 he holds the chair Wireless and Mobile Communications at Delft University of Technology, where he is heading the Telecommunications Department. He was involved in many European research projects, e.g., the EU projects MAGNET and MAGNET Beyond on personal networks, EUROPCOM on UWB emergency networks and, eSENSE and CRUISE on sensor networks and iCore on the Internet –of-Things. He was a member of the Expert group of the European technology platform eMobility. His present research interests are 4G wireless infrastructures, future home networks, ad-hoc networks, personal networks and cognitive networks. He has (co)authored more than 300 scientific publications and a Wiley book on Personal Networks.

Dr. Theodore Zahariadis is the CTO of Synelixis Solutions and Ass. Prof at Technical Educational Institute of Chalkida (TEIHAL). Currently, he is the technical coordinator of the EC ICT projects: COAST and VITRO. He is heavily involved in the EU Future Internet Assembly (FIA) activities and coordinates the Future Internet Architecture Group (FIArch). Since 1994, he has participated in many ACTS, ESPRIT, ARTEMIS, IST and ICT projects. His research interests are in the fields of broadband wireline/ wireless/ mobile communications, trusted routing/virtualisation over wireless sensor networks, interactive service deployment over IP networks, embedded systems, and multimedia home networks. He has published more than 100 papers in magazines and conferences. Since 2001, he has been EC evaluator and reviewer/rapporteur in many IST/ICT projects.

Rui L. Aguiar received a Ph.D. degree in electrical engineering in 2001 from the University of Aveiro. He is currently an Associate Professor at the University of Aveiro and an adjunct professor at the INI, CarnegieMellonUniversity. He is leading a 40-person research team at the Institute of Telecommunications, Aveiro, on next-generation network architectures and protocols. His current research interests are centered on the implementation of advanced wireless networks, and systems. He has more than 250 published papers in those areas. He has served as technical and general chair of several conferences, such as ICNS'05, ICT'06, ISCC'07 and Monami'11. He is a Senior member of IEEE and a member of ACM. He has regularly performed reviewing tasks for the EU and several national bodies (France, Cyprus, South Africa, Portugal, etc...) as well as acted as court expert in telecommunication legal cases.

Dr. Monique Calisti joined Martel as Senior Consultant and Project Manager in 2011 where she is responsible for the Consortium Management activities of various 7th EU FP funded ICT projects, and contributes to the creation and submission of new R&D project proposals. In the last 5 years, Monique has been also working on a regular basis for the European Commission as expert evaluator of proposals and reviewer of running EC funded projects. Previously, Monique worked for Whitestein Technologies that she joined in 2002 as Vice President of Research and Development. There, she bootstrapped the overall R&D team and activities by securing affiliation and funding for several national and international R&D projects. She has also been directly responsible for the management of these projects, as well as for IPR protection, professional publications, technical support and consulting and public relations.

Dr. Philippe Cousin is the C.E.O. on newly established company providing services and solution for an "easy global market". Recently appointed as EU expert in the EU-China Memorandum of Cooperation for IoT

(Internet of Things)(www.iot-eu-cn.org) and EU rapporteur for another EU-China group on Future internet, Ipv6 and IoT. Philippe has 28 years of experience in ICT. 17 years at various positions (operational fields, R&D, Standardisation (ETSI, ITU), testing methodologies, etc.) Has worked in France Telecom R&D, EC Project officer for 5 years, Worldwide Test house Managing Director for 4 years. Has developed large projects and cooperation in China since 1999 For 9 years manager within ETSI on interoperability activities (+70 events organised) and later on managing Sales for Standards Enabling Services in relationships with many worldwide industrial fora (OMA, GCF, Wimax, IPSO.); Involved in ICT research projects since 5th EU research programme (FP5). Technical Director of the FP6 research project GO4IT involving 12 partners. Involved in 11 FP7 projects including management of one (FP7 Walter) and development of four recent ones (FP7 Mosquito, MyFire, PROBE-IT, BUTLER).

Dr. Antonio G. Ruzzelli is a research fellow and a team leader in the CLARITY research centre at University College Dublin. At UCD, he manages a talented team of engineers that investigates technologies to empower building energy-efficiency, usage prediction, smart energy metering and wireless sensor networking. Some of our achievements on this topic have recently been awarded at the Globe Forum Ireland Innovation and featured in international newspapers such as the NYT. Up to know, this research allowed him to attract significant funding from national agencies and at European level (e.g. EU-FP7).

Prof. Dr. Ralf E.D. Seepold obtained his MSc in Computer Science from the University of Paderborn, Germany (1992) and his Ph.D. in Computer Science from the University of Tübingen, Germany (1997). His main research area is Ubiquitous Computing with special focus on mobile devices, intelligent environments and automotive IT. Since 2009, he is Professor at the University of Applied Sciences Konstanz (HTWG), Germany. Before that he worked as an Associate Professor at the University Carlos III of Madrid in Spain and as Department Manager at the Computer Science Research Center (FZI) in Karlsruhe (Germany). He has more than 100 scientific publications; he served as Chair of the Fifth IEEE Workshop on Intelligent Solutions in Embedded Systems, as well as PC member and reviewer in many IEEE conferences. He is member of the German "Gesellschaft fürInformatik" (GI) and member of the Forum SatNav MIT BW (Galileo Security Working Group). He worked as project leader in several international and national projects. He has served as reviewer in European projects, national projects and for several associations.

Djamal Zeghlache. Graduated from SMU in Dallas, Texas in 1987 with a PhD. in Electrical Engineering and joined the same year ClevelandStateUniversity as an Assistant Professor. In 1990 and 1991 he worked with the NASA Lewis Research Centre on mobile satellite terminals, systems and applications. In 1992 he joined the Networks and Services Department at INT where he currently acts as Professor and Head of the Wireless Networks and Multimedia Services Department. He is an active member of the IEEE communications Society and a member of the IEEE Technical Committee on Personal Communications. He acted as co-technical chair of the ASWN 2001, 2002, 2005 Workshops and Technical Chair of the Wireless Communications Symposium for Globecom 2003. He acts as lead scientist for INT in European project MAGNET Beyond. He is also a expert group member of the eMobility Platform at the European level for framework program 7. He is also involved in WWRF working groups 2, 3 and 6. His interests and research activities span a broad spectrum of issues related to wireless networks and services. The current focus besides resource allocation is on dynamic adaptation and configuration of wireless networks and services based on context awareness and service discovery using P2P and autonomic networking paradigms. An on going activity relates to personal networks seen as a wide area extension of wireless personal area networks involving remotely located personal clusters. A key objective is to address the challenge of establishing overlay networks and service overlays for these networks at run time.

Ingrid Moerman received the degree in Electro-technical Engineering and the Ph.D degree from the GhentUniversity, Gent, Belgium in 1987 and 1992, respectively. Since 1987, she has been with the Interuniversity Micro-Electronics Centre (IMEC) at the Department of Information Technology (INTEC) of the GhentUniversity, where she conducted research in the field of optoelectronics. In 2000 she became a part-time professor at the GhentUniversity. In 2001 she has switched her research domain to broadband communication networks. Since 2006 she joined the Interdisciplinary institute for BroadBand Technology (IBBT), where she is coordinating several interdisciplinary research projects. She is currently involved in the research and education on mobile & wireless communication networks. Her main research interests are:

wireless broadband networks for fast moving users, mobile ad hoc networks, personal networks, virtual private ad hoc networks, wireless body area networks, wireless sensor and actuator networks, wireless mesh networks, fixed mobile convergence, protocol boosting on wireless links, QoS support in mobile & wireless networks and multimedia traffic over IP networks (in particular the impact of the network on video quality). She is author or co-author of more than 400 publications in the field of optoelectronics and communication networks.

Hans-Peter Schwefel is Scientific Director of FTW and also coordinates the 'Networked Services' Research Area at FTW. The about 90 researchers at FTW focus on application-oriented research on communication technologies within the application areas of telco networks, intelligent transport systems and intelligent energy networks. Core research goals of the 'Networked Services' research area are middleware and communication solutions for future context-sensitive, intelligent applications with particular interest in dependable systems. In addition, Hans is Associate Professor and leading the research group at Aalborg University/CTIF that focuses on network architectures, communication protocols and evaluation methodologies for future IP-based wireless networks. He is actively involved in research and coordination activities and also leading several industrial cooperations. Hans obtained his doctoral degree (Dr. rer. nat.) in the area of IP traffic and performance modelling from the TechnicalUniversity in Munich, Germany, in 2000.

Ralf Tönjesread communication engineering at the University of Hannover and biomedical engineering at the University of Strathclyde in Glasgow. He graduated with a Dipl.-Ing. degree in 1989 and a Master degree (MPhil) in 1990, respectively. In 1998 he received his Dr.-Ing. degree (summa cum laude) in electrical engineering from the University of Hannover. Between 1990 and 1998 he worked as a research engineer and teaching assistant at the Institute for Communication Engineering and In-formation Processing of the University Hannover. From 1998 to 2005 he was with Ericsson Research, where he worked on UMTS core network evolution, mobile broadcast (MBMS) and represented Ericsson in the DVB-CBMS (Convergence Broadcast and Mobile Systems) standardisation. 2005 Dr. Tönjes joined University of Applied Sciences of Osnabrück as a professor for Mobile Communications. He has been the responsible project manager for the IST projects DRiVE and OverDRiVE. He is a TPC member of several international conferences and expert member in the Net!Works platform. He has (co-) authored more than seventy scientific publications. His current research interests include wireless communication networks, mobile service platforms and test automation.

NatividadMartínez Madrid received the M.Sc. and Ph.D. degrees in telecommunications engineering both from the Technical University of Madrid, Madrid, Spain, in 1993 and 1998, respectively. She focuses on the design of distributed web-based systems with special emphasis on eHealth services and applications. Currently, she is Associate Professor at Reutlingen University, Germany. She is Chair of Internet Technologies at the School of Informatics. Before that she worked as an Associate Professor at the University Carlos III of Madrid in Spain, and as a Project Manager at the ForschungszentrumInformatik (FZI) Karlsruhe in Germany. She has more than 90 publications and several books published in the scientific research community. She organized and contributed to several summer schools, workshops and conferences over many years. She is member of IEEE since 1993; furthermore, she is member of the GesellschaftfürInformatik (GI) and the OSGi-UserGroup Spain. She has been coordinator of 12 research projects and she participated in several more projects.

Annex II – Individual Evaluation Form

Proposal No. : 257992	Acronym : SmartSantander

1. Scientific and/or technological excellence (relevant to the topics addressed by the call)	Score: *(Threshold 3/5; Weight 1)*

1. Scientific and/or technological excellence (relevant to the topics addressed by the call)

    a) *Does the proposal sufficiently relate to the topics addressed by the SmartSantander open call?*

    b) *Is the proposed experiment well described? Is the experiment feasible? Is the experiment plan sound?*

    c) *Is the need for the SmartSantander platform sufficiently motivated? Does the proposal sufficiently strengthen the SmartSantander project? Is the proposed experiment sufficiently relevant scientifically or technically (innovation) speaking?*

Note:

i) The call must not be used as a means for budgeting extra material and extra installation costs. Good proposals have to rely on most of the infrastructures already deployed in one and/or several sites. Of course, minor amounts can be accepted.

ii) It is not compulsory that the experiments are proposed for the four sites (Belgrade, Guilford, Lübeck and Santander). An experiment is valid even using just one of the sites.

iii) The call does not budget proposals which consume most of the one year experiment duration in developing modules and just testing them in the last month. Proposers have to come with solutions already available by them aiming at adapting to the SmartSantander experimentation platform.

iv) Experiments have to be interpreted in wide sense, that is, new services, middleware or even network/transport techniques on top of IoT infrastructures

Score: *(Threshold 3/5; Weight 1)*

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2. Quality and efficiency of the implementation and the management

    a) *What is the quality of the proposer(s)?*

    b) *Do the proposers have the right skills and expertise to execute the experiment?*

    c) *Are the resources for the experiment justified?*

    d) *Is it the time plan realistic?*

    e) *Is there any risk and contingency plan included?*

Score: *(Threshold 3/5; Weight 1)*

For the purposes of any subsequent negotiation, an above-threshold score for this criterion is regarded as an indication that the proposer(s) has the operational capacity to carry out the work.

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3. Potential impact through the development, dissemination and use of project results

Score: *(Threshold 3/5; Weight 1)*

a) Will the experiment have sufficient impact on the SmartSantander project? *b) Will the SmartSantander project sufficiently benefit from the experiment?* *c) How much will the SmartSantander project learn from the experiment?* *d) Is the experiment helping to the sustainability of the SmartSantander platform?* *f) Is there any realistic exploitation plan?* *g) Is the plan for dissemination adequate?* *h) Are the plans for management of knowledge sufficiently clear?* *i) Will any foreground knowledge be created? If yes,are the conditions clear under which access rights for using foreground will be granted during and after the SmartSantander project?*	
Remarks *Are there any general recommendations? e.g.* • *to improve the scientific quality and output of the project?* • *related to the resources?* • *related to the management of knowledge?*	**Overall score:** *(Threshold 10/15)*

Does this proposal contain ethical issues that may need further attention?	**NO** ☐	**YES** ☐

I declare that, to the best of my knowledge, I have no direct or indirect conflict of interest in the evaluation of this proposal

Name	
Signature	
Date	

Name	
Signature	
Date	

Annex III– Notification Text

Non-funded proposal communication (e-mail)

Dear proposer,

Please find attached the Evaluation Summary Report (ESR) for the proposal which you recently submitted to the First Open Call for experimentations issued by the SmartSantander project (SmartSantander-1-Open-Call).

We regret to inform you that your proposal was not finally selected for funding. We have received a big number of high quality proposals, but unfortunately and due to the high over-subscription we will only be able to fund very few of them within the open call budget.

We really want to thank you for your interest in this open call. We however would like to draw your attention to the fact that unfunded use of the SmartSantander infrastructure is also possible. Please contact us if you are still interested to perform, or partially conduct, the proposed experiment without funding from the Commission, so that we can further check with the SmartSantander consortium to which extent we can support you.

Please keep in mind that new opportunities for funded experimentation will be again opened through the 2nd Open Call planned within the SmartSantander project.

Finally, we kindly ask you to provide the other proposers of this proposal with a copy of the attached ESR.

Kind regards,

Jose M. Hernandez-Munoz
SmartSantander Co-ordinator

Funded proposal communication (e-mail)

Dear proposer,

We are pleased to inform you that your proposal has been selected for funding.

Please find attached the Evaluation Summary Report (ESR) for the proposal which you recently submitted to the First Open Call for experimentations issued by the SmartSantander project (SmartSantander-1-Open-Call). We kindly ask you to provide the other proposers of this proposal with a copy of the attached ESR.

You will receive (probably in January 2011) an official invitation from the Commission for a negotiation meeting. New partners succeeding in the Open Calls will join the SmartSantander consortium via an amendment request to the existing SmartSantander contract. We will keep you informed about the next steps.

We have one urgent question related the starting date of the experiment. Although the amendment will not be finalized by January 2012, we strongly encourage the new partners to join the consortium to start working as soon as possible, from early January 2012 onwards. Please let us know when it will be possible for you to join the SmartSantander project.

Finally, we take this opportunity to kindly invite you to the kick-off meeting for the new partners. This meeting will take place during a regular SmartSantander consortium meeting at the end of February beginning of March in Patras, Greece. Please reserve this week in your agenda.

Kind regards,

Jose M. Hernandez-Munoz
SmartSantander Co-ordinator

Accompanying communication letter to all the proposers

Open Call Identifier: SmartSantander-1-Open-Call

Dear colleague,

You submitted a proposal in response to the 1st Open Call for proposals issued by the SmartSantander Project (FP7-ICT-2009-5). All eligible proposals were evaluated by external independent experts in accordance with the terms of the *FP7 Rules for submission of proposals, and the related evaluation, selection and award procedures*.

Attached to this letter, please find a copy of the Evaluation Summary Report for this proposal. The address for any questions concerning the results of the evaluation of your proposal is:opencalls@smartsantander.eu

This letter only provides information on the outcome of the evaluation process. The SmartSantander Project cannot at this stage make any commitment as regards possible selection and funding. After approval of the Commission, the SmartSantander Project will draw up the final list of proposals for possible funding from those that passed the evaluation thresholds, on the basis of the results of the evaluation by experts. Due account is taken of the scores received and of any advice from the experts. They will also take account of the available budget, the strategic objectives of the Project, the community policies, as well as the overall balance of proposals to be funded.

Let me take this opportunity to thank you and your fellow consortium (if applicable) for the interest shown in the SmartSantander Project and to wish you success in your endeavors. If it is the case, please kindly provide the other members of your consortium with a copy of the attached report.

Yours sincerely,

José M. Hernández-Muñoz
SmartSantander Coordinator