



D1.4. ICT Industry Toolkit

**ICT Policy, Research and Innovation
for a Smart Society**

October 2016

www.picasso-project.eu



Project Deliverable

Project Number:	Project Acronym:	Project Title:
687874	PICASSO	ICT Policy, Research and Innovation for a Smart Society: towards new avenues in EU-US ICT collaboration

Instrument:	Thematic Priority
COORDINATION AND SUPPORT ACTION	H2020 ICT

Title
D1.4 ICT Industry Toolkit

Contractual Delivery Date:	Actual Delivery Date:
31 October 2016	3 November 2016

Start date of project:	Duration:
January, 1 st 2016	30 months

Organization name of lead contractor for this deliverable:	Document version:
inno TSD	V1.0

Dissemination level (Project co-funded by the European Commission within the Horizon 2020 Programme)		
PU	Public	X
PP	Restricted to other programme participants (including the Commission	
RE	Restricted to a group defined by the consortium (including the Commission)	
CO	Confidential, only for members of the consortium (including the Commission)	

Authors (organizations):

Clémence Rottée, Eva Fadil (inno)

Reviewers (organizations):

Svetlana Klessova (inno)

Abstract:

In order to support the overall project aim, PICASSO is developing a so-called “ICT toolkit”: it is a mobile app and dedicated website section that contains a set of information tools providing stakeholders with a smart and quick access to ICT activities in EU and US through a user-friendly interface and ensuring free access. The mobile app /website section has officially been named “CROSSROADS – Your EU-US ICT info-hub”. It provides a collection of information that shall be provided to the PICASSO stakeholders from research, development and innovation (RDI), so as to support the EU-US ICT collaboration activity they plan/work upon.

Keywords:

ICT Toolkit, CROSSROADS, info-hub, mobile app, website, EU-US collaboration

Disclaimer

This document is provided with no warranties whatsoever, including any warranty of merchantability, non-infringement, fitness for any particular purpose, or any other warranty with respect to any information, result, proposal, specification or sample contained or referred to herein. Any liability, including liability for infringement of any proprietary rights, regarding the use of this document or any information contained herein is disclaimed. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by or in connection with this document. This document is subject to change without notice.

PICASSO has been financed with support from the European Commission.

PICASSO brings together prominent specialists willing to contribute to enhancement of EU-US ICT collaboration. PICASSO does not represent EU or US policy makers, and the views put forward do not necessarily represent the official view of the European Commission or US Government on the subject. PICASSO cannot be held responsible for any use which may be made of information generated. This document reflects only the view of the author(s) and the European Commission cannot be held responsible for any use which may be made of the information contained herein.

The PICASSO Project

The aim of the 30-months PICASSO project is (1) to reinforce EU-US collaboration in ICT research and innovation focusing on the pre-competitive research in key enabling technologies related to societal challenges - 5G Networks, Big Data, Internet of Things and Cyber Physical Systems, and (2) to support the EU-US ICT policy dialogue by contributions related to e.g. privacy, security, internet governance, interoperability, ethics.

PICASSO is oriented to industrial needs, provides a forum for ICT communities and involves more than 24 EU and US prominent specialists in the three technology-oriented ICT Expert Groups and an ICT Policy Expert Group, working closely together to identify policy gaps in the technology domains and to take measures to stimulate the policy dialogue in these areas. The synergy between experts in ICT policies and in ICT technologies is a unique feature of PICASSO.

A number of analyses will be accomplished, as well as related publications, that will for a major part be made public and contribute to the project's outreach. The overall aim is to support the EU and US stakeholders from industry, research and policy in their collaborative approach.

Table of Contents

1. Introduction	6
2. Objectives and format	6
3. Methodology.....	7
4. Concept and outline of the content	9
5. Conclusion and next steps.....	12
6. Annexes	13

1. Introduction

The PICASSO “ICT Industry Toolkit” is a tool that compiles a variety of information items providing stakeholders with a smart and quick access to ICT activities in the EU and the US. It is developed as a **mobile application and also accessible through the project website interface** (www.picasso-project.eu), ensuring free access. It aims at supporting EU-US ICT collaboration through a one and single access to all relevant information related to this topic, and is developed in a clear and easily readable user-friendly format.

As the toolkit is a collection of information that shall be provided to the PICASSO stakeholders from research, development and innovation (RDI) and policy, it has been decided to **enlarge the initially planned target audience of industry towards the whole PICASSO target group**. Indeed, it had been originally thought and designed for industry stakeholders involved in EU-US collaboration, but the target group of the PICASSO ICT Toolkit has been extended to reach also technical experts/researchers from the public and private sector (namely of the three core topics of PICASSO), industry representatives (small and large companies) and policy makers from the EU and the US.

In order to avoid exclusion of any target group and ensure the mobile app / website section is easily recognizable, it has been decided to choose an official public name that corresponds to these criteria: **it has been decided to name it “CROSSROADS – Your EU-US ICT info-hub”**. This name is clear and understandable for each category of user.

The **content** of CROSSROADS is and will be provided through data gathered internally by the PICASSO project and combined to information stemming from external sources to have a complete panorama of EU-US ICT collaboration relevant to the project’s thematic topics. Content from internal sources relies mostly on project analyses and reports, as well as input through the project’s Expert Groups. The content stemming from external sources is included as reference to existing publications (e.g. other projects or open source content). All the collected contents and data have been standardized and gathered in databases to simplify the access to the information for the users.

2. Objectives and format

The main objective of the PICASSO CROSSROADS mobile app / website section is to **facilitate collaboration activities in the field of ICT between the EU and the US through the structuring of information and relevant data**, that are gathered and regrouped in a **single entry point** – CROSSROADS, the EU-US ICT one-stop info-hub.

CROSSROADS is above all a mobile application, compatible for iOS and Android devices in order to reach the maximum of potential users. It is equally accessible through the project’s website. All contents are adapted to the different devices that may be used for access (mobile, tablet, PC, etc.). The data provided is easily readable and searchable, therefore allowing to offer an optimal user-experience. CROSSROADS offers to the users the possibility to have access to the information and data through a thematic approach on 5G, Big Data, IoT/CPS and Policy (PICASSO’s areas of focus) – upon a first connection, users can set their preferences (e.g. indicate their interest only for a specific topic

focus) and the content will be displayed consequently. The access to CROSSROADS is provided following an open and free access approach, both to the specific web page content as for the mobile application.

Finally, the Toolkit aims at greater dissemination on the topic of ICT and strengthening of collaboration actions between the EU and the US.

3. Methodology

The methodology to develop and implement the PICASSO CROSSROADS was focused on **two main aspects**: the **content collection and its adaptation** to display in a mobile app/web section on the one hand and the **technical development** of a dedicated section on the project website and the creation of a mobile application on the other hand.

Content:

The format of the PICASSO CROSSROADS mobile app / website section content was collected in two different ways:

- part of the content was provided as information content with short introduction to the content and complementary sources (e.g. downloadable reports, cross-linking to the website or external sources)
- the other part is content that has been translated into database format: e.g. programmes or initiatives, projects database and facilities database, events calendar, etc. These are provided with relevant search functions that notably take into account the project's focus topics and relevant application domains (5G Networks, Big Data, Internet of Things and Cyber Physical Systems, smart cities, smart grids...) and related key words to be used for any filter function.

Technical development:

The technical development has concentrated to facilitate the access for users of all PICASSO stakeholder groups with their different needs and interests, e.g. topic-focus. Besides ensuring correct display of information on different devices, the technical development mainly concentrated on providing clear, easy and free access. The development/adaptation of all content takes into account that all information should be readily searchable and accessible on multiple platforms.

The methodology for the development and implementation of the PICASSO CROSSROADS mobile app / website section is applied as below, with the following **methodology steps**:

- Content collection and adaptation
 1. A Short needs analysis through an online [questionnaire](#) has been released to evaluate the interest of potential users in a PICASSO CROSSROADS mobile app / website section. The aim was equally to check which kind of information would be of specific interest to the target group. The methodology step was not initially planned, but seemed of interest to target the

development of the mobile app / website section. Information has been collected from potential users on 1) General interest in such tool 2) Most useful content they would expect 3) Which format would be the most appropriate for the tool, etc.

2. Development of a concept for the PICASSO CROSSROADS mobile app / website section and approval through the PICASSO partners during the project plenary meeting in May 2016.
3. Content collection and gathering of information stemming from external sources (e.g. different types of guidelines relevant for EU-US collaboration, events database external to the PICASSO project, key note talks relevant to each of the project's focus topics, information on partner search opportunities, etc.) and in parallel extract of relevant information from PICASSO deliverable reports and activity (e.g. from the Panorama report and Overview on ICT-related access opportunities EU and US reports) and adaptation to the mobile app / website section format.
4. Collection of additional information to complete the content of the databases developed in step 3., e.g. for the initiatives, projects and facilities database, programmes database, and key networks database.
5. Structuring of the information display for the mobile app and web access to prepare and support the technical development. Details on the structure envisaged is displayed in the slides provided in the Annexes.
6. To come: continuous update of the content throughout the project lifetime.

- Technical development of the PICASSO CROSSROADS mobile app / website section

1. Technical development of the backend and frontend.
2. Development of a Beta version of the PICASSO CROSSROADS mobile app / website section.
3. Test of the PICASSO CROSSROADS mobile app / website section through a group of potential users (internal and external to the consortium) and improvements where necessary.
4. Public availability of the PICASSO CROSSROADS, both as dedicated section of the project website and as mobile application.
5. Continuous technical improvements of the PICASSO CROSSROADS mobile app / website section if necessary.

Both the technical development and the content gathering/adaptation go obviously hand in hand. For example, in order to allow for easy further dissemination of information and possibly acquisition of additional users/subscribers to the app, a share-function for social media will be implemented. Also, a reminder-function for calls, event deadlines... is planned in the development.

4. Concept and outline of the content

The implementation of the PICASSO CROSSROADS mobile app / website section aims at providing information and documentation related to EU-US ICT collaboration on a single entry-point. This includes relevant information on collaboration programme, ongoing calls of interest to the PICASSO stakeholders, relevant projects, initiatives and networks in the focus topics, etc. It also serves as information hub to present upcoming events, both internal and external to the project.

The PICASSO CROSSROADS mobile app / website section will be therefore **divided into four sections**:

- **“ICT Panorama” (databases with relevant information on the thematic focus areas),**
- **“Get connected” (information on collaboration opportunities),**
- **“Join us” (information on events and webinars), and**
- **“Read on” (further documentation and guidelines).**

Those four sections are covering all the aspects of EU-US ICT collaboration mentioned above, completed by other features like relevant webinars on ICT policies and ICT access opportunities, key note talks on 5G networks, Big Data, IoT/CPS and transversal policy aspects. It also includes special pages dedicated to the PICASSO Trans-Atlantic Symposium on Technology and Policy for a Smart Society, possibly success stories on collaboration in the thematic focus topics, a feature supporting the promotion of individual organisations to others (to potential collaboration partners) and a collaboration info helpdesk which includes also a Frequently Asked Questions (FAQ) part.

To improve the user-experience, the ICT toolkit will offer the possibility to select one or several topics related to the PICASSO project - 5G, Big Data, IoT/CPS, policy - in order to access specific information related to the topic(s). Therefore, at the first connection to the PICASSO CROSSROADS mobile app / website section, the user will indicate his/her preferences among 5G, Big Data, IoT/CPS and Policy. At any time, the user will have the possibility to re-configure the settings to access information related to other topic(s). Although the website and the mobile application will offer a topic-oriented experience to the user, the PICASSO CROSSROADS will, no matter which topic(s) has/have been chosen, always include general documentation on EU-US ICT collaboration and on how to develop partnerships.

An overview of the content of PICASSO CROSSROADS are presented below for each of the four sections:

- **ICT Panorama**
 - A **projects, initiatives and facilities database** that gathers information on ongoing EU and US projects, initiatives and facilities relevant to 5G, Big Data, IoT/CPS, policy, with the possibility to apply the following filters: Topic, Title, Application areas, Geographic coverage, Funding Body, Related Programme, Website, Abstract, Keywords.
 - A **Programmes database**, that gathers information on existing programmes in the EU and US relevant to the ICT thematic topics and its application areas, with the possibility to apply the following filters: Title, Application areas, Geographic coverage, Website, Abstract, Keywords.

- A **Key networks database**, that gathers relevant information on existing networks in the EU and the US relevant to the ICT thematic topics and its application areas, with the possibility to apply the following filters: Title, Application areas, Geographic coverage, Main contact, Abstract, Keywords.
 - **Key note talks**, selected by the Picasso Expert Groups on 5G, Big Data, IoT/CPS, and policy from open sources in a video format (e.g. stemming from YouTube), with the possibility to filter the content by area of interest.
- **Get connected**
 - A **Quick Access to information on collaboration opportunities in the EU and the US**, that gathers information on existing programmes, funding possibilities, participation rules, etc. relevant to 5G, Big Data, IoT/CPS, Policy.
 - Information on **open calls** in the EU and the US relevant to 5G, Big Data, IoT/CPS, Policy, with a reminder function for the mobile application users.
 - **Information on partner search opportunities** provided by external sources, e.g. through IDEAL-IST, possibly the DISCOVERY project, etc.
 - **An interface for the promotion of selected organisations**, that offers the possibility to users to suggest one organisation / company that is looking for collaboration partners (EU-US collaboration in any of the PICASSO focus areas). The idea is to provide a simple “promotion tool” that can be fed through different communication materials: a short description, a video ... The organisation promoted will be selected by the project team through majority vote in a transparent and fair way of selection. The content will be displayed for at least one month – if considered useful some sort of “organisation of the month” contest can be developed.
 - **Success stories**, presenting relevant EU-US ICT cooperation good practices, allowing to showcase existing cooperation.
 - **Collaboration Helpdesk and Frequently Asked Questions (FAQ)**: the helpdesk is set up with experts from the project team who answer to stakeholders from the EU and the US on questions with regards to collaboration in ICT. The FAQ gathers the answers to frequently asked questions where experts respond to stakeholders’ questions on collaboration opportunities and schemes.
- **Join us**
 - **Event calendar**, that aims at announcing PICASSO events (public events & webinars), as well as information on external events/conferences, relevant to the PICASSO focus topics (Title, dates/deadlines, target audience/topic, website).

The registration to project events will be available through a dedicated function in CROSSROADS (in the mobile application and web-dedicated section).

- **A dedicated section on the PICASSO Trans-Atlantic Symposium on Technology and Policy for a Smart Society**, that is going to take place in June 2017, in Minneapolis, USA. This section will include relevant information on registration to the conference, maps, logistics information, etc. to guide symposium participants.
- **PICASSO Webinars**, that provides an access to “policy webinars” and “access opportunities webinars” already organized by PICASSO, including access to the recorded versions, but also the possibility to register to upcoming project webinars.

- **Read on**

- **General H2020 guide** for US organisations, stemming from the BILAT 2.0 project
- **Short US programs guide** for EU organisations, if available in open sources
- **Public deliverables, reports**, etc. from the PICASSO project that are particularly interesting for EU-US collaboration: this includes an ICT panorama report, an opportunity report for enhanced EU-US ICT collaboration, etc.
- **Policy briefs and policy white paper**, developed by the PICASSO Expert Group on Policy

Focus of all content is EU-US collaboration, notably with regards to 5G Networks, Big Data, Internet of Things and Cyber Physical Systems or application domains (smart cities, smart grids...) and Policy aspects. All data needed for the development of the PICASSO CROSSROADS mobile app / website section has already been collected, either by soliciting stakeholders from the PICASSO Expert Groups, or by gathering information from PICASSO Deliverables, e.g. the “ICT panorama landscape” and “Overview on ICT-related access opportunities in EU and US”. Therefore, the information on the initiatives, projects & facilities database, the programmes database, and the key networks database has been extracted from the PICASSO “the ICT panorama landscape” and compiled to create a coherent database, optimized for ease of use. Desk research has been made in order to complete and harmonize the different data collected, with the provision of cross-links to existing tools, relevant pieces of information... Information regarding ICT opportunities in the EU and the US like existing programmes, funding possibilities, participation rules to open calls, are extracted from the PICASSO “Overview on ICT-related access opportunities in EU and US” Deliverable, and completed by an access to full reports like other PICASSO Deliverables or relevant publications regarding EU-US ICT cooperation opportunities.

5. Conclusion and next steps

The PICASSO CROSSROADS mobile app / website section aims at supporting the general project objective, namely to enhance EU-US cooperation in the field of ICT, through an important work of data selection and compilation. The access to ICT activities in EU and US will be simplified for technical experts, researchers from both the public and private sectors, industry representatives, policy makers and other relevant stakeholders, therefore allowing to enhance ICT cooperation between the EU and the US on multiple levels.

The development of the PICASSO CROSSROADS mobile app / website section is ongoing. All the content to be integrated to the PICASSO CROSSROADS mobile app / website section and its structuration have already been prepared in order to facilitate their implementation on the Website of the project and in the mobile application. Directly after the development of a Beta version of the PICASSO CROSSROADS mobile app / website section, this new section of the PICASSO Website and the mobile application are going to be tested by both internal and external stakeholders. According to the feedback and remarks of the stakeholders on the tests, this version of the PICASSO CROSSROADS mobile app / website section will be adjusted and improved to increase its efficiency and performance, prior to providing it publicly.

A dissemination strategy will be set up to ensure potentially interested users can be reached. Communication will mainly be based on existing project channels, namely the project website, social media accounts, contact database for newsletters/emailings, direct contacts of the partners and Expert Groups.

Once the PICASSO CROSSROADS mobile app / website section is consolidated, its content will be continuously updated and the tool improved to meet potential users' requests.

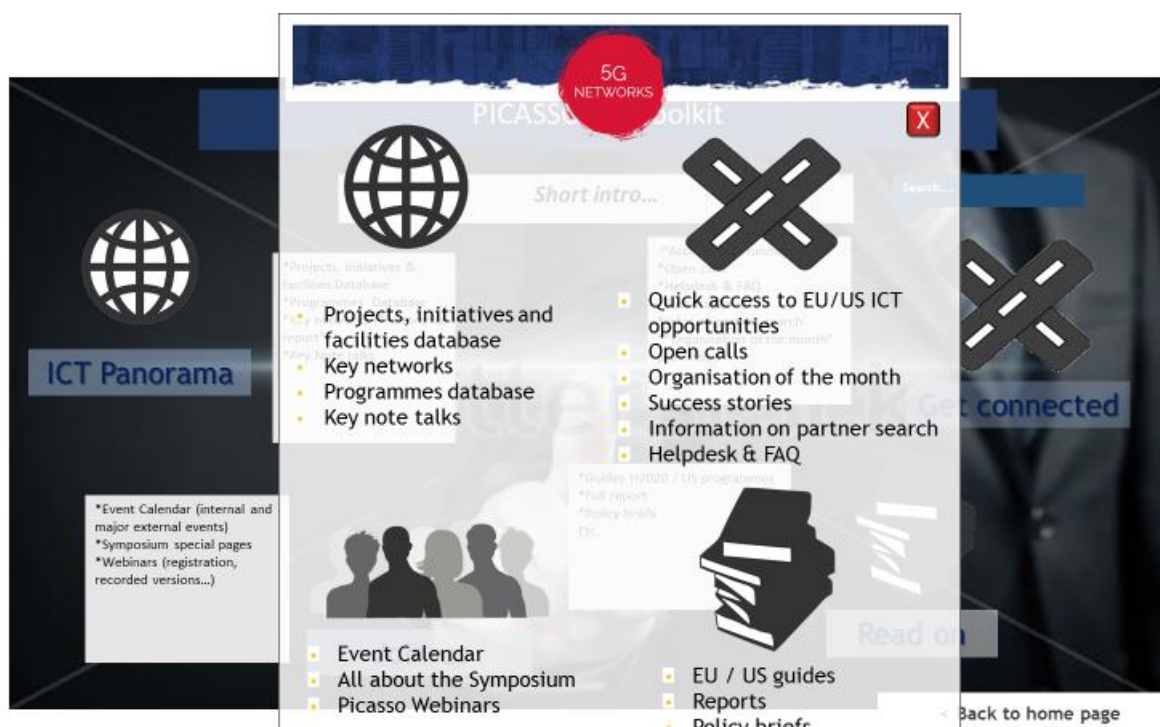
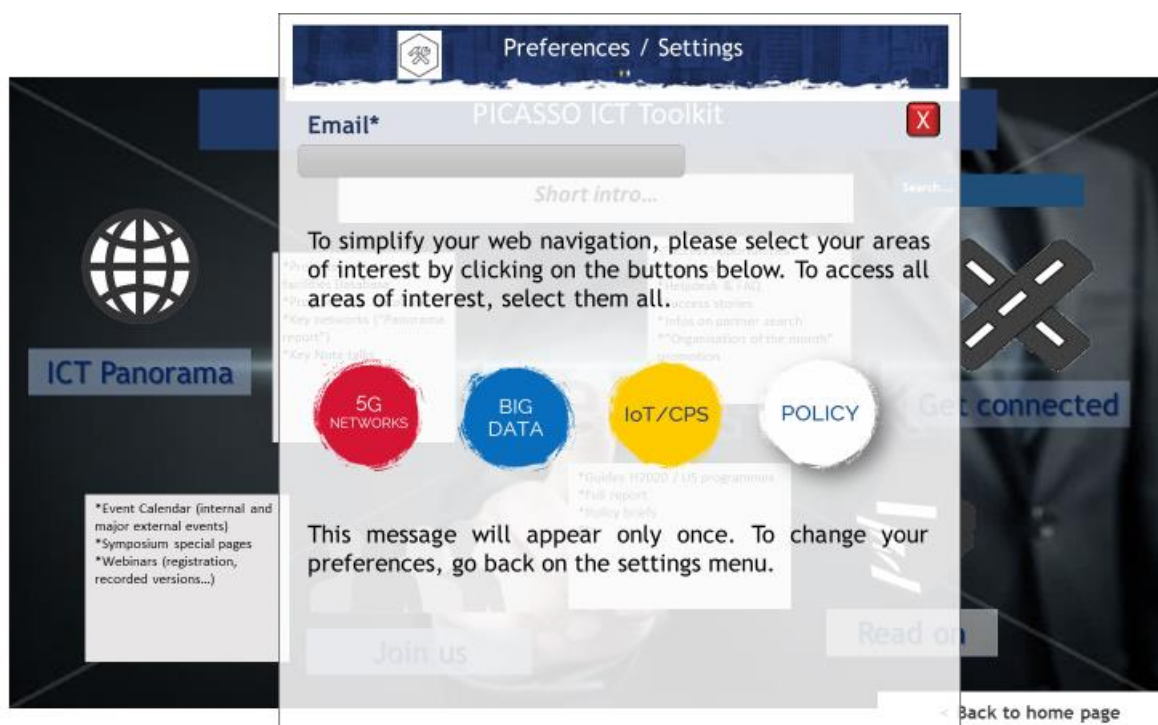
6. Annexes

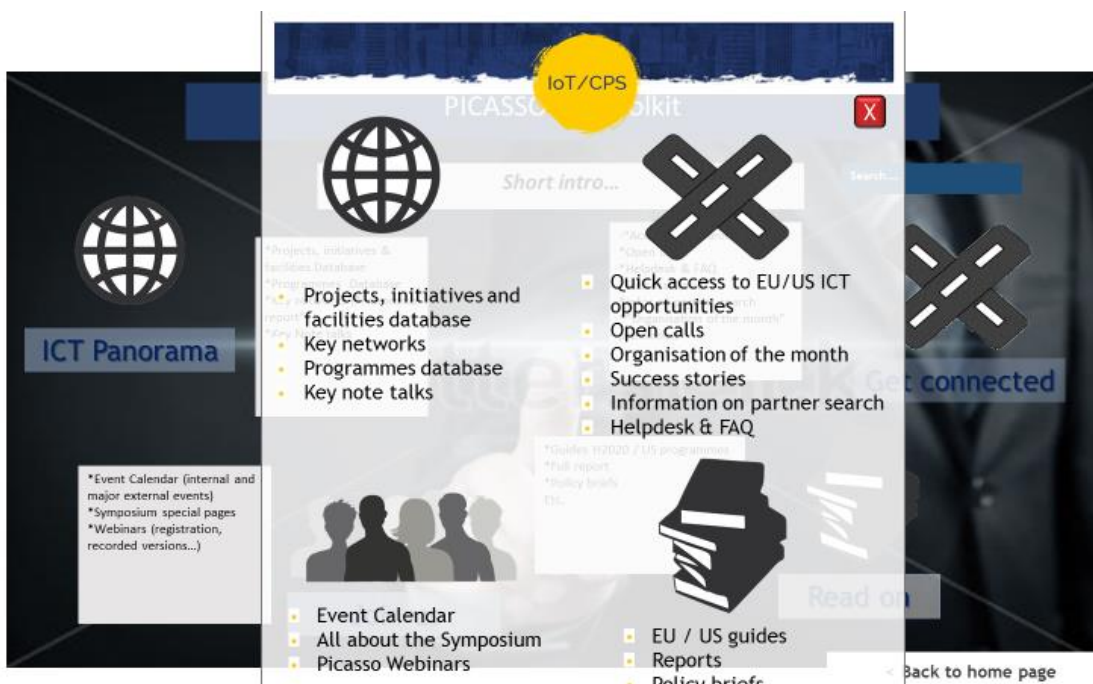
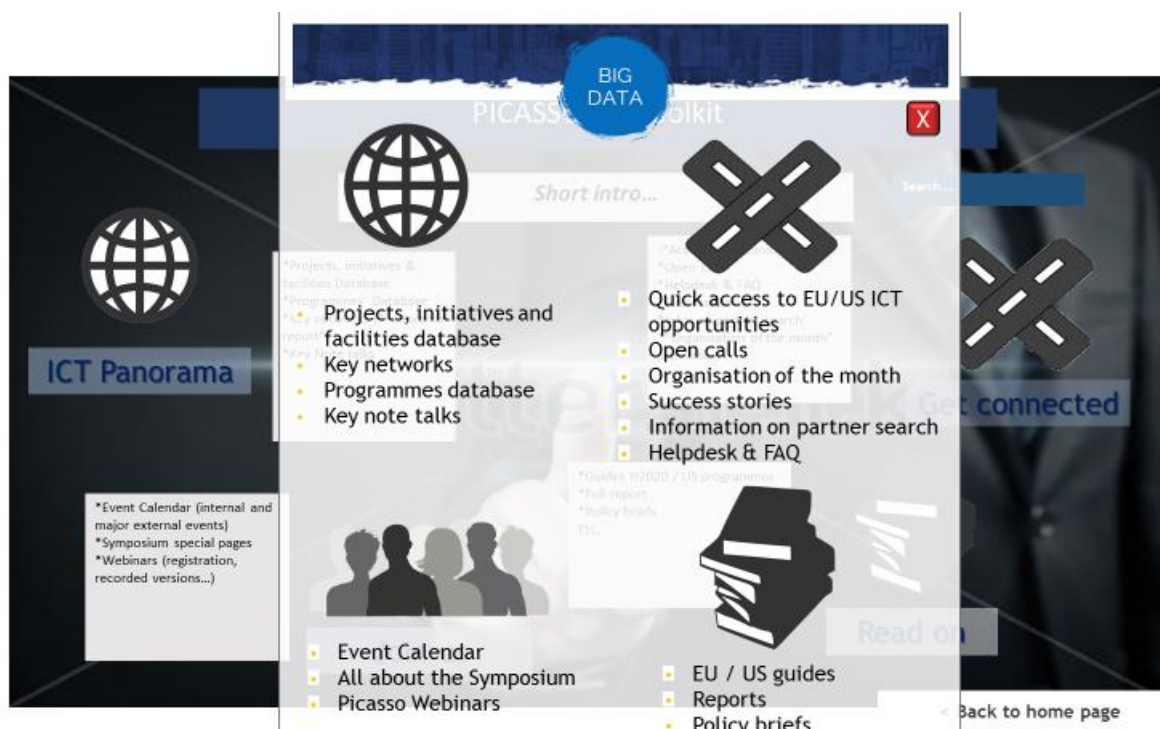
PICASSO CROSSROADS structuration and content

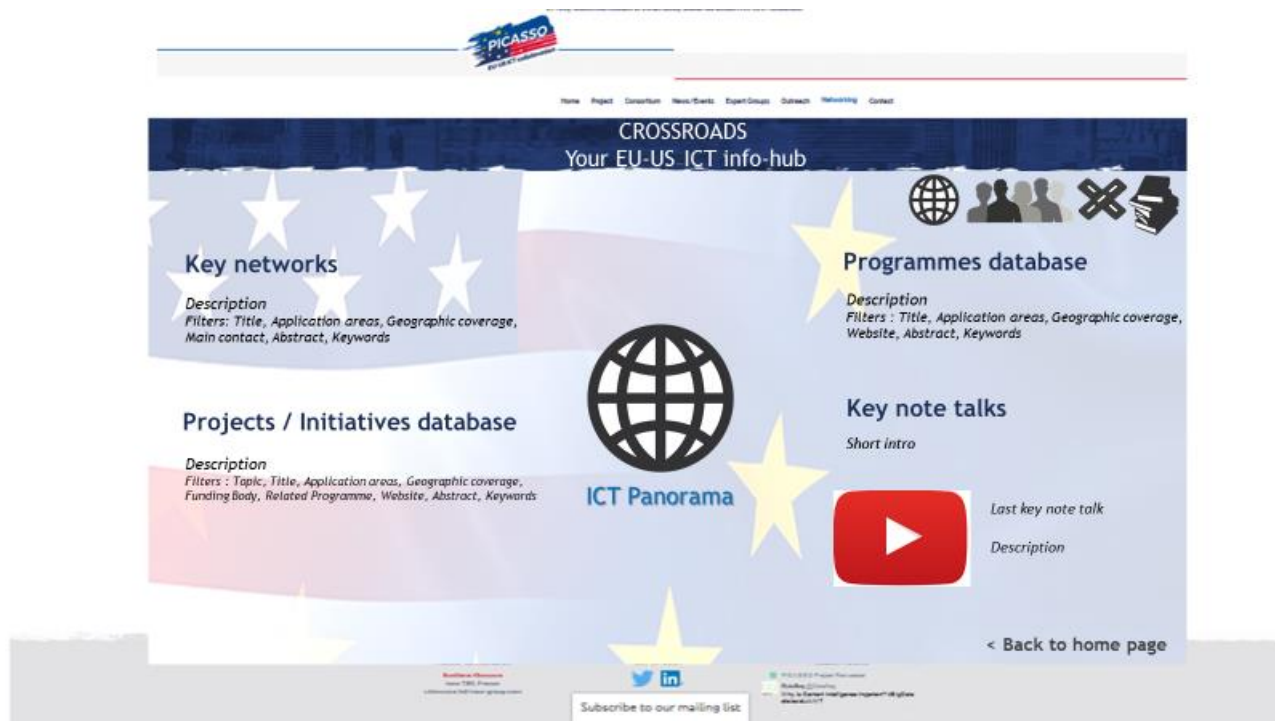
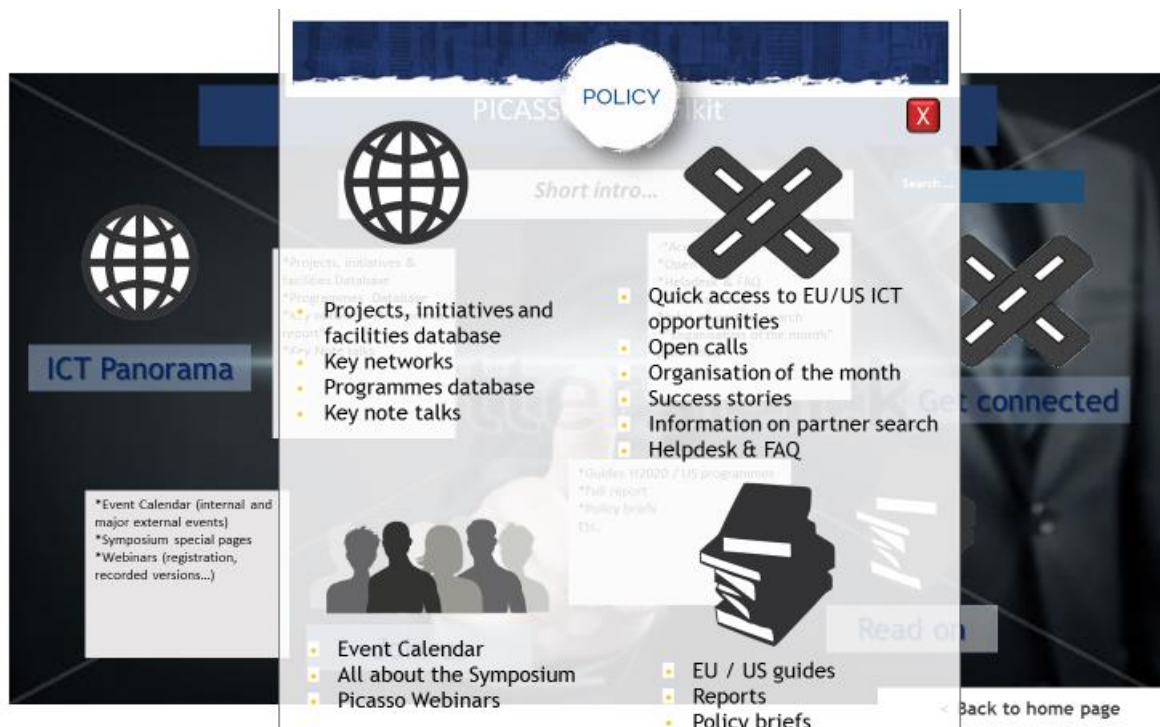
The following slides provide an overview of the structure planned for the website section that will equally be displayed in the mobile app (adapted to the device). It is meant to provide an idea on the content structuring without being exhaustive. Where necessary, content or display will be adapted to the technical possibilities and needs, as well as availability of data (e.g. data that is expected to be available later only can be displayed on the images below without being visible on the mobile app / website section from the beginning).

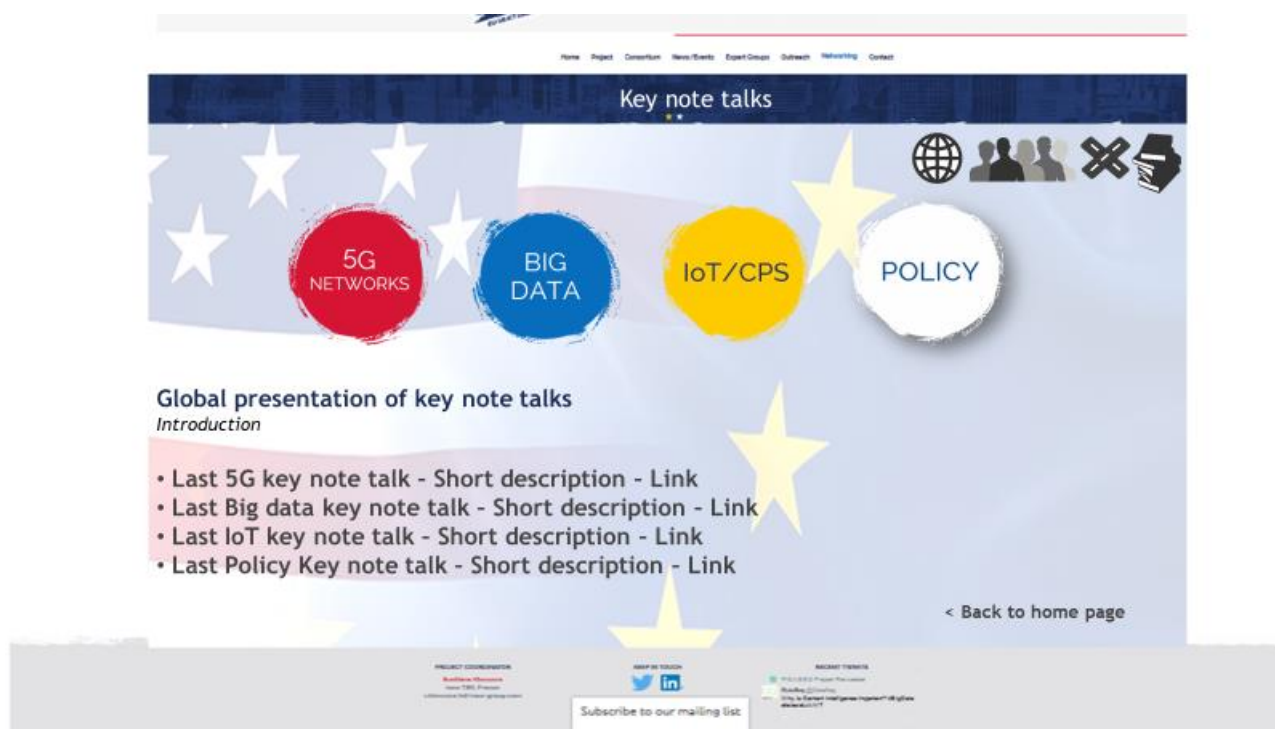
CROSSROADS Your EU-US ICT info-hub Suggestion Website Access











Home Project Consortium News/Events Expert Group Outreach Networking Contact

Key note talks

5G NETWORKS BIG DATA IoT/CPS POLICY

Global presentation of key note talks

Introduction

- Last 5G key note talk - Short description - Link
- Last Big data key note talk - Short description - Link
- Last IoT key note talk - Short description - Link
- Last Policy Key note talk - Short description - Link

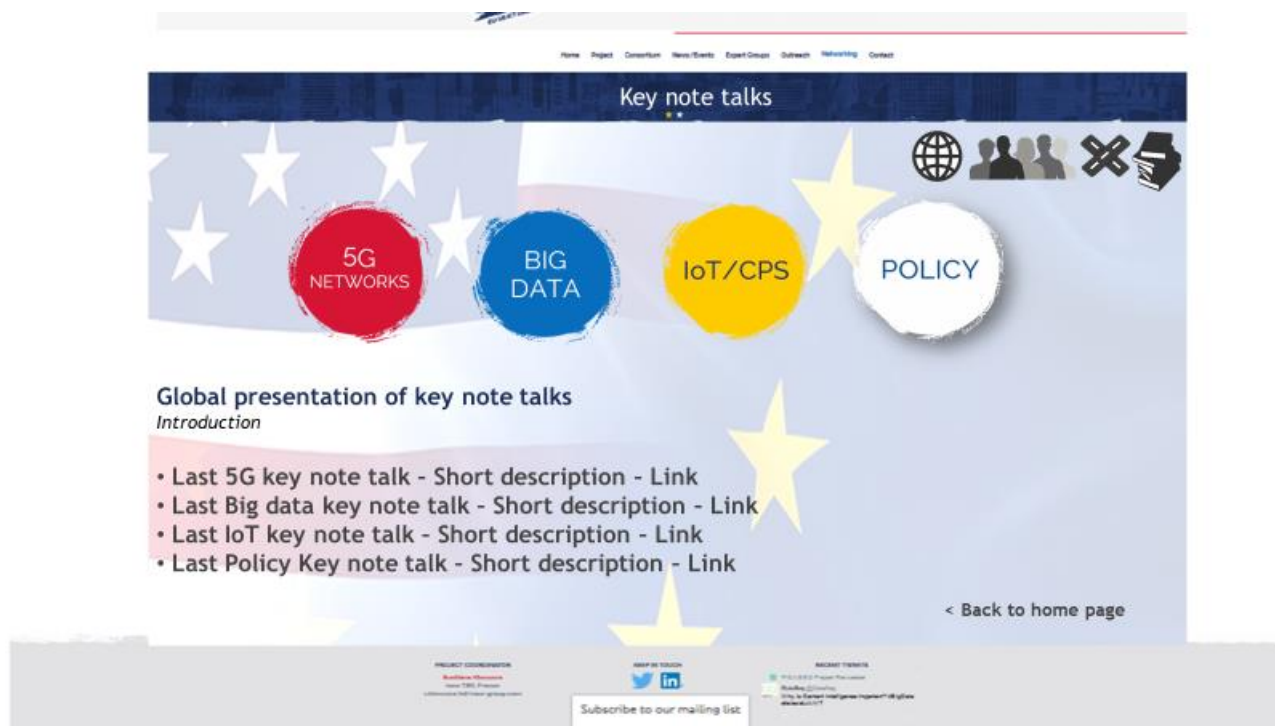
< Back to home page

PROJECT COORDINATOR
Bosch Research
Humboldt-Strasse 1
D-70569 Stuttgart, Germany

ASSOCIATE INSTITUTION
Twitter LinkedIn

PROJECT THEMES
5G Big Data IoT/CPS Policy

Subscribe to our mailing list



Home Project Consortium News/Events Expert Group Outreach Networking Contact

Key note talks

5G NETWORKS BIG DATA IoT/CPS POLICY

Global presentation of key note talks

Introduction

- Last 5G key note talk - Short description - Link
- Last Big data key note talk - Short description - Link
- Last IoT key note talk - Short description - Link
- Last Policy Key note talk - Short description - Link

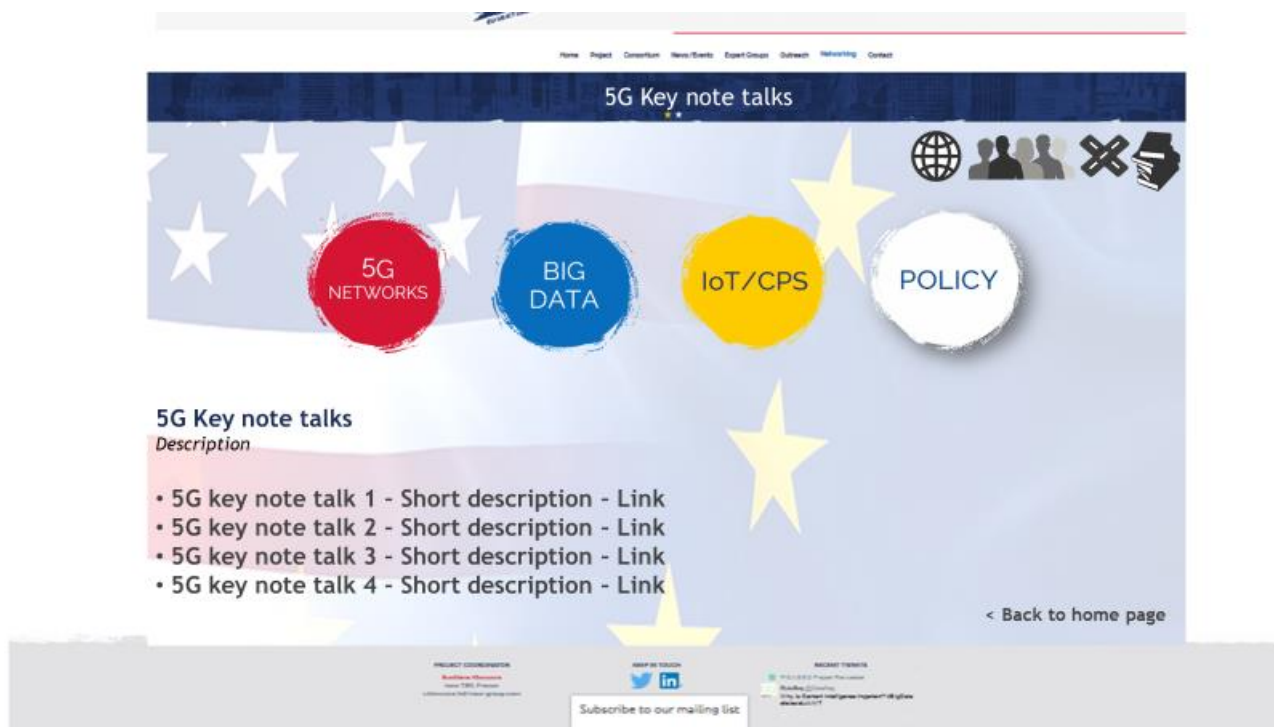
< Back to home page

PROJECT COORDINATOR
Bosch Research
Humboldt-Strasse 1
D-70569 Stuttgart, Germany

ASSOCIATE INSTITUTION
Twitter LinkedIn

PROJECT THEMES
5G Big Data IoT/CPS Policy

Subscribe to our mailing list



5G Key note talks

5G NETWORKS BIG DATA IoT/CPS POLICY

5G Key note talks
Description

- 5G key note talk 1 - Short description - Link
- 5G key note talk 2 - Short description - Link
- 5G key note talk 3 - Short description - Link
- 5G key note talk 4 - Short description - Link

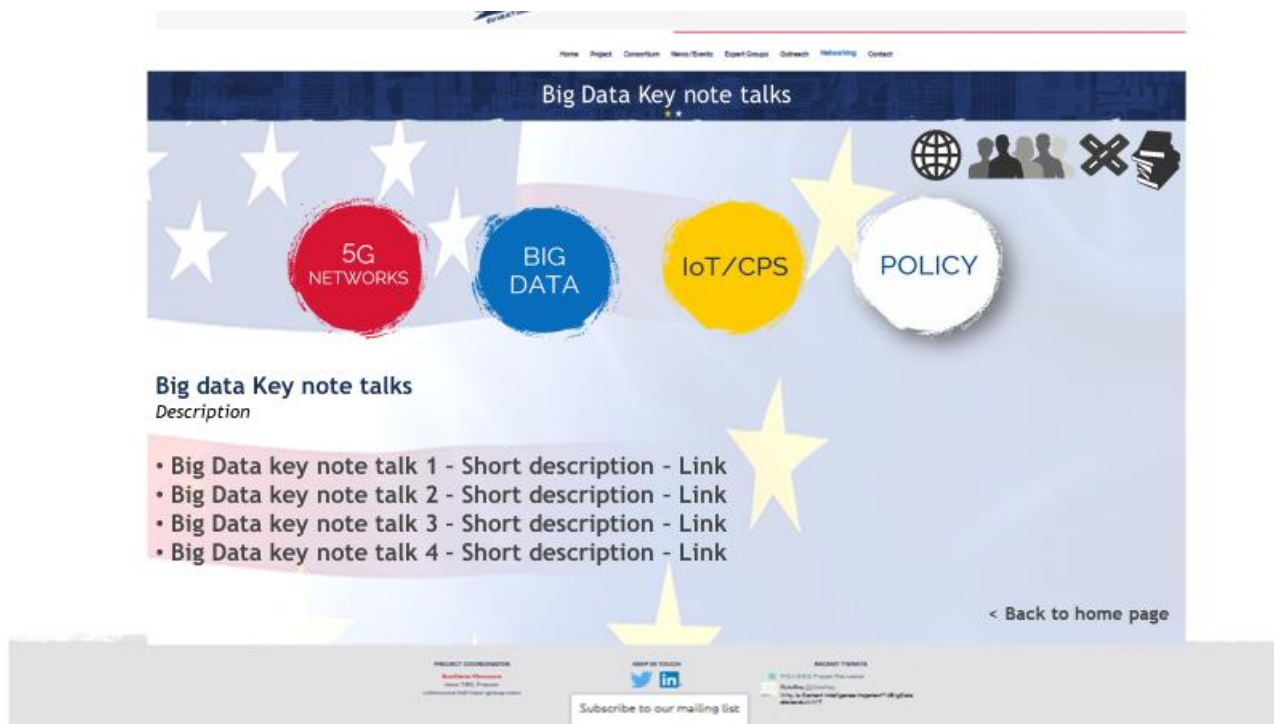
< Back to home page

PROJECT COORDINATION
Business Mission
Project 5G-4 Europe
collaboration with major groups across

ANALYSIS TOOLBOX
Twitter LinkedIn

SUBMIT TENDERS
Project 5G-4 Europe
Building 22/01/2017
Only in Europe (not in Germany) 18/01/2017

Subscribe to our mailing list



Big Data Key note talks

5G NETWORKS BIG DATA IoT/CPS POLICY

Big data Key note talks
Description

- Big Data key note talk 1 - Short description - Link
- Big Data key note talk 2 - Short description - Link
- Big Data key note talk 3 - Short description - Link
- Big Data key note talk 4 - Short description - Link

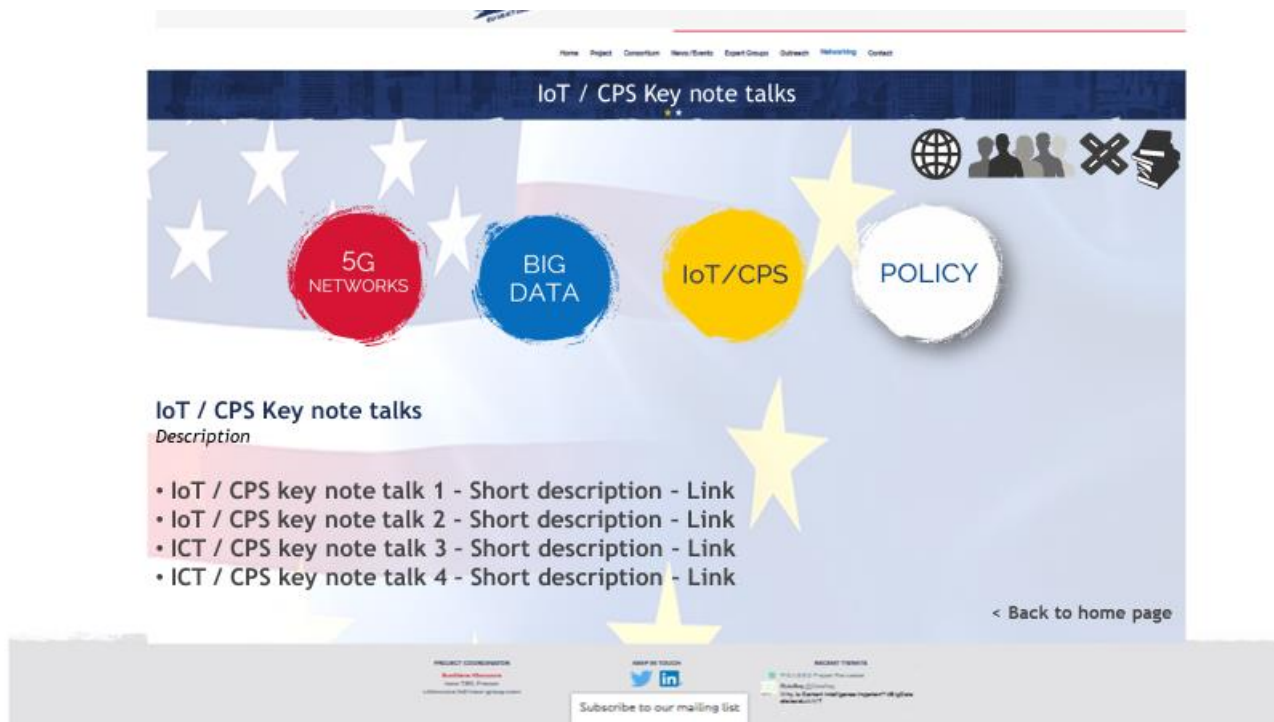
< Back to home page

PROJECT COORDINATION
Business Mission
Project 5G-4 Europe
collaboration with major groups across

ANALYSIS TOOLBOX
Twitter LinkedIn

SUBMIT TENDERS
Project 5G-4 Europe
Building 22/01/2017
Only in Europe (not in Germany) 18/01/2017

Subscribe to our mailing list



Home Project Consortium News/Events Expert Group Outreach Networking Contact

IoT / CPS Key note talks

5G NETWORKS BIG DATA IoT/CPS POLICY

IoT / CPS Key note talks

Description

- IoT / CPS key note talk 1 - Short description - Link
- IoT / CPS key note talk 2 - Short description - Link
- ICT / CPS key note talk 3 - Short description - Link
- ICT / CPS key note talk 4 - Short description - Link

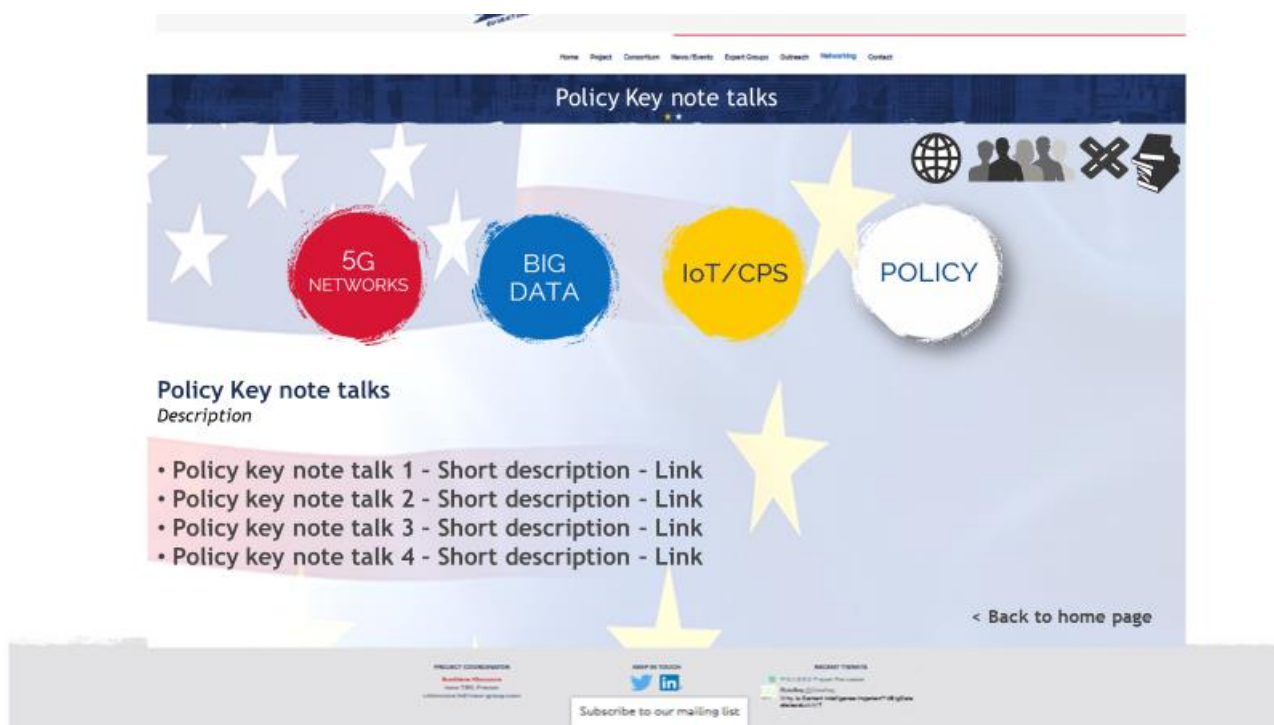
< Back to home page

PROJECT COORDINATOR
Boulevard de la Woluwe
1200 Brussels
Belgium

ASAP IN TOUCH
Twitter LinkedIn

SUBSCRIBE TO OUR MAILING LIST

RECENT TRENDS
IoT / CPS Project The latest
Building 2020
IoT in Europe and the impact of the
IoT / CPS



Home Project Consortium News/Events Expert Group Outreach Networking Contact

Policy Key note talks

5G NETWORKS BIG DATA IoT/CPS POLICY

Policy Key note talks

Description

- Policy key note talk 1 - Short description - Link
- Policy key note talk 2 - Short description - Link
- Policy key note talk 3 - Short description - Link
- Policy key note talk 4 - Short description - Link

< Back to home page

PROJECT COORDINATOR
Boulevard de la Woluwe
1200 Brussels
Belgium

ASAP IN TOUCH
Twitter LinkedIn

SUBSCRIBE TO OUR MAILING LIST

RECENT TRENDS
IoT / CPS Project The latest
Building 2020
IoT in Europe and the impact of the
IoT / CPS

