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Task Leader: **Brunel**
Author: **Brunel**

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SIGMA	SigmaOrionis	France
SPI	Sociedade Portuguesa de Inovação	Portugal
TORCH	Torch High Technology Industry Development Center	China
CATR	China Academy of Telecommunication Research	China
EUPIC	EU Project Innovation Centre	China

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Executive Summary

The CHOICE project provided continuity and progress in supporting and strengthening China Collaboration on Information and Communications Technology (ICT) research with Europe, offering timely input and follow-up on common ICT Research and Development (R&D) priorities and future cooperation opportunities between the EC and China, assisting in focusing dialogue meetings and increasing their visibility. The present document is a report on the work carried out by the project over the entire duration of the project (January 2014 – December 2015).

The report begins by introducing the project in terms of its key distinguishing features and its objectives and how it related to the topics of the call under which it was funded. A brief overview of the context in which the project operated is then provided, in particular the strategic vision of the project. The concrete outcomes of the project are then described. These are resources, available via the project websites, that have been developed by the project to support: The building of research proposals for EU-China collaborative ICT R&D; European nationals, companies and organisations to participate in Chinese research programmes; European and Chinese industrial cooperation and dialogue.

The public deliverables of the project can be downloaded from the project websites, one in English and a ‘mirror’ site in Chinese. As all but one of the project deliverables are public only an overview of the content of the project’s public deliverables is provided with the intention that, from the overview the interested reader can identify deliverables of interest to them and download them from the project website for more information.

The project organized four workshops bringing together representatives of European and Chinese industry in focused technical areas of ICT R&D to highlight European research excellence of relevance to China and Chinese research excellence of interest to Europe and provide inputs to EU-China dialogues on research that has the potential for initiating economic sustainable research cooperation with China outside of European funded research programmes. The project also delivered two one-day open events, one in China and one in Europe that involved presentations from European and Chinese representatives of national/regional governmental bodies, industries, research institutes, and included: High level, policy oriented session(s) involving Chinese and Europeans officials; Thematic session(s) based on “hot topics”, with a specific focus on showcasing cooperation success stories and EU research excellence; and networking oriented sessions. As reports on the workshops and events, and the slides of their speakers’ presentations, can be downloaded from the project websites overviews are provided to assist the interested reader in exploring further.

The last section of the report comprises two parts. The first part provides information on the cooperation agreements and collaborations that have been reached through the work of the project, the potential impact of project work in terms of policies development and implementation and standardization. Beyond this, the exploitation of the results of the project is in large part about the use of the resources developed by the project so effective dissemination is essential to exploitation. Accordingly, the second part of the last section provided information on the extensive dissemination activities of the project, in particular its social media presence.

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1 Summary description of the project context and objectives

1.1 The CHOICE project

The CHOICE project provided continuity and progress in supporting and strengthening China Collaboration on Information and Communications Technology (ICT) research with Europe, offering timely input and follow-up on common ICT Research and Development (R&D) priorities and future cooperation opportunities between the EC and China, assisting in focusing dialogue meetings and increasing their visibility.

The key distinguishing features of the CHOICE project are that it:

- Bridged towards H2020 emphasizing opportunities in China for the exploitation of H2020 and in particular its potential for contributing to increasing Chinese domestic demand;
- Focused dialogues towards research that has the potential for initiating economic sustainable research cooperation with China outside of European funded research programmes;
- Provided online helpdesk services in English and Chinese for European and Chinese researchers in the ICT field.
- Delivered a roadmap which provides a sustainability strategy for EU-China research cooperation beyond FP7;
- Delivered an action plan, which provides a sustainability strategy for EU-China research cooperation outside of European funded research programmes;

1.2 Project objectives

The main objectives of the project were to:

- Identify, bring up to date and specify ICT cooperation themes and policy priorities;
- Reinforcement of industrial ICT R&D cooperation, notably through better networking between ICT ETPs and relevant associations in third countries
- Enhance industrial cooperation through, the identification of industry R&D potential and pioneers, insight reports on relevant associations, and liaison activities with EU ICT Technology Platforms
- Support policy dialogue and its visibility through the organisation of events synchronized with dialogue meetings and the assessment of policy actions and progress;
- Assist and encourage EU organisations/individuals willing to access Chinese programs through e.g. awareness raising activities and identification of best practices.
- Identify synergies between H2020, Digital Agenda for Europe's international pillar, EC horizontal actions and MS/AC programs and Chinese national/provinces' ICT strategies;
- Increased coordination at the EU level with horizontal FP instruments and relevant EU MS/AC programs;

The activities implemented to achieve these objectives and the outputs obtained from them are detailed in Section 2.

1.2.1 *How project objectives related to topics addressed by the call*

The CHOICE project targeted the Objective ICT-2013.10.3 “International partnership building and support to dialogues” of the ICT FP7 work programme for 2013, and more specifically its Target outcome “Support dialogues between the European Commission / the EU and strategic partners countries and regions, and foster cooperation with strategic third country organisations in collaborative ICT R&D both within the EU’s Framework Programs (FP7, H2020) and relevant third country programs”. Target countries included China, which is a strategic partner for Europe.

The comprehensive objective of the CHOICE project was to strengthen ICT R&D collaboration between China and the European Union and to support EU-China policy dialogue in the ICT field. This objective is totally in line with Objective ICT-2013.10.3. Moreover, the work programme mentioned specific activities that could usefully be developed:

- Identification and analysis of ICT research priorities, provision of recommendations for future cooperation initiatives and organisation of events synchronized with policy dialogue meetings;
- Facilitation of access of European organisations to third-country programs and strengthening of research links with the aim of establishing sustainable cooperative mechanisms and platforms;

1.3 The Context

1.3.1 *Key Institutions and Organisations Dealing with ICT in China*

- The Ministry of Science and Technology (MoST) is in charge of formulating and implementing China’s Science and Technology policies. It coordinates science and technology activities in China and is the central government’s main funding agency for national science and technology programmes;
- The Ministry of Industry and Information Technology (MIIT) was created by the State Council in 2008. It oversees the IT sector, approves industry standards, promotes technology innovation and ensures China’s information security;
- The Chinese Academy of Sciences (CAS) the main research institute in China, acting as an executive agency managing over 97 research institutes;
- The TORCH High Technology Industry Development Centre was established to organize the implementation of a Chinese high-tech industry development plan, approved by the Chinese government in 1988. Torch is market oriented. It promotes the commercialization of China’s high-tech achievements, industrialization of new and high technology products and high-tech industry internationalization.
- The China Communications Standards Association (CCSA), created by Chinese enterprises and institutes with MIIT approval, carries out ICT standardization activities;

1.3.2 EU-China ICT R&D Cooperation

DG CONNECT is presently involved in two on-going dialogues with China:

1. Dialogue on ICT Research with MoST
2. Dialogue on Information Technology, Telecommunications and Informatisation with the Chinese Ministry for Industry and Information Technology (MIIT)

DG CONNECT and MoST/MIIT jointly established the following EU-China expert groups with the aim of developing efficient dialogue mechanisms:

- The Expert Group on Future Internet/IPv6 was established in 2010 by DG CONNECT and CATR. A cooperation plan on future Internet/IPv6, to be coordinated by contact persons from both sides, has been agreed¹.
- The EU-China IoT Advisory Group², was established in February 2011. Chinese members, are mainly from national research institutes and enterprises including CATR, China Mobile, China Unicom, and ZTE. EU members are mainly IoT project members under FP7.
- The EU-China Green Smart City Expert Group, was established by the European Commission and MIIT in 2011. Its focus includes: Solving problems arising from the process of urbanization by extensive and in-depth ICT application, selecting demonstration cities in the EU and China for cooperation on smart cities, and creating more opportunities for industry from the realization of smart cities and further promoting EU-China cooperation in this area.
- The EU-China Broadband Policy Expert Group³, the first meeting took place in December 2012, was established by MIIT and the China Academy of Telecommunications Research on the Chinese side, and DG CONNECT on the EU side.

1.3.3 Building on previous projects

In order for CHOICE project to effectively build on previous projects, a mapping of the most notable outputs of these projects has been done, as shown in the table below.

¹ http://ec.europa.eu/information_society/activities/internationalrel/dialogue_coop/china/index_en.htm

² http://www.internet-of-things-research.eu/pdf/IERC_Newsletter_Volume_2_Issue_1_2011.pdf

³ <http://www.eu-chinapdsf.org/english/home.asp>

Table 1 - Mapping of outputs of previous FP7 projects targeting ICT R&D cooperation with China, including Euraxess Links China and Erawatch

General R&D context	Erawatch*
Current status of ICT R&D	SPICE
ICT programs & policies	ChinaACCESS4EU*, Erawatch*
Key ICT actors (e.g. main research centres, researchers, etc.)	SPICE
Funding opportunities for EU researchers	ChinaACCESS4EU*, Euraxess Links China*, Erawatch*
SWOT analysis research cooperation with the EU	SPICE
Success stories and lessons learnt	ChinaACCESS4EU*
NCPs training	BILAT SILK
Cooperation priorities with the EU	OpenChina-ICT, SPICE, BILAT SILK*

- ChinaACCESS4 EU, Euraxess Links China, BILAT-SILK and Erawatch do not focus on ICT R&D cooperation but have a wider focus on EU-China R&D cooperation in the field of Science and Technology

The OpenChina-ICT project identified and analysed ICT policy and research priorities in China and aligned them to European priorities. This led to the formulation of a EU-China ICT Cooperation Plan that was the main output of the OpenChina-ICT project and was intended to provide guidelines for the European Commission and DG CONNECT on promoting international cooperation in ICT between Europe and China. The CHOICE project aimed at building on and exploiting the achievements and outputs of the OpenChina-ICT project and following up on activities implemented by the OpenChina-ICT project.

The CHOICE project took great advantage of the expertise, knowledge and networks developed in the framework of the ChinaACCESS4EU project. The ChinaACCESS4EU project coordinator SPI is a member of CHOICE consortium. ChinaACCESS4EU produced many fact-sheets of Chinese research funding programmes and extensive lists of more than 3000 key stakeholders in Europe and China (including research organisations, universities, national/regional agencies, and industrial organisations), analysed case studies of European researchers participating in Chinese funding programmes and drafted a Strategy Paper for enhancing reciprocity in EU-China S&T Cooperation. The ChinaACCESS4EU website worked as a platform for European researchers to search for funding opportunities in China. Although CHOICE and ChinaACCESS4EU do not have entirely the same objectives, The CHOICE consortium analysed the obstacles encountered by the ChinaACCESS4EU project and elaborated contingency plans to avoid similar difficulties. The ChinaACCESS4EU Strategy Paper called for increased cooperation between EU and EU MS/AC S&T collaboration initiatives with China, and CHOICE dedicated a specific task to developing synergies with EU MS/AC initiatives in the field of ICT research.

The CHOICE partners took into consideration other sources of valuable information. Detailed background information on the general context of Chinese research systems, policies, and programs can be found on the ERAWATCH portal⁴, which is a long term initiative jointly carried out by the European Commission's Joint Research Centre - Institute for Prospective Technological Studies (JRC-IPTS) and the Directorate-General for Research and Innovation (DG RTD) in close collaboration with the Directorate-General for Enterprise and Industry (DG ENTR).

1.3.4 *Strategic vision of the CHOICE project*

The core purpose of the CHOICE project included promoting European excellence in ICT R&D. From a strategic point of view the key is that this excellence is represented not just in scientific and technological expertise but in a whole approach to transnational cooperation and using ICT to meet pressing societal needs, consumer aspirations, and improve the quality of life of citizens of the EU. The evolution of this coherent body of excellence is embodied in Horizon 2020. The project partners firmly believe that the approach taken by Horizon 2020 to the concept of excellence in ICT R&D offers significant potential for assisting the Chinese Government in meeting its aspirations for its citizens and society while at the same time making Chinese policy makers very aware of the possibilities for achieving these aspirations through engaging in ICT R&D activities with EU partners. For European industry, engaging in ICT R&D in China in the spirit of Horizon 2020 has the potential to provide EU industry with major market opportunities. With this in mind CHOICE sought to reinforce strategic partnerships with China in areas of mutual interest and added value by jointly addressing important issues. In doing so it provided increased visibility for EU ICT R&D activities and research excellence. CHOICE sought to reinforce industrial cooperation on leading edge ICT research and development, notably through a better networking between European ICT Technology platforms and relevant Chinese associations.

1.3.5 *EU-China Cooperation on ICT research: what needed to be done*

1. Identify obstacles to reciprocity and encouraging a more balanced relationship with China based on reciprocity, especially supporting European nationals, companies and organisations willing to access Chinese research programmes;
2. Highlight and showcase both EU and Chinese excellence in ICT R&D;
3. Strengthen EU-China industrial ICT R&D cooperation, also with the view of preparing the ground for new upcoming rules governing EU-China ICT R&D cooperation under Horizon 2020 (H2020).

⁴ <http://erawatch.jrc.ec.europa.eu/>

2 Main Scientific and Technical results/foregrounds

2.1 Concrete outcomes of CHOICE

The CHOICE project has delivered concrete outcomes, which include:

Resources supporting research and dialogue on EU-China S&T R&D cooperation in ICT

An interactive web platform

- An interactive web platform that provides the latest information on EU-China S&T R&D cooperation in ICT as of December 2015; www.euchina-ict.eu and www.euchina-ict.cn

A virtual community of stakeholders

- A virtual community of stakeholders supporting research and dialogue on ICT on LinkedIn, Twitter and Weibo;

The above two outcomes are core parts of the dissemination activities of the project which are reported more fully in section 3 of this report.

Project e-books

- The CHOICE project has produced three electronic books taking over the content of some deliverables. The objective was to make the project findings more attractive and accessible to the reader.

At M16 (April 2015), The first e-book, based on the content of deliverable D2.4 “Handbook for ICT Industrial Support Services”, presents support mechanisms and structures in China that facilitate European ICT based firms’ interaction with the regulatory framework and standards in China in the field of ICT. The second one, based on the content of deliverable D2.2 “Information package for European researchers – 1st end of year report” provides EU researchers with the list of all Chinese-funded research programs that fund EU- China collaborative ICT R&D&I. At the end of December 2015 (M24), the Consortium updated the “Information package for European researchers” e-book based on the content of deliverable D2.6 “Information package for European researchers – 2nd end of year report”. In addition, the consortium produced one additional eBook providing a roadmap and the subsequent action plan for a strengthened and sustainable EU-China ICT R&D&I cooperation. This third and last e-book is based on the content of deliverable D1.3 “Updated roadmap for EU-China cooperation beyond FP7” and deliverable D1.5 “CHOICE Action Plan”.

2.1.1 *Resources supporting research proposal building*

Two webinars

- Two webinars that illustrate key features of the European Commission’s Digital Agenda for Europe (DAE), the Horizon 2020 (H2020) programme and the future of EU-China ICT R&D cooperation; Reported in D2.3 Webinars on the ECs DAE, H2020 and future of EU-China ICT R&D cooperation, overviewed later in this section.

An online database

- An online database that provides information on relevant EU-China, and Member State/Associated Countries (MS/AC) projects with China and the organisations that participated in them, to support coordination and EU and China experts to find more opportunities for other research topics and partners for their future cooperation; Reported in D3.1 Online database of China - EU MS/AC projects and relevant EU projects - Report on database and D3.2 Online database of China - EU MS/AC projects and relevant EU projects - Report on updates to and use of database, overviewed later in this section.

An "Ask an expert" online service and FAQ section

- An "Ask an expert" online service for English and Chinese researchers in the ICT field looking for support and guidance in the development of joint research projects together with a FAQs section of the website which details the responses to frequently asked questions from the "Ask an Expert" service, as well as the inputs from the queries received during the project events; The project team identified 55 queries in total, and all of these queries have been gathered and updated into the CHOICE project website <http://euchina-ict.eu/faqs/>.

2.1.2 *Resources supporting reciprocity*

An information package

- An information package, to assist and encourage EU researchers and organisations willing to access Chinese programs; It provides an analysis of relevant Chinese national agencies and programmes in ICT R&D and an overview of the Chinese sources of funding for EU-China collaborative ICT R&D&I and guidance for application submission; Reported in D2.6 Information package for European researchers – Second end of year report, overviewed later in this section.

2.1.3 *Resources supporting industrial cooperation and dialogue*

An online mapping

- An online mapping of Chinese and EU industrial associations, to support industrial cooperation, and project Deliverable 2.7 "Online mapping of Chinese and European ICT industrial associations –final report" which provides an overview of Chinese ICT industrial associations that are a Chinese priority for collaboration with the EU; Deliverable 2.7 also lists other Chinese ICT industrial associations, EU level ICT industrial associations, and the ICT European Technology Platforms (ETPs) and Public Private Partnerships (PPPs). It maps Chinese associations to EU associations and to ETPs and PPPs based on subject area match.

A handbook for EU based ICT firms

- A handbook for EU based ICT firms presenting support mechanisms and structures in China that support the development of national regulations and standards for emerging ICT technologies so that EU firms can engage with these processes. It presents the current policy framework within which new Chinese regulations and standards for emerging ICT technologies are being developed. The China Communications Standards Association (CCSA) is the organization in charge of drafting the standards of the Chinese ICT industry. Chinese ICT industry associations that have a

role in making policy recommendations to the CCSA are listed; Reported in D2.4 Handbook for ICT Industrial Support Services, overviewed later in this section.

Strengthened strategy for EU-China ICT R&D research collaboration

A roadmap together with an action plan

- A roadmap towards a strengthened EU-China ICT R&D cooperation strategy for EU-China research cooperation beyond FP7 together with an action plan based on the roadmap have been developed by the CHOICE project that provide a sustainability strategy for EU-China ICT R&D&I cooperation outside of European funded research programmes. The action plan includes actions proposed for EU stakeholders in EU-China ICT R&D to support them in being proactive in pursuing collaboration with China in ICT R&D and actions targeted at the European Commission intended to provide a sustainability strategy for activities around regulation, standardization and policies development and implementation; Reported in D1.3 E-book “Roadmap towards strengthened EU-China ICT R&D cooperation” – second end of year report and D1.5 CHOICE Action plan, overviewed below.

2.2 Project deliverables

All but one of the deliverables of CHOICE are public and all are intended to be useful resources. The public project deliverables are available from the CHOICE websites. Also available on the websites are detailed reports on the four workshops and two events delivered by the project, which are overviewed later in this report, together with the slides of all the presentations given at them. An overview of the contributions of the CHOICE deliverables will now be provided. Many of the project deliverables were intermediate end of year one, progress type, reports so only the contributions of final versions of deliverables are reported.

D1.3 E-book “Roadmap towards strengthened EU-China ICT R&D cooperation” – second end of year report and D1.5 CHOICE Action plan

Deliverables D1.3 and D1.5 are reported together as the action plan comprises actions that will help in meeting the roadmap goals.

What the CHOICE roadmap and action plan make clear is that the main priorities at the EU level with respect to ICT R&D&I collaboration with China need to be on cooperation in a context of policies driven research and dialogues focused towards standardization and regulatory initiatives that have the potential for initiating economic sustainable cooperation with China. This has the merit of benefiting all member states as standardisation and regulation for open markets reduces ICT related unit costs for all member states. A further added benefit of the above approach is that it accommodates the reality that EU member states involved in bilateral collaboration with China are often direct competitors in Chinese markets and, where they are not, have a tendency to be involved different fields across which best practice sharing is difficult or not meaningful.

Internal reports

The CHOICE roadmap and action plan are supported by appendices which are CHOICE project

internal reports on specific aspects of EU-China ICT R&D&I cooperation that were investigated in course of developing the CHOICE roadmap and action plan. Some of these reports are very useful documents in their own right and all but one are available for download as stand alone reports from the CHOICE website. The following reports are considered by the project team to be particularly useful to stakeholders in EU-China collaborative ICT R&D&I:

CHOICE Internal report I-2 Chinese regional and local funding bodies for Scientific and Technical research.

- In this report it is shown that to understand the structure of the Chinese local government offices funding S&T research it is necessary to be aware of where they are located in the hierarchy of Chinese administrative divisions. The activities of a sample of Chinese local government offices funding S&T research are reviewed according to the type of administrative division to which they belong starting with the most important divisions and progressing down the hierarchy. Conclusions are presented followed by recommendations on how a EU organisation could explore the potential for collaborative ICT R&D&I with a Chinese regional or local funding body.

CHOICE Internal report I-3 EU member state cooperation with China in ICT R&D&I: Bilateral cooperation in ICT R&D&I

- In this report EU member states bilateral programmes of cooperation with China in ICT R&D are reviewed. Conclusions are presented followed by recommendations targeted at organisations in EU member states interested in exploring the potential for bilateral collaborative ICT R&D with Chinese organisations.

CHOICE Internal report I-4 The current status of ICT R&D&I for Chinese Eco-Cities: The implications for EU-China collaboration in ICT R&D&I

- This report attempts to give a flavour of the current of status of ICT R&D&I for Chinese Eco-cities and thereby provide some insights into the potential of China's emerging market for Eco-city solutions for EU-China collaborative ICT R&D&I. It addresses Eco-city standards development in China, Evaluation Centres for Eco-City software solutions, the context into which ICT for Chinese Eco-cities fits, Chinese ICT R&D in smart cities, EU-China collaboration in ICT R&D smart cities, EU Member states bilateral cooperation with China on ICT R&D for Eco-cities, Chinese smart city industry alliances, other Chinese industry alliances active in eco-friendly cities, Wuhan Intelligent City, and current concerns related to the market situation for the EU ICT industry. Conclusions are followed by recommendations targeted at organisations in EU member states interested in exploring the potential for collaborative ICT R&D&I with Chinese organisations targeted at China's emerging market for Eco-city solutions.

CHOICE Internal report I-5 Clustering for Success: Cluster to establish EU-China collaborative ICT R&D&I

- A lot of work has been done which highlights the important role clustering plays in the establishment of EU-China collaborative activities in ICT R&D&I. This report reviews much of this work and in doing so provides an overview of different approaches to clustering that have been taken and their effectiveness. Conclusions are presented and recommendations made which are targeted at organisations interested in establishing collaborative ICT R&D&I activities with China.

CHOICE Internal report I-6 Support available for innovation in ICT R&D&I in China: Protecting IPR

- This report reviews support available to EU organisations for innovation in collaborative ICT R&D with China. In particular, attention is paid to the extent to which this support addresses Intellectual Property Rights (IPR) related concerns. The report discusses the context of the issues around IPR protection in China, reviews the support for IPR protection in China available to EU organisations at the member state and EU level, support provided by the European Chamber of Commerce in China, guidance from UK Trade & Investment, and provides an overview of Chinese industrial associations and centres, and Chinese Science and Technology Bureaus, with an interest in promoting IPR protection. Conclusions are drawn and recommendations made which are targeted at organisations concerned about ICT related IPR protection in China.

Appendix 7 of D1.3, D1.5 comprises:

Recommendations for more productive EU-China Dialogue

The EU-China Dialogue on Information Technology, Telecommunications and Informatization (ITTI) was established in 2009 between the Ministry of Industry and Information Technology of the People's Republic of China (MIIT) and the European Commission Directorate General for Communications Networks, Content & Technology (EU DG CNECT). The dialogue, as a high-level cooperation mechanism between the EU and China, is a good platform that has positively pushed EU-China ICT cooperation and achieved fruitful and practical outputs.

The CHOICE project has proposed recommendations to make the Dialogue more productive: Each Dialogue meeting should be preceded by a preparatory or 'scoping' meeting at which specific priority topics within the strategic areas to be discussed at the meeting can be identified. This will enable suitable contact persons to be invited to the Dialogue meeting who are in a position to act on actions agreed on topics discussed at the Dialogue meeting. The implementation of agreed actions on topics should be dealt with outside of the Dialogue meetings by working groups of experts that would agree an action plan and roadmap and would present a brief report on their work to a later Dialogue meeting.

D1.4 Post workshops reports linked to roadmaps for sustaining EU-China research cooperation beyond FP7 – Second end of year report

D1.4 provides a summary of the presentations of the four CHOICE project workshops and plenary discussions. The outputs of the workshops are highlighted to provide recommendations to policy makers and contribute to the elaboration of the CHOICE final roadmap and action plan. An overview of these workshops is provided in a later subsection of this report.

D2.3 Webinars on the ECs DAE, H2020 and future of EU-China ICT R&D cooperation

D2.3 aims to summarize the main results obtained from the two CHOICE project webinars organized between September and December of 2014. Both webinars were structured and designed under WP2 of the project – Fostering cooperation, more specifically Task 2.1 “Supporting ICT R&D cooperation and reciprocity”. The Webinars aimed to:

- Improve communications and mutual learning channels between EU and Chinese NCPs. The project aims to ensure that EU National Contact Points (NCPs) help their Chinese counterparts to

build up knowledge on Horizon 2020 and related ICT programmes.

- Address Chinese NCPs/Regional Contact Points' (RCPs) specific needs for information arising from the implementation of Horizon 2020, as from the DAE in China.

The Webinar entitled “DIGITAL AGENDA FOR EUROPE (DAE) AND HORIZON 2020 (ICT)” - aimed at improving effectiveness of communication and expanding mutual learning channels between the EU and Chinese National Contact Points (NCPs), building up knowledge on Horizon 2020, its related ICT programmes, as well as on the DAE in China.

The webinar was an informative one-hour session, including the introduction to CHOICE, DAE, H2020 opportunities for China, as well as a discussion session. To promote the webinar, the project team developed an e-mail invitation, both in English and in Chinese, and sent it to a wide range of contacts from SPI and other partners from the CHOICE project. The invitees included a variety of different types of stakeholders, such as representatives from Chinese and European research institutes and universities, private companies, governmental bodies, as well as European and Chinese NCPs. The invitation email was sent a number of times since its first dissemination (2nd of September) in order to remind stakeholders of the event.

In total, the webinar had 36 registrations, 13 of those coming from China. In addition, European participants represented a wide range of countries including Austria, Belgium, France, Germany, Italy, Portugal, Romania, Spain, Switzerland and the UK. In order to increase the number of participants, several efforts were taken for the Second Project Webinar.

The Webinar entitled “FUTURE OF EU-CHINA ICT R&D COOPERATION” - aimed at improving effectiveness of communication and expanding mutual learning channels between the EU and Chinese National Contact Points (NCPs), addressing Chinese NCPs/RCPs' specific needs for information arising from the implementation of Horizon 2020.

The webinar lasted for more than one hour, and included three presentations from different external speakers. To promote the webinar, the project team developed an e-mail invitation, both in English and in Chinese, and sent it to a wide range of contacts, including EU and Chinese NCPs, Advisory Board Members, EU Chambers of Commerce in China and other contacts from the different project partners. In addition, the webinar was also promoted through social networks (including LinkedIn and Facebook), as well as through press releases developed by SPI, which were disseminated on several media channels (Project Website, SPI Website and Online Newspaper). In total, the webinar had 41 registrations: the participants represented a total of 12 different countries, including Belgium, China, France, Germany, Italy, Latvia, Luxembourg, Netherlands, Portugal, Romania, Switzerland and the UK. The invitees included a variety of different types of stakeholders, such as representatives from Chinese and European research institutes and universities, private companies, government bodies, as well as European NCPs. The invitation e-mail was sent several times since its first dissemination (1st of December) in order to remind stakeholders of the event.

D2.4 Handbook for ICT Industrial Support Services

The intention of D2.4 is that it provides information that will facilitate the participation of European based ICT firms in the processes by which Chinese regulations and standards for emerging ICT technologies are developed. It begins by presenting the current policy framework within which new regulations and standards for emerging ICT technologies are being developed. Financial support for

such development is provided through the annual Electronic Development fund. The process of tendering for funding from this fund is outlined. A provide a brief overview of the socialised service system is then presented. This is the system of industry associations and related bodies whose members contribute to the development of the Chinese ICT regulations and standards. These bodies are important contact points for European based ICT firms interested in issues around ICT related standardisation in China and the development and implementation of Chinese regulations in area of ICT. Furthermore, as they commonly have a role in making policy recommendations for the development of technology and equipment in the ICT industry to the Chinese government, they have the potential to act as conduits through which European ICT firms can contribute recommendations in the common interest to the China Communications Standards Association which is the organization in charge of drafting the standards of the Chinese ICT industry.

D2.5 1st Annual Electronic Report on ICT Industrial and Research Cooperation.

In D2.5 the global role of the Enterprise Europe Network (EEN) in providing European SMEs with supporting services as regards technological innovation, transformation of scientific achievements, and economic cooperation and trade is introduced. In this context the specific role of the EEN West China established by the EU Project Innovation Centre (Chengdu) (EUPIC) is outlined. From June 11, 2014 to June 21, 2014, a European Trip 2014 of Technology-based Enterprises was carried out in Belgium, Czech Republic and Germany under the organization of the Science and Technology Bureau of Hi-tech District, Chengdu, the Economic and Trade Development Bureau of Hi-tech District, Chengdu, and CHOICE partner EUPIC, which was supported by the CHOICE project. The activities of this trip are described and the Annex of D2.5 lists ten cases of EU-China ICT Research and Development and Innovation (R&D&I) collaboration that resulted from this trip. D2.5 gives the background to the EU-China Business & Technology Cooperation Fair organised annually by EUPIC, it then goes on to provide an overview of the current status of the outcomes of the ICT related business to business matching that took place at the 9th Edition of the Fair that took place in Chengdu, China, on 23rd October 2014 and which was supported by the CHOICE project.

The cases presented in D2.5 of EU-China ICT Research and Development and Innovation (R&D&I) collaboration that resulted from the European Trip 2014 partly supported by the CHOICE illustrate the diversity of links needed for collaboration to be realised. They span almost purely commercial links to cooperation in fundamental research. More details are given in section 3.

In D2.5 it is emphasised that collaborative research links with China will not be forthcoming unless there is a willingness to engage in a diversity of connections, in particular, including innovation. All the cases presented come under the umbrella of Research and Development, and Innovation (R&D&I).

D2.6 Information package for European researchers – Second end of year report

In Deliverable 2.2 - Information package for European researchers (Preliminary version), the report presented the information through three sections: Chinese ICT Funding Programmes, Information from other Initiatives/Projects and Guidance for Submission of Applications. For the Chinese ICT funding programmes section, these were analysed according to the following criterion: Outline, Fields of Research, Funding Agency, Eligibility, What is Funded, Duration, Calls, Contact Information and Programme website. The second section, Information from other Initiatives/Projects, presented useful information from other initiatives/projects from the EU and

China. In regard to the third section, the Guidance for submission of applications, it provided a set of relevant suggestions for European researchers to consider when applying to Chinese funding programmes.

D2.6 is the final version of the Information package for European researchers. It includes all the information that was presented in the Deliverable 2.2 (the Preliminary version), as well as more up to date information on the latest funding programmes, new relevant initiatives/projects and the latest developments concerning Chinese funding programmes.

The Information Package is structured under four main sections:

- **Chinese ICT Funding Programmes:** describes the most relevant funding opportunities that are available from major Chinese funding organizations. In total, 32 Chinese funding programmes are described: seven programmes from the Ministry of Science and Technology (MoST), eleven from the National Natural Science Foundation of China (NSFC), two from the Chinese Academy of Sciences (CAS), two from the China Scholarship Council (CSC) and ten from the Regional Programmes. Each of the identified programmes was selected through the implementation of a set of selection criteria, in order to focus on the most relevant programmes under the project's field. Each programme is described according to the following aspects: Outline, Fields of Research, Funding Agency, Eligibility, What is Funded, Duration, Calls, Contact Information and Programme website. The information available on each of these aspects is considered relevant for European researchers interested in applying to Chinese funding programmes. The selected funding programmes were also analysed to help identify the set of main obstacles for European researchers in applying for Chinese funding.
- **Information from other Initiatives/Projects:** presents a set of (mainly) EC and Chinese projects and initiatives that are in some way related to Chinese funding programmes, and are considered relevant for supporting European researchers, in total, eleven initiatives/projects are described, ten of them being led by EU partners and one by a Chinese organization. The section also identifies a set of relevant specific documents within each initiative/project, which have added value for funding applications.
- **Latest development of Chinese funding programmes:** presents the Co-Funding Mechanism that was jointly established by MoST, China, and the Directorate General for Research and Innovation, European Commission, and the reforms of the Chinese research funding system.
- **Guidance for Submission of Applications:** provides a set of relevant actions for European researchers to consider when identifying possible Chinese funding programmes and then implementing applications. In total, four actions are proposed: Action 1: Pre-proposal preparation; Action 2: Partnership development; Action 3: Proposal implementation; and Action 4: Relationships with Chinese partners. These actions aim to support possible solutions to the obstacles that were identified by European researchers, as well as offering relevant recommendations to them. The development of such recommendations was supported by interviews performed with European and Chinese researchers that have applied for funding from Chinese funding programmes during the first period of the project, as well as contributions from the team members of the CHOICE consortium.

D2.7 Online mapping of Chinese and European ICT industrial associations – Final report

D2.7 reports the mapping of Chinese industrial associations and other relevant bodies to European Technology Platforms (ETP) and Public Private Partnerships (PPP) in ICT. It is structured in four parts: The first part provides details of the Chinese industrial associations and other relevant bodies in ICT that are a Chinese priority for collaboration with their EU counterparts related to EU-China collaborative ICT R&D&I and was developed by Torch High Technology Industry Development Center, The Ministry of Science and Technology, China. These bodies are considered by TORCH to be in a position to promote excellent Chinese collaborative ICT R&D&I with the EU. The second part of the report summarises other such Chinese bodies that are not a Chinese priority for such collaboration. This part of the report was developed by Brunel University London. The third part of the report summarises European industrial associations and other relevant European bodies in ICT so that mappings of each European Public-Private Partnerships (PPP), European Technology Platform (ETP), and industrial associations and related bodies to their Chinese counterparts in ICT can be made in part 4, which includes a discussion of the actions taken by the CHOICE project to foster collaboration in EU-China ICT R&D&I on the basis of these mappings and their outcomes. This is followed by conclusions regarding opportunities to foster collaboration ICT R&D&I that include recommendations for the EC on actions to take to foster collaborations that arise from the mapping and the outcomes of project actions taken on the basis of it. In this context the proposing of actions on the EC is realistic as these actions relate directly or indirectly to interfacing with ETPs and PPPs which the EC already does and as it provides funding in support of these bodies it has real leverage with them.

D2.8 2nd Annual Electronic Report on ICT Industrial and Research Cooperation

To ensure a full exploitation of opportunities offered by the CHOICE project by further exploring industrial opportunities for EU-China ICT Research and Development and Innovation (R&D&I) collaboration, a second European Trip of a Chinese High-Technology-based Business Delegation to Europe was carried out in Poland and Italy from June 4 to June 13, 2015 under the organization of the Science and Technology Bureau of Hi-tech District, Chengdu, the Economic and Trade Development Bureau of Hi-tech District, Chengdu, and CHOICE project partner EUPIC. This European Trip 2015 also received support from another CHOICE project partner the Torch High Technology Industry Development Center, Ministry of Science and Technology. Activities of the ICT delegation on this 2015 trip were supported by the CHOICE project.

The activities of this trip are described in D2.8 which lists eleven selected cases of EU-China ICT Research and Development and Innovation (R&D&I) collaboration that resulted from this trip, it then goes on to provide an overview of the current status of the outcomes of the ICT related business to business matching that took place at the 10th Edition of the Fair that took place in Qingdao and Chengdu, China, from 4th to 11th November 2015. More details are given in section 3.

All the cooperation agreements reported are a testimony to the efficiency and effectiveness of face to face, business to business, networking in the context of realising collaboration with China. This has influenced the development of the CHOICE project roadmap and action plan, which provides a sustainability strategy for EU-China ICT R&D research cooperation beyond FP7.

D3.1 Online database of China - EU MS/AC projects and relevant EU projects - Report on database

The CHOICE online database aims to provide a summary of the on-going and concluded China-EU member states and associated countries (EU MS/AC) projects and relevant EU projects, which promote the cooperation between China and EU on ICT R&D. The online database is available at <http://euchina-ict.eu/choice-online-database/>. The projects are organized in two types of programmes: 1) EC Funded Projects for EU-China Cooperation on ICT R&D; 2) Bilateral initiatives regarding cooperation between the EU and China, the bilateral initiatives usually cover more broad sectors than ICT. For each of the China-EU MS/AC projects and relevant EU projects, the initial version of the database contained basic information on the project. The database introduced the start date and the duration of the project. Then it described the aim, the cooperation mechanism and summarized the achievements of the project. Finally it gave the website of the project where one is available, making it easy for users to find more information about the project.

D3.2 Online database of China - EU MS/AC projects and relevant EU projects - Report on updates to and use of database

In the first phase of the CHOICE project, the Online Database contained the basic information of project making it easy for users to understand the nature of each funded project. But the first phase CHOICE Online Database was only focused on the project itself and could not support EU and China experts to find more opportunities for other research topics and partners for their future cooperation. In order to solve this problem, in the second phase of the CHOICE project, the Online Database had more information added about each partner that has been involved in the EU-China cooperation project, including the partner website, the working attribute and the areas, so it is easy for EU and China experts to find more interests and more partners for their future EU-China project cooperation. At the conclusion of the work on the database it contained information relating to 63 projects and their partners.

In order to track visitors on the CHOICE Online Database website, and how they got to the website and what they did while they were there, universal terms were used to analyse the usage of the CHOICE Online Database website, including Hits, Visits and Pages. The definitions of these terms are as follows:

- Visits - A visit is one individual visitor who arrives at the website and proceeds to browse. A visit counts all visitors, no matter how many times the same visitor may have been to your site.
- Pages - Once a visitor arrives at the website, they will search around on a few more pages. On average, a visitor will look at about 2.5 pages. For each individual page, visitor views are tracked as page views.
- Hits - A Hit actually refers to the number of files downloaded on the website, this could include photos, graphics, etc. Picture the average web page, it has photos (each photo is a file and hence a hit) and lots of buttons (each button is a file and hence a hit). On average, each page will include 15 hits.

The analytics for the CHOICE Online Database was started from the beginning of 2015, and using the analytics definitions described above the data of the analytics is collected in the table on the next page.

Table 2: The data of the Analytics for the CHOICE Online Database

Summary by Month						
Month	Daily Avg			Monthly Total		
	Hits	Pages	Visits	Hits	Pages	Visits
Dec-15	251	133	60	4027	2142	963
Nov-15	240	113	64	7228	3400	1937
Oct-15	398	160	68	12356	4990	2112
Sep-15	415	228	74	12474	6853	2223
Aug-15	328	163	69	10179	5070	2155
Jul-15	262	122	55	8143	3812	1711
Jun-15	277	133	68	8314	4016	2054
May-15	323	140	66	10022	4340	2056
Apr-15	283	131	48	8503	3957	1466
Mar-15	521	140	45	16176	4355	1423
Feb-15	448	208	40	12556	5833	1132
Jan-15	641	263	36	19893	8178	1137
Total	/	/	/	125844	54804	19406

D3.3 Report on participation in external events

This report summarises the main CHOICE activities regarding dissemination and communication through the participation in external events during the project period. It presents detailed information of each external event attended by the partners. The CHOICE project was disseminated in these events through direct interactions with the participants, as well as presentations developed by the project partners. The CHOICE partners participated actively in networking sessions during the conferences, disseminating the project goals and main outcomes to the participants. The partners also delivered some communication materials to the participants such as brochures and flyers. The external events attended by the project team were selected according to the following criteria:

- Events focusing on the Chinese Market.
- Events focusing on the ICT area.
- Other events attended by the project team that were considered relevant to the project topic (ICT and EU-China cooperation).

In total, the project team participated in 21 external events, including seven different European countries – Belgium, France, Greece, Hungary, Italy, Portugal and Spain, and four different Chinese

cities – Beijing, Chengdu, Shanghai and Shenzhen. In total, more than 3.000 people received or were made aware of the CHOICE project information through different communication methods in external events. This number is estimated based on the total number of participants that attended the events and the number and relevance of dissemination methods used by the partnership in those events.

D4.1 Dissemination plan

D4.1 presents the CHOICE project communication and dissemination strategy set out shortly after the start of the project and its implementation measures that served as the basis for the promotion of the project throughout its lifetime. With the aim of ensuring excellent outreach, the dissemination strategy aims and objectives are structured in three sections: (i) objectives (why disseminate and communicate?); (ii) messages (what to disseminate and communicate?); (iii) measures and tools (how to disseminate and communicate?). The implementation measures went beyond tools and measures to address the identification and description of the target audience (to whom to disseminate and communicate?), defining the features of the project website, establishing a tentative calendar of project events, identifying external project relevant events, and setting up specific mechanisms for information exchanges with various stakeholders. This ensured the high visibility of the mission of the CHOICE project, its achievements and impact, by prompting an active interaction with researchers, industrial stakeholders and key policy-makers involved in EU-China ICT issues.

D4.3 Second annual report on dissemination activities

Deliverable D4.3 addresses the work carried out on project impact and dissemination, presenting the dissemination activities developed during the entire duration of the project (January 2014 – December 2015). It contains the description of these activities and final achievements. It also provides information on the impact these dissemination actions have led to. An overview of the main dissemination activities of the project and their impact is provided in section 3 of this report.

D5.3 Report on Sustainability and Impact

D5.3 is confidential and provides an impact assessment of CHOICE and a sustainability strategy for activities around regulation, standardization and policies development and implementation related to EU-China collaborative ICT R&D&I. The main focus of this report is on the ‘hard’ outcomes of the project, activities around regulation, standardization and policies development and implementation.

2.3 Project events

2.3.1 Events supporting dialogues

The CHOICE project organised of 4 workshops to be synchronised with policy dialogues (EU dialogues with MoST and MIIT). The focus of the event themes was chosen according to:

- The outputs of project activities targeted at identifying, bringing up to date and specifying EU-China ICT cooperation themes and policy priorities
- Priorities identified during previous EU-China policy dialogues

The common aims of the workshops were to:

- Generate policy dialogues: one session in each event was to be exclusively reserved for the interaction of Officials from Europe and China (EU dialogues with MoST and MIIT)
- Promote European research excellence focusing on European research of relevance to China to support policy dialogues; one of the main issues or burdens for reaching a better integration of the European and Chinese research landscapes is the lack of perceived relevance of European research to China
- Propose self-sustaining mechanisms for identifying European research that has the potential for initiating economic sustainable research cooperation with China outside of European funded research programmes

Two of the workshops were to take place in China, and 2 of the workshops in the EU, with each targeting at least 20 persons. A report on each workshop was made public on the project website soon after the delivery of the workshop.

The project events were significant dissemination channels as they enabled project partners to spread the project activities and results to the relevant stakeholder groups in Europe and China. The project events were also used as a showcase for European and Chinese excellence in ICT R&D&I, and as forum for discussion providing experts with the opportunity to explore common ICT R&D&I priorities and future cooperation opportunities between Europe and China.

The project successfully organised, as planned:

- 4 thematic workshops (2 in China and 2 in Europe) to support policy dialogues in Europe and in China, that identified priorities for strengthening EU-China ICT R&D cooperation and provide recommendations to the European Commission and Chinese Ministries

Following each workshop, the speakers presentations and attendee list were made available online in the event webpage and event photos in the picture gallery. A post-event report was uploaded online to provide an overview of the workshop and to summarize the main outputs.

The project workshops' outputs and impacts are assessed in project deliverable D1.4 "Post workshops reports linked to roadmaps for sustaining EU-China ICT research cooperation beyond FP7".

The main mechanism used by the CHOICE project for determining the future opportunities for EU-China collaboration in ICT R&D was feedback provided by CHOICE project partner CATR on the activities of: The EU-China Dialogue on Information Technology, Telecommunications and Informatization (ITTI) which was established in 2009 between the Ministry of Industry and Information Technology of the People's Republic of China (MIIT) and the European Commission Directorate General for Communications Networks, Content & Technology (EU DG CONNECT), the dialogue, is a high-level cooperation mechanism between the EU and China. From the 5th EU-China ICT Dialogue Meeting in April 2014 in Yangzhou, CHOICE knew the cooperation fields included ICT policies, ICT regulation, broadband, 5G, network security, IoT, e-commerce, smart cities, medical electronics and cloud computing. It was decided to proceed initially by focusing on providing input to the dialogue.

CHOICE organized the first year one CHOICE project EU-China ICT R&D Thematic workshop on the IoT in London to discuss IoT research excellence and IoT R&D collaboration mechanisms, as IoT had been the most important cooperation point from the beginning of the ICT dialogue and the

IoT expert group was set up at the third meeting of the dialogue. The intention being for proposals for collaboration mechanisms arising out of the workshop to be submitted to the 6th ICT dialogue meeting in 2015 in Europe.

2.3.1.1 CHOICE Thematic Workshop on the Internet of Things in London, UK (June 2014 – Month 6)

CHOICE organised a first workshop entitled EU-China Thematic Workshop on the Internet of Things in London, UK, on June 19, 2014, as part of the annual IoT Week Conference. The annual IoT Week Conference, which originated in the European Research Cluster on Internet of Things (IERC), has become one of the pre-eminent IoT events attracting industry and academics from around the world. During the IoT Week of 2014, a delegation of Chinese IoT experts, led by the China Academy of Telecommunication Research (CATR /MIIT) were invited to attend the events, as were EU-China IoT Advisory group members.

In order to take advantage of the opportunity of involving Chinese IoT experts and EU-China Advisory group members, the CHOICE project consortium decided to organise the 1st CHOICE project EU-China Thematic Workshop to run alongside the IoT Week. The objective of this workshop was to facilitate the interaction of officials from Europe and China and generate policy dialogues. The event successfully promoted the CHOICE initiative while highlighting European research excellence in IoT of relevance to China.

This first workshop gathered 30 participants composed of policy and research stakeholders from Europe and China specialized in the Internet of Things (IoT), plus members of the EU-China FIRE project, to discuss cooperation in FIRE (Future Internet Research & Experimentation) between the EU and China for the Internet of Things (IoT) and propose self-sustaining mechanisms for strengthening EU-China ICT R&D&I collaboration in the IoT area. The EU-China FIRE Project, aiming at strengthening EU-China cooperation in Future Internet and the IoT field in particular gave direct support to the CHOICE Consortium by co-organising the workshop.

Eleven presentations were made at the workshop.

The morning sessions started with welcome speeches from the European Commission DG Connect and MIIT, followed by two keynote speeches from the EU-China IoT Advisory Group, and two introductory presentations on the CHOICE and EU-China FIRE projects, both introduced as EU-China FP7 Projects on ICT research specifically focusing on IoT. Each group included one speaker from Europe and one speaker from China. This session was addressed to policy makers and the speakers briefed the audiences on the development and important roles of the IoT and shared information on the hot topics of EU-China IoT cooperation.

The second half of the morning session was divided into presentations on two topics, on on-going European projects specialised in the IoT and Chinese excellence in IoT R&D, respectively. In each topic, 4 experts from Europe and China gave presentations on a specific topic, covering the research domains of eHealth, IoT, e-government, Smart cities, and Future Internet. This session explored the possibility of bilateral cooperation in the area of ICT R&D and shared the experience of working with Chinese partners in existing projects.

The afternoon session featured plenary discussions and a wrap-up session. The plenary discussions were based on EU-China IoT R&D collaboration mechanisms, focusing on the areas of: Research

cooperation, Twinning operational cooperation and Application focussed cooperation (discussion on eHealth). The CHOICE Project Coordinator chaired the wrap-up and conclusion session. The plenary session moderator reported the group discussion, and highlighted the important outcomes reached by the group.

The 1st roundtable discussions were focused on the research domains of IoT technology, Future Internet, 5G, eHealth/Healthcare. Here is the summary of key points that were discussed:

- E-Health/Healthcare is facing a challenge linked with the IoT, Future Internet and telephone networks, The Cloud, and The Fog need to be brought together through 5G.
- There is a Global market need for 5G and 5G standards. 5G is playing an important role in cooperation with China. Advanced 5G network infrastructure is crucial for the Future Internet; industry is driving the development of 5G technical and business standards.
- eHealth, Smart Phone control, Smart Communities (Smart Cities), Vehicular Networks, are all key areas where world-class excellent EU resources are key to connecting with China. Solutions will have to be different in different Chinese cities. Cities could be brought together to share information specifically on knowing where to get solutions. They could also collaborate on solution development.
- An important question to resolve in repurposing EU solutions for the Chinese market is whether EU business models can be applied to China with its difference social systems.
- By cooperating to set and promote the development of open, global 5G industry standards, Europe and China can play a key role in shaping the future of the ICT industry and boost their long-term competitiveness and industry leadership.
- Security and privacy protection of personal data and the safety of that data are critical and should be generic, i.e., this should be common technology for the IoT.
- IoT and Smart Cities will have a lot of status so we need to think about how to consider these together. We need to address the Cloud and Future and Emerging Technologies in this context but we cannot just look at the technologies but also the business models for SMEs and large companies and applications. The outputs from above roundtable discussions have made some contributions to the EU-China IoT White Paper, which IERC and CATR were working on.

The 2nd part of the roundtable discussion was around EU-China project cooperation, especially with Chinese partners, all the attendees shared their own experiences with their Chinese partners on projects funded via various programmes including FP7. Most the speakers had encountered problems and difficulties, even misunderstanding during the project cooperation period with their Chinese partners at different levels and stages, and in order to encourage EU-China cooperation, here are the main outcome points:

- When encouraging collaborative work, there are still strong cultural and communication barriers, meaning there is a certain level of a lack of trust and confidence.
- We need to build on mutual trust, which is based on an honest and sincere relationship.

- In order to build on trust, which relies on people, the approaches suggested include Summer Schools, and Joint Events highlighting Chinese research papers and giving more visibility to Chinese research.
- IoT education exchange between projects could be a step in this direction to help build up long-term relationships.
- Opportunities to share research both within the EU and between the EU and China have to be bidirectional and based on trust.
- Innovation business is also about human relationships and specific markets, which are different in different parts of China. A lot of IoT cooperation points exist between Europe and China (i.e. FP7), but it is difficult to implement them due to time differences and language difficulties, which sometimes cause significant problems, even for research projects on-going.
- The Commission should continue to encourage the EU-China relationship with some funding support for activities, but choosing the right partner is critical.
- In H2020, there is more funding for innovation etc. There is more emphasis on as working on exploitation, but this can often result in a need for more participants to join the in cooperation. Maybe EU engineers working in China through projects are the key to exploitation.
- China is opening funding to EU partners in national projects financed by MoST. Reporting of activities and budgets is not always easy because of language difficulties. In 2014 MoST has continued to open up international cooperation to EU participants. Person to person cooperation needs to be kept going.
- In discussions around EU-China cooperation in the IoT the same topics keep coming up with no resolution. A call from this group should be made for more research projects and discussions should get specific, we keep talking about the same challenges on an on-going basis.

2.3.1.2 CHOICE thematic workshop on Immersive and Interactive Media in Beijing, China (March 2015 – Month 15)

The EU-China thematic workshop “Discussing China-EU cooperation in the field of Immersive and Interactive Media” was organised by the CHOICE project on March 31, 2015 in Beijing, China. The objective of the 1st CHOICE workshop in China was to identify opportunities to begin processes leading to innovation in the field of immersive and interactive media through EU-China collaboration. Considering the progressively increased cluster effect, this workshop was planned to build a bridge connecting the NEM on the European side with the IMIA on the Chinese side, and workshop successfully connected the New European Media (NEM) initiative on the European side with the China Interactive Media Industry Alliance (IMIA) on the Chinese side. The information exchanging and communication between these two major platforms aimed at integrating and coordinating industrial resources and social resources. One of the main goals of calling for international cooperation is to provide end-users with more user-friendly immersive and interactive services and communication environments, including user-generated content in which the quality of access to value-added and creative content, as well as services, is the key enabling factor.

This workshop gathered together 32 participants composed representatives of industrial companies, consultancies specialised in technology innovation and transfer, official representatives of the Ministry of Industry and Information Technology (MIIT), researchers in the ICT field from top universities and research institutes, and experts from EU-funded projects. In summary, the key presentations were as follows:

Kun YANG (Chief Engineer of CAICT and Vice-General Secretary of the IMIA) spoke on the work of the Chinese Industrial China industrial media alliance and highlighted that the challenge is industrial cooperation on different formats. Here cooperation with the NEM would offer real benefits.

Pierre-Yves DANET (Head of collaborative projects at Orange Lab) spoke on the work of the NEM ETP and short focus was made on a proposed PPP, on Immersive and Interactive Content anticipated to be funded through the 2018-2019 Horizon 2020 WP. He concluded by highlighting that NEM global activity has an objective of cooperation with any region of the world. There are common interests with China and we can share a common vision.

Jian HAN CEO of Cyber Cloud focused on the potential of a cloud based ‘virtual’ set-top box for IPTV services. Going forward Cyber Cloud is interested in providing services more suitable to the Chinese household. The potential for ‘virtual’ restoration of historical sites using augmented reality so there would be no need to rebuild physically is also interesting. Here cooperation with the EU offers many potential benefits.

Christopher KRAUSS Senior project manager R&D at Fraunhofer FOKUS spoke on HbbTV, which provides a platform for broadcast independent applications (TV portal services) and broadcast related applications (press the red button services). HbbTV is important because draws from open standards and is an important example of wide use of interactive media.

Yanxiang ZHANG CEO of LMTW talked about the IPTV market in China expressing the view IPTV/OTT is the future of TV in China. IPTV is the new growth point and taking the lead in driving OTT (over the top content). There is now a vertical integrated delivery chain for IPTV in China.

Gion LINDER of SwissTXT introduced the Hbb4All Project and accessibility services giving some examples of accessibility services. He emphasised that with an ageing population China will soon be looking hard at such services.

Javier CAMPOS of eDiamSistemas spoke on the EU VENTURI project and presented the 3 applications of VENTURI, which included 3D and augmented reality. He then presented the services of his company including marketing, cultural, real estate, manufacturing and retail projects.

The session host, the CHOICE project coordinator, noted there had been great interest in Mr Campos’s demonstrations so many thanks for those.

Yi XIAO of general manager of SOHU TV/ OTT Department presented on-line video services in China and their business features. The key cooperation point is these could be integrated with VR and AR. There is a gradual movement to fee paying for video content and this gives rise to a huge market. Lifestyle changes are radically changing video content consumption usage models so OTT will be very important in 2015.

Peng YANG of PPTV introduced PPTV and highlighted that PPCloud provides content to screens 1.3 to 130 inches and has a user base of hundreds of millions of users. PPTV is now extensively using a Big Data Intelligence Platform (BIP) to reduce its costs in a very sophisticated way. For example, it is being used for advertisement delivery optimization.

The first CHOICE workshop in China on immersive and interactive media achieved a success due to the support from NEM and IMIA the common interests of which in the new media industry, and the creative industries, are valued by both European and Chinese policy makers. The different aspects towards new media are dynamic between EU and China. In the EU, the new media is more functional and user-oriented. Home entertainment, remote medical treatment, marketing and cultural projects are highlighted for the use of immersive and interactive media. However, in China media including traditional and new media industry is more policy-driven. New media is designed for solve social challenges, e. g. the emotional and psychological health problems caused by long-term separation among migrant workers and the educational problems of their left-behind children. One more lesson learnt from the workshop is that consumption habits in China are changing. More and more consumers are choosing to pay for the OTT service instead of watching 30 seconds of advertisement before 3 minutes of video. This change makes OTT services more commercial. This may be an indicator that, the OTT service in China may be in a process of transforming from a policy-driven to a more commercially oriented service.

Further information on the EU-China thematic workshop on Immersive and Interactive Media can also be found in deliverable D1.4 “Post workshops reports linked to roadmaps for sustaining EU-China ICT research cooperation beyond FP7”



Figure 1: EU-China thematic workshop on Immersive and Interactive Media in Beijing, China - March 31, 2015

2.3.1.3 CHOICE thematic workshop on Industry IoT in Beijing, China (July 2015 - Month 19)

This second CHOICE workshop in Beijing on Industry IoT was planned and organised to synchronise with the EUCTPII Roundtable and the EU-CHINA IoT for the Future Forum between the EC and MIIT. These policy dialogues were postponed to September 2015 by the EC. Considering the full schedule of work of the CHOICE project in the last half-year of its life, the consortium decided to hold the Industry IoT workshop as planned in July 2015.

The EU-China thematic workshop on Industry IoT was organised by CHOICE on July 6, 2015 in Beijing, China. The aim of this workshop was to identify opportunities to begin processes leading to innovation in the field of industry Internet of Things (IoT) through EU-China ICT R&D&I collaboration. The workshop permitted to identify Industry 4.0 innovation opportunities, and spurred subsequent discussion on which cutting-edge Industry IoT technologies and applications could be exploited through EU-China ICT R&D&I collaboration for the benefit industry and the wider commercial sector.

The workshop gathered 25 experts from the Chinese and European IoT research community including telecommunication companies, official representatives of the Chinese Ministry of Science and Technology (MoST) and Ministry of Industry and Information Technology (MIIT), researchers in the ICT field from top universities and research institutes, and experts from EU-funded projects.

The workshop comprised sessions on: New Service Models and Typical Use Cases for Industry IoT, ICT Deployment Status in Factory and Development Trend under the Concept of Industry IoT, Cloud Computing and Big Data Technology to Support Industry IoT, Roadmap and Progress of Industry IoT Standardization, and Capability Requirements of Network Infrastructure to Support Industry IoT.

The CHOICE project summary of the proposed key findings of the workshop on Industry IoT is as follows:

- The Chinese and EU frameworks for industry 4.0 are broadly comparable.
- China could benefit from FIWARE; we can compare generic enablers where they exist on the Chinese side.
- Implications of sensor lifecycles need to be recognised and the implications properly considered/acknowledged.
- There is a need to recognise the real role of standards, which is limited but crucial to accommodating the plethora of sensors. Currently there is a need for convergence between industrial sector standardisation and ICT standardisation.
- Mutual appreciation of the models/conceptual frameworks on which standards are developed is crucial to the EU and China being able to work together on standards; we need compatible models.
- Protocols as well as Application Programme Interfaces (APIs) need to be developed for a truly service based approach to data.
- We do not need new visualisation interfaces. The challenge is to use existing tools. In particular, use mobile device interfaces.
- How best to exploit data lakes is an on-going issue to monitor.



Figure 2: EU-China thematic workshop on Industry IoT – Beijing – July 6, 2015

2.3.1.4 CHOICE Thematic Workshop “Exploring FIWARE opportunities towards China” in Hamburg, Germany (November 2015 - Month 23)

The 4th CHOICE workshop, organised in Europe, aimed at exploring FIWARE opportunities towards China. This thematic workshop was organised on November 6, 2015, as part of the 3rd edition of the European Conference on Future Internet ECFI-3 event held in Hamburg, Germany.

The objectives of this workshop were to:

- Promote the FIWARE European initiative, technology and its applications towards China
- Explore FIWARE opportunities in China with a focus on excellence in technological domains like IoT, big data, and specific application fields such as Smart Cities
- Explore what collaboration belongs within H2020 to promote discussion of what can/should be done outside of H2020 – notice that under H2020, there is no automatic funding for Chinese participants from the EU, but there is parallel funding from the Chinese government through MoST.
- Generate policy dialogues around FIWARE by facilitating the interaction between European and Chinese officials.
- Explore/propose self-sustaining mechanisms for strengthening EU-China research collaboration.

This workshop was organised with the support of the FIWARE Mundus initiative designed to spread FIWARE outside Europe engaging local ICT players and domain stakeholders and liaising with local governments in different parts of the world, including Asia. The CHOICE workshop “Exploring FIWARE opportunities towards China” proved to be a great opportunity to introduce FIWARE to a Chinese audience. It was a promising first step paving the way for further information sharing and discussion between the two regions to develop closer synergies and concrete uptake of FIWARE as enabling technology to build smart cities apps and services in China.

More than 30 participants including stakeholders from IT industries and services companies, researchers and academics, and policy makers, mostly European, attended this last project workshop.

There were three main sessions: Presenting the FIWARE landscape, EU developments in the area of smart cities through the OASC initiative and FIWARE, and Chinese Developments on research excellence in the area of IoT, big data, and smart cities.

As an outcome of the CHOICE workshop in FIWARE, a CHOICE project meeting between Hengqin Local Government representatives and representatives of FIWARE, PCCW (Pacific Century CyberWorks) Hong Kong, and the CHOICE Project, took place on 16th and 17th December 2015, in Hengqin, China, to discuss FIWARE opportunities and the possibility of taking FIWARE forward in Hengqin New Area – Pilot Free Trade Zone. See section 3 of this report for more details of this meeting and its outcomes.



Figure 3: CHOICE Thematic Workshop “Exploring FIWARE opportunities towards China” in Hamburg, Germany – November 6, 2015

2.3.2 EU-China project events

The CHOICE project organised two one-day open (registration free) events, each targeting 100 attendees. The first event was held in China towards the end of year 1 of the project and the second

one was held in Europe towards the end of year 2, in major cities with a strong background and rich resources in ICT. European and Chinese representatives from national/regional governmental bodies, industries, research institutes were invited to attend these events which included: High level, policy oriented session(s) involving Chinese and Europeans officials; Thematic session(s) based on “hot topics, with a specific focus on showcasing cooperation success stories and EU research excellence; Networking oriented sessions, and Bilateral meetings involving potential partners were prepared in advance through community building web tools, so that their potential was maximized. Participants to each bilateral meeting will be requested to agree on specific cooperation topics and patterns and identify concrete cooperative actions to be undertaken after the event.

Following each event, the speakers presentations, the event report, the participants list and the pictures and videos taken during the meeting were made available on the project website. An evaluation survey was released to get feedback from participants on the project event; the results are detailed in the event proceedings.

2.3.2.1 1st CHOICE Event “Fostering EU-China Collaborative Innovation in ICT” in Chengdu, China (M10 – October 2014)

The 1st CHOICE Event “Fostering EU-China Collaborative Innovation in ICT” was organised on October 22-23, 2014 in Chengdu, China, in conjunction with the 9th EU-China Business & Technology Cooperation Fair to identify opportunities to begin processes leading to innovation in ICT through EU-China collaboration. This event was composed of a conference, hosted on October 22, 2015, and on October 23, 2015, a morning matchmaking session followed in the afternoon by a visit to two selected places in Chengdu Hi-Tech Zone.



Figure 4 – The 1st CHOICE Event in Chengdu, China – October 22-23, 2014

A dedicated webpage was created on the project website to present the event concept and objectives, agenda and logistics information. Event promotion was ensured by project partners via the project website, social media tool and an email blast sent to the community, and the use of related dissemination channels such as project partners’ websites, and external media coverage.

The 1st CHOICE Event was attended by 152 participants who represented main stakeholders from Europe and China, involved in or interested in strengthened cooperation in ICT innovation between the two regions including:

- Industrial companies
- Consultancies specialised in service design and deployment
- Representatives of national, regional and municipal government in China with responsibility for eco-friendly smart city initiatives, 5G, broadband and Future Internet/Internet of Things
- Policy makers from Europe and China
- Researchers in the ICT field from universities and research institutes.

To highlight excellence we need to know what it is characterised by. In China, the International S&T Cooperation Programme of the Chinese Ministry of Science and Technology (MOST) funds projects with foreign research institutions universities and enterprises to carry out cooperation in R&D:

- Attracting outstanding overseas talents and teams to work in China, promoting China's international scientific and technological cooperation base construction;
- Strengthening China's capacity of indigenous innovation.

European ICT Poles of World-Class Excellence are geographical agglomerations of best performing ICT production, R&D and innovation activities, located in the European Union, which play a central role in global international networks. Excellence in ICT in European terms is built up of high and balanced performance in all activities. So from both the Chinese and European perspectives ICT R&D excellence cannot exist in isolation from excellence in innovation, which in this context means innovation in design, processes and organisational models in manufacturing and services.

The market issue for innovation in ICT in China is a lack of clarity on business models. In terms of the international trade around ICT between the EU and China the issue is a lack of common business models. To clarify the business models we have to look at the entire application delivery chain.

The objective of the 1st CHOICE event was to identify opportunities to begin processes leading to innovation in ICT through EU-China collaboration. The event was aiming to promote the identification of such opportunities by highlighting through presentations examples of what potentially could be done leaving subsequent discussion on what cutting edge ICT can be exploited through EU-China collaboration to industry and the wider commercial sector to sessions promoting matchmaking intended to lead to concrete cooperative actions (in the perspectives of the new Horizon 2020 funding programmes for Research and Innovation) to be undertaken after the event.

The first thematic session on research priorities for EU-China ICT R&D&I research cooperation focused on Smart Cities & Future Internet/Internet of Things (IoT). The IoT discussion highlighted the importance of Governance and Business Models from the outset. Business models in ICT are of increasing complexity as was evidenced by the presentations in the Cloud computing and Open Source software areas; this complexity is not a reason to avoid these issues. Conclusions drawn from the session included that in the IoT area managing public expectation and educating users about services generally is essential for effective co-creation of services; the challenge of trust for the IoT is about reliability (safety) and privacy (cyber-security).

On October 23, 2014, the CHOICE matchmaking session was held at Jinjiang Hotel as part of the matchmaking activities of the 9th EU-China Business & Technology Cooperation Fair. According to

preliminary statistics from the matchmaking session of the Fair, 52 potential cooperation agreements regarding the ICT sector were reached between 28 EU enterprises/ clusters/ organisations and 27 Chinese enterprises/ clusters/ organisations. For more details see section 3 of this report.

In the afternoon of October 23, 2014, a visit delegation invited by CHOICE paid a visit to two selected places in Chengdu Hi-Tech Zone.

2.3.2.2 2nd CHOICE Event “Providing continuous progress in strengthening China collaboration on ICT RDI with Europe”, Lisbon, Portugal (M22 – October 2015)

The CHOICE Final Event “Providing continuous progress in strengthening China collaboration on ICT RDI with Europe” was organised on October 19-22, 2015 in Lisbon, Portugal. This final event was composed of a conference, hosted on October 19, 2015, and of various dissemination activities, including an exhibition booth and a presentation of the project at two networking sessions during the ICT 2015 event organised by the European Commission on October 20-22, 2015.

This CHOICE Event aimed to summarize and show the main CHOICE project outputs, showcase project expertise, share experiences of EU-China collaboration in the ICT field, promote tools to initiate collaborative ventures in ICT R&D&I in China and provide a chance for European and Chinese stakeholders to network and establish a closer relationship for future cooperation.



Figure 5: CHOICE Conference “Providing continuous progress in strengthening China collaboration on ICT RDI with Europe” in Lisbon, Portugal (M22)

The CHOICE final conference in Lisbon was held one day before ICT 2015 in Lisbon, just across from the ICT 2015 venue. ICT 2015 is one of the most important events in Europe in the ICT field in 2015, and the timing and location of the CHOICE event in Lisbon allowed the event to attract more stakeholders not only from Europe, but also from China. In the Conference, the up-to-date outputs of the project were introduced, the experience of EU-China collaboration in ICT RDI was shared and the future cooperation opportunities between EU and China were discussed. Moreover, the participants of the Conference had a good chance to communicate face-to-face with the CHOICE experts and relevant international stakeholders, which may help them to develop new contacts and find new opportunities for cooperation.

The CHOICE conference on October 19, 2015 had a total of 174 registrations and was attended by 88 participants. These participants represented stakeholders from Europe and China, including:

- Industrial companies
- Representatives of national, regional and municipal governments in China with responsibility for eco- friendly smart city initiatives, 5G, broadband and Future Internet/Internet of Things
- Policy makers from Europe and China
- Researchers in the ICT field from universities and research institutes
- Consultancies specialised in service design and deployment

The CHOICE conference provided its participants with an opportunity to discuss and exchange ideas on best practices related to EU-China cooperation in the field of ICT RDI. Held in the Associação Industrial Portuguesa / Câmara de Comércio e Indústria Headquarters in Lisbon the day prior to the opening of ICT 2015, it provided access to the latest information on future opportunities for EU-China collaboration in ICT RDI within the framework of Horizon 2020, showcased success cases of the EU and Chinese excellence in ICT R&D through the presentation of previous and on-going funded projects, and discussed priority topics in the field. Participants also had the opportunity to further interact with the speakers and network with other attendees to initiate joint projects.

The invited speakers included European and Chinese representatives from different national and regional governmental bodies, industries and research institutes. The conference began with a welcoming session with high-level representatives from both the EU and China, focusing on policy measures and future opportunities on the EU-China cooperation on ICT-RDI topics. From the presentations, China was widely recognized as a key collaboration partner of the EU in the ICT field, both by the speakers and the participants. Some topics were identified as “hot topics” for future cooperation: Big data, 5G and IoT.

The lessons learnt from the presentations given at the conference were as follows:

- The key characteristics of the international cooperation tools of the EU are generally opening for targeted activities. Horizon 2020 is fully open to participation of entities from across the world. Calls may be jointly identified through Joint S&T Coordination Committees.
- There are several calls in H2020 focusing on China, including collaboration on Future Internet, 5G PPP Research and Validation of critical technologies and systems and 5G PPP Convergent Technologies.
- From the Twelfth Five-Year "National Strategic Emerging Industry Development Plan" of China, integrated, secure and ubiquitous information infrastructure will cover both urban and rural areas of China by the end of 2020. Therefore, China will need to systematically master the key technology of areas such as the new generation of mobile communications, digital TV, next generation of internet, internet and information security, and intelligent terminals; to develop satellite mobile communication service systems, and develop the industrial capacity to reach an international leading level.
- Socialized service systems have been developing through major Chinese industrial associations such as the China Semiconductor Industry Association, the China Communications Standards Association and the China Information Technology Security Evaluation Center.
- There are many examples of successful R&D cooperation between the EU and China. Chinese partners joined EU projects such as PROBE-IT, Chains and ECIAO. EU partners also joined Chinese projects such as the Mega Project on LTE (Long Term Evolution) and international cooperation projects supported by MoST.



Figure 6: CHOICE exhibition booth at ICT 2015 in Lisbon, Portugal – October 20-22, 2015

The exhibition booth hosted by the consortium during ICT 2015 attracted more than 500 visitors from all continents who interacted with the project partners on site and learned more about the CHOICE project. Among them, 128 people from 38 countries worldwide (Europe, Asia, United States, Latin America and Africa) expressed their interest in joining the CHOICE community and gladly gave their business cards. These visitors were government officials, policy makers, ICT industries and services stakeholders, researchers and academics, and journalists.

The objectives of the booth hosted by the CHOICE Consortium during ICT2015 were:

- To showcase project expertise
- To present latest outcomes to date
- To explore opportunities with the visitors willing to engage in EU-China ICT R&D cooperation
- To expose tools to initiate collaborative ventures in ICT R&D in China
- To provide up-to-date documentation on EU & Chinese research environments and major ICT research topics and priorities
- To shed light on important EU-China ICT RDI activities
- To provide live support to European organisations willing to develop joint research projects
- To increase project's visibility

ICT 2015 visitors had the opportunity to meet with and discuss with members of the Consortium at the CHOICE booth during exhibition hours on October 20-21 from 9h to 18h30 and on October 22 from 8h30 to 16h. At the booth, the CHOICE team:

- Shared knowledge with visitors. Various materials on EU-China ICT R&D cooperation were introduced to visitors (incl. CHOICE website, online database and eBooks) providing info on Chinese ICT R&D research programmes, ICT industrial associations and support mechanisms. CHOICE European partners and representatives from CAICT mandated by the Chinese MIIT informed visitors about open funding programmes and ICT support services opportunities in China
- Informed visitors about EU-China ICT R&D excellence. The CHOICE team promoted examples of excellent EU-China collaboration and provided valuable recommendations
- Provided live support services. Partners answered visitors' questions and provided them with guidance regarding the development of research projects in China.

Contribution to the networking session “China: Demonstrating your Smart City achievements”

The networking session “China: Demonstrating your Smart City achievements” was organised during ICT 2015, on Wednesday 21st October 2015, by Dr Shaun Topham, President of EU e-Forum. The objective of this networking session was to showcase successful European smart city applications in leading Chinese Smart Cities. Marion Le Claireq from Sigma Orionis was invited to participate on behalf of the CHOICE project.

Following Dr Shaun Topham’s presentation on “What there is to build on as a result of previous EU-China collaborations”, Marion Le Claireq showcased the on-going EU Smart City activities with China as identified and supported by the CHOICE project and described the foundations for R&D collaboration.

At the end of the session, CHOICE discussed with other participants how to possibly replicate exemplar applications and technologies in China and how to help Chinese smart cities benefit European Industry. Using the successful example of the UK-China Smart Cities Project, and taking into account the existing platform of cooperation created by the EU-China IST Project, China-Europe Public Administration project and the EU-China Smart Cities Project attendees discussed how to turn policy into practice and have real demonstrations of EU smart city applications deployed in China, with a mechanism for them to be taken up further across China.

Contribution to the IDEAL-IST 2018 co-located workshop

Anthony Dupont from Sigma Orionis participated on behalf of the CHOICE project in the IDEAL-IST workshop “Working together for getting successful participation of organizations from third Countries in the H2020 ICT Calls” organized as part of the ICT 2015 event in Lisbon. CHOICE was represented together with other CSA projects dealing with ICT cooperation with third countries including CONNECT2SEA, EAST-HORIZON, EECA-2- Horizon, LEADERSHIP, Sci-GaIA, TANDEM, MED-Dialogue, ERACAN +, JUPISTE, MOSAIC, and CONECTA2020.

This workshop, organised on October 20th from 09:30 to 11:15, was divided into two parts: A presentation session and a panel discussion to share interesting experiences and explore H2020 challenges. Anthony Dupont introduced CHOICE as a successful collaborative project and presented the activities of the CHOICE project, informed the audience on the latest outcomes of the initiative and shared best practices with the counterpart projects as the project is ending. This workshop was also the opportunity to discuss identified topics of interest between Europe and China in the field of ICT and how to improve synergies and concertation activities between the various CSA projects through IDEAL-IST.

3 Potential impact and dissemination activities and exploitation of results

3.1 Cooperation agreements and collaborations

3.1.1 *European trips of Chinese Technology-based enterprises*

From June 11, 2014 to June 21, 2014, a European Trip 2014 of Technology-based Enterprises was carried out in Belgium, Czech Republic and Germany under the organization of the Science and Technology Bureau of Hi-tech District, Chengdu, the Economic and Trade Development Bureau of Hi-tech District, Chengdu, and CHOICE project partner the EU Project Innovation Centre (Chengdu). The activities of the ICT delegation on this trip were supported by the CHOICE project.

ICT-related enterprises in the Hi-tech district, Chengdu, benefited a lot from the “European Trip”. Chengdu Jiayi Technology Co., Ltd. is dedicated to the research of utility software for the medical industry and the application of the Internet of Things in the medical industry. A cooperation intention was made on some products and technology aspects with the foreign enterprises. Chengdu Han Kang Information Industry Co., Ltd. is dedicated to disaster prevention and reduction, water conservancy, the smart city, and other public service fields as well as the system management service. During this ‘European Trip’ activity, this company made communication with the municipal government of Ostrava, the third largest city in Czech Republic and has been invited to participate in the investment and project construction for the industrial park and hi-tech industry of Ostrava. At present, both parties are working on the deepening the communication on cooperation. Chengdu Billion UNITA Shun Technology Co., Ltd. is mainly involved in the resolution and product development of the Internet of Things and vehicular networking as well as the development & application of in-car networking systems and platforms. During this ‘European Trip’ activity, this company negotiated with the Scientific Research Institute of Transport, Ministry of Transportation, Germany. It reached a deep understanding of the existing work of the Germany party as well as its future development plans in China. Upon mutual matching and negotiation, both parties have made a preliminary cooperation intention on technical cooperation and technology introduction to the Chinese market and the application & development of a joint market.

The activities of this trip are described in CHOICE deliverable D2.5 1st Annual Electronic Report on ICT Industrial and Research Cooperation, which lists ten cases of EU-China ICT Research and Development and Innovation (R&D&I) collaboration that resulted from this trip, one of which is that between Chengdu Han Kang Information Industry Co., Ltd. and Industrial Park of Ostrava City. The ten cases listed span almost purely commercial links to cooperation in fundamental research. All the cases presented come under the umbrella of Research and Development, and Innovation (R&D&I). It is significant that of the ten cases presented one involves a French partner, one Belgian, one Polish, and one Hungarian; two involve Czech partners, and four involve German partners. It is difficult to establish cooperation between Chinese and east European partners. The cooperation agreements involving Polish and Hungarian partners highlighted the benefits of clustering them with Western European, in particular German partners, through the organisation of the trip.

To ensure a full exploitation of such opportunities offered by the CHOICE project by further exploring industrial opportunities for EU-China ICT Research and Development and Innovation (R&D&I) collaboration, a second European Trip of a Chinese High-Technology-based Business

Delegation to Europe was carried out in Poland and Italy from June 4 to June 13, 2015 under the organization of the Science and Technology Bureau of Hi-tech District, Chengdu, the Economic and Trade Development Bureau of Hi-tech District, Chengdu, and CHOICE project partner the EU Project Innovation Centre (Chengdu). This European Trip 2015 also received support from another CHOICE project partner the Torch High Technology Industry Development Center, Ministry of Science and Technology. Activities of the ICT delegation on this 2015 trip were supported by the CHOICE project.

Among the 48 Chinese enterprises participating in the trip, 20 of them were from ICT related sectors, the including smart city, IoT, smart home, mobile internet, E-Health, cloud computing and big data sectors, covering most of the priorities between EU and China for collaboration in ICT R&D&I.

During the 10-day “European Trip 2015”, three matchmaking meetings were held in total, including the matchmaking meeting for Chinese and Polish enterprises (in Lodz, Poland), the matchmaking meeting for Chinese and European enterprises under the framework of EU-China Days Event organised by DG Enterprise (in Milano, Italy), and the business to business as well as the cluster to cluster matchmaking between Chinese and Italian enterprises (in Palermo, Italy). In addition, the Chinese delegation visited the Sicily Mechatronic Cluster, Carini in Palermo. EUPIC has signed a MoU with Carini Cluster to enhance the substantial cooperation in technology innovation and industry expansion regarding sectors including mechatronics and ICT on June 11th, 2015.

ICT-related enterprises from Chengdu Hi-tech Zone benefited a lot from the “European Trip 2015”:

Chengdu Sysware Electronic Information Incorporated is a leading domestic technology automation, informationization, computer hardware and software product developer and system solution provider with registered capital of CNY 40 million. Its main products include a high-speed railway station monitoring control system for electromechanical equipment, a tunnel monitoring system, an intelligent lighting control system, an expressway monitoring system, and an energy management system. This company has reached technology cooperation intentions with five European enterprises concerning its monitoring system in Italy.

Chengdu Wang An Technology Inc. is dedicated to research for the virtualization industry. It was founded in 2001, and is located in Chengdu, providing virtualization software based on the x86 platform for enterprises, such as server virtualization, VDI, and virtualization security. During the “European Trip 2015”, this company has established common collaboration interests regarding 3D virtualization realisation and cloud computing with two different Italian companies.

The activities of this trip are described in CHOICE deliverable D2.8 2nd Annual Electronic Report on ICT Industrial and Research Cooperation. This report lists eleven selected cases of EU-China ICT Research and Development and Innovation (R&D&I) collaboration that resulted from this trip; one involves Chengdu Sysware Electronic Information Incorporated and another Chengdu Wang An Technology Inc. The eleven cases of resulting cooperation presented involve eight Italian partners and three Polish partners. The cooperation intentions focus on the following priorities, the Smart City, Software Programmes, Intelligent Traffic, IoT, 3D Virtual Reality Technology, and E-Health.

Several Italian enterprises planned to visit to their Chinese collaborative companies during the 10th EU-China Business & Technology Cooperation Fair in Chengdu in November 2015 as a result of the European trip 2015.

3.1.2 *The EU-China Business & Technology Cooperation Fair*

The EU-China Business & Technology Cooperation Fair, organised annually by EUPIC, plays an important role in promoting EU-China collaboration in ICT R&D&I. The 9th Edition of the Fair took place in Chengdu, China, on October 21-23, 2014 and was supported by the CHOICE project. The 9th Edition kept the traditional multidimensional profile of the Fair and consisted of numerous and various events that included the first CHOICE Event October 22-23, 2014. According to preliminary statistics from the matchmaking session of the Fair, 52 potential cooperation agreements regarding the ICT sector had been reached between 28 EU enterprises/ clusters/ organisations and 27 Chinese enterprises/ clusters/ organisations. Cooperation agreements have already been reached on areas from IT solutions to multimodality software design for medical systems.

3.2 Potential impact

3.2.1 *Use of FIWARE in China*

FIWARE is the technological core of the Future Internet Public Private Partnership (FI-PPP), “and is built to facilitate access to services, cloud hosting, Internet of Things connection, data and context management or security.”⁵

The CHOICE project has played a significant role in promoting the use of FIWARE⁶ platform for the implementation of smart applications in China. Presentations on FIWARE were given at the second and third project workshops in Beijing, and at the main conference and final event of the CHOICE project that was held in Lisbon on 19 October 2015. As a key finding of the third CHOICE workshop, on Industry IoT was that China could benefit from FIWARE, the final CHOICE workshop was used to explore the opportunities for ICT R&D&I activities with China based around the use of FIWARE. This workshop took place in Hamburg on 6 November 2015. Its focus encompassed technological domains like IoT, Big Data, and specific application fields such as Smart Cities.

At the CHOICE workshop on FIWARE in Hamburg, Lu Dong presented the Macro Euro-China Entrepreneurs Club (MECEC)’s efforts to promote FIWARE in China. The Ministry of Housing and Urban-Rural Development coordinate Smart City Construction in China. Since May 2015 MECEC is coordinating with this ministry making the case that in China in smart city construction we have a 160 billion euro market shared by 40 big companies, which means the huge problem of 40 standards. It would take 5 years to establish a Chinese national technical standard so the use of open source technology is suggested and FIWARE is a good candidate. Lu Dong reported that that week the vice-minister responsible stated that he was very satisfied and declared that FIWARE was very good technology, the problem is eight Chinese government ministries jointly issued the "Guiding Opinions on Promoting the Healthy Development of smart cities” and all of them have to be convinced.

⁵ <https://www.fi-ppp.eu>

⁶ <https://www.fi-ppp.eu>

At the workshop Zhangyi Shen (Project leader of Big Data Platform of Hengqin New Area, Zhuhai Dahengqin Tech. Ltd) gave a presentation on the Big Data and Cloud Computing Platform of Hengqin. During workshop discussions Mr. Shen explained that the Chinese government regulations are far less constraining in free trade areas where FIWARE can in principle be used. He pointed out that Hengqin is a free trade area overseen by 10 government bureaus instead of the usual 50. He made clear that there is no limit to the level of working with FIWARE when working with the Hengqin local government. He indicated he would be in contact with the CHOICE and FIWARE Mundus projects.

As an outcome of the CHOICE workshop in FIWARE, a CHOICE project meeting between Hengqin Local Government representatives and representatives of FIWARE, PCCW (Pacific Century CyberWorks) Hong Kong, and the CHOICE Project, took place on 16th and 17th December 2015, in Hengqin, China, to discuss FIWARE opportunities and the possibility of taking FIWARE forward in Hengqin New Area – Pilot Free Trade Zone.

3.2.2 Policies development and implementation and standardisation

White papers and a position paper

Project partner CATR (now the China Academy of Information and Communications Technology (CAICT)) contributed steadily to policies development over the 2 years of the CHOICE project leading towards discussion of Internet of Things (IoT) standardization by the end of that period. CATR worked on the publication of the EU-China IoT Identification (ID) white paper and the IoT Architecture Statement and reported these two papers in Shanghai 2014 IoT conference, and completed the draft version of EU-China IoT semantic white paper and the EU-China IoT white paper. CATR coordinated the successful proposal for the second stage of EU-China Green Smart City cooperation with the EU Commission and China MIIT Officer. CATR liaised with EU and China IoT experts, discussed the updated version of the EU-China IoT white paper, discussed the the new topic of EU-China white paper cooperation, IoT standardization, discussing the updated version of the EU-China IoT semantic white paper. CATR liaised extensively with the relevant expert groups and advisory groups and planned EU China ICT Dialogue.

Directly related to the activities of CATR in this area, in 2014 the CHOICE Project organised a thematic workshop in London on the IoT. The workshop offered the participants the opportunity to discuss the future of the policy dialogues for IoT. Following on from the workshop, with the support from the CHOICE Advisory Board members (some of them being also members of the EU-China IoT Advisory Group), an EU-China Joint White Paper on Internet-of-Things Identification was released at the IoT week Shanghai on 28-29th Oct 2014, documenting the state-of-the-art on IoT Identification technologies in the EU and China, as well as towards providing an outlook for future developments. Based on the co-research of the EU-China IoT Advisory Group, some common EU-China views on the IoT architecture design were also reached. The “Expert Group Position Paper on Internet-of-Things Architecture” was released in Oct. 2014.

Innovation Dialogue

In June 2014 CHOICE project partner TORCH led an ICT R&D&I delegation to participate in the Second China Europe Innovation Dialogue. The Delegation visited EU headquarters in June 12, 2014 and during their stay in Europe June 12 to 18, 2014, they visited Brussels clusters and Czech

aviation industry equipment suppliers. On the afternoon of June 13, 2014, the EU Strategy 2020 Workshop was held in DG-RTD, with participants including 60 Chinese representatives from the delegation, TORCH, local innovation clusters and enterprises, and 10 EU officials. The Chinese representatives carefully listened to the general introduction of Horizon 2020 by EU officials. The major contents of this strategy include the scientific and technical innovation plan.

3.3 Main dissemination activities and exploitation of results

The following dissemination activities were carried out and regularly updated and benchmarked using the communication tools and channels produced by the project in the first months of the project. Some additional promotional materials were created during the second period to engage stakeholders in the project activities (project events, helpdesk etc.) but mostly to circulate concrete outcomes.

3.3.1 Printed materials

Project visual identity

The CHOICE logo and visual identity – including typography, fonts and colour palette – were both created following the launch of the project, at Month 1 – January 2014, to provide identity to the project and ensure the consistency of its image during the initiative's lifetime.

Templates

Three templates were produced to grant a consistent style and quality to the materials to be produced by the consortium through the project lifetime. Based on the project graphic identity, a template for project deliverables, a template for general project letters, as well as a template for project PowerPoint presentations were designed at Month 1 – January 2014.

Reference project presentation

A PowerPoint presentation containing key information on the project such as objectives, expected outcomes and partnership has been produced at Month 3 – March 2014. This reference PPT presentation has been translated into the Chinese language, and has been used by project partners when attending external meetings to introduce the CHOICE initiative.

Project poster and roll up banner

A project poster was designed by at Month 3 – March 2014 to give broad visibility to the CHOICE project during project and external events. This A1 format poster introduces the CHOICE project key facts and objectives. It was translated into the Chinese language to optimise communication towards the Chinese target audience.

A roll up banner, ideal material to be used during project events was designed at Month 7 – July 2014. The portable banner stand with the banner introduces the CHOICE project key facts and objectives. This banner was translated into the Chinese language to optimise communication towards the Chinese target audience, remaining accessible to the general public.

Both the project poster and roll up banner have been uploaded in the resources section of the project website, remaining accessible to the general public, and displayed during project and external events, therefore giving broad visibility to the CHOICE project.

Project social media business card

In Month 6 – June 2014, in order to promote the CHOICE online community, the consortium agreed to create a business card introducing the CHOICE Twitter and LinkedIn groups to the European audience, and the Chinese Weibo account to the Chinese audience - Twitter being not available in China. Partners were invited to distribute these two social media business cards as widely as possible on the occasion of each event the consortium would organise or contribute to.

Project flyer/leaflet

A project flyer was produced at Month 3 – March 2014, as an informative 1-page document to introduce the CHOICE project's key facts and objectives. In order to optimise the communication towards the Chinese audience, this flyer was translated into the Chinese language. Both versions have been uploaded on the public resources section of the project website, remaining accessible to the general audience. The project flyers have been distributed by project partners in hard copies in A5 format on the occasion of the 1st CHOICE Workshop, and during several external events.

Project brochure

At Month 7 – July 2014, a tri-fold brochure was produced to present in more detail the project and its consortium, its objectives and expected outcomes (both in English and Chinese), and thus provide a comprehensive overview of the CHOICE initiative. This brochure has been uploaded in the resources section of the project website, remaining accessible to the general public, and was distributed as widely as possible during each event CHOICE organised and contributed to.

The project flyer and the brochure have been uploaded in the resources section of the project website, thus guaranteeing its accessibility to the general public. Both documents have been distributed in hard copies as widely as possible at each event the consortium organised and contributed to.

Main outcomes brochure

In July 2015 (Month 19) an updated version of the tri-fold project brochure was produced. This new version, released in English with Chinese subtitles, showcased the main project outcomes. It was widely distributed during project events and by partners when participating at external events. The new project brochure has been uploaded in the public resources section of the project website, remaining accessible to the general audience.

Flyer “5 Reasons you will love CHOICE”

In February 2015 (Month 14) a promotional flyer was elaborated titled “5 reasons you will love CHOICE”. This material highlights the CHOICE project value proposition. It details in 5 concrete points how stakeholders can benefit from the CHOICE activities and outcomes by inviting them to visit the website, to take advantage of the CHOICE Online Database, to use the project helpdesk services and to join the project events.

Project infographic

In October 2015 (Month 22), the consortium produced an infographic to promote in numbers the many outcomes of the project. This infographic was printed in roll-up-banner format and displayed at the CHOICE exhibition booth hosted by the consortium at ICT2015 in Lisbon (October 20-22, 2015).

3.3.2 Project website

Two websites were developed during the first months of the project. The European project website was designed using Wordpress and made available at Month 3 - March 2014, through the following domain name: www.euchina-ict.eu. It has been made accessible for mobile devices and optimized for search engine use (SEO parameters) in order to secure maximum traffic. This platform has been translated into the Chinese language (www.euchina-ict.cn) and set online at Month 7 – July 2014 by project partner EUPIC. During the first twelve months of the project, the two CHOICE websites have been used as prime online communication channels to give official identity and visibility to the CHOICE initiative toward the broadest possible EU-Chinese audience. They were also used to disseminate useful information on the project activities and objectives, and share related news with target stakeholders. Partners have been actively contributing to communication and dissemination efforts by supplying information on project advancement and related news posted on the website.

Website updates and refinement

Both English and Chinese websites, mirroring each other, were regularly updated and refined with extensive content derived from the project outputs. During year 2, the CHOICE website was used as the main dissemination channel. It has been used as a sustainable repository of practical information for EU and Chinese researchers interested in cooperation ventures, for follow up initiatives to re-use the data. The website was fed with extensive content derived from the project outputs including EU/MS-AC and Chinese R&D&I programs available, contacts of relevant industrial associations, identified priorities and opportunities for EU-China collaboration in ICT.

News was regularly provided in English and Chinese to keep stakeholders informed on the status of ICT R&D&I in China and in Europe, and the status of cooperation in the field between the two regions. Over the course of the year 2, 106 news items were posted on project activities and general announcements representing on average 2 news items posted per week.

During Year 2, the CHOICE website menu and sections were reorganised to make it more comfortable to navigate in and easier for visitors to find information.

In November 2015 (Month 23) and December 2015 (Month 24), the Frequently Asked Questions (FAQ) page was refined with additional frequent questions collected in the course of project activities. The objective of this page is to provide first and immediate support desk services to EU and Chinese stakeholders looking for answers to questions regarding H2020, IPR in China etc. In case they could not find any answer in the FAQ page, stakeholders have been invited to use the online “Ask an expert” helpdesk. Further helpdesk services to the project stakeholders have been provided through the CHOICE social media channels, via online questions and discussions on the project LinkedIn group, Twitter account and Chinese Weibo account.

The home page of the website was re-organised to showcase the main results of the project. A specific “main outcomes ” page was created to provide more details and links to the activity reports and useful documentation produced or collected by the project. At the end of December 2015

(Month 24) this “main outcomes” page was updated with the very final achievements of the project and be renamed “Final Outcomes”.

Website statistics

Since going online at the end of March 2014 (Month 3) until the end of November 2015 (Month 23), the project website attracted over 5,610 unique visitors (267 unique visitors per month on average) mainly from Europe, with an average visit duration of 00:04:19. The evolution of sessions per month was quite stable with an average of 473 sessions. However, some peaks can be noticed corresponding to major project events held in October 2015 (1st CHOICE Event), in March 2015 (EU-China Thematic workshop on immersive data and interactive media) and October 2015 (Final Event).

During the reporting period, the CHOICE website attracted almost as many newcomers (54%) as returning visitors (46%). This can be explained by the fact that the CHOICE website offers relevant content and is therefore very attractive for new visitors, most of them in return find it worthwhile coming back. Those returning visitors spend more time visiting the website (00:07:10 in average). More than 42% of visitors typed the CHOICE website URL directly into their browser or clicked on links from documents thanks to successful communication/dissemination. More than 34% of visitors arrived at the CHOICE website through a search engine meaning that the CHOICE website is well indexed on the web.

The fact that the second and third main sources of traffic to the website were LinkedIn and Twitter highlights the success of the dissemination efforts and importance of the project social media in terms of outreach during the reporting period.

1393 website pages were visited on average per month and among the most visited pages of the CHOICE website are the homepage, the newsroom, CHOICE in a nutshell and the project events webpages. The Online Database, the page providing information about available European ICT R&D research programmes and the “Ask an expert” section are also very popular.

No data is available for the Chinese version of the project website online since Month 7 for Year 1, but for year 2 up to the end of Month 23, this version of the website attracted over 300 users mainly Chinese unique visitors (27 unique visitors per month on average) with an average visit duration of 00:02:28.

3.4 Project social media activities

The CHOICE project is represented on LinkedIn ([EU-China cooperation on ICT research](http://www.linkedin.com/groups/EUChina-Cooperation-on-ICT-research-4331785/about)⁷) and Twitter ([@EUChinaICT](https://twitter.com/EUChinaICT)⁸) in Europe, plus on Weibo ([EUChinaICT](http://weibo.com/5142490404/profile?topnav=1&wvr=5)⁹) in China. Partners agreed to use the @EUChinaICT Twitter account as a joint account benefiting both the EU-China FIRE project and the CHOICE project, two FP7 projects aiming at contributing to the development of cooperation

⁷ <http://www.linkedin.com/groups/EUChina-Cooperation-on-ICT-research-4331785/about>

⁸ <https://twitter.com/EUChinaICT>

⁹ <http://weibo.com/5142490404/profile?topnav=1&wvr=5>

in ICT research and the Future Internet between EU & China. The objective was to further increase the visibility of the two projects.

Tweets on common topics of interest for both the EU-China FIRE and CHOICE projects have been regularly posted on the project Twitter account. A specific hashtag, #eucnICT, was used to indicate when tweets were providing information specifically related to the CHOICE project. After the end of the EU-China FIRE project on July 31st, 2015 tweets were exclusively produced by and referring to the CHOICE project.

The CHOICE website is linked to the project social media channels to facilitate public access, and to guarantee that up-to-date and live information is optimally shared between the consortium and the stakeholder community.

During year 2, partners continued to use Twitter, LinkedIn, and Weibo in China, to spread project information related to CHOICE and EU-China RDI cooperation on ICT on the web, but mainly to make project outcomes more widely available, and engage with stakeholders.

Social media usage

The following statistics can be reported:

Table 3: Social media usage by the CHOICE project

Twitter statistics	at M12	at M23
Total tweets	448	903 (+101.56%)
Total followers	245	398 (+62.45%)
Links clicked	11 / month	16 / month (+45.45%)
Retweets	18 / month	25 / month (+38.89%)
Favorites	11 / month	17 / month (+54.55%)
Twitter statistics	at M12	at M23
Total discussions	76	112 (+47.37%)
Total group members	352	396 (+12.5%)
Weibo statistics	at M12	at M23
Total posts	378	960 (+153.97%)
Total followers	51	108 (+111.76%)

3.5 Additional media coverage

3.5.1 *Project promotion through partners' corporate websites and social media channels*

Since the launch of the project, the CHOICE partners have worked actively to promote the project and its activities through their corporate websites and social media channels. Project partners BRUNEL, EUPIC and SIGMA used on many occasions their extended network to circulate news and important information about the project

3.5.2 *Media coverage by external players*

European and Chinese players outside the CHOICE consortium have provided valuable additional media coverage to the project. During the first twelve months of the project, several information portals, collaborative research networks and EU Technology platforms dealing with ICT research have published news introducing the CHOICE project and highlighting its activities to a global international audience.

During the last twelve months of the project, European and Chinese players outside the CHOICE consortium provided further media coverage to the project outcomes. Several web platforms dealing with ICT research published news promoting the events organised by the project, the project helpdesk, and highlighting the useful information generated by the CHOICE activities, this news has been read by a global international audience.

Table 4: Coverage of the CHOICE project on external platforms

	Main external platforms	Number of links	Target CHOICE webpages and posts
1	CORDIS (www.cordis.europa.eu)	125	12
2	Open China ICT (www.openchina-cit.eu)	61	1
3	Europa Nu (www.europa-nu.nl)	36	2
4	China IPR SME Helpdesk (www.china-iprhelpdesk.eu)	18	1
5	ECIAO project (www.euchina-fire.eu)	17	5
6	EU Agenda (www.euagenda.eu)	12	2
7	GIS ASIE (www.researu-asie.com)	10	3
8	ICT FIRE (www.ict-fire.eu)	8	2
9	SIGMA ORIONIS (www.sigma-orionis.com)	6	1
10	Universitat de Girona (www.udg.edu)	6	2
11	German Ministry for Education and Research (www.kooperation-international.de)	5	1
12	EBN (www.ebn.be)	5	2
13	Czech ERA Portal (www.evropskyvyzkum.cz)	5	2
14	Euroasia-ict (www.euroasia-ict.eu)	4	1
15	Portuguese Chamber of Commerce and Industry (www.ccilc.pt)	4	2
16	EU-China Smartcities (www.eu-chinasmartcities.eu)	4	2
17	EU Funding Trends (www.eufundingtrends.eu)	4	4
18	Ideal-IST (www.ideali-ist.eu)	3	3

Synergies were established with European and Chinese bilateral initiatives working on fostering ICT R&D cooperation, with whom further cross-promotion and dissemination was negotiated. This informal arrangement established that CHOICE and the projects listed below helped each other promote their respective interests. During year 2, cross-dissemination agreements already established were extended and additional synergies were generated with initiatives, especially dealing with IoT and Smart cities development in Europe and China. Synergies were also established with initiatives providing hands-on support services to European SMEs interested in doing business in China such as the EU SME Centre and the China IPR SME helpdesk:

- The EU-China Policy Dialogues Support Facility (PDSF) project (www.euchinapdsf.org/EN/home.asp)
- China-Finland Strategic ICT Alliance (www.ictalliance.org)
- The EU-China FIRE (ECIAO) project (www.euchina-fire.eu)
- The DRAGON STAR project (www.dragon-star.eu)
- The ORIENT plus project (www.orientplus.eu)
- The EU-China Smartcities project (www.eu-chinasmartcities.eu)
- The Chain-reds project (www.chain-project.eu)
- The Fitman project (www.fitman-fi.eu)
- The Venturi project (www.venturi.fbk.eu)
- EUROCITIES (www.eurocities.eu) and the Green Digital Charter initiative (www.greendigitalcharter.eu)
- The NICE project (www.greendigitalcharter.eu/projects/niceproject)
- The Smart CAMPUS project (www.greensmartcampus.eu)
- The FIWARE project (www.fiware.org) and FIWARE Mundus project in particular (www.fiware.org/mundus)
- The EU SME Centre (www.eusmecentre.org.cn)

16 experts (11 from Europe and 5 from China) were invited at the beginning of the project to form the CHOICE Advisory Board, whose mission was to help define cooperation priorities between the EU and China in the ICT field and provide ad-hoc recommendations for sustainable collaboration. They also contributed to the massive promotion of the CHOICE outcomes during the reporting period.

3.6 Project publications

Project press releases

A first press release was published in January 2014 (Month 1) to announce the launch of the CHOICE project, and it was disseminated via broadcasting channels including CORDIS and related bilateral initiatives. During year 2, the consortium issued three press releases. In February 2015 (Month 13), a press release to inform interested readers about the latest project outcomes. Two additional press releases in September 2015 (Month 21) and October (Month 22) to invite stakeholders to join the Final Event in Lisbon, and the workshop “Exploring FIWARE opportunities toward China” organised by the project. A final press release will be released by the end of December 2015 (Month 24) to inform about the end of the project and to draw stakeholders’ attention on the many achievements of the CHOICE project. This last press release will list the major outcomes of the CHOICE initiative. This press release will feature links redirecting the readers to the CHOICE website for more details.

Project bi-annual newsletters

The CHOICE project published a first bi-annual newsletter in June 2014 (Month 6). This first edition promoted the launch of the project website; highlighted the formation of the CHOICE Advisory Board, and informed readers about the coming 1st CHOICE workshop, while inviting stakeholders to register to the project’s LinkedIn and Twitter accounts. This electronic newsletter was sent to the

project dissemination mailing lists (totalling 5,702 contacts at the time), and extensively distributed through partners' networks. The second electronic newsletter, released at the end of December 2014 (Month 12), highlighted project landmark activities of Year 1, and the first results of the project. It has been sent to the dissemination mailing lists (totalling 3,910 contacts at the time). During year 2, the project released 1 additional newsletter. The 3rd edition of the CHOICE bi-annual newsletter was published in October 2015 (Month 22). The newsletter highlighted the latest results of the project such as the updates of the CHOICE online database, invited stakeholders to join the coming project events and highlighted related news on ICT RDI in Europe and China. This newsletter was sent to 3,492 subscribers. A 4th and final newsletter will be shared with the project subscribers by the end of December 2015 (Month 24). This newsletter will inform about the project end of CHOICE and on the various achievements of the project, and will highlight related news.

Project email blasts

Email blasts were used to share short and more targeted messages with the CHOICE research community. During the first project year, three email blasts were sent out. During year 2, 7 e-mail blasts containing attention-grabbing information were sent to the project mailing list subscribers. According to the campaign statistics, each CHOICE email blasts went to an average of 3,498 subscribers, with a rather consistent open rate of 12.8% and click through rate of almost 3%. A last email blast is envisaged for end of December 2015 to communicate the final outcomes of the CHOICE project.