Funded by the 7th Framework Programme
of the European Union

CHOICE

www.euchina-ict.eu

Project Acronym: **CHOICE**

Project Full Title: **Strengthening Chinese Collaboration on ICT R&D with Europe**

Grant Agreement: **610578**

Project Duration: **24 months (Jan. 2014 - Dec. 2015)**

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

Deliverable Status: **Draft**

File Name: **CHOICE_ WP_D2.7_ Online mapping of Chinese and European ICT industrial associations – Final report**

Due Date: **31 December 2015 (M24)**

Submission Date: **31 December 2015 (M24)**

Dissemination Level: **Public**

Task Leader: **Mo Tan (TORCH)**

Authors: **Mo Tan (TORCH), Dr T J Owens and Dr T Itagaki (Brunel University)**

Contributors: **TORCH, BRUNEL, CATR**

Copyright

© Copyright 2014-2016 The CHOICE Consortium

Consisting of:

BRUNEL	Brunel University London	United Kingdom
SIGMA	Sigma Orionis	France
SPI	Sociedade Portuguesa de Inovacao	Portugal
TORCH	Torch High Technology Industry Development Center	China
CATR	China Academy of Telecommunication Research	China
EUPIC	EU Project Innovation Centre	China

CHOICE project ■ Grant Agreement #610578 Page **2** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
 ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme **■** Coordination
and Support Action FP7-ICT-2013-10 **■** Theme: Information and Communication Technologies **■**

Preface

This document is a deliverable of CHOICE project task 2.2 Bringing together European and Chinese Industrial Associations. This task will, at the end of the project, have delivered a final version of an online database of relevant Chinese and European ICT industrial associations.

This document is a report on the information gathered for the development of the online database of relevant Chinese and European ICT industrial associations. It maps Chinese industrial associations to European industrial associations in ICT. It does this by providing details of the Chinese industrial associations and other relevant bodies that are a Chinese priority for collaboration with their EU counterparts related to EU-China collaborative ICT R&D&I. Other such Chinese bodies that are not a Chinese priority for such collaboration that map to European industrial associations in ICT are then summarised so that a complete mapping of Chinese industrial associations and related bodies to European industrial associations in ICT can be made. Mappings are made based on the best matches in terms of the subject matter covered by the associations, in each case the best match based on this criteria is identified and highlighted by being given in bold type. If a mapped Chinese association is not a priority for collaboration it is identified in italics. The Chinese selection of Chinese bodies that are a priority for collaboration with EU counterparts reflects the relevant policy guidance provided on behalf of the Chinese government on how the aims of the "Twelfth Five-Year" National Strategic Emerging Industry Development Plan are to be achieved. An overview of the policy guidance relevant to ICT R&D&I is given in section one of CHOICE deliverable D2.4: Handbook for China ICT Industrial Support Services. Based on this mapping opportunities to foster interaction between the associations in China and Europe are identified. A DVD of the modest database that exists on the basis of the mapping presented in this report accompanies the report.

This report 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

CHOICE project ■ Grant Agreement #610578   Page **3** of **88**
D2.1- _ **Online mapping of Chinese and European ICT industrial associations – Progress report**
    ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

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 European Public-Private Partnerships, Technology Platforms, industrial associations and related bodies to their Chinese counterparts in ICT can be made in part 4 of this report 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 the 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.

Table of Contents

CHOICE project ■ Grant Agreement #610578   Page **5** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

CHOICE project ■ Grant Agreement #610578   Page **6** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
   ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

www.euchina-ict.eu

Part 1 Chinese priority associations for EU-China collaboration on ICT R&D&I

1. China Semiconductor Industry Association

(CSIA,中国半导体行业协会)

- **Website:** http://www.csia.net.cn/

- **Contact info.**

The association has 5 branches：

IC Branch
Contact: Shula RUAN
Tel: 86-510-81190090
Fax: 86-510-81190107
Address: Room 109, 1st building of Wuxi National Industrial Design Park, 599 West Construction Road, Wuxi, Jiangsu Province
Zip code: 214020

Discrete Semiconductor Devices Branch
Contact: Yong LI
Tel: 86-311-87091519
Fax: 86-311-87091477
Address: 46th branch of 179 mailbox,Shijiazhuang, Hebei Province
Zip code: 050002
Email: csiadd@126.com

Semiconductor Packaging Branch
Contact: Geying LI
Tel: 86-10-82356605
Fax: 86-10-82356605
Address: 411 Room of Liangzixinzuo Building, Zhichun Road, Haidian District, Beijing
Zip code: 100083
Email: china.ep@163.com

IC Design Branch

CHOICE project ■ Grant Agreement #610578　　　　　　　　　　　　　　　　　　　Page **7** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

Contact: Yingming ZHANG
Tel: 86-21-6160 9878 - 240
Fax: 86-21-6160 9876
Address: 2nd floor, 01st zone, 1388th Zhangjiangjidiangang Zhangdong Road, Pudong New Area, Shanghai
Zip code: 201203
Email: zym@csia-iccad.net.cn

Semiconductor Industry Support Branch
Contact: Wenfang XIN
Tel: 86-10-82087088-647
Fax: 86-10-62355381
Address: 2nd Xinjiekouwai Street, Beijing
Zip code: 100088
Email: xinwf@gritek.com

- **Key responsibilities**

The association was founded on 17th Nov. 1990 and it is a voluntary, nationwide, and non-profit social organization, consisting of companies and experts engaged in integrated circuits, discrete semiconductor production, design, research, development, operation, application, and teaching. The association carries out activities regarding China's Semiconductor Industry while strictly complying with the country's constitution, laws, regulations and policies; it provides member services, industry services and government services; it plays the role of a bridge and link between the government and its members; it maintains the legitimate interests of its members and the industry and promotes the development of the semiconductor industry.

Key responsibilities:

1) Implement the relevant government policies and regulations, propose economic advice and policy recommendations for the development of technology and equipment in the industry to the government;

2) Information consulting work: Investigate, research, and forecast the industry and market; according to authorization, generate industry statistics, provide timely industry status investigation reports, identify market trends, make economic forecasts regarding the industry to its members and the government, provide policy-orientation, information-orientation, and market-orientation.

CHOICE project ■ Grant Agreement #610578   Page **8** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
      ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

3) Extensively carry out activities of economic and technological exchanges and academic exchanges. Commissioned by the government or based on market and industry development needs, organize seminars and exhibitions for domestic and overseas new products and new technology in the industry, so that enterprises can explore domestic and international markets.

4) Carry out international communication and cooperation. Develop connections with foreign organizations, and promote industrial development and internationalization. As a member of the World Semiconductor Council, organize the members to participate in World Semiconductor Council activities to promote China and the global semiconductor industry to develop mutually beneficial and win-win partnerships.

5) Assist the Government in making (revising) industry standards, national standards and recommendations. Promote the implementation of the standards.

- **Superior of CSIA**

Ministry of Industry and Information Technology

- **Leadership of CSIA**

Honorary chairman: Peiyan ZENG, Weizhi QU, Zhaoji LI, Zhongwen GOU, Zhongyu YU

- **Member status**

520 members in total, some of the member companies are listed below:

- *Ningbo Hualong Electronics CO., LTD* http://www.nbhldz.com
- *Beijing Sevenstar Electronics CO., LTD* http://www.sevenstar.com.cn
- *General Research Institute for Nonferrous Metals* http://www.grinm.com
- *Grinm Advanced Materials CO., LTD* http://www.gritek.com
- *Beijing Institute of Chemical Reagents* http://www.bicr.com
- *Beijing Jinglianfa Digital Control Technology CO., LTD* http://www.jinglianfa.com
- *Tianjin Jingling Microelectronics Material CO., LTD* http://www.jingling.com.cn
- *Hangzhou Haina Semiconductor CO., LTD* http://www.hainasemi.cn

CHOICE project ■ Grant Agreement #610578   Page **9** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme **■** Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

2. China Robot Industry Alliance

(CRIA，中国机器人产业联盟)

- **Website:** http://cria.mei.net.cn/

- **Contact info.**

Tel & Fax: 86-10-68594830
Address: 46th Sanlihe Road, Xicheng Dist. Beijing, 100823
Email: CRIA@mei.net.cn

- **Key responsibilities**

CRIA is a non-profit organization composed voluntarily of enterprises, manufacturers, universities, research institutes, regional or local robotic associations, related organizations as well as government-sponsored organizations in the fields of R&D, manufacturing, application and services of the robot industry in China. Founded on April 21, 2013, it has 104 members so far. The Secretariat of CRIA is located at CMIF, which is also the location of the CRIA's headquarters.

CRIA's aim is by following the nation's industry policies and market demands to set up a cooperation platform for the industry, colleges and universities, research institutes and users in order to strengthen the members' abilities in R&D, manufacturing, integration, applications and customers services, to extend the application of robots in various fields and to improve the robot industry chain in China, so as to promote the health development strength and competitiveness of the domestic robot industry.

CRIA's major mission is to implement the state's industrial policies and measures, to strengthen exchanges and cooperation regarding technology, promote the market and intellectual property rights among members and international cooperation, to push forward collaboration between the industry, colleges and universities, research institutes and users, to be a vehicle for self-discipline on the part of the robot industry and avoid redundant projects, to provide a platform for information exchange, application promotion, education and training, to organize exhibitions and conferences, in order to facility the efficient use of resources accelerate cooperation between the robot industry and other industries and popularize the application of the robot technology and products.

- **Superior of CRIA**

National Development and Reform Commission

Ministry of Industry and Information Technology

Ministry of Science and Technology

- **Leadership of CRIA**

Executive Chairman and Secretary General: Xiaogang SONG

Deputy Secretary General: Xinmin ZHAO, Zhiju YAO

- **Member status**

104 in total, some of the member companies are listed below:

- ✧ *Beijing Ziguang Intelligent Robot System CO., LTD http://www.robotunis.com/*
- ✧ *Dalian Jialin Machine Manufacture CO., LTD http://www.jiatian.net.cn/*
- ✧ *Beijing Bochuangxingsheng Technology CO., LTD http://www.up-tech.com.cn/*
- ✧ *Guangdong Welling Motor Manufacture CO., LTD http://www.welling.com.cn/s/index.php*
- ✧ *Qingdao Chuangxiang Robot Manufature CO., LTD http://www.incrobot.com/*

3. China Software Industry Association

(CSIA,中国软件行业协会)

- **Website:** http://www.csia.org.cn/htm/index.html

- **Contact info.**

Tel: 86-10-51527160
Fax: 86-10-62186579
Address: 55th China Software Building, Xueyuan Road South, Haidian Dist., Beijing, 100086

- **Key responsibilities**

1) Learn, promote and implement the national policies that encourage the software industry;
2) Organize China International Software Expo;
3) Carry out "Software Product Authentication" and "Software Enterprise Authentication";
4) Carry out credit rating work for China software service companies;
5) Make the annual software industry statistical yearbook;
6) Carry out credit rating of China software and service companies;
7) Recommend excellent software products, cultivate excellent brands of China software;
8) Organize China software industry development & business innovation summit;
9) Organize China industry software development summit;
10) Prepare and publish "China Software Industry Development Report";
11) Prepare and publish "China Software Enterprise Encyclopedia";
12) Construct the official website of CSIA: the window of China software;
13) Edit and publish "Software Industry News";
14) Strengthen international communication and cooperation, promote the internationalization of the China Software industry;
15) Undertake tasks entrusted by the government, participate in planning software industry development;
16) Organize various seminars, training activities, serve enterprises and the software industry;
17) Establish industry standards, promote genuine software, create a fair competitive environment for industry development;
18) Act as a nongovernmental coordinating institution for software exports, promote software exports;
19) Organize excellent software talent contests;
20) Strengthen organization construction, adapt to situation development, promoting all-round service.

- **Superior of CSIA**

Ministry of Industry and Information Technology

- **Leadership of CSIA**

Chairman: Xiaofan ZHAO

Secretary General: Duying XIE

- **Member status**

The number of member companies is over 1000. The members consist of the majority of software companies, and most of the top 100 enterprises of the China software and information service industry. The membership also includes research institutions, universities, etc., a very wide range.

4. Shanghai Integrated Circuit Industry Association

(SICA, 上海市集成电路行业协会)

- **Website**: http://www.sica.org.cn/

- **Contact info.**

Tel: 86-21-50805257
Fax: 86-21-50805259
Address: Room 209 No.500 Bibo Road, Pudong New Area Shanghai PRC., 201203
E-mail: contact@sica.org.cn

- **Key responsibilities**

The Shanghai Integrated Circuit Industry Association (SICA) is a nongovernmental organization composed of 5 committees on IC design, manufacturing, testing & packaging, smart cards, materials & equipment, and other related enterprises of this industry. SICA was founded on April 19th 2001.

SICA's tenet: under the laws and regulations of China, work as the bridge between the government and enterprises, carrying out the function of an "industrial service, promoting industrial self-discipline, industrial representation, and industrial correspondence"; supporting and assisting the healthy development of the companies of the IC industry, dedicating itself to the development and prosperity of the IC industry in Shanghai.

SICA's operation: researching and analysing the industry; evaluating and testing IC products; providing IC technical training; publishing; attracting investment by holding exhibitions or conferences; promoting IC products; media-consulting; promoting technical cooperation and communicating within China and abroad; implementing functions authorized by the government.

- **Superior of SICA**

Shanghai Economic and Information Technology Commission

Shanghai Administration of Societies

CHOICE project ■ Grant Agreement #610578   Page **14** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
   ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

- **Leadership of SICA**

  President: Wenbiao FU

  Secretary general: Shoulei JIANG

- **Member status**

417 in total, some of member companies are listed below:

- ✧ *Shanghai Huahong (Group) Co.Ltd. (上海华虹（集团）有限公司)*
- ✧ *Shanghai Huahong NEC Electronics Company ,LTD. (上海华虹NEC电子有限公司)*
- ✧ *ADVANCED SEMICONDUCTOR MANUFACTURING CORPORATION OF SHANGHAI (上海先进半导体制造股份有限公司)*
- ✧ *SHANGHAI GRACE SEMICONDUCTOR MANUFACTURING CORP. (上海宏力半导体制造有限公司)*
- ✧ *Shanghai SIM-BCD Semiconductor Manufacturing Co., LTD. (上海新进半导体制造有限公司)*
- ✧ *Semiconductor Manufacturing International Corporation (中芯国际集成电路制造（上海）有限公司)*
- ✧ *SHOUGANG NEC ELECTRONICS CO.,LTD. (首钢日电电子有限公司)*
- ✧ *TSMC（China) COMPANY LIMITED （台积电（中国）有限公司)*
- ✧ *HeJian Technology Co.，Ltd （和舰科技（苏州）有限公司）*
- ✧ *Ningbo BYD Semiconductor Co.，Ltd （宁波比亚迪半导体有限公司）*

CHOICE project ■ Grant Agreement #610578   Page **15** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

5. China Communications Standards Association

(CCSA, 中国通信标准化协会)

- **Website:** http://www.ccsa.org.cn/

- Contact info.

Tel: 86-10-62302730, 86-10-62304228
Fax: 86-10-62301849
Address：52th Huayuan North Road, Haidian Dist., Beijing, 100191

- **Key responsibilities**

China Communications Standards Association (hereafter referred to as CCSA) is a non-profit legal entity organization established by enterprises and institutes in China for carrying out standardisation activities in the field of Information and Communications Technology (ICT) across China.

The membership of CCSA is open to corporate bodies only, including R&D institutes, design institutes, manufacturers, operators, universities and other societies.

CCSA is committed to making a contribution to the development of ICT industry in China by establishing an enterprise-based and market-oriented working system that incorporates the industry, universities and R&D institutes and conducts communications standardisation activities following the principles of "Openness, Fairness, Justness and Consensus".

CCSA is committed to conducting standardisation activities in the field of ICT under the guidance of the authorities, i.e. the Ministry of Industry and Information Technology, and other authorities concerned. Its main activities are:

1) To promulgate the state laws, regulations and policies on standardisation; to deliver opinions and requests of its members to the relevant authorities in order to facilitate communication between its members and the authorities;

2) To conduct studies and surveys on the standardisation system, to propose R&D projects on communications standardisation; to organize its members to conduct, standards

CHOICE project ■ Grant Agreement #610578   Page **16** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
      ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

drafting, comments collecting, coordination, reviewing, standards compliance testing, and interoperability testing;

3) To promote the implementation of communications standards through activities such as the promulgation of communications standards, consultation, services and training;

4) To organize domestic and international exchanges and cooperation in ICT and standardisation; to collect and analyse information relating to domestic and international communications standards to support R&D activities in communications standards;

5) To undertake work related to standardisation commissioned by the authorities, members of CCSA or other organizations.

- **Superior of CCSA**

Ministry of Industry and Information Technology

- **Leadership of CCSA**

Honorary Chairman: Gaofeng ZHU, Zhiyuan SONG
Chairman: Hequan WU

- **Member status**

The CCSA has 302 members in total, some of its member companies are listed below:

✧ *1. Shenzhen Gold Power Tech Co.,Ltd*
✧ *2. ZTE Corporation*
✧ *3. Zhuhai hansen technology Co., ltd*
✧ *4. Zhongtian Broadband Technology Co.Ltd.*
✧ *5. ZHEJIANG ZHAOLONG CABLE CO.,LTD*
✧ *6. ZHEJIANG TENGEN ELECTRICS CO.,LTD.*
✧ *7. ZheJiang FuChunJiang Communication Group Co.,Ltd.*
✧ *8. Zhejiang Ebang Communication Co.,LTD*
✧ *9. ZHEJIANG 8TELECOM CO.,LTD*

6. The National Remote Sensing Center of China

(NRSCC, 国家遥感中心)

- **Website:** http://www.nrscc.gov.cn/nrscc/en/organization/

- **Contact info.**

Tel: 86-10-58881180, 86-10-58881183
Fax: 86-10-58881179
Address: No. 8A, Liulinguan Nanli, Haidian Dist., Beijing, 100036
Email: public@nrscc.gov.cn

- **Key responsibilities**

With support from relevant government departments, the NRSCC has made great progress in promoting the development of national earth observation and navigation technologies, as well as their applications in social development and economic construction. It has greatly promoted the development of remote sensing, geographic information systems and navigation and positioning technologies and their key applications.

NRSCC devotes itself to strategic planning in the domains of earth observation and navigation and takes responsibility for formulating annual plans, annual inspections, mid-term inspections, checking before acceptance and summarising the achievements of R&D projects under its management. In the process, the NRSCC has strengthened intra-field and inter-fields integration of relevant achievements, and promotion of their applications.

Since the launching of the negotiations on China-EU cooperation in the Galileo Project in 2002, the NRSCC has been the agency responsible for China's cooperation with European counterparts, actively communicating with and coordinating relevant departments of both the European Union and China, and implemented relevant projects with high standards. The NRSCC implemented market surveys, training and personnel exchange activities on the platform of the Joint Training Center of China-EU Navigation Technology, which provides a good technology foundation and harmonious international environment for development of the satellite navigation technologies of China.

According to the instruction from previous Premier Li Peng in 1996, the NRSCC has represented the State Science and Technology Commission and its after-body the Ministry of Science and Technology to report remote sensing information on disasters, agriculture,

ecology and the environment directly to the General Office of the State Council (GOSC) for 15 years, and been highly appreciated by national leaders. The NRSCC organized remote sensing dynamic monitoring of the 1998 huge flood disaster, and the devastating earthquake of 2008 in Wenchuan, Sichuan Province.

Since 1996, the NRSCC has carried out assessment of the space information system software of China, according to the accreditation request of China National Accreditation Service for Conformity Assessment, and played a key role in development of China's space information system software industry.

The NRSCC has built broad and close international cooperation relations with over 20 countries and international organizations. China is one of the co-chairs of GEO and the NRSCC takes charge of the secretariat affairs of China for GEO. The NRSCC was the Chinese implementation body of the MOST-European Space Agency Dragon Project and achieved significant international impact through its implementation. The NRSCC is also an official member of CEOS and the China contact point of UNESCAP. Through cooperation and exchange in science and technology, the NRSCC has contributed a lot to the development of earth observation and navigation technology in China.

- **Superior of NRSCC**

Ministry of Science and Technology

- **Leadership of NRSCC**

Director-General: Xiaohan LIAO
Deputy Director-General: Guifei JING

CHOICE project ■ **Grant Agreement #610578**   Page **19** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ■ **September 2014**

www.euchina-ict.eu

7. China Mobile Communications Association

(CMCA, 中国移动通信联合会)

- **Website:** http://www.cmca.org.cn/company.asp?action=5

- **Contact info.**

Tel: 86-10-88452630

Fax: 86-10-88452655

Address: 16FA, East Area of Shijijinyuan Restaurant, Banjing Road, Haidian Dist., Beijing, 100097

Email: dqp@cmca.org.cn

- **Key responsibilities**

CMCA was founded on 16th Sep. 2000, its key responsibilities include:

1) Implement national industrial policy, research the relationship between the industry and the government's macro control of it, coordinate the relationship between the industry at home and abroad and the domestic market, and promote the competitiveness of the domestic industry groups;

2) Promote the common development of the manufacturing and the operator industry;

3) Strengthen connections between enterprises, promote communication and cooperation between enterprises, promote various cooperation modes between enterprises, promote information sharing and mutual benefit among peers;

4) Build a bridge for communication with international bodies, promote the import of foreign talent and advanced technology, improve the entire technology level and competitiveness of the domestic mobile communication business;

5) Promote the perfection of the service provided by the industry, organise learning of international business operations, promote the improvement of business management and

the service level, and increases in business operation efficiency and the business strength. Cultivate management and technical talent for business at home and abroad.

- **Superior of CMCA**

Ministry of Industry and Information Technology

- **Leadership of CMCA**

Honorary Chairman: Ji LIU

Chairman: Xinli ZHENG

- **Member status**

CMCA members include: telecom operators such as *China Mobile Communications Corporation*, *China United Telecommunications Corporation*, and *China Telecom Corporation*; national mobile communication backbone manufacturers, operation companies, Chinese mobile communication companies well-known overseas; enterprises and people who care about and promote the development of the China mobile information industry including the government policy research department, finance community, technology community, media community, consumer groups and individuals.

8. China Information Technology Security Evaluation Center

(CNITSEC, 中国信息安全测评中心)

- **Website:** http://www.itsec.gov.cn/export/sites/itsec/english/

- **Contact info.**

Tel: 86-10-82341188, 86-10-82341118
Fax: 86-10-82341100
Address: 1st building, 8th Shangdi West Road, Haidian Dist., Beijing, 100085

- **Key responsibilities**

The China Information Technology Security Evaluation Center is a leading Information Security Evaluation authority approved by Chinese government with the main function of providing IT security evaluation services. Its responsibilities are as following:

◆ Conducts vulnerability analysis
◆ Enables evaluation of security risks
◆ Provides IT security evaluation and testing services
◆ Provides evaluation services for information security professionals
◆ Delivers IT security consulting, engineering supervision and R&D services

With the support of national dedicated funds, as a key infrastructure of the National Information Assurance framework, CNITSEC has acquired and mastered edge testing technologies and equipment of vulnerability analysis and evaluation. It is well equipped with a Vulnerability Foundation Research Lab, Application Software Lab, Products Security Evaluation Lab, System Vulnerability Lab and Evaluation Tools Lab that ensure CNITSEC's quality evaluation services. Besides, CNITSEC has built a group of professionals and seasoned technical experts specialized in risk evaluation of critical infrastructure systems for party and government organizations.

Since it was founded in 1997, CNITSEC began to grow almost immediately. In accordance with the laws and regulations of People's Republic of China, CNITSEC meets its commitment to providing security assurance and improving infrastructure systems reliability.

Up to now it has successfully completed several tasks and projects such as National Science & Technology Research, China's National Science Fund, 863 973 Plans, many of which have been prized by the competent authorities. The Center has also greatly promoted the shaping and development of China's national security standards.

CHOICE project ■ Grant Agreement #610578   Page **23** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
     ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

9. China Optics and Optoelectronics Manufacturers' Association

(COEMA, 中国光学光电子行业协会)

- **Website:** http://www.coema.org.cn/English/

- **Contact info.**

Tel: 86-10-84321499

Fax: 86-10-84321499

Address: No.11 Research Institute, No.4 Jiuxianqiao Road,P.O.box 8511 Beijing China, 100015

Email: coema@coema.org.cn

- **Key responsibilities**

China Optics & Optoelectronics Manufactures Association (COEMA) was established in early 1987 and approved by the State Council, it is a social organization voluntarily sponsored by enterprises, institutions engaging in optics and optoelectronic science research, manufacturing, teaching and studying throughout the country, it was a civil organization approved by Civil Administration of China. COEMA plays an advisory and assistance role for government administration of the optics and optoelectronics industries.

COEMA is administered and guided in business by Ministry of Industry and Information Technology, and supervised by the Civil Administration of China. Its key responsibilities are listed below:

1) To assist government to promote economic system reform of the China Optics & Optoelectronics Manufacturers (COEM), help council members transfer business mechanisms, and adapt to the development of the socialist market.

2) To carry forward investigation of COEM and undertake marketing research, provide the

government with proposals for the developing planning of COEM; carry out market forecasting providing information to government and council members.

3) To organize international and domestic exhibitions, seminars, academic exchanges, and conferences; provide dedicated new products and technology promotion and application; publish periodicals and newspapers, record industry contents in various albums; enlist council members to temper the domestic market, organize international exchanges, carry forward international cooperation, push COEM development and progress.

4) To strengthen the vigour and vitality of enterprises, expand the market, play an advisory and assistance role to government administration of COEM, promote the technology and industry development of China Optics & Optoelectronics Manufacturers.
.

- **Superior of COEMA**

Ministry of Industry and Information Technology

- **Leadership of COEMA**

General Secretary: Mrs. Lin Wang, Email: ﹙ wl@coema.org.cn ﹚
Deputy Secretary: Mr. Hongtao Suo, Email: ﹙ suohongtao@coema.org.cn ﹚

- **Member status**

There are 712 members of COEMA, divided into seven branches in accordance with the following fields of specialisation: *lasers, infrared technology, optical elements & optical instruments, optoelectronic devices, optoelectronic diode display screens, liquid crystal and laser holography branch.* Its member institutions include not only high-tech enterprises such as *BOE Technology Group Co., Ltd., SVA Electron Co., Ltd., Shenzhen Tianma Microelectronics Co., Ltd., Shanghai Nicera Sensor Co., Ltd., China Daheng Laser Engineering CO., Ltd.* but also nationally important science research institutes, such as *North China Research Institute of Electro-Optics, No.33 Institute, Beijing Tsinghua National Liquid Crystal Technology Engineering Research Center, No.8358 Institute of China Aviation Industry General Corporation, Fujian Institute of Research on The Structure of Matter, CAS etc.*

CHOICE project ◼ Grant Agreement #610578   Page **25** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ◼ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ◼ 7th Framework Programme ◼ Coordination and Support Action FP7-ICT-2013-10 ◼ Theme: Information and Communication Technologies ◼

10. China Electronics Standardisation Association

(CESA，中国电子工业标准化技术协会)

- **Website:** http://www.cesa.cn/default.aspx

- **Contact info.**

Tel: 86-10-68207848/7847/0655
Address: 27th Wanshou Road, Haidian Dist., Beijing, 100036

- **Key responsibilities**

1) Extensively keep in touch with the national electronic information industry standardisation bodies and standardisation workers, report the desires and requirements of enterprises to the government, meanwhile deliver the comments of the government to enterprises, assist the government in well conducting electronic information industry standardisation work;

2) Research and investigate common issues in electronic information industry standardisation, promote standardisation achievements, organize the academic and technical exchanges in electronic information industry standardisation;

3) Research and investigate standardisation related work, so as to provide suggestions to the government on standardisation guidelines and policy making;

4) Entrusted by the government to coordinate the resolution of significant technical problems related to electronic information industry standardisation, or provide related suggestions;

5) Explore the standardisation work in the information technology area;

6) Publicise national standardisation principles, policies and laws, popularize standardisation knowledge, train standardisation personnel, co-organize the publicity and implementation work of significant standardisation projects;

7) Develop information resources for electronic industry standardisation, edit and publish standardisation books, audio-visual materials, organize standardisation technical consulting services;

8) Reflect the views and recommendations from standardisation workers, maintain the legitimate interests of standardisation workers; organize various activities for members, recommend or reward excellent academic papers and scientific works on standardisation, organize recognition and reward for the advanced units and individuals involved in the standardisation work of the association;

9) Launch international standardisation academic exchange activities in the field of information technology.

- **Superior of CESA**

Ministry of Industry and Information Technology

- **Leadership of CESA**

Honorary Chairman: Hongkun LIU
Chairman: Yan HU

- **Member status**

CESA has 240 member organisations in total, some of member companies are listed below:

✧ *International Business Machines Corporation (China) Investment Co., Ltd.*
✧ *The soldiers Communication Technology Co., Ltd.*
✧ *Nokia (China) Investment Co., Ltd.*
✧ *Hisense Group Co., Ltd.*
✧ *Haier Group's R & D center*
✧ *Sony (China) Co., Ltd.*
✧ *Jiangxi KingGrid Technology Co., Ltd.*
✧ *Panasonic (China) Co., Ltd.*
✧ *Shenzhen ANSIN Network Systems Limited*
✧ *China Electronic Chamber of Commerce*

CHOICE project ■ Grant Agreement #610578   Page **27** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

11. Beijing Electronic Commerce Association

(BECA, 北京电子商务协会)

- **Website:** http://www.beca.org.cn/

- **Contact info.**

Tel: 010-63435415
Fax: 010-51814650
Add: Room 312,C1 Lianhuachi Dong Road, Xicheng Dist.Beijing, 100045
E-mail: beca9999@gmail.com

- **Key responsibilities**

The Beijing Electronic Commerce Association (BECA) was founded in 2002. The scope of the Beijing Electronic Commerce Association includes R&D on the direction of the e-commerce industry in Beijing and making policy, assisting the Government in formulating industry standards, and planning Beijing's e-commerce development.

It is active in the field of electronic commerce providing information, advice, training, and legal services. It participates in exhibition organization to help e-commerce enterprises to develop domestic and international markets.

It engages in horizontal exchanges with domestic and foreign enterprises to implement community organizations and economic and technical cooperation.

BECA is approved and registered by the Beijing Municipal Caste authority department. BECA is incorporated as a non-profit institution.

Its key responsibilities are:

◆ Investigation

BECA studies in Beijing electronic commerce industry developments, programming correlative policy, technology, and industrial market trends. BECA helps government frame

and revise relevant layout of Beijing municipal electronic commerce developments and industry standards.

◆ Serving

BECA actively promotes information, consultation, professional training, and legal services in the field of electronic commerce. BECA organizes membership enterprises to participate in exhibitions, and helps enterprises develop business in China and abroad.

◆ Self-discipline

BECA sets up and improves the industrial regulation & rules of Beijing municipal electronic commerce, to guide the development of electronic business enterprises development.

◆ Exchange

BECA engages in transverse communication with relevant institutions and enterprises in China and abroad aimed at improving economic and technical cooperation.

- **Superior of BECA**

Beijing Municipal Commission of Commerce

- **Leadership of BECA**

Honorary Chairman: Yan LU
Chairman: Tongxin DING

- **Member status**

BECA has 94 member organisations in total, some of its member companies are listed below:

✧ *Beijing Express Channel Food Logistics Co., Ltd*
✧ *Beijing Changping New Century Shopping Mall*
✧ *Beijing Xiaomi Technology Co., Ltd*
✧ *Beijing Zhongwangshenzhou Technology Co., Ltd*
✧ *Beijing Co-Mall Software Technology Co., Ltd*
✧ *Beijing SinoTsing Information Technology Academy*

CHOICE project ■ Grant Agreement #610578   Page **29** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
     ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

12. China Computer Industry Association

(CCIA, 中国计算机行业协会)

- **Website:** http://www.chinaccia.org.cn/index.htm

- **Contact info.**

Tel: 86-10-57757112, 86-10-57757149
Fax: 86-10-68865288
Address: Room 211, No. 21A, Shijingshan Road, Shijingshan Dist., Beijing, 100049
Email: ccia@chinaccia.net.cn

- **Key responsibilities**

The China Computer Industry Association (CCIA) was established on April 17, 1987 in Beijing and registered with the Ministry of Domestic Affairs in April 1991 as a commonalty.

China Computer Industry Association is a social organization organized and participated in by enterprises and institutions which are engaged in scientific research, development, production, and application of computers and related products. Now, there are more than 190 registered members in the association. It also has five regional social organization members in Shenzhen, Shanghai, Jiangsu, Zhejiang, and Henan. Registered members of the five organisations total more than 600.

The principle and purpose of the China Computer Industry Association is: Observing the Constitution, Laws, regulations, and policies of the state, respecting social morality, the China Computer Industry Association serves its members and the government; safeguards the lawful rights and interests of its members; and carries out work under the principles of "fairness, unity, service"; serves as a bridge and link between government and enterprises and institutions; to promote the development of China's computer industry.

The competent authority of the China Computer Industry Association is the Ministry of Industry and Information Technology.

China Computer Industry Association is one of the authoritative mass organizations of the information industry in China. Most of its members are manufacturers of computers and related products. Many well-known computer companies are members of the association.

Statistics show that their computer output value accounts for 60% of the total computer industry output value in China. There are nineteen members among the top hundred electronic enterprises. Their sales account for 23% of sales of the top one hundred, and 37% of total sales of computers on the domestic market.

The membership of China Computer Industry Association is showing a tendency to developmental pluralism. Joint-ventures, foreign capital enterprises, and enterprises jointly managed by China and foreign countries, in the association account for 27% of its membership, injecting new vitality into the development of the China Computer Industry Association.

- **Superior of CCIA**

Ministry of Industry and Information Technology

- **Leadership of CCIA**

Honorary Chairman: Zhi WANG, Qi ZHANG, Maochao ZENG
Chairman: Ming LU

- **Member status**

CCIA has 600 plus member organisations, some of its member companies are listed below:

- *Beijing Computer Factory No. 1*
- *VIA Technologies (China) Co., Ltd.*
- *Shenzhen MingHua AoHan Technology Co., Ltd.*
- *Tianjin Samsung Electronics Display Co., Ltd.*
- *Jilin North Display Digital Electronics Co., Ltd.*
- *Beijing KeChuang JingCheng Barcode Technology Co., Ltd.*
- *East China Institute of Computing Technology*
- *Dandong JinLong Technology Development Co., Ltd.*
- *Shenzhen KangGuan Computer Technology Co., Ltd.*
- *WeiGuanTechnology (Shenzhen) Co., Ltd.*

13. China Electronic Components Association

(CECA, 中国电子元件行业协会)

- **Website:** http://www.ic-ceca.org.cn/

- **Contact info.**

Tel: 86-10-68638939, 86-10-68638969
Fax: 86-10-68637639
Address: Room 311, Zhongchu Building, Shijingshan Road, Beijing, 100049

- **Key responsibilities**

1) Plays the role of a bridge and link between the government and enterprises. Actively reports the industry and association member's desires and requirements to the government, assists the government in managing the electronic component industry;

2) Carries out the industry investigation and research. Actively proposes suggestions on industry development and legislation etc. to the government, participates in formulating and revising the preliminary investigation and interim evaluation of the industry development;

3) Strengthening industry self-discipline around standardizing the market order, vigorously promoting industry integrity building, regulating the behaviour of members, coordinating member relations and safeguarding a fair competitive market environment;

4) Fulfilling the mission of its services business, conducts industry statistics compilation, grasps the development dynamic of the industry at home and abroad, collects and publishes industry information; publishes newspapers and establishes its website in accordance with the relevant regulations, carries out consulting services on technology, economy, management, market etc., organize training of talents, technology, management, and laws & regulations;

5) Assists enterprises in exploring markets. Carries out economy and technology exchanges and cooperation at home and abroad, contacts with relevant international organizations, holds exhibitions entrusted by the government or according to market and industry development needs; actively participates in coordinating foreign trade disputes, organizes member companies carrying out anti-dumping, countervailing and other safeguards related work, maintains the normal import and export order;

6) Approved by the related department of the government, organizes new product identification, R&D outcome reviews, industry standard formulation, and quality supervision etc.

- **Superior of CECA**

Ministry of Industry and Information Technology

- **Leadership of CECA**

Honorary Chairman: Weizhi QU, Xinkui LV
Chairman: Xueli WEN

14. Technology Innovation Strategic Alliance of Internet of Things Industry

(物联网产业技术创新战略联盟, TTSAIoTI)

- **Website:** http://www.china-iot-alliance.cn/member.asp

- **Contact info.**

Tel: 86-10-64303105
Address: Building 202, A10, Jiuxianqiao North Road, Chaoyang Dist. Beijing, 100015
Email: public@china-iot-alliance.org

- **Key responsibilities**

The key mission of the alliance is to: extract the significant requirements of the IoT; regarding the key issues of IoT innovation, organize enterprises, universities and institutions to carry out some important technology innovation and research activities; promote the significant technology breakthroughs; build key technology, products and standards of the industry; support and lead the development of the industry; realise the promotion and application of IoT technology in China and the global market; improve the entire competitiveness of China's IoT industry.

Its key responsibilities are:

1) Research the industry innovation strategy, provide a decision-making reference for the government about relative policy making and successful implementation of significant projects;

2) Promote and dominate the enaction of IoT technology standards;

3) Carry out project cooperation, organize the implementation of significant technology innovation projects and special industrialization projects;

4) Integrate the advantages of the alliance members, carry out joint technology research;

5) Drive resource integration of the upstream and downstream of the industry chain, achieve industry cluster development;

CHOICE project ■ Grant Agreement #610578   Page **34** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

6) Integrate the power of industry-university-research to establish compact independent innovation platforms;

7) Actively promote technology exchange and cooperation inside and outside the alliance;

8) Promote the intellectual property strategy implementation for alliance members.

- **Superior of TTSAIoTI**

Ministry of Science and Technology

- **Member status**

Some of TTSAIoTI's member companies are listed below:

- *Huawei Technologies Co., Ltd*
- *China University of Mining & Technology*
- *Beijing University of Post & Telecommunication*
- *Jiangsu Sailian IT Industry Institute Union*
- *Nanjing Sample Technology Co. Ltd*
- *Beijing HUNRAY Technology Co. Ltd*
- *Beijing HuaYuanQiuShi Technology Co. Ltd*

15. China Strategic Alliance of Smart City Industrial Technology Innovation

(中国智慧城市产业技术创新战略联盟, CSAoSCITI)

- **Website:** http://www.smartcityunion.cn/

- **Contact info.**

Tel: 86-10-82317867
Address: Room 701, BoYan Building, #238 North 4th Ring Middle Road, Haidian Dist., Beijing,
Email: secret@smartcityunion.cn

- **Key responsibilities**

The key mission of the alliance is with the goal of breaking through common & critical technology and developing key technology competitiveness of smart city IT industry, integrate industry-university-research-application resources, establish the mechanism and channel communicated with the government, platform of talents training and international cooperation, promote self development of the member companies. Meanwhile, the alliance supports the construction and implementation of China independent technology and standard system of smart city, promote the realization of leap development of city informatization level, lead & guide the technical development trend of international relevant fields.

1) Around the common and critical technology issues, taking the smart city data processing as the core, organize enterprises, universities, and research institutions to develop technical cooperation, build the key technical competitiveness of smart city IT industry;

2) Publicize and execute the relevant policies, laws and regulations, establish the common strategy, together seek support of policy, law, regulation, funding, public opinion, report the wishes and requirements of alliance members to the related department of the government, create good social environment for industry development;

3) On the basis of complementary advantages, resources sharing, and fully developing the resource and capacity of alliance members, realize the effective division of labor and reasonable connection of innovation resource. Build public technical platform, execute intellectual property sharing;

CHOICE project ■ Grant Agreement #610578   Page **36** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
   ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

4) Implement technology transfer, accelerate the commercialization of technical achievements, improve industry entire competitiveness;

5) Jointly cultivate talents, strengthen personnel's exchange and interaction, provide talents support for industry continuous innovation.

- **Superior of CSAoSCITI**

Ministry of Science and Technology

- **Member status**

CSAoSCITI has 57 member organisations in total. Some of its member companies are listed below:

◇ *Hubei Hexing Group*
◇ *China Academy of Telecommunication Research of MIIT*
◇ *Founder International Co., Ltd*
◇ *Digital China Co., Ltd*
◇ *Aerospace Hi-Tech Holding Group Co., Ltd*
◇ *Wuhan University*
◇ *Beihang University.*

Part 2 Overview of other Chinese national organisations supporting Chinese industry

16. Chinese ICT industry associations and alliances

Beidou satellite navigation application industry alliances[1]

Since early 2012 the cities of Shanghai, Beijing, Nanjing, and Shenzhen, and the provinces of Sichuan and Guangdong have separately founded Beidou satellite navigation industry alliances or industrial zones.

The establishment of the navigation alliances or industrial zones is part of the Chinese government's plan to accelerate the adaptation of the Beidou Navigation Satellite System (BDS), domestically engineered by China. Its competitor, the US Global Positioning System, still holds the advantage in terms of cost, market scale and marketing.

China Association of Communications Enterprises[2]

China Association of Communications Enterprises was formed voluntarily, by communications operators, information services providers, equipment manufacturers, construction, operation and maintenance of the network, network security and other communication industry-related businesses, institutions, and non-profit community organizations. It plays a bridging role to government services for its members to promote the development of the communications industry and information technology, and to promote industrialization and information integration. Its main functions include[3]:

- Providing advice and reference for government departments and enterprises

- Drafting or participating in the development of industry standards, research organizations, research and consulting, information reporting, industry statistics organizations,

---

[1] http://www.wantchinatimes.com/news-subclass-cnt.aspx?id=20131128000071&cid=1102
[2] http://www.cace.org.cn/
[3] http://www.cace.org.cn/new/content/2006-05/13/content_866410.htm

organizations and businesses for practitioners' qualification certification and inspection, and other qualifications

- Organizing foreign economic and technological exchanges and cooperation, coordination of foreign trade disputes

China Embedded System Industry Alliance (CESIA)[4]

China Embedded System Industry Alliance was the first non-governmental organization in China's embedded systems industry. It aims to build a complete embedded system industry chain, promote exchanges between enterprises and government as well as international counterparts, to increase the overall competitiveness of the industry.

China Electronic Appliance Corporation (CECC)

The China Electronic Appliance Corporation[5] is a national body formed to promote and nurture the electronics industry in China. It is a trade association.

China High-Performance Computer Industry Alliance[6]

The China High-Performance Computer Industry Alliance was founded under the guidance of the Ministry of Industry and Information Technology. The alliance is aimed at promoting the cooperation of IT enterprises in fields such as host, chip, operating system, database, and middleware, establishing China's own high-end IT industry chain, and realizing the transformation and upgrading of its development. It vigorously promotes the application and promotion of high-end IT Products, as well as accelerating the proprietary progress of the national information strategy. The purpose of establishing a national host industry alliance was to establish cooperation and exchange mechanisms among members to set about the formulation of related standards for the industry.

---

[4] http://www.techsecuritychina.com/2008/07/01/6943-china-embedded-system-industry-alliance-unveiled-in-beijing/
[5] http://www.digitivity.com/association/china.html
[6] http://www.inspur.com/inspur/495255/494903/508719/index.html

China Interactive Media Industry Alliance

The China Interactive Media Industry Alliance (IMIA)[7] is working on triple play IPTV, mobile TV, and online game services provided on public platforms and websites. The main purposes of IMIA include: to promote technology innovation and launch products. Telecom and broadcast systems are separately managed in China, which means cooperation faces more non-technical challenges in China than in the EU. The IMIA is seeking for market mechanisms to address these problems. The third area of IMIA activity is new media services, e.g. smart manufacturing, smart agriculture, etc.

China Smart City Industry Alliance (CCIT).

The China Smart City Industry Alliance (China smart Cities IndusTry Alliance), abbreviated as CCIT[8] was founded on 10 October 2013 to boost the development of smart technologies in China and help the country meet its urbanization challenges[9]. It a Chinese national Ministry of Industry and Information Technology (MIIT) approved agency the aims of which include developing industry standards with independent intellectual property rights and promoting the harmonious development of emerging smart industries.

The totality of its work is best viewed in the context of the hierarchy of Chinese industry associations focussed on Smart Cities which reviewed in CHOICE project 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.

National Industry Alliance of Smart City Technology Innovation

The National Industry Alliance of Smart City Technology Innovation brings together expertise related to the urban industrial chain, including sensor design and manufacturing, data acquisition and processing, chip design and manufacturing and intelligent terminals, software and industry applications, planning and consulting, investment, and all aspects of competitive enterprises.

---

[7] www.im-ia.org
[8] www.ccit.org.cn
[9] http://www.chinadaily.com.cn/bizchina/2013-10/10/content_17021380.htm

The overall objectives of the Alliance are through market demand traction, gathering smart city enterprises, universities, and research institutes, and industrial capital, to create a smart city technology innovation system and industrial base, to form a smart city industry chain and promote the rapid and orderly development of China's large-scale smart city industry, establish a well-known brand, build a national team, and nurture and strengthen member companies.

As the main technical innovation alliance in this area it has: developed an information platform of smart city technology standards; developed the smart city's diverse heterogeneous data acquisition, processing, and exchange technology; within the established urban infrastructure elements developed a monitoring and management platform and related construction specifications and procedures, developing a series of sensors that connect to the urban management and automation equipment. It has addressed challenges of large-scale production, and the operation and maintenance of urban management "big data" systems, including dynamic monitoring, information extraction, and the refinement of the application of information services.

At the 2nd Internet of Things (IoT) Symposium 16-17 April 2014 in Hong Kong officials from the Chinese government and the EU spoke about the development of smart cities using the IoT in China and the EU[10]. The secretary general of National Industry Alliance of Smart City Technology Innovation[11] said the central government's objectives for smart cities are to enhance city planning, building and management stating that: "The Smart city is a new ecosystem of city management and public service delivery," The Alliance's smart city initiatives will aim to improve city traffic, city administration, energy supply, underground space utilization, water supply and other areas closely related to the well-being of the public. The three areas that have been the focus of largest number of smart city projects have been public information portals (79 projects), public infrastructure databases (72 projects), and egovernment (53 projects).

---

[10] http://cw.com.hk/feature/china-eu-tackle-urbanization-challenges-smart-city-pilots
[11] http://cylm.scitycn.org/en

CHOICE project ■ Grant Agreement #610578   Page **41** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

Shanghai Software Industry Association (SSIA)

The Shanghai [City] Software Industry Association (SSIA)[12] is one of the earliest established software industry associations in China. It has a particular interest in software quality management and process improvement, software services, software, intellectual property, embedded systems and software, open source software and educational software, reflecting the wide range of its member organisations' interests.

The Shanghai Software Industry Association has a role in software engineering practices and industry self-regulation. It studies software engineering specifications and standards. The association's "software price estimation methods" and "Software Product Specification", provide the basis for software industry standard development. The association organizes technical information and management experience exchanges between its members.

Shenzhen City Big Data Industry and Innovation Alliance

In January 2014 the Shenzhen City Big Data Industry and Innovation Alliance was launched, this Alliance is sponsored by the Technology Innovation Committee of the Shenzhen Government which comprises numerous key enterprises of the Big Data industry in Shenzhen City. The Alliance aims at promoting industry collaborations and Big Data technology developments and applications to promote Shenzhen City's pioneering position in China's Big Data industry[13].

"As a national strategic emerging industry, Big Data has received great attention from the Chinese government. The "Twelfth Five-year Plan for the National Development of Strategic Emerging Industries" clearly advocated the research and development of mass data storage, processing technology, and industrialization. The "Internet of Things Five-Year Plan" lists information processing technology as one of the top technology innovation initiatives. Smarter Cities are leveraging Big Data technology to improve infrastructure, planning and management, and human services with the goal of making cities more desirable, liveable, sustainable, and green. Some specific focus areas include mass transit, utilities, environment, emergency response, big event planning, public safety, social security, and healthcare."

---

[12] http://www.chinaccia.org.cn/
[13] http://www.prnewswire.com/news-releases/china-information-technology-inc-chairs-the-shenzhen-city-big-data-industry-and-innovation-alliance-240458841.html

Shenzhen Electronics Industry Association

The Shenzhen[14] Electronics Industry Association[15] was established to safeguard the legitimate rights and interests of its member companies to provide services to its members, to promote the development of Shenzhen's electronics industry; to act as a bridge and a link between government and enterprises and assist the Government to carry out macro-management of the industry. It is involved in industry-self regulation activities.

Its tasks include assisting the Government in formulating industry development plans, participating in the consideration of major projects in the industry; conducting industry research, monitoring industry trends, offering advice and recommendations to the government on behalf of the industry; quality diagnosis, certification, consulting services, for the enterprise outbound overseas personnel certification procedures; providing policy, economic, technical, scientific and technological information to its member companies.

Smart City Development Alliance

This is a recently established Chinese national smart city alliance the "Smart City Development Alliance", a signing ceremony for which was held concurrently with China International Urbanization Forum 2014 in Shanghai on April 19, 2014[16]. Formed by the National Development and Reform Commission (NDRC)[17] this alliance helps promote urban governance, city management and public service innovation.

---

[14] Guangdong Province

[15] http://www.szeia.com/sc/association/about.asp

[16] http://www.chinadaily.com.cn/m/beijing/zhongguancun/2014-05/05/content_17483684.htm

[17] http://www.chinabusinessreview.com/smart-city-development-in-china/

CHOICE project ■ Grant Agreement #610578   Page **43** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

17. Chinese ICT Evaluation Centres

Beijing [City] Information Security Evaluation Center [18]

The Beijing Information Security Evaluation Center (Beijing Information Security Test and Evaluation Center) is Beijing municipal government approved.

China Software Evaluation Center [19]

This Center is of major national importance to ICT businesses in China. Its main roles are:

- The reliability of electronic systems business description which includes:
  - IOT program design, verification, evaluation services
  - Cloud Computing Design and Evaluation
  - Data Center (room) Evaluation Services
- Product Evaluation and Information Systems which includes:
  - National e-government system application software acceptance testing
  - Power Information System Test
  - National Science and Technology Special Assessment Service
- Information Security Evaluation which includes:
  - Electronic authentication of public services
  - Government information security research and policy advice auxiliary
  - Personal Information Protection Standards Compliance Assessment
- Military software and system evaluation
- Industrial control system reliability evaluation

---

[18] http://www.bjtec.org.cn/cenep/html/index.html

[19] http://www.cstc.org.cn/

- Mobile Internet applications software evaluation

- Photovoltaic (PV) products and systems evaluation

Importantly for CHOICE the Center plays a significant role in smart cities development in China. It has responsibility for City top-level design and evaluation of Smart City Consulting, environmental / health planning and evaluation of Smart City Seminar series, Project Management.

Its responsibilities are very wide ranging and encompass: Education sector supervision and counselling; Government Information Technology Project Management; E-Science project supervision; ITSS conformity assessment and consultation; IT Services / Security Management System Consulting; Computer Information System Integration Qualification Accreditation and Information Systems Project Management Qualification Accreditation; the Government website performance evaluation group.

Guangdong [Province] Information Technology Security Evaluation Center[20]

Guangdong Provincial Information Security Evaluation Center is a Guangdong Provincial People's Government approved independent institution.

Shanghai [City] Information Security Testing Evaluation and Certification Center[21]

Is a Shanghai municipal government approved center.

---

[20] http://www.gditsec.org.cn/
[21] http://www.shtec.gov.cn/

Shenzhen City Information Technology Security Evaluation Center[22]

Shenzhen Information Security Evaluation Center (Shenzhen Information Engineering Quality Supervision and Inspection Station) (referred to as SISTEC) is an independent institution which is Shenzhen Municipal Office approved.

State Information Center Software Testing Center[23]

National Information Center Software Testing Center is a National Development and Reform Commission approved national home-level software products and information systems professional evaluation agency, with national measurement certification.

The Center provides, evaluation services: a cloud services platform, information systems auditing, software reliability assessment; personnel training and other professional information; technical services for government, research institutions and enterprises to provide overall technical service solutions.

The National Evaluation Service System has regional centers in Chongqing, Guangdong, Sichuan, Fujian, Shenzhen, Shanghai, Shandong, Yunnan, Jiangsu, Tibet, Hebei, Hubei, Liaoning, Zhejiang, Inner Mongolia and other regions, under the unified management of the Center.

On 9 July 2014 the Center hosted the Smart City Development Research Center of China 2014 annual meeting.

---

[22] http://www.stc.org.cn/pczx/main/portal/login/index.aspx

[23] http://www.stc.sic.gov.cn/

CHOICE project ■ Grant Agreement #610578   Page **46** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
   ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

18. Chinese Software and Integrated Circuit Promotion Centre

The Ministry of Industry and Information Technology Software and Integrated Circuit Promotion Center (CSIP)

CSIP is China's national software and integrated circuit public service platform[24].

It major responsibilities are to[25]:

Provide support and guarantees for major technology items of national core electronic elements, high-end general chips, and fundamental software products.

Promote R&D and application of advanced technologies and common technologies in relevant fields, and engage in scientific achievement transforming, promotion, and importantly for CHOICE technical exchange and consultation with domestic and overseas partners.

Engage in construction of a national industrial public service platform and industrial public service system for software and integrated circuit industries, and provide a public, neutral, and open service for the development of the software and integrated circuit industries and enterprises of the nation.

Engage in industry and informatization related fields' soft science research, such as strategic research and IPRs warning research, and provide supportive services for government's decision-making and industry development.

Be responsible for the training of high-end and critical talent related to the industry and informatization fields.

Undertake other issues ordered by the Ministry of Industry and Information Technology of the People's Republic of China.

---

[24] http://www.miit-csip.org.cn/CSIPEnglish/CSIPEnglish_Aboutus/DevelopmentHistory/

[25] http://www.miit-csip.org.cn/CSIPEnglish/CSIPEnglish_Aboutus/CSIPIntroduction/

19. Chinese ICT standards associations

China High-Performance Computing standardisation committee[26]

The High-Performance Computer Standardization Committee (HPCSC), an independent special interest group devoted to developing in-country resources for high-performance computing which consists of volunteers from domestic and foreign enterprises, institutions, standardization bodies and individuals engaged in standardization work in the field of electronic and IT technologies. The association is a direct affiliate of the Chinese Electronics Standardization Association, under the supervision of the Ministry of Industry and Information Technology.

China Society for Urban Studies (CSUS)

The leading government body responsible for the development of a national Eco-city standard is the China Society for Urban Studies (CSUS). Most research around China's EcoCities standard focuses upon Key Performance Indicators, several of which have been established by CSUS against which the performance of Eco–Cities, once constructed, will be evaluated.

Progressing Eco-city Policies into Main-stream Practice – Action Research on Policy, Financing and Implementation Strategies for Low Carbon Cities in China was a project supported by the UK Foreign & Commonwealth Office and China's National Development & Reform Commission that reported its results in July 2012[27].

The project reviewed the Chinese national standard for Eco-cities standard and its KPIs. An implementation tool was developed in the project to support the Eco-City Assessment and

---

[26] https://ssiforum.org/index.php?option=com_content&view=article&id=49:server-system-infrastructuresm-forum-announces-liaison-agreement-with-the-high-performance-computer-standardization-committee-of-china&catid=9:press-releases&Itemid=18

[27] Progressing Eco-city Policies into Mainstream Practice in China, The UK-China Ecocities & Green Building Group, July 2012. (http://ols.cbbc.org/eco-cities/progressing%20eco%20city%20policies.pdf)

CHOICE project ■ Grant Agreement #610578   Page **48** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
   ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

Best Practice standards developed by CSUS. The tool comprises a framework with sets of high-level, strategic questions that aid decision making at the planning and master plan design stages.

The project determined that the 'hardware' of Eco-city urban planning and design should include SMART infrastructure which utilises Information and Communications Technology (ICT) to enable virtual connections, reduce physical urban loads, and in combination with face-to-face interaction promote quality of life. Although SMART can be adopted loosely as a label, Eco-city relevant technologies can be clearly defined, critically appraised and selectively adopted.

Part 3 Overview of EU organisations that support EU industry at an EU level

20. European industrial associations

ARTEMIS Industry Association http://www.artemis-ia.eu/about_artemis.html

Advanced Research & Technology for EMbedded Intelligence and Systems

"ARTEMIS Industry Association is the association for actors in Embedded & Cyber-Physical Systems within Europe. As private partner, the association represents its members - industry, SMEs, universities and research institutes - in Electronic Components and Systems (ECSEL) Joint Undertaking[28].

ARTEMIS Industry Association continuously promotes the R&I interests of its members to the European Commission and the Public Authorities of the participating states. It continues the work of the European Technology Platform ARTEMIS and is therefore responsible for the ARTEMIS Strategic Research Agenda (SRA) on Embedded & Cyber-Physical Systems, which reflects the Research & Innovation (R&I) needs of the industry. The association strongly believes that the continued success of the Embedded & Cyber-Physical Systems sector in Europe depends on one coordinated, pan-European strategy.

ARTEMIS Industry Association is a membership organisation with more than 180 members and associates from all over Europe. The multidisciplinary nature of the membership provides an excellent network for the exchange of technology ideas, cross-domain fertilisation, as well as for large innovation initiatives."

---

[28] http://www.ecsel.eu/web/index.php

CHOICE project ■ Grant Agreement #610578   Page **50** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

Cable Europe http://www.cable-europe.eu/about-us/

"Cable Europe is the trade association that connects leading broadband cable TV operators and their national trade associations throughout the European Union.

Cable Europe is a not-for-profit, non-commercial professional membership organisation. Cable Europe membership is open to broadband cable TV operators and national cable associations within the European Union.

The European cable TV industry provides high speed broadband internet, digital TV services, and telephony to more than 76 million customers."

"Regulatory & Public Policy

The regulatory and public policy activities of Cable Europe aim to promote and defend the industry's policies and business interests at European and international level.

Cable Europe is an engaged member of the technology policy community and an active player in the domain of related regulation.

The liberalisation of the European telecoms sector, current relevant legislation and future EU policy endeavours are key concerns of European cable operators"

The key areas of Cable Europe's lobby activities are: Audiovisual, Competition Law, Copyright, Data Retention, Network Related Items, and Privacy.

DIGITALEUROPE http://www.digitaleurope.org/

"DIGITALEUROPE represents the digital technology industry in Europe. Our members include some of the world's largest IT, telecoms and consumer electronics companies and national associations from every part of Europe. DIGITALEUROPE wants European businesses and citizens to benefit fully from digital technologies and for Europe to grow, attract and sustain the world's best digital technology companies.

We ensure industry participation in the development and implementation of EU policies.

DIGITALEUROPE's members include 58 corporate members and 36 national trade associations from across Europe."

CHOICE project ■ Grant Agreement #610578   Page 51 of 88
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
   ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

With such a broad remit the actual work of DIGITALEUROPE is carried out through its Policy groups which cover: Digital Economy, Environment, Technical & Regulatory, and Trade. The remit of each these groups is so large that their work is carried out through their Working groups which are listed below.

- Digital Economy: Consumer policy, Copyright, Intellectual property rights, Market regulation, Privacy and security

- Environment: Chemicals, Ecodesign, Resource efficiency. Waste

- Technical & Regulatory: Broadcast, e-Inclusion, Market Access, Mobile Terminals, R&D, Smart Grids, Spectrum, Standards and Interoperability

- Trade: Customs related issues, International Agreements, Market access to Third Countries

European Competitive Telecommunications Association (ECTA)
http://www.ectaportal.com/en/HOME/Welcome/

The mission of EICTA is: "To promote and foster a regulatory environment for the European Communications Sector which ultimately supports free market competition and leads to political, social and economic benefits for all Europe's businesses and consumers.

Aims & Objectives

- Assist and encourage market liberalisation and competition

- Represent the telecommunications industry to key government and regulatory bodies

- Maintain a forum for networking and business development throughout Europe

- Assist new market entrants through pro-competitive policies

- Continually reflect the dynamic nature of the telecommunications industry"

CHOICE project ■ Grant Agreement #610578   Page **52** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
        ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

European Digital Media Association (EDiMA)

http://www.europeandigitalmediaassociation.org/

"EDiMA, is the European trade association representing online platforms. It is an alliance of new media and Internet companies whose members include Allegro Group, Amazon EU, Apple, eBay, Expedia, facebook, Google, Microsoft, Nokia, Yahoo! Europe. EDiMA's members provide Internet and new media platforms offering European consumers a wide range of online services, including e-content, media, e-commerce, communications and information/search services.

- EDiMA supports policy initiatives that are pro-consumer and promote innovation and growth in the new media sector.

- EDiMA believes that all stakeholder interests in the value chain should be considered when formulating policy for the new media sector. Ensuring that everyone benefits from the cultural and economic opportunities offered by the new media sector enables the new media sector to continue as a driver for cultural diversity and economic growth in the EU.

- EDiMA advocates policies to ensure that barriers to pan-European E-commerce are addressed and consumers can benefit from cross-border commerce."

European Satellite Operators' Association (ESOA) https://www.esoa.net/

ESOA was formed to: "represent the interests of the industry with key European organisations, including the European Commission, Parliament, Council and the European Space Agency as well as other international organisations. ESOA's goals include ensuring that satellites benefit from the appropriate political, industrial and regulatory environment to fulfil their vital role in the delivery of communications."

"ESOA is often consulted as reference point for the industry by policy-makers, national and international regulators, other industrial groups, associations and academics for information concerning facts and views of the industry or with requests to cooperate on specific issues. It often participates in conferences representing the space or satellite operator's industry.

As the provision of satellite communications through ESOA members in fact implies global coverage, ESOA also has Co-operations with other organisations on issues that affect members' business outside Europe."

European Semiconductor Industry Association (ESIA)

http://www.eeca.eu/esia/home

ESIA represents the European semiconductor industry in Brussels. "Its mission is to represent and promote the common interests of the Europe-based semiconductor industry towards the European Institutions and stakeholders in order to ensure a sustainable business environment and foster its global competitiveness."

"Semiconductor products are the key enabler for improved energy consumption and performance across a wide range, of everyday technology applications in society. These applications in the field of industrial operations, consumer electronics, healthcare, security and energy devices have contributed to improved energy efficiency for positive societal change."

"The industry was ranked as the most R&D intensive sector by the European Commission in 2011 and supports around 200,000 jobs directly and more than 1,000,000 indirect jobs in Europe."

European Telecommunications Network Operators Association (ETNO)

https://www.etno.eu/

ENTO's activities are predominantly issue-based. When an issue arises a working group set up to it. ETNO working groups cover topics ranging from Research and Development to various EU policy matters. A working group is normally dissolved once its tasks have been completed.

The working groups of ETNO currently cover:

Competitive Markets, Digital Society, Research & Innovation, Corporate Responsibility, Digital Single Market, Data Protection, Trust & Security, Spectrum Policies, Employment, Health & Safety, Fraud, Cybercrime and Network Security, Benchmarking, CERT, Energy Task Force, Internet Governance, Naming, Addressing and Numbering Issues, Tax Issues, Communications Managers, External Trade Issues, ITU

Internet service providers association in the European Union (EuroISPA)

http://www.euroispa.org/

"EuroISPA is a pan European association of European Internet Services Providers Associations (ISPAs). It is the world's largest association of Internet Services Providers (ISPs), representing over 2300 ISPs across the EU and EFTA countries – including ISPs from Austria, Belgium, the Czech Republic, Finland, France, Germany, Ireland, Italy, Norway, Romania and the UK.

The association was established to represent the European ISP industry on EU policy and legislative issues and to facilitate the exchange of best-practices between national ISP associations."

EuroISPA was established to achieve several important objectives including:

"To protect and promote the interests of Europe as a whole within the global Internet, securing a premier position for Europe in the key industry of the new Millennium.

To help deliver the benefits of this new technology of liberation and empowerment to individuals, while at the same time, meeting the legitimate concerns of parents and others responsible for the more vulnerable members of society.

To encourage the development of a free and open telecommunications market"

CHOICE project ■ **Grant Agreement #610578**   Page **55** of **88**
D2.1- _ **Online mapping of Chinese and European ICT industrial associations – Progress report**
    ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

21. EU Public-Private Partnerships

5G Infrastructure Public-Private Partnership (5G PPP) http://5g-ppp.eu/

"Initiated by the EU Commission and industry manufacturers, telecommunications operators, service providers, SMEs and researchers. The 5G PPP will deliver solutions, architectures, technologies and standards for the ubiquitous next generation communication infrastructures of the coming decade."

"The challenge for the 5G Public-Private Partnership (5G PPP) is to secure Europe's leadership in the particular areas where Europe is strong or where there is potential for creating new markets such as smart cities, e-health, intelligent transport, education or entertainment & media. The 5G PPP initiative will reinforce the European industry to successfully compete on global markets and open new innovation opportunities."

Big Data Value Association www.bdva.eu

"The Big Data Value Association AISBL is a fully self-financed non–for-profit organisation under Belgian law. Currently there are 24 founding members from large and SME industry and research. The BDVA shall present an industry-led contractual counterpart to the European Commission for the implementation of the Big Data Value PPP cPPP. A basic principle is openness, transparency and inclusiveness.

The main role of the Big Data Value Association will be providing the Big Data Value strategic research agenda (SRIA) and its regular updates, defining and monitoring the metrics of the cPPP and joining the European Commission in the cPPP partnership board. The Association shall carry out acts, take steps and commit to all activities that are deemed appropriate or useful in view of achieving its Objectives." These activities include:

"collaborating with the European COMMISSION (including to establish a Public-Private Partnership, and to develop and implement a strategic roadmap for research, technological development and innovation in the BIG DATA VALUE and other ICT domains);

developing strategic goals of European BIG DATA VALUE research and innovation and supporting their implementation;

improving industrial competitiveness of Europe through innovative BIG DATA VALUE technologies, applications, services, solution;"

"contributing to policy development, education and technology raminfication in the widest possible sense and addressing ethical, legal and societal issues"

Electronic Components and Systems (ECSEL) Joint Undertaking (JU)

http://www.ecsel.eu/web/index.php

ECSEL is the Public-Private Partnership (PPP) targeted with keeping Europe at the forefront of technology development in Electronic Components and Systems, a pervasive Key Enabling Technology:

"A smartphone, a smart card, a smart energy grid, a smart city, even smart governance; everything "smart" is based on integrating semiconductor chips running embedded software. They provide the fabric on which the internet runs; they give life to portable phones and tablets; they drive driverless cars and trains, fly airliners, drones and satellites. In modern times, no national economy can win in the global competition without mastering this technology, with unparalleled systemic and strategic impact."[29]

The objectives of the ECSEL JU include:

"Contribute to the development of a strong and globally competitive electronics components and systems industry in the European Union;

Ensure the availability of electronic components and systems for key markets and for addressing societal challenges, keeping Europe at the forefront of technology development, bridging the gap between research and exploitation, strengthening innovation capabilities and creating economic and employment growth in the Union;

Build a dynamic ecosystem involving Small and Medium-Sized Enterprises (SMEs), strengthening existing clusters and creating new clusters."

The Members of the ECSEL JU are:

---

[29] http://www.ecsel.eu/web/JU/local_index.php

CHOICE project ■ **Grant Agreement #610578**   Page **57** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
   ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

"The European Union (through the Commission); Member States and Associated Countries to the Framework Programme Horizon 2020 on a voluntary basis; Three associations (EPoSS, AENEAS and ARTEMIS Industry Association) representing the actors from the areas of micro and nanoelectronics, smart integrated systems and embedded/cyber-physical systems."

ENIAC Joint Undertaking (JU) http://www.eniac.eu

"The ENIAC Joint Undertaking (JU) is a public-private partnership focusing on nanoelectronics that brings together ENIAC Member/Associated States, the European Commission, and AENEAS (an association representing European R&D actors in this field)."

The objectives of the ENIAC JU are to[30]:

"a) Define and implement a Research Agenda

b) Award funding to participants

c) Mobilise both public and private efforts to increase overall R&D investments

d) Achieve synergy and coordination of European R&D efforts

e) Promote the participation of SMEs"

"The ENIAC Joint Undertaking supports R&D activities through open and competitive calls for proposals while ensuring with the independent evaluation and selection of proposals, allocation of public funding to selected proposals, and the funding of projects."[31]

---

[30] http://www.eniac.eu/web/JU/missionandgoals.php
[31] http://www.eniac.eu/web/calls/local_index.php

euRobotics AISBL (Association Internationale Sans But Lucratif)

http://www.eu-robotics.net/

"euRobotics AISBL (Association Internationale Sans But Lucratif) is a Brussels based international non-profit association for all stakeholders in European robotics. euRobotics builds upon the success of the European Robotics Technology Platform (EUROP) and the academic network of EURON, and will not only continue the cooperation but will also strengthen the bond between members of these two community driven organisations. Thus, leading towards the establishment of only one sustainable organisation for the European robotics community as a whole.

One of the association's main missions is to collaborate with the European Commission (EC) to develop and implement a strategy and a roadmap for research, technological development and innovation in robotics, in view of the launch of the next framework program Horizon 2020. Towards this end, euRobotics AISBL was formed to engage from the private side in a contractual Public-Private Partnership with the European Union as the public side."

"The objectives of euRobotics are to boost European robotics research, development and innovation and to foster a positive perception of robotics. It aims at: strengthening competitiveness and ensuring industrial leadership of manufacturers, providers and end users of robotics technology-based systems and services; the widest and best uptake of robotics technologies and services for professional and private use; the excellence of the science base of European robotics."

The European Factories of the Future Research Association (EFFRA)

http://www.effra.eu/

"EFFRA is an industry-driven association promoting the development of new and innovative production technologies.

EFFRA's key objective is to promote pre-competitive research on production technologies within the European Research Area by engaging in a public-private partnership with the European Union called 'Factories of the Future'.

'Factories of the Future' brings private and public resources together by launching market-orientated cross-border projects through a progressive research and innovation agenda. These projects produce demonstrators and models which are applied in a wide range of manufacturing sectors."

"The 'Factories of the Future' public-private partnership (PPP) under Horizon 2020 is centred on the priorities of 'Factories of the Future 2020', an ambitious and far-sighted strategic multi-annual research roadmap produced by EFFRA.

'Factories of the Future 2020' is the basis for research call topics and the overall direction of research in the 'Factories of the Future' public-private partnership under Horizon 2020.

The roadmap was developed over a period of 24 months though working meetings including discussions with the European Commission within the 'Factories of the Future' public-private partnership Ad-hoc Industrial Advisory Group (AIAG) and close consultations with representatives of companies and RTOs organised in other related European technology platforms."

"The 'Factories of the Future' PPP identifies and realises these transformations by pursuing a set of research priorities along the following research and innovation domains:
 - Advanced manufacturing processes
 - Adaptive and smart manufacturing systems
 - Digital, virtual and resource-efficient factories
 - Collaborative and mobile enterprises
 - Human-centred manufacturing
 - Customer-focused manufacturing"

FIWARE Open APIs for Open Minds (FI-PPP) https://www.fiware.org/about-us/

"**FIWARE** is an open initiative aiming to create a sustainable ecosystem to grasp the opportunities that will emerge with the new wave of digitalization caused by the integration of recent Internet technologies. The initiative is based on the following pillars:

FIREWARE: The FIWARE platform provides a rather **simple yet powerful set of APIs** (Application Programming Interfaces) that ease the development of Smart Applications in multiple vertical sectors. The specifications of these APIs are **public and royalty-free**. Besides, an **open source reference implementation of each of the FIWARE components is publicly available** so that multiple FIWARE providers can emerge faster in the market with a low-cost proposition.

FIWARE Lab: is a non-commercial sandbox environment where innovation and experimentation based on FIWARE technologies take place. Entrepreneurs and individuals can **test the technology** as well as their applications on FIWARE Lab, exploiting **Open Data published by cities and other organizations**. FIWARE Lab is deployed over a geographically distributed network of federated nodes leveraging on a wide range of experimental infrastructures.

FIWARE Ops: is a collection of tools that eases the deployment, setup and operation of FIWARE instances by Platform Providers. It is designed to help expand the infrastructure associated to a given FIWARE instance by means of federating additional nodes (datacenters) over time and allowing cooperation of multiple Platform Providers. FIWARE Ops is the tool used to build, operate and expand FIWARE Lab.

The FIWARE Acceleration Programme: aims at promoting the take up of FIWARE technologies among solution integrators and application developers, with special focus on SMEs and start-ups. Linked to this program, the EU launched an ambitious campaign in September 2014 mobilizing 80M€ to support SMEs and entrepreneurs who will develop innovative applications based on FIWARE. Similar programmes may be defined in other regions.

FIWARE Mundus: Although it was born in Europe, FIWARE has been designed with a global ambition, so that benefits can spread to other regions. The FIWARE Mundus programme is designed to bring coverage to this effort engaging local ICT players and domain stakeholders, and eventually liaising with local governments in different parts of the world, including Latin American, Africa and Asia.

Photonics[21] http://www.photonics21.org/

"Photonics21 represents the European photonics community of industry and research organisations. Our members develop a common photonics strategy for future research and innovation in Europe."

From[32]: "The "Photonics 21 Association" - a legal entity under Belgium law - was formed to become the private contract partner in a contractual Public Private Partnership (PPP) arrangement with the EU Commission in the frame of Horizon 2020."

"As one of six Key Enabling Technologies (KET's) in Europe Photonics plays a major role for driving growth and employment in Europe and contributes to solve the major societal challenges such as aging society, energy efficiency, inclusion and smart living."

---

[32] http://www.photonics21.org/AboutPhotonics21/Photonics-PPP.php

CHOICE project ■ Grant Agreement #610578   Page **62** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
     ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

22. European Technology Platforms

European Technology Platform for High Performance Computing (ETP4HPC)

http://www.etp4hpc.eu/

An industry-led initiative, The European Technology Platform (ETP) for High Performance Computing (HPC), is an industry led initiative targeted with defining research priorities for the development of a globally competitive HPC technology ecosystem in Europe. "It will propose and help to implement a Strategic Research Agenda, while acting as the "one voice" of the European HPC industry in relations with the European Commission and national authorities."

It is notable that the website of ETP4HPC states that[33]: "To sustain its competitiveness, Europe needs to enhance its innovation capabilities using HPC. However:

Today, HPC is mostly used in large HPC research centres and some large enterprises. It needs to become much more pervasive across the entire industry, including Small and Medium Enterprises (SMEs).

While Europe represents a significant portion of the world's available HPC resources, only a fraction of that technology and infrastructure is developed in Europe.

Other regions invest considerably more in new technologies, architectures and software for HPC systems, gaining a substantial competitive edge over Europe."

European Technology Platform on Smart Systems Integration (EPoSS)

http://www.smart-systems-integration.org

"EPoSS is an industry-driven policy initiative, defining R&D and innovation needs as well as policy requirements related to Smart Systems Integration and integrated Micro- and

---

[33] http://www.etp4hpc.eu/about-us/who-we-are/

CHOICE project ■ Grant Agreement #610578   Page **63** of **88**
D2.1- _ **Online mapping of Chinese and European ICT industrial associations – Progress report**
   ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

Nanosystems. EPoSS is contributing to EUROPE 2020, the EU's growth strategy for the coming decade, to become a smart, sustainable and inclusive economy.

EPoSS provides a common European approach on Innovative Smart Systems Integration from research to production, defines priorities for common research and innovation in the future, formulates commonly agreed road maps for action, provides a Strategic Research Agenda, mobilises public and private resources, and supports its members in coordinating their joint research efforts and improving communication amongst the members as well as towards the European Commission."

The EPoSS members are a group of major industrial companies and research organizations from more than 20 European Member States.

NetWorld2020 http://www.networld2020.eu

"NetWorld2020 is the European Technology Platform for communications networks and services."

"The NetWorld2020 European Technology Platform gathers players of the communications networks sector: industry leaders, innovative SMEs, and leading academic institutions."

The NetWorld2020 vision for the further development of mobile and wireless, fixed and satellite communications includes:

"Contribute to collaborative research programmes on European and national level for collaborative research in the domain of mobile and wireless, fixed and satellite communication networks by a regularly updated research agenda."

The mission statement of the NetWorld2020 Platform is:

"To develop position papers on technological, research-oriented and societal issues, which are agreed in NetWorld2020 bodies to receive a joint mandate.

To seek discussion of issues with decision makers in the political and public domain as well as in the industry and research community to bridge the gap between research and innovation and the expectations from the European society.

To regularly develop an updated Strategic Research and Innovation Agenda (SRIA) for Europe in the communication networks domain in an open process in order to guide industrial and long-term oriented research and to provide means for future economic exploitation in global standards and the widespread deployment of communication systems and networks.

To strengthen Europe's leadership in networking technology and services so that it best serves Europe's citizens and the European economy.

To support the 5G PPP initiative by

Providing the Association members, representing a broad spectrum of the 5G stakeholders, through an open election process

Producing a comprehensive Strategic Research and Innovation Agenda for the 5G domain with frequent updates, and

Promoting the active involvement of the ETP community in 5G initiative proposals and projects

To support general communication networks R&D&I issues."

New European Media (NEM) http://www.nem-initiative.org/

The NEM Initiative was founded with the aim of fostering the convergence between consumer electronics, broadcasting and telecoms in order to develop the emerging business sector of networked and electronic media. In order to respond to the new needs and requirements of the Horizon 2020 programme, the NEM initiative enlarged its focus towards the creative industries and changed its name (form Networked and Electronic Media) to New European Media.

"The NEM constituency includes all major European organisations working in the networked and electronic media area, including content providers, creative industries, broadcasters, network equipment manufacturers, network operators and service providers, academia, standardisation bodies and government institutions. Those actors share a common Vision and have been producing a Strategic Research and Innovation Agenda (SRIA)."

CHOICE project ■ Grant Agreement #610578   Page **65** of **88**
D2.1- _ **Online mapping of Chinese and European ICT industrial associations – Progress report**
    ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

The NEM is currently focussed on the following areas: Digital Content, Distributed Media Applications, Future Media Delivery Networks and Network Services, New User Devices and Terminals.

Networked European Software and Services Initiative (NESSI)
http://www.nessi-europe.eu/

"NESSI is a European Technology Platform active in Information and Communication Technologies for contributing to the research and innovation space of Software and Service."

"It provides a platform for the community from industry and academia."

From[34]: "NESSI promotes that software, services, and data are key enablers to help resolve European societal and economic challenges across all sectors, both private and public, such as manufacturing, transportation, energy, and healthcare."

"NESSI's first objective is to engage with European (ICT) Industry and to promote the need for dramatic changes due to new ICT eco-systems and innovations which are a pre-requisite for Europe to stay competitive globally. Innovation will take place in infrastructure, software, platforms, products, services, processes and information. Individual technologies will advance in areas such as servicification of products, platforms interoperability, real-time data analytics, Software-as-a-Service (SaaS) and virtualisation and these will all be supported by new advanced innovative software engineering techniques and tools."

---

[34] http://www.nessi-europe.eu/?Page=about_us

Part 4 Mapping of Chinese industrial associations to ETPs, PPPs, and EU industrial associations

23. Mapping of Chinese industrial associations to European Technology Platforms and Public-Private Partnerships

In the following table, if a Chinese industrial association or other relevant body maps to a European Technology Platform (ETP) or Public-Private Partnership (PPP) that is not a Chinese priority for EU-China collaboration in ICT R&D&I it is given in italics. The best matching Chinese association for each ETP and PPP is given in bold.

ETP and PPP in **ICT**	Main Subject	Research Subjects/Agenda	Possible Chinese Counterpart
ARTEMIS Industrial Association [Continues the work of the ARTEMIS ETP] & ECSEL JU (PPP) http://www.artemis-ia.eu/ http://www.ecsel.eu/	Embedded and Cyber-Physical Systems	• ARTEMIS Strategic Research Agenda (SRA) on Embedded & Cyber-Physical Systems, which reflects the Research & Innovation (R&I) needs of the industry.	• **China Semiconductor Industry Association** • *China Embedded System Industry Alliance* • Beijing Electronic Commerce Association • China Electronic Components Association • Shanghai Integrated Circuit Industry Association • China Computer Industry Association

CHOICE project ■ Grant Agreement #610578   Page **67** of **88**
D2.1- _ **Online mapping of Chinese and European ICT industrial associations – Progress report**
    ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

BVDA (PPP)	European Big Data Value research, development and innovation	• Develop and implement a strategic roadmap for research, technological development and innovation in the Big Data Value and other ICT domains. • Develop strategic goals of European Big Data Value R&I and support their implementation. • Contribute to policy development, education and technology raminfication in the widest possible sense and address ethical, legal and societal issues contributing to policy development.	• *Shenzhen City Big Data Industry and Innovation Alliance*
	www.bdva.eu		
euRobotics AISBL (PPP)	Robotics	• manipulation robots, • robotic co-workers, • logistics robots, • security robots, • robots used for • exploration or inspection, edutainment	• **China Robot Industry Alliance**
	http://www.eu-robotics.net/		

ETP and PPP in **ICT**	Main Subject	Research Subjects/Agenda	Possible Chinese Counterpart
ETP4HPC (ETP) http://www.etp4hpc.eu/	High Performance Computing	• HPC System Architecture • System Software and Management • Programming Environment • Energy and Resiliency • Balance, Compute, I/O and Storage Performance • Big Data and HPC Usage Models	• ***High-Performance Computer Industry Alliance*** • China Software Industry Association • Shanghai Integrated Circuit Industry Association • *China High-Performance Computing standardisation committee*
ENIAC JU (PPP) http://www.eniac.eu	European Nano-electronics Initiative Advisory Council	• more Moore: extremely dense, complex digital circuits (compute); • beyond CMOS: pushing the physical limits of miniaturisation; • more than Moore: non-digital functions and human interface (interact); • heterogeneous integration: total system integration ('system-in-package'); • equipment and materials: enables manufacturing of complex technologies; • design methods and tools: platform-based system • design for extremely complex devices.	• **China Semiconductor Industry Association** • Shanghai Integrated Circuit Industry Association • China Electronics Standardisation Association

ETP and PPP in **ICT**	Main Subject	Research Subjects/Agenda	Possible Chinese Counterpart
EPoSS (ETP) http://www.smart-systems-integration.org	Innovative Smart Systems Integration	Smart systems applications • automotive, • aeronautics, • information and telecommunications, • medical technologies, • RFID, • safety and security, • cross-cutting issues.	• ***China Association of Communications Enterprises*** • China Electronics Standardisation Association
EFFRA (PPP) http://www.effra.eu/	Development of new and innovative production technologies	• Advanced manufacturing processes • Adaptive and smart manufacturing systems • Digital, virtual and resource-efficient factories • Collaborative and mobile enterprises	• In the ICT area there is no match to an association. Links need to be made with, e.g., Institute of Communications Standards Research of CAICT China
FI-PPP https://www.fiware.org/about-us/	Future Internet technologies.	• Provide a set of APIs (Application Programming Interfaces) that ease the development of Smart Applications in multiple vertical sectors. • R&D on network and communication technologies, devices, software, service and media technologies; and their experimentation and validation in real application contexts. • Integration and harmonization of the relevant policy, legal, political and regulatory frameworks.	• ***China Interactive Media Industry Alliance***

ETP and PPP in **ICT**	Main Subject	Research Subjects/Agenda	Possible Chinese Counterpart
NetWorld2020 (ETP) http://www.networld2020.eu	Communications networks and services	• Contribute to collaborative research programmes on European and national level for collaborative research in the domain of mobile and wireless, fixed and satellite communication networks by a regularly updated research agenda. • To seek discussion of issues with decision makers in the political and public domain as well as in the industry and research community to bridge the gap between R&I and the expectations from the European society. • To regularly develop an updated Strategic Research and Innovation Agenda (SRIA) for Europe in the communication networks domain in an open process in order to guide industrial and long-term oriented research and to provide means for future economic exploitation in global standards and the widespread deployment of communication systems and networks. • To support general communication networks R&D&I issues. • To support the 5G PPP initiative by Producing a	• *China Association of Communications Enterprises* • ***China Mobile Communications Association*** • China Communications Standards Association • The National Remote Sensing Center of China • *Beidou satellite navigation application industry alliances*

		comprehensive Strategic Research and Innovation Agenda for the 5G domain with frequent updates, and • Promoting the active involvement of the ETP community in 5G initiative proposals and projects	
NEM (ETP)	New European Media	• fostering the convergence between consumer electronics, broadcasting and telecoms in order to develop the emerging business sector of networked and electronic media. • Digital Content • Distributed Media Applications • Future Media Delivery Networks and Network Services • New User Devices and Terminals.	• ***China Association of Communications Enterprises*** • China Communications Standards Association • China Information Technology Security Evaluation Center
	http://www.nem-initiative.org/		

ETP and PPP in **ICT**	Main Subject	Research Subjects/Agenda	Possible Chinese Counterpart

NESSI (ETP)
 	
http://www.nessi-europe.eu/
	Networked European Software and Services Initiative	• ICT for contributing to the research and innovation space of Software and Services
		• software, services, and data as key enablers to help resolve European societal and economic challenges
		• new advanced innovative software engineering techniques and tools supporting:
		  o servicification of products
		  o platforms interoperability
		  o real-time data analytics
		  o Software-as-a-Service (SaaS)
		  o virtualisation
			• **China Software Industry Association**
			• *China Association of Communications Enterprises*

The Photonics 21 Association (PPP) http://www.photonics21.org/	Photonics	• increased public and private investment in photonics research; • greater cooperation and coordination between national and European research programmes; • stronger links between the photonics industry, research institutions and academia; • identifying the existing and potential market of photonics in different sectors as a means to direct research strategies.	• **China Optics and Optoelectronics Manufacturers' Association** • *China Association of Communications Enterprises* • China Communications Standards Association

ETP and PPP in **ICT**	Main Subject	Research Subjects/Agenda	Possible Chinese Counterpart

5G Infrastructure Public-Private Partnership (5G PPP)
 	
http://5g-ppp.eu/
	Solutions, architectures, technologies and standards for the ubiquitous next generation communication infrastructures	• leadership in the particular areas where Europe is strong or where there is potential for creating new markets such as:
		  o smart cities,
		  o e-health,
		  o intelligent transport,
		  o education
		  o entertainment & media.
			• **China Mobile Communications Association**
			• China Strategic Alliance of Smart City Industrial Technology Innovation
			• National Industry Alliance of Smart City Technology Innovation

24. Mapping of Chinese industrial associations to European industrial associations

In the following table, if a Chinese industrial association or other relevant body maps to a European industrial association that is not a Chinese priority for EU-China collaboration in ICT R&D&I it is given in italics. The best matching Chinese association for each European industrial association is **given** in bold.

European industrial association in **ICT**	Main Subject	Research Subjects/Agenda	Possible Chinese Counterpart
ARTEMIS Industry Association http://www.artemis-ia.eu/about_artemis.html	Embedded & Cyber-Physical Systems	Network for the exchange of technology ideas, cross-domain fertilisation, as well as for large innovation initiatives.	• ***China Embedded System Industry Alliance (CESIA)*** • *Shanghai Software Industry Association (SSIA)*
Cable Europe http://www.cable-europe.eu/about-us/	Broadband cable TV	Regulatory and public policy activities to promote and defend the Broadband cable TV industry's policies and business interests at European and international level. Key activity areas are: o Audiovisual, o Competition Law, o Copyright, o Data Retention, o Network Related Items, o Privacy.	• **China Communications Standards Association**

European industrial association in **ICT**	Main Subject	Research Subjects/Agenda	Possible Chinese Counterpart
DIGITALEUROPE http://www.digitaleurope.org/	European Digital Technology Industry	• Digital Economy • Environment • Technical & Regulatory • Trade	• *China Association of Communications Enterprises*
European Competitive Telecommunications Association (ECTA) http://www.ectaportal.com/	Telecommunications industry	• Promote and foster a regulatory environment for the European Communications Sector which ultimately supports free market competition	• **China Mobile Communications Association**
European Digital Media Association http://www.europeandigitalmediaassociation.org/	Online platforms	• Promote innovation and growth in the new media sector • Policies to ensure that barriers to pan-European E-commerce are addressed.	• *China Association of Communications Enterprises*
European Satellite Operators' Association https://www.esoa.net/	Satellite Communications	• Ensuring that satellites benefit from the appropriate political, industrial and regulatory environment to fulfil their vital role in the delivery of communications	• *Beidou satellite navigation application industry alliances*

European industrial association in **ICT**	Main Subject	Research Subjects/Agenda	Possible Chinese Counterpart
European Semiconductor Industry Association	Semiconductor Industry	• Promote the common interests of the Europe-based semiconductor industry to ensure a sustainable business environment and foster its global competitiveness.	• **China Semiconductor Industry Association**
http://www.eeca.eu/			
European Telecommunications Network Operators Association	Telecommunications networks	• Issue-based. When an issue arises a working group set up to it. Working groups cover topics ranging from Research and Development to various EU policy matters.	• **China Mobile Communications Association**
https://www.etno.eu/			
Internet service providers association in the European Union	Internet Service Providers	• Represent the European ISP industry on EU policy and legislative issues. • Facilitate the exchange of best-practices between national ISP associations. • To encourage the development of a free and open telecommunications market.	• No obvious match
http://www.euroispa.org/			

25. Notification of the mapping to the ETPs and PPPs, responses and follow-up

To disseminate to the ETPs and PPPs the mapping of section 23 of Chinese industrial associations to ETPs and PPPs and develop the work of the project by exploiting the mapping, ETP and PPP contact email addresses were sent on 9 January 2015 the following carefully worded email that reported that the mapping had been done and sought to elicit information that could assist in developing the agendas of the CHOICE workshops in China:

Dear Sirs,

First of all, let me introduce ourselves, we are coordinating an FP7 support action project CHOICE - Strengthening Chinese collaboration on ICT research with Europe (http://euchina-ict.eu/). We organised an event in China in October 2014 that included a very successful EU to Chinese ICT business to business matchmaking session (http://euchina-ict.eu/event-chengdu/).

For the 2nd and last year of the project, we are planning to organise at least two workshops in China, to promote European excellence in ICT R&D&I and encourage a more balanced relationship between the EU and China in collaborative ICT R&D&I. We have done a subject area mapping of ETPs to Chinese industrial associations that are a Chinese national priority for collaboration with the EU. We wish to use this mapping together with information gathered from ETPs to draw up agendas for our workshops that will provide excellent opportunities for dialogue leading to collaboration.

In order to do so, we would be very grateful, if you can provide the following information regarding your ETP and the current and recent projects under your ETP by the end of January 2015:

1) any wish/demand/desire to promote technologies developed within the projects in China.

2) any current and previous involvement with Chinese partners (either industry or academic/research institutions) in ICT R&D&I.

3) any volunteers who are willing to go to China to attend a CHOICE project workshop to promote, and demonstrate, if desired, the ICT R&D&I of their organisation and participate in an EU to Chinese ICT business to business matchmaking session.

If you reply we will provide you with a brief summary of the responses we obtain and the action take on them unless you request no further communication on this matter.

CHOICE project ■ Grant Agreement #610578   Page **78** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
     ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

The contact email addresses used were as follows:

ARTEMIS JU info@artemis-ia.eu
euRobotics secretariat@eu-robotics.net
ETP4HPC office@etp4hpc.eu
eniac JU Andreas.wild@eniac.europa.eu (governed by Aeneas)
EPoss wolfgang.gessner@vdivde-it.de
Networld2020 werner.mohr@nsn.com, tallas@eurescom.eu
NEM contact@nem-initiative.org
NESSI office@nessi-europe.eu
photonics21 secretariat@photonics21.org

The BDVA was not contacted at this time as it only became active in January 2015.

EFFRA was not contacted because it was seen at the time as being primarily in the realm of manufacturing.

FI-PPP was not contacted at this time because with its focus on developing APIs for smart applications it was originally not clear that there was any matching Chinese association. Later on in this section it is explained how FIWARE was promoted at the two CHOICE workshops in China and a match was identified.

5G PPP was not contacted as Networld2020 supports the 5G PPP initiative and other EC initiatives are responsible for R&D&I cooperation in the area of 5G. This is justified by the response from obtained from Werner Mohr of Networld2020:

"Dear Colleagues,

Please find in the following the feedback from the Networld2020 ETP on your questions on the CHOICE project. Please do not hesitate to contact me in case of further questions.

Best regards,

Werner Mohr

1) any wish/demand/desire to promote technologies developed within the projects in China.

The Networld2020 ETP is closely related to the 5G Public-Private-Partnership (5G PPP), which is a sub research program in Horizon 2020 on 5G communication networks. Part of the activities of 5G PPP is international cooperation. Therefore, we are in discussion with

CHOICE project ■ Grant Agreement #610578   Page **79** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
      ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

Chinese counterparts to sign an MoU on research cooperation in parallel to an agreement on government level between the EU Commission and the Chinese government. In addition, we are working on the preparation of future standards by means of research cooperation. Business oriented cooperation is in the responsibility of members and their particular business interests. Therefore, the Networld2020 ETP is not involved in business-oriented activities, because we are focused of precompetitive research activities.

2) any current and previous involvement with Chinese partners (either industry or academic/research institutions) in ICT R&D&I.

There is a long history of cooperation with organizations in China in EU collaborative research and international standardization. European programs are open for non-European organizations to participate. There is cooperation with Chinese organizations in activities in 5G PPP by direct participation in research proposals and information exchange with counterparts in China. There are established channels and further channels are under preparation. On the other hand, up to now the participation of non-Chinese organizations in Chinese program is limited for political reasons. This can only be solved on government level and therefore the EU Commission is taking actions since quite some time to improve the situation.

3) any volunteers who are willing to go to China to attend a CHOICE project workshop to promote, and demonstrate, if desired, the ICT R&D&I of their organisation and participate in an EU to Chinese ICT business to business matchmaking session.

This is not a topic for the Networld2020 ETP as said above. Business-matching activities are in the responsibility of individual organizations, whether this fits to their strategy. This area is also beyond precompetitive research and therefore not in the scope of the ETP. However, such European-Chinese workshop may be of interest for our community (especially the SME) and we could offer to Choice project to disseminate the details of their workshop on the Networld2020 mailing list to directly check if any member could be interested. There is an SME working group in Networld2020."

It was clear that organizing a CHOICE workshop on 5G would not be appropriate.

Marcel Annegarn, Director General of AENEAS, which governs the ENIAC ETP, emailed the members of AENEAS inviting them to respond to the CHOICE email directly indicating that that the answer for ENIAC projects to question 2 was no. This email did not elicit any expressions of interest from ENIAC members.

CHOICE project ■ Grant Agreement #610578   Page **80** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
   ■ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7ᵗʰ Framework Programme ■ Coordination and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

It was clear there was no demand for a CHOICE workshop on nanoelectronics from ENIAC members.

The Photonics 21 association sent an acknowledgement of receipt of the email but not a response. However, it may have distributed the email to its members as an enquiry was received from Fraunhofer-Institut für Zuverlässigkeit und Mikrointegration (IZM) asking if there were to be any CHOICE activities on photonics.

There does not seem to be a broad interest in EU China collaboration in Photonics from the members of the Photonics 21 association.

Pierre-Yves Danet replied in connection with the NEM ETP that, "China is clearly in the targeted NEM countries because media and content is becoming more and more important and we think that NEM could help and could learn from them. However, we never found any cluster in China which address the NEM sector, it could be a great help from CHOICE to help us to find such an organization.

NEM do not manage any project, NEM is a platform that helps people to set up and submit project proposals but the main purpose of NEM is to build a vision and the corresponding Strategic Research Agenda that should influence the future European Work program in the Creative industry and media sector. NEM is also editing a number of position papers, which also influence policy and technology strategy development. However, we are interested to share this strategic research agenda with Chinese partners/clusters of organisations in order to check the relevance of these technologies in China market.

Some years ago, there were some attempts to involve Chinese partners in NEM but we never succeed as far as no clusters exist. We have 3 members (Academy of Broadcasting Planning, Beijing University of Post and Telecommunications and HUWAEI Technology) from China and obviously we would like to extend this list.

As China is a Global NEL targeted country, we are interested to join any event where we can meet Chinese organization and as already said more than happy to find Media clusters in order to established strong liaisons as we made with Latin America, Mediterranean and EECA. Depending the dates of the event, we should be able to find NEM representatives interested to join including myself."

Brunel responded to Mr Danet pointing out that:

CHOICE project ■ Grant Agreement #610578   Page 81 of 88
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ■ September 2014
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ■ 7th Framework Programme ■ Coordination
and Support Action FP7-ICT-2013-10 ■ Theme: Information and Communication Technologies ■

As for the Chinese side of the cluster(s), there are some relevant organisations in China, such as China Association of Communications Enterprises, China Communications Standards Association and China Mobile Communications Association.

Mr Danet remarked that we (NEM) are currently working on a PPP on Immersive and Interactive content, it could be a good opportunity to check interest of Chinese on such a concept. This presented an important opportunity for the CHOICE project that was taken.

The idea of organizing the first CHOICE thematic workshop in China on immersive and interactive media was proposed by the CHOICE project in early February 2015. The proposal aimed at taking advantage of the intention of the NEM to establish a Public Private Partnership (PPP) in Immersive and Interactive Media as an opportunity for a targeted cooperation initiative. The main Chinese association in this area, the China Interactive Media Industry Alliance (IMIA) has a close relationship with one of the CHOICE project partners, CAICT/ MIIT (original known as the CATR/ MIIT). The timing for organising a thematic workshop on immersive and interactive media could not have been better.

The workshop successfully took place in Beijing on 31 March 2015. At this workshop:

Kun YANG of CAICT spoke on the work of the China IMIA and highlighted that the challenge is industrial cooperation on different formats.

Pierre-Yves DANET 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 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.

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.

Pierre-Yves DANET gave a presentation on FIWARE highlighting that FIWARE is going global so this is a great opportunity for Chinese involvement.

A report on the workshop is available for download from the CHOICE website.

From the workshop it was concluded that Chinese industry cooperation on different media formats with NEM would offer real benefits. A possible area of EU-China cooperation in interactive and immersive media was 'virtual' restoration of historical sites. FIWARE was identified as a particular opportunity for EU-China cooperation.

The FIWARE platform potentially offered an opportunity for CHOICE to engage with the NESSI ETP. CHOICE partner CATR (now known as CAICT/MIIT) was asked to suggest possible topics of interest to China for a second workshop in China with a view to identifying a topic that involved the use of smart applications. CAICT/MIIT made clear that the Chinese priority topic for the second CHOICE in China was Industry 4.0, a very broad topic. It was agreed to limit the topic of the workshop to Industry Internet of Things (IoT), in particular to what can be done now to foster R&D based innovation in manufacturing leading to greener more efficient manufacturing through the application of the IoT. This ensured that the presentations at the workshop would be focussed, relevant and of real technical depth. Focussing on this aspect of Industry 4.0 allowed for the benefits of using FIWARE to be discussed at the workshop in the context of developing smart Industry IoT applications.

Industry 4.0 is a collective term for technologies and concepts of value chain organization. Based on the technological concepts of cyber-physical systems, the Internet of Things and the Internet of Services, it facilitates the vision of the Smart Factory. CHOICE exploited its contact with Pierre-Yves Danet of NEM to approach NESSI through him about NESSI sending a representative to the CHOICE workshop on Industry IoT, this did not result in a positive response from NESSI.

The term Industry 4.0 was first proposed in 2011 at the Hanover Fair. In October 2012, the Working Group on Industry 4.0 chaired by Siegfried Dais (Robert Bosch GmbH) and Kagermann (acatech) presented a set of Industry 4.0 implementation recommendations to the German federal government. On 8 April 2013 at the Hanover Fair the final report of the Working Group Industry 4.0 was presented.

The second CHOICE workshop on Industry IoT was particularly timely because on 4 July 2015 the Chinese Government unveiled its "Internet Plus" action plan, aimed at integrating the Internet with traditional industries and fuelling economic growth. The action plan maps

development targets and supportive measures for key sectors that the government hopes can establish new industrial modes by integrating with the Internet, including mass entrepreneurship and innovation, manufacturing, agriculture, energy, finance, public services, logistics, e-commerce, traffic, biology and artificial intelligence. Applying Internet instruments to the traditional manufacturing sector is therefore becoming the priority both in EU and China.

The CHOICE workshop on Industry IoT took place in Beijing on 6 July 2015, a report on the workshop is available for download from the CHOICE website. Key findings of the workshop that can be input to the EU-China policy dialogues included that, China could benefit from FIWARE, the EU and China can compare generic enablers where they exist on the Chinese side. How to best exploit data lakes, an area of interest for the BDVA, was considered to be an on-going issue to monitor. Feedback from workshop attendees revealed that a number of them would have liked the workshop address IoT security (in more depth).

What quickly became clear to the project partners, after the project workshop on Industry IoT, was that the best way that CHOICE could contribute to effectively promoting the potential for EU China cooperation in ICT R&D&I through its final workshop activity, a second workshop in the Europe, was to explore the opportunities for ICT R&D&I activities with China based around the use of FIWARE. This was because of existing contacts of CHOICE partners to members of the FIWARE community and the very wide scope of possible FIWARE application contexts.

The second CHOICE workshop in Europe on 'Exploring FIWARE opportunities towards China took place in Hamburg on 6 November 2015 as part of the 3rd edition of the European Conference on Future Internet, ECFI-3. It was organized with the support from 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.

In concluding the workshop in Hamburg and proposing a way forward for EU China ICT R&D&I cooperation around FIWARE, the CHOICE Project Coordinator noted that although significant progress appears to be being made in getting Chinese government approval for the use of FIWARE in government applications the natural starting point for realising FIWARE apps usage in China at this point seems to be through their adoption by a free trade area (New Area). Accordingly, by way of next steps, it was proposed that the CHOICE project coordinate with workshop speaker Mr Shen Zhangyi Shen, Project leader of Big Data

Platform of Hengqin New Area, to see could be done in Hengquin around trialing some FIWARE smart city apps and to establish the next stage in discussions around this.

As FIWARE is the core initiative of the FI-PPP permission was sought and gained from the EC for the Project to organize a meeting in Hengqin between and representatives of Hengqin Local Government and experts on FIWARE and its use in the development of Smart City applications. The FIWARE experts were sourced in consultation with representatives of FIWARE Mundus and of the then recently concluded ECIAO EU project, which sought to establish an efficient bridge between European and Chinese stakeholders to make the future Internet a truly global success. The meeting took place in Hengqin on 17 December 2015 and a report on this meeting is available from the Project website. Outcomes of this meeting have fed into the CHOICE roadmap and action plan reported in CHOICE project deliverables D1.3 and D1.5.

Part 4 Conclusions

Key points:

- A Chinese industrial association or other relevant body can be mapped to each of the European Public-Private Partnerships (PPPs) and European Technology Platforms (ETPs) in ICT. Except for EFFRA, which is first and foremost a manufacturing PPP, and the BDVA (PPP), which only became active in January 2015, at least one Chinese industrial association or other relevant body that is a Chinese priority for EU-China collaboration in ICT R&D&I can be mapped to each of the PPPs and ETPs. However, some of these associations are somewhat monolithic and the some of the PPPs and ETPs tend to be more focussed.

- The mapping appears to be particularly direct in the areas of High Performance Computing, Robotics, and Communications Networks and Services.. However, the dedicated Chinese industrial association and Chinese standardisation committee in high-performance computing are not Chinese priorities for EU-China collaboration in ICT R&D&I for reasons apparent from information provided on the website of the ETP4HPC ETP. Many of the areas of potential EU ICT R&D&I cooperation with China in Communications Networks and Services are covered by NetWorld2020 but Networld2020 supports the 5G PPP initiative and other EC initiatives are responsible for R&D&I cooperation in the area of 5G.

- The mapping appears to be least direct in the area of nanoelectronics.

- The ENIAC Joint Undertaking takes European public-private partnerships to the next level. Its goal is to make a recognisable contribution towards a globally successful and sustainable European nanoelectronics industry by supporting R&D activities through open and competitive calls for proposals while ensuring the independent evaluation and selection of proposals, allocation of public funding to selected proposals, and the funding of projects.

- How to best exploit data lakes is an on-going issue to monitor, which is an area of interest for the BDVA.

- Chinese industry cooperation on different media formats with NEM would offer real benefits.

- China could benefit from FIWARE. The EU and China can compare generic enablers where they exist on the Chinese side. The most obvious partner in China for the FI-PPP is the China Interactive Media Industry Association.

- The natural starting point for realising FIWARE apps usage in China at the time of the writing of this report seems to be through their adoption by a free trade area (New Area).

- The European industrial associations in ICT are primarily focussed on policy, regulatory, and legislative issues that impact on their industry sector, ICT R&D is not a major focus.

Recommendations:

The following recommendations are in effect recommendations for the EC to take actions to foster collaborations. In the context of this report 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.

- The euRobotics AISBL (PPP) should be encouraged to begin dialogues with the China Robot Industry Alliance as soon as possible on the potential for EU-China ICT R&D&I cooperation on the robotics aspects of Industry 4.0. If euRobotics could establish meaningful cooperation with China Robotic Industry Alliance in this area it could provide a template for the establishment of future EU-China cooperation in ICT R&D&I.

- The BDVA should be encouraged to monitor the issue of how to best exploit data lakes and consider this as a fundamental emerging aspect of Big Data that offers an opportunity for establishing EU-China collaboration on ICT R&D&I in Big Data which should be explored.

- The FI-PPP should be encouraged to discuss potential EU-China ICT R&D&I cooperation on FIWARE with the China Interactive Media Industry Association (IMIA).

- Chinese industry cooperation on different media formats with NEM would offer real benefits. The NEM should be encouraged to discuss the possibilities for EU-China ICT R&D&I in this area with the China (IMIA) and the China Communications Standards Association.

- The EU should start now in working on determining through high level policy dialogues how to interface with China in the crucial area of nanoelectronics as this appears to be problematic.

- Dialogues should be encouraged between the ENIAC Joint Undertaking PPP and the Commission focussed on conveying the merits, and exploring the possibilities of, funding calls for EU-China collaborative R&D&I in nanoelectronics.

CHOICE project ◼ **Grant Agreement #610578**   Page **88** of **88**
D2.1- _ Online mapping of Chinese and European ICT industrial associations – Progress report
    ◼ **September 2014**
Authors: Mo Tan (TORCH) Dr T J Owens and Dr T Itagaki (BRUNEL) ◼ 7th Framework Programme ◼ Coordination
and Support Action FP7-ICT-2013-10 ◼ Theme: Information and Communication Technologies ◼