LinkTADs

D8.10 Best practices report

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D8.10
Best Practices Report

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Shanghai Veterinary Research Institute

Harbin Veterinary Research Institute

China Animal Health and Epidemiology Center

China Animal Disease Control Center

Sociedade Portuguesa de Inovação

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01

Introduction and methodology

Introduction and methodology

This document is the result of Task 8.4 "Detect synergies and propose joint actions" in Work Package 8: Dissemination and Sustainability in the LinkTADs project. The purpose of the task is to monitor and analyse bilateral and multilateral cooperation programmes and platforms between EU and China. In close cooperation with other work packages in LinkTADs and cooperating with other projects (RISKSUR, ASFORCE, etc.), the task produces an overview comparing worldwide trends in animal health research cooperation between the EU and China and worldwide. This document focuses on introducing the best examples identified during the task implementation. The task leader is EM. Contributors were FAO, SPI, HVRI, SHVRI, CAHEC, CADC, CIRAD and SVA.

The first section introduces shortly the EU-China collaboration in the field of animal health. The second section focuses on the best practices. Throughout the project duration, several work packages worked towards the identification and analysis of best practices in EU-China collaboration. LinkTADs partners have collected good examples related to policy, research collaborations and private-public partnerships. The LinkTADs project has also initiated several successful collaborations that will continue after the end of the project. Below we introduce our methodology in more detail.

Information on EU-China collaboration

LinkTADs partners have analysed the information from secondary sources, such as policy documents, press releases and other news and reports available on the Internet, as well as gathered additional information from policy events (e.g. the ASF policy event organised with LinkTADs) and other face-to-face discussions (e.g. FAO Emergency Centre for Transboundary Animal Diseases (ECTAD) China visited the Veterinary Bureau in China several times). The main reports and documents analysed include results/deliverables from WP2, WP3, WP4 and WP5, policy documents[1][2][3][4][5] and reports[6][7][8][9][10] developed within the ChinaAccess4EU (http://www.access4.eu/China/) and DRAGON STAR (http://www.dragon-star.eu/) EU-China projects.

[1] Brief Introduction on EU-China Cooperation, Ministry of Science and Technology, PRC, 2012
[2] http://www.eeas.europa.eu/china/docs/eu-china_2020_strategic_agenda_en.pdf
[3] Final report, Science, Technology and Innovation (STI) Performance of China , 2014
[4] Science, Research and Innovation: Co-operation between the European Union, Member States and China, European Union Delegation to China, 2012
[5] Operational Feasibility Study for STI Joint European Liaison Offices (STI JELOs) for European Research Organizations in Argentina, Australia, Brazil, Canada, China, Japan, New Zealand, Russia, South Africa and the USA
[6] Building an Alliance between the Stars & Dragon for Science & Technology; European Union, China & the Free Flow of Knowledge; Andrea Degen, Marcus Cheetham & Zheng Zhang
[7] Deliverable 3.5 Tackling Societal Challenges: Final Report; Sophie Tang and Odette Paramor; The University of Nottingham Ningbo China
[8] Bilateral Cooperation between China and the EU Member States/Associated Countries; Zheng Zhang
[9] China 2025; Research and Innovation Landscape
[10] Strategy Paper for enhancing reciprocity in EU-China S&T Cooperation

Collection of best practices

LinkTADs partners have gathered information on best practices from their own experiences, secondary sources and face-to-face discussions. Some examples were collected through the events organised under WP2, WP3, WP4 and WP5. These events provided the opportunity to talk to several researchers, private sector representatives and policy-makers from the EU and China. Each partner summarised their findings in reports submitted as deliverables. Some of the examples included in this document have been selected from these reports. All project partners were consulted as well, as they are all experienced in international collaboration related to animal health. Some examples refer to EU-Africa, EU-Indonesia or EU-Mediterranean cooperation. Secondary sources were Internet sources introducing EU- or China-funded initiatives or projects, official EU documents related to the evaluation of successful international collaboration projects, workshop reports on international collaborations; and reports of the EU-China bilateral projects such as Dragon STAR and ChinaAccess4EU (all research fields), and CHOICE (Information and Communication Technologies - ICT field).

LinkTADs was interested in successful examples that had the following characteristics:

- Focused on research and innovation collaboration between the EU and China or focused specifically on animal health research and innovation collaboration.
- In cases involving projects, when they had a positive impact on research and/or innovation collaboration.
- Synergies with other programmes and initiatives have been identified and benefitted from.

The information that was collected utilised the following criteria:

- Scope, short description, positive aspects, website, contact details (if available)
- Recommendations for LinkTADs and other EU-China collaboration projects

Europa Media has created a template that has been used by all partners to compile the examples on best practices. Below, we include the main information collected; Annex 1 includes the full template.

Best practice	**Project/Programme/Initiative/Policy Cooperation (select)**
Title (and acronym if any):	
Highlights	
Sector/Priority area:	
EU Contribution: **China Contribution:**	€
Scope/Objectives:	
Description:	**Please specify content, start/end date. The description should be useful to someone considering implementation of the practice.** **Please summarise briefly main results and/or impact achieved and how**

	these were evaluated.
Country of origin (country of the leading partner)	Please specify the country where the good practice originated
Location: (more possible)	
Reference documents (if any)	Please give any references (Author (date). Title. Journal/publisher) or links supporting to online documents.
Website:	http://www.
Contact:	Please include details of the contact person.
Lessons learnt, recommendations	

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02.

Main findings

Main findings on EU-China collaboration

To implement the co-funding mechanism (CFM) highlighted in the Joint Statement of the 17th EU-China Summit, building on Horizon 2020 on the EU side and relevant research and innovation programmes on the Chinese side, during the period from 2016 to 2020, the European Commission (EC) expects to continue spending over 100 million Euro per year for the benefit of Europe-based entities in joint projects under H2020 with Chinese participants. China will match corresponding resources and expects to spend 200 million RMB (28 million EUR) per year for the benefit of Chinese based entities that will participate in joint projects with European ones under Horizon 2020.[11]

EU-China cooperation in any research field should be focusing on the commonly defined strategic priorities in order to gain funding more easily on both the European and Chinese sides. As Europe seeks access to the Chinese market while China seeks to gain access to know-how and technological developments, taking into consideration national interests and cultural differences, the cooperation has to be carefully planned. In both regions clear strategies are guiding the researchers in planning international cooperation, such as the 'European Partnership for International Scientific and Technological Cooperation' from 2008 and the new strategy from 2012 'Enhancing and Focusing EU International Cooperation in Research and Innovation: a Strategic Approach' in the EU and the 'Guidelines on the National Plan for Medium and Long-Term Program for Science and Technology Development (2006-2020)' and 'Science and Technology in China: A Roadmap to 2050' in China as well as the 'EU-China Strategic 2020 Agenda for Cooperation' guiding on the specific EU-China collaboration.

China, after the United States of America and the Russian Federation, was the third international partner most involved in FP7 projects. Out of 315 Chinese institutions, 12% were involved in the Knowledge Based Bio Economy (KBBE) area that covered animal health topics[12]. Previous EU-China bilateral projects conducted surveys with project coordinators of projects with Chinese participants. Conclusions include: *"...research projects serve knowledge exchange and transfer and networking. But the exploitation of results and project management for delivering common patents, publications, new products, new processes and services is rather difficult...our data indicate that the establishment of networks initiated by EU-FPs collaborative projects as well as the exploitation of results and innovations actually tend to result from personal contacts rather than from predefined pathways in a given project. Many Chinese scientists who were educated or finished their PhD in Europe and many Europeans familiar with and attached to Chinese language and culture therefore pursued their research in relation to these familiar locations*."[13] It is too early to envisage any Chinese participation rate in H2020 only based on the results from the first calls, especially with the requirement of continuous mirroring funding from China for the Chinese institutions participating in H2020 projects.

[11] http://ec.europa.eu/research/index.cfm?pg=newsalert&year=2015&na=na-070915
[12] data from Building an Alliance between the Stars & Dragon for Science & Technology
[13] Building an Alliance between the Stars & Dragon for Science & Technology

Based on the survey conducted by LinkTADs partners (submitted as D2.2 Report on the mapping of synergies) we concluded that EU-China collaboration in the field of animal health is necessary for the stakeholders in both the EU and China. The survey has identified the main gaps. One issue was a concern for both regions – the lack of awareness of and difficulties in access to postgraduate epidemiology courses. The other issues were highlighted in one region but not the other, in other words, these are gaps which could potentially be filled by cross-collaboration between the two regions, which is illustrated by the arrows in Figure 1.

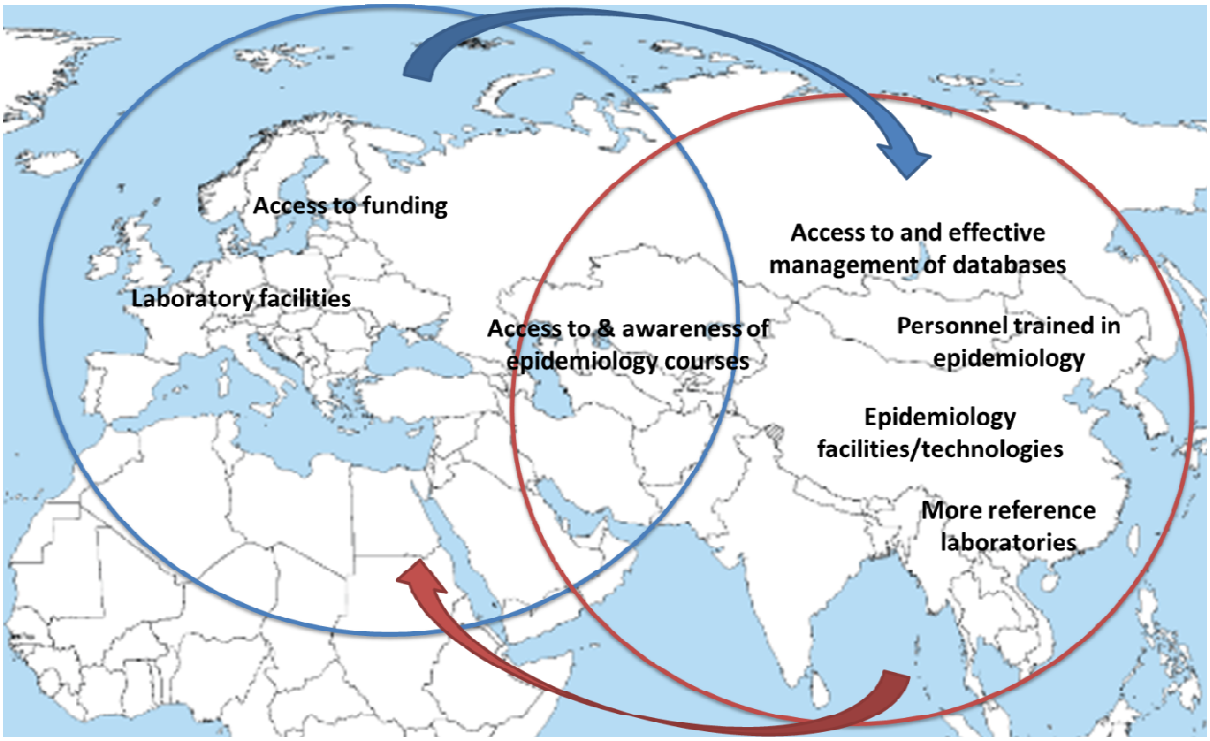

Figure 1 – Gaps in animal health research resources according to perceptions stakeholders, and opportunities for cross-collaboration[14]

Regarding previous collaborations in the field, the report on the 'Review of emerging animal health and food security issues' (submitted as deliverable D2.1 in LinkTADs) has found that there is a small number of papers that currently involve collaborations between researchers in the EU and China. EU research is more likely to involve collaborations with other countries than China, while papers published in China are more likely to involve European collaborators than *vice versa*. While collaborations are currently fairly few, both partners already have experience in collaboration that can be built upon in forming networks between the EU and China and increasing opportunities for collaboration as per the aims of LinkTADs.

Figure 2 shows the major reasons why stakeholders feel it is important to facilitate collaborations between the EU and China. Filling the gaps in resources is a common interest shared between both regions, as is the need to address a lack of existing collaborations. This is encouraging and the identification of resource gaps in Figure 1 can aid in targeting future collaborations more precisely.

[14] D2.2 Report on the mapping of synergies – Figure 13

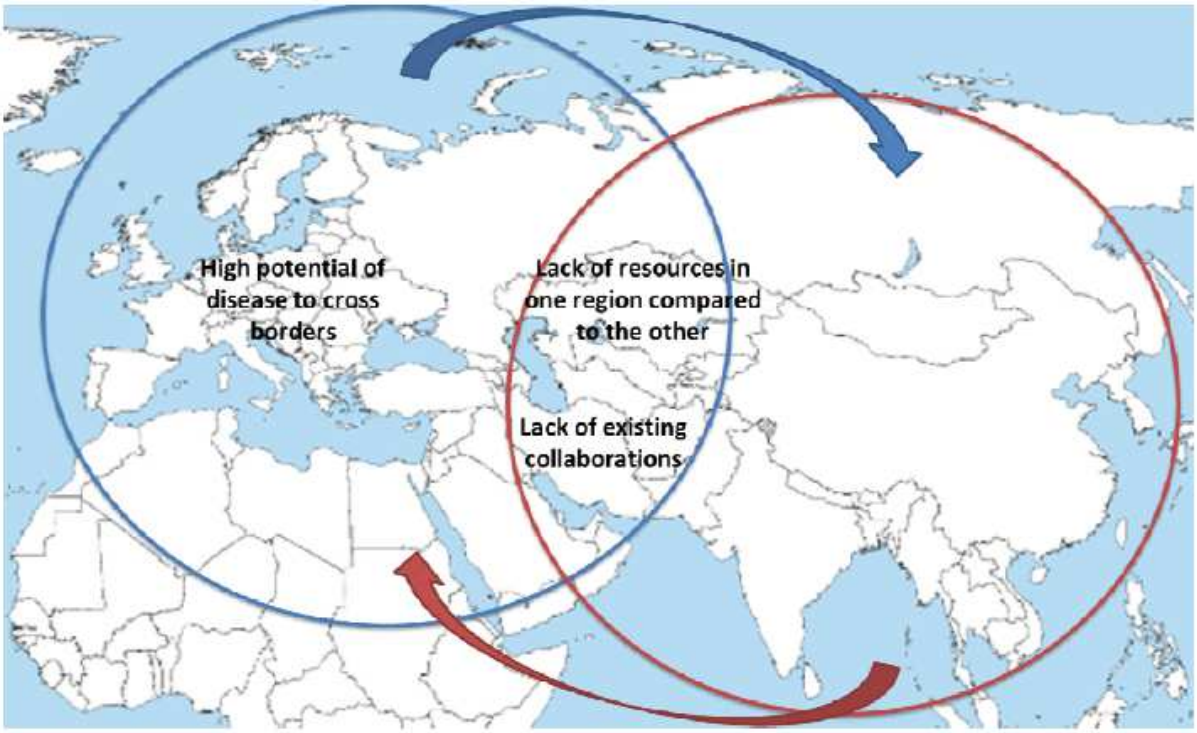

Figure 2 – Major concerns of stakeholders from the EU and China regarding the reasons why cross-collaborations between EU and China should be established[15]

The final report[16] of WP2 in LinkTADs that mapped the animal health policies in the EU and China suggested that there could be a benefit in trying to harmonise the legislation regarding animal identification and animal movement within the EU and China to improve trade opportunities, animal and human health. On the contrary, results suggested that other policy topics such as the surveillance for early detection of exotic threats and contingency planning in case of introduction of exotic threats need to be context specific, and therefore do not need harmonisation. However, there is a need for both the EU and China to be compliant with OIE standards, so they can use OIE guidelines as a basis for harmonisation to a certain extent. The task of supporting the official policy dialogues on animal diseases and food security between the EU and China was conducted within work package 5.

Chinese programmes and initiatives

The Building an Alliance between the Stars & Dragon for Science & Technology[17] report describes the context of the present funding programmes in Europe and China. The report shows that the reformation of the Chinese funding system to support research and innovation, technological development projects is still rather new. There are nearly 100 R&D programmes administered by 40 government agencies. For LinkTADs and animal health researchers, the three most important funding providers are the Ministry of Science and Technology (MoST), the Ministry of

[15] D2.2 Report on the mapping of synergies – Figure 14
[16] D2.3 Report on agreed areas in animal health, food safety and security requiring policy discussion and possible harmonisation between EU and China, Report on animal health policy
[17] www.dragon-star.eu project result

Agriculture (MoA) and the Chinese Academy of Agricultural Sciences (CAAS)[18]. Important developments are ongoing, such as the Science and Technology (S&T) Management Platform and the integration of the present programmes into five types of S&T programmes. The changes should be finalised in 2017. These developments will of course have significant effect on future EU-China collaboration, hopefully improving the coordination, decreasing the fragmentation, and increasing the focus on strategic priorities.

On the website of ChinaAccess4EU, there is a downloadable pack of factsheets of Chinese national research and innovation programmes and agencies. http://www.access4.eu/China/268.php

European programmes and initiatives

The EU's funding system is complex and not all programmes are open for third country participants. However, international collaboration is a key priority and many programmes linked to research and innovation will try to open the gates to projects with participants outside Europe. In terms of animal health research, the main funding programme open to China is Horizon 2020. All parts of the programme are also open to Chinese researchers and organisations. The second most important funding source for EU-China collaboration is based on bilateral and multilateral agreements between governments from Europe and China.

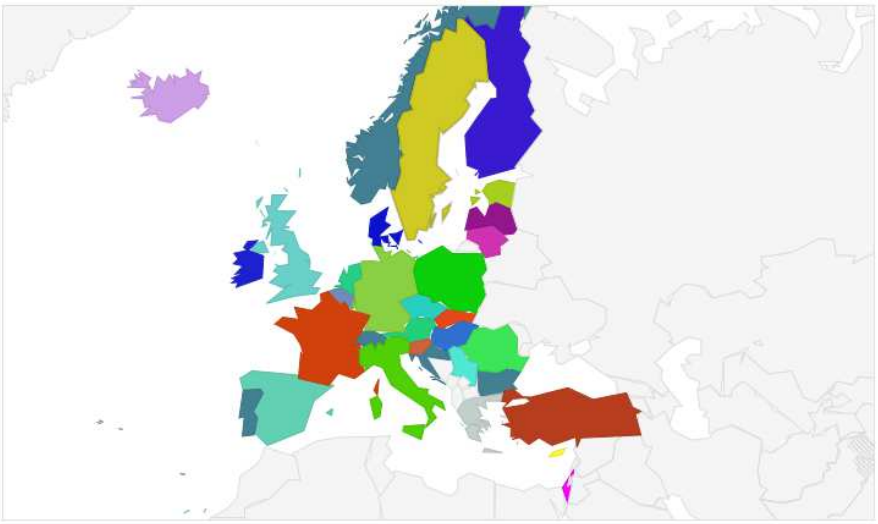

Figure 3 – Bilateral agreements between European countries and China[19]

The third option to obtain funding lies with specific initiatives and funding programmes financed from private, non-governmental sources, international foundations, such as the Animal Welfare Foundation (AWF), Boehringer Ingelheim Funds, Central European University, etc. or a few international or EU-funded projects aiming at training, for example, early-stage researchers. This third source requires a lot of searching from the researchers on the

[18] See detailed information in D5.1 Summary report – the report provides guidance to future collaborations on areas of common interest by analysing the priority activity areas, the governance structure, the funding model, intellectual property rights (IPR) procedures, etc.

[19] http://www.dragon-star.eu/bilateral-agreements-between-eu-member-states-china/

Internet or contacting many authorities to gain as much information as possible to be able to apply to a funding opportunity with a relevant application.

Finding information

Europa Media supports researchers in finding the proper funding source at http://grantsportal.europamedia.org/ portal.

DRAGON-Star plus website at http://www.dragon-star.eu/research-funding/ offers a search tool for research funding calls relevant to China and tries to map bilateral agreements between EU Member States and China at http://www.dragon-star.eu/bilateral-agreements-between-eu-member-states-china/.

The LinkTADs website at http://linktads.com/cooperation_opportunities has two sections supporting the establishment of future international cooperation in the field of veterinary research:

- Opportunities, listing relevant EU and international projects and initiatives, working in the areas of animal health, TADs, zoonoses, epidemiology and laboratory research, etc.
- Find funding, where registered users can search for programmes and initiatives offering financial support for the mobility of researchers, i.e. PhD scholarships, research grants, exchanges of experts, training and other types of support.

Supporting EU-China collaboration in H2020[20]

A dedicated information brochure about "what's in it for China in Horizon 2020" is available consulting the following website:

http://eeas.europa.eu/delegations/china/documents/eu_china/research_innovation/2_horizon/140708_h2020_pguide_china_chinese.pdf

The EU-China Co-Funding Mechanism (CFM) will be primarily used for Horizon 2020 topics targeting China but it will also be open to many other areas of Horizon 2020. The exact terms and conditions of the MoST call can be found at the MoST web site[21]:

http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2015/201512/t20151216_122975.htm;

Potential Chinese participants are encouraged to contact the MoST to seek support 2020:

MoST: Mr. Li Ruiguo, Email: lirg@cncbd.org.cn or hzs_ozc@most.cn

Tel. +86 1058881356

China Science and Technology Exchange Center (CSTEC)

Mr. Dong Keqin, E-mail: dongkq@cstec.org.cn; Tel: +86 1068513370

At the researchers' level, in order to promote the mobility of researchers between the EU and China, the European Research Council (ERC) and the National Natural Science Foundation of China (NSFC) agreed on the Implementing

[20] People's Republic of China - Country Page
[21] http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_china_en.pdf

Arrangement in June 2015 to stimulate excellence-based, bottom-up collaboration in frontier research by facilitating high-calibre Chinese researchers with coming to Europe to join ERC-funded research teams. The scheme is targeted at the Chinese researchers who are active holders of the competitive grants of NSFC. Selected researchers will be incorporated in the research teams of the European Principal Investigators who are already supported through the ERC grants and who have expressed an interest in hosting Chinese researchers in their research teams.

Potential Chinese participants are encouraged to contact NSFC to seek support:

NSFC: Ms. Fan Yingjie

Email: fanyj@nsfc.gov.cn, Tel: +86.10.62325309

Best practices

The following best practices have been identified to be the most relevant ones for LinkTADs.

Best practices collected (See details in Annex 2)	
Best practice	**Activity**
EU-China Trade Project I-II	Supporting CFETPV training courses – animal health
Bilateral Netherlands-China cooperation	Supporting the development of veterinary epidemiology in China – animal health
LinkTADs initiated collaboration between SHVRI, CIRAD and SVA	Common project application to MoST funding for « Eco-epidemiology and risk analysis of genotype shift of Japanese encephalitis virus in pigs and mosquitos » - the project was funded and started in 2015 – animal health
LinkTADs initiated collaboration between HVRI and SVA	Collaboration for establishment of a joint laboratory of Veterinary microbiology – animal health
ESA-MOST Dragon 2 Programme	A programme supporting long term scientific collaboration between the EU and China – training, products useful for animal health research
China Field Epidemiology Training programme for Veterinarians	European epidemiologists supporting a training programme for Chinese veterinarians – training, collaboration in animal health
ICONZ project	Integrated control of neglected zoonoses – Africa focus - animal health
STAR-IDAZ project	Global Strategic Alliances for the coordination of research on the major infectious diseases of animals and zoonoses – global collaboration - animal health
ChinaAccess4EU project	EU-China research collaboration support – any scientific field
Dragon STAR project	EU-China research collaboration support – any scientific field
CHOICE project	EU-China research collaboration support – ICT field

Table 1 – Best practices collected

The best practices include project and programme examples achieved within LinkTADs that represent potential for establishing long-term cooperation, but most of them are good practices collected from all around the world with a specific relevance for LinkTADs.

Best practices outside LinkTADs

The best practices outside LinkTADs include projects specifically focusing on animal health research collaboration between the EU and China, projects supporting research collaborations between the EU and China in all research fields, or one specific project focusing on the ICT sector, as well as other cooperation projects focusing on Africa or other regions in the world. Some of these projects and programmes have been co-funded from the budget of the EU, one is based on a bilateral agreement between a European country and China, and there are also initiatives financed from other sources. Most of the projects identified researchers as core target groups, but there are programmes targeting policy and decision-makers. Such a mix of best practices allows us to draw general as well as specific conclusions for enhancing EU-China collaboration in the field of animal health after the finalisation of LinkTADs.

The EU-China Trade project represents a successful example of a series of technical assistance projects since 2006. Within all EU-China trade areas the project has supported several areas in animal disease prevention and control including veterinary epidemiology field-training. In March 2016, as the final activity of the EUCTP policy dialogues, the EU-China seminar on Antimicrobial Resistance in the Veterinary and Food Sector was successfully held in Beijing. This seminar has also contributed to the decision that some LinkTADs partners will, in cooperation with the Veterinary Bureau in China, start developing a common project application to Horizon 2020, 'Alternative production system to address anti-microbial drug usage, animal welfare and the impact on health' SFS-46-2017 call.

The best practice on the specific bilateral cooperation between the Netherlands and China has been selected because of the scientific relevance to LinkTADs. The project shows that even a small project with a small contribution may generate high impact. The train-to-trainer (TOT) approach has been shown in this project to have a multiplying effect. The last training in WP3 in LinkTADs follows a very similar approach, also linked to the FETPV TOT approach.

The ESA-MoST Dragon2 programme is a best practice example for a post-graduate training established for the long term between the EU and China even if not in the field of animal health. Many training programmes are running in the field of animal health, the FEPTV programme is also one of the best practices, but this programme received support from the MoST and the EU agency to be implemented in many Chinese universities. It shows that if cases having common priorities are agreed on and planned well, both the EU and China will find the support mechanisms to establish long term cooperation programmes.

As the most relevant best practice to LinkTADs, we list the China Field Epidemiology Training Programme for Veterinarians (FETPV). This topic was chosen because it entails epidemiology training held by European experts for Chinese government services, and because the programme aims to build a self-sustaining in-service training model. The training courses and workshops held in LinkTADs were partly linked to FETPV courses not only because of cost efficiency, but also trying to follow the model and work on sustainability measures. The financial support, however, should come from European sources for LinkTADs related events.

The ICONZ project in the field of zoonoses mapped successfully the global research into neglected zoonoses. LinkTADs has included this project amongst the best practices to always consider the global perspective and take into account the OIE recommendations. LinkTADs generated interest from countries outside the EU and China, as of course transboundary animal diseases and zoonoses are global issues. e.g. one comment on the website came from South Africa: *Important changes in OIE recommendations in terms of trade could also be highlighted, e.g. Article 8.8.22 of the Terrestrial Animal Health Code accepted by the General Assembly of OIE in 2015 that could enable livestock producers in areas where foot and mouth disease is endemic at the wildlife/livestock interface (Southern Africa has particular problems in this respect) so that trading partners in EU and China are aware of alternative approaches that permit equivalence (as indicated in Article 4 of the WTO SPS Agreement) to assure them of the safety of the commodity regardless of the status of particular TADs in the area of origin*.

The STAR-IDAZ project, also linked to the above mentioned issues, has been one of the reference projects to LinkTADs. The two projects have been cooperating throughout the entire duration of LinkTADs including the announcement of the STAR-IDAZ continuation, where the programme owners from Europe, Asia, Australasia, the Americas, Africa, and the Middle East as well as international organisations and the representation of veterinary pharmaceutical companies committed a total budget in the region of EUR 2 billion to invest over a five year period to 2021. The Data Sharing Policy Statement and the Research Organisation Database are two main results carefully analysed by LinkTADs. LinkTADs has informed the STAR-IDAZ consortium regularly on EU-China aspects.

Last but not least, the three EU-China international collaboration projects, ChinaAccess4EU, Dragon STAR and CHOICE are best practices of LinkTADs because of their extensive studies and reports delivered on EU-China collaboration, the Chinese S&T landscape and results of the surveys conducted with stakeholders in the EU and China. Several recommendations provided by these projects have been used by LinkTADs as well (see under Recommendations).

Best practices within LinkTADs

Two initiatives within LinkTADs are listed amongst the best practices as these represent key achievements in EU-China collaboration. One of them ensures long term collaboration between two scientific institutes by setting up a joint research laboratory and the other represents a successful grant application to obtain Chinese funding for a specific scientific project in animal health between LinkTADs partner organisations. However, these two listed examples are not the only successful collaboration examples reached within LinkTADs. Here we list a few other achievements as well:

- On 9-10 April 2015, a workshop was organised in Qingdao, China[22], with the main objective to develop new research projects that will fill the main knowledge gaps on the top emerging infectious diseases (EIDs) and transboundary animal diseases (TADs). Eight diseases were identified as priorities by LinkTADs partners in

[22] http://www.fao.org/ag/againfo/programmes/en/empres/news_160415.html

both the EU and China: avian influenza (AI), bovine tuberculosis (bTB), classical swine fever (CSF), African swine fever (ASF), antimicrobial resistance (AMR), porcine reproductive and respiratory syndrome (PRRS), Japanese encephalitis (JE) and peste des petits ruminants (PPR). It was seen as one of the most important events under LinkTADs, since it will lead to the identification of projects where partners can collaborate beyond the life-span of LinkTADs, addressing the major research gaps.

- A joint proposal on ASFV between HVRI and SVA and other partners was submitted by SVA to The Swedish Research Council Form as on April 16th, 2015.
- HZAU has set up collaboration with INRA and applied for a grant related to the detection of bovine mycoplasma supported by both National Natural Science Foundation of China and Agence Nationale de la Recherche of France.
- A joint proposal entitled with "China-EU collaboration on development of novel technique for surveillance and control of transboundary animal diseases" was prepared and submitted to the Ministry of Agriculture (MoA) of China by SHVRI with the participation of HVRI, CADC, CAHEC, HZAU and SVA.
- Cooperation with other projects:
    - Transmission dynamics and spill-over of avian influenza under changing agriculture intensification and landscapes (NIH R01 project): members from this new project were invited to the Shanghai workshop where they also organised their kick-off meeting. As AIV experts, they provided their inputs to the expert opinion session. NIH R01 participated at WP3 expert opinion session (back-to-back with NIH R01 kick-off meeting);
    - LinkTADs First Dissemination Event was organised as a parallel session at the 9th Annual EPIZONE Meeting, Congress Centre "Le Corum" in Montpellier, France. This year, EPIZONE was combined with the 10th International Conference of ESVV 2015, 'Changing viruses in a Changing world'. The meeting's emphasis was on multidisciplinary approaches for animal disease prevention and control and recent research advances. Being very much in line with LinkTADs areas of interest, the meetings brought together a very relevant audience for the purpose of dissemination.
- Within the framework of the LinkTADs project – but as an outcome of the best practice of JEV project introduced in the Annex 2 - SHVRI, CAAS, and SVA (Sweden) agreed to set up a joint laboratory of animal infectious diseases. The aim of the joint laboratory is to improve control and prevention of animal infectious disease through the following joint activities:
    - Enhancing research collaboration on selected topic like novel diagnostic assays for early detection of pathogens;
    - Jointly applying for grants from China, Sweden or the EU;
    - Exchange and training of scientists and students;
    - Exchange of disease information and protocols for diagnostic assay.

Twinning projects of LinkTADs

The list of best practices would not be complete without mentioning the two twinning projects of LinkTADs identified already in the Grant Agreement. Some of the actions implemented together are listed below:

RISKSUR (FP7 - http://www.fp7-risksur.eu/) - Decision support tools for cost-effective risk-based surveillance

- LinkTADs was presented to RISKSUR members during their progress meeting in October 2014.
- LinkTADs and RISKSUR shared the news reciprocally on the relevant social networks.
- In order to strengthen the link between EU and Chinese scientists, a Chinese case study will be implemented in the framework of the RISKSUR project. This collaboration between RISKSUR European scientists and LinkTADs Chinese scientists was started during the Task 3.2.1 workshop on risk-based surveillance that was held in Qingdao on 13-14 July 2015. Beyond the work on risk-based surveillance, this workshop allowed for the identification of a topic for a Chinese case study following the framework developed by the RISKSUR scientists.
- CAHEC took part in RISKSUR discussions between May and July 2014. As part of that CAHEC also invited RVC to introduce the project in July 2014, strengthening the twinning activities of LinkTADs. CAHEC had a discussion on twinning project with FAO China, RVC and CIRAD on 31 July 2014 in Beijing. A Chinese case study will be discussed using the framework developed in the RISKSUR project.

ASFORCE (EU FP7 project - http://asforce.org) – Targeted research effort on African swine fever

- FAO established a linkage with ASFORCE through 1) dissemination of ASFORCE brochures and exhibition of ASFORCE banners at LinkTADs meetings; and 2) invited speakers to LinkTADs events in WP4 and WP5; 3) presentation on LinkTADs at ASFORCE full consortium meeting; and 4) placement of official logos on respective websites
- ASFORCE materials (leaflet and banner) were used for the WP5 meeting on ASF Policy

LinkTADs

03.

Recommendations

Recommendations

In summary, the following recommendations are concluded from the listed best practices:

1. Future research collaborations should focus on the commonly identified priorities in the EU and China to have a higher chance for funding. Working groups identifying these priorities should consult the running projects to receive more relevant and up-to-date information for their discussions. The policy and scientific gaps identified in LinkTADs has to be introduced to relevant policy-makers in both regions – which has not been an easy task in WP2 and WP5 – as well as global initiatives, such as STAR-IDAZ, in order to enable evidence-based policy making for EU-China collaboration in the field of animal health. Policy dialogues organised through multi-disciplinary international collaboration projects are continuously needed.
2. The co-funding mechanism established for H2020 participation in China is favourably perceived by the Chinese organisations; however, the participation of Chinese institutes e.g. in the planned project targeting the SFS-46-2017 topic is still not guaranteed without a special permission procedure. The SFS-46 requires a high budgetary contribution in China and the Chinese partners are not sure that the monetary contribution will be available even if the SFS-46 topic is a flagship topic in EU-China collaboration. More clear communication and funding mechanism would further support the development of new projects.
3. Simplified administrative procedures are needed in China to allow Chinese scientists travelling to Europe.
4. Thematic platforms delivering information and enabling cooperation between scientists are useful, but might not be sustainable for technical or political reasons. The collaboration functions on the LinkTADs platform will not be sustainable as the Internet policy in China blocks the access to certain features. The information delivered through the portal should be distributed and disseminated through multiple channels, not only the website – e.g. newsletter, face-to-face events, etc.
5. Face-to-face events are one of the useful means of establishing contacts among scientific community. The events have to focus on a specific topic to be seen as a forum for reflection, sharing vision and innovative ideas which may lead to future joint research collaboration.
6. The multiplier effect of training courses always has to be taken into account. The most effective training courses with long lasting effects utilise the train-the-trainer approach and work on a sustainability model from the very beginning.
7. Mobility of scientists, both young scientists and those more experienced with certain decision-making rights, in both directions is essential for fostering long lasting cooperation.
8. Reciprocal actions with other relevant projects and initiatives bring high impact and additional benefits to partner organisations implementing these actions. All future projects could have this as an obligatory activity. LinkTADs partners should maintain the developed network of the organisations involved in these projects and build new cooperation routes.

Recommendations of international collaborative projects

International collaboration projects with some or full relevance to EU-China cooperation resulted in recommendations that are shared in this report with a note on their connection to LinkTADs.

The International Learning Network[23] (ILN) project highlighted that, "*BILAT and INCONET projects are important instruments for enhancing cooperation with international partner countries and regions. A continuation of these projects is deemed essential for 3rd country cooperation, and is particularly pertinent in the context of low participation by international partners in the first H2020 call*." LinkTADs has also benefitted throughout the project implementation from cooperating with the EU-China BILAT project supporting the dissemination of LinkTADs results, getting information on the status of EU-China collaboration, reaching a wider network of stakeholders relevant in policy, and decision-making. On the other hand, LinkTADs shared information and experience in EU-China collaboration that will be analysed by the BILAT project and used to develop better support services.

The ChinaAccess4EU project raised the attention on information and knowledge exchange:

- "*…there are many EU-supported initiatives on China running in parallel. Apart from these, there are a considerable number of (sometimes very successful) collaboration schemes directly supported by different Member States and from which many lessons could be learned. Synergies between these different instruments and initiatives should definitely be supported in order to enable an efficient Best Practice Sharing. …it is highly advisable to consider a series of measures aimed at favouring a much closer interaction and effective exchange of information…*" Accessing information for this LinkTADs report about best practices from China has proved to be quite difficult. The number of project/programme descriptions shared by the Chinese partners was significantly lower than those received from Europe. Moreover, sharing research results achieved in China has been particularly difficult on the LinkTADs platform as they are not accessible or not available in English. While a survey done by Dragon STAR in cooperation with other BILAT projects suggests that stakeholders both in the EU and China would be interested in establishing a Joint European Liaison Office in China to support scientific and technological cooperation (STI JELO), no specific actions have been initiated to set up such an office.

The Dragon STAR project reported the following recommendations relevant to LinkTADs:

- "*Key researchers should be targeted to enhance Euro-Chinese relationships. For example, Chinese Marie-Curie Fellows educated in Europe and speaking Chinese and English could act as invaluable door openers. For this, an MSCA-Alumni Organisation should be set up. This would serve to raise the prestige of researchers educated in Europe and of those who go on, once returned to their countries, in collaborating with Europe*." LinkTADs could also highlight that the positive examples shared by Chinese and European researchers on EU-China collaboration raised the most interest of the website visitors or newsletter subscribers. Such an Alumni organization could boost networking and information exchange that would generate new cooperation.

[23] http://www.ilnworld.eu/

- "*There should be no visa restriction for innovators and scientists. Instead, fast track facilities need to be put in place with a special visa category for scientists. A university's international unit should provide support to scientists to get the visa. The same idea would apply for EU business people from high-tech sectors working in China*." LinkTADs focused on the organization of workshops, training events, exchanges, etc. Our main barrier in implementing these programmes was not related to visa restrictions in China, rather the restrictions on travel for Chinese researchers to Europe. Based on the experiences in LinkTADs, Chinese state institutes should decrease the restrictions on travel of their scientists, especially if fully funded in an EU R&I project.
- Establish a better understanding of the Chinese research landscape. The first chapter of Deliverable 3.5 of Dragon STAR project, 'Tackling Societal Challenges: Final Report' introduces the Chinese research landscape. A general understanding of the differences between the Chinese and European system in terms of research collaboration and obtaining funding is extremely useful. As an example, having personal contacts, network in China or being introduced by someone who has, is important. Also in LinkTADs it was seen that the short visits and introductory meetings organised within the project framework led to opportunities for future collaboration, whilst inviting Chinese organisations externally to a new project would have failed without the necessary line of existing personal contacts.

More of these international collaboration projects provided a general recommendation on the need of more systematic support or training for national contact point representatives and other intermediaries in third countries about R&I programme rules. Working on the new project proposal to be submitted in 2017 with some of the LinkTADs partners, it becomes clear that Chinese organisations would need more hands-on support in successfully developing H2020 project proposals. If the support organisations available in China could offer this assistance, more ideas initiated from China could become successful. The present situation shows that Chinese organisations need the guidance/support of experienced European organisations in developing their project ideas for H2020.

Other common challenges

The Building an Alliance between the Stars & Dragon for Science & Technology[24] report raises the attention to Intellectual Property (IP) related challenges. In terms of the research publications, in an international project Chinese researchers are required to be listed as the first or only author in international peer-reviewed journals. As this is not in line with established convention in science, such requirements may lead to conflicts. In LinkTADs, the partners have worked on and published common journal articles and no conflicts arose, but in future collaborations reciprocity and good reputation in the scientific community will have to be considered by both sides.

The same report[25] raises the attention on the importance on network maintenance. Chinese and European researchers e.g. participating in Marie-Curie actions and visiting EU or China could form Alumni, supporting building bridges and a knowledge base between the EU and China.

[24] www.dragon-star.eu project result
[25] Building an Alliance between the Stars & Dragon for Science & Technology

One of the main issues affecting EU-China collaboration is the language barrier. An international researcher without adequate technical Chinese language skills cannot successfully perform research in China, e.g. submit applications to obtain Chinese grants[26]. On the other hand, LinkTADs experience shows that using English as the common foreign language might present challenges for some of the Chinese researchers, whose scientific contributions would be crucial in certain stages of project development and implementation. Language barriers might lead to misunderstandings, cultural conflicts and lower scientific achievements.

Focal Point Network

Sustainability of a network may be described through the diversity and intensity of the activities/outputs that are maintained or developed, but also through the intensity and enlargement of the cooperation (i.e., the maintenance of the international work; the enlargement of the initial work in order to incorporate other domains or entities)[27]. The sustainability of the Focal Point Network depends on the commitment of the participating organisations and their representatives. Both the potential for extension and diversity and intensity of the activities is available based on the experiences gained in LinkTADs. However, the barriers in receiving systematic support and/or acknowledgement, language and cultural issues are also visible and may hinder successful implementation.

A final note for R&I actors in the EU and China

R&I players in both regions should more carefully consider the industrial demand when establishing new collaborative projects. This is a challenge that actors in both regions are facing and the failure to focus on exploitation and the use of results by the commercial actors might bring low impact results.

[26] DragonSTAR: Deliverable 3.5 Tackling Societal Challenges
[27] Collab4Safety

LinkTADs

04.

Annexes

Annex 1: Template for collecting best practices

Best practice	**Project/Programme/Initiative/Policy Cooperation (select)**
Title (and acronym if any):	
Highlights	
Sector/Priority area:	
EU Contribution: **China Contribution:**	€
Scope/Objectives :	
Description:	**Please specify content, start/end date. The description should be useful to someone considering implementation of the practice.** **Please summarise briefly main results and/or impact achieved and how these were evaluated.**
Country of origin (country of the leading partner)	**Please specify the country where the good practice originated**
Location: (more possible)	
Reference documents (if any)	**Please give any references (Author (date). Title. Journal/publisher) or links supporting to online documents.**
Website:	**http://www.**
Contact:	**Please include details of the contact person**
Lessons learnt, recommendations	

Disclosure:

I agree on collecting, processing and publishing my personal data by the LinkTADs EU project. If the data were collected from a third person I state that I received unambiguous consent from the data subject on using it for this purpose. The purpose of the best practice collection is to provide to researchers, policy makers and all interested bodies good examples on EU-China cooperation in the field of animal health research.

Submission of the data is made on voluntary basis, and there are no consequences by not doing so. Data are collected according to the Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 and you as a data subject have the right to have recourse at any time to the European Data Protection Supervisor.

Form Completed by: _____

Thank you for your support!

Annex 2:

Collected Best practices

Best practice	**Project**
Title (and acronym if any):	Supporting CFETPV trainings EU-China Dialogue on Agriculture EU-China Trade Project (EUCTP)
Highlights	Supporting trainings on Veterinary Epidemiology in China (CFETPV) Policy Dialogue on Agriculture
Sector/Priority area:	Animal health
EU Contribution: **China Contribution:**	Unknown
Scope/Objectives :	The objectives of EUCTP are to support China's economic, trade and investment reform in line with China's sustainable development path. The project aims to strengthen the design and implementation of trade and investment policy, legislation and regulation at central and provincial levels.
Description:	Running 2010-2015 the EU-China Trade Project (EUCTP) was the third in a series of major EU-China trade related technical assistance projects since 2000. The project was designed to strategically support the Chinese government's rapid trade reform as part of a wider sustainable development process and to provide technical assistance under the various EU-China sector trade dialogues and working groups which underpin the EU-China trade partnership. The project was completed in April 2016. The EUCTP involved all major trade areas and supported five linked components. These include, I) Trade in Services, II) Quality Infrastructure and / technical barriers to trade (TBT), III) Agriculture and agro-food /sanitary and phytosanitary measures (SPS), IV) Customs and trade-related regulatory systems, and V) Horizontal- cross cutting issues. In the field of Animal health, EUCPT has been supporting various activities in China, including the China field veterinary epidemiology training program(CFETPV) and other activities related to animal disease prevention and control (please find details in the website). Since 2006, there were regular annual dialogues on agriculture between the EU and China that were supported by EUCTP. There was a specific working group to promote dialogue on Food Safety and SPS measures between DG SANTE, MOA

	and AQSIQ. The dialogues took place alternatively in Brussels and Beijing and the most recent one was held in Beijing in Nov 2015. These dialogues promote cooperation in a variety of areas such as increasing the Chinese technical capacity in animal origin food safety. On 8th March 2016, as the final activity of EUCTP policy dialogues, the EU-China seminar on Antimicrobial Resistance in the Veterinary and Food Sector was successfully held in Beijing This meeting was jointly held by the Veterinary Bureau of the Ministry of Agriculture of China, Delegation of the European Union to China, and FAO, with financial support from the EU-China Trade Project (Phase II) and FAO regional Antimicrobial Resistance (AMR) project (OSRO/RAS/502/USA). Around 70 representatives from the national and provincial veterinary authorities, research institutions, universities, embassies, international organizations and private sector attended the one-day seminar. Seven invited speakers, including veterinary officials and AMR experts from both the EU and China, gave presentations on AMR national strategies, policies, regulatory frameworks, implementation and enforcement on AMR and Antimicrobial Usage (AMU), and introduced the surveillance and monitoring systems as well as the countries' current situations of AMR and AMU. This seminar provided a platform for experts from the EU and China to exchange their experiences in controlling AMU and AMR in the veterinary sector, and to explore future opportunities for EU-China collaborations on AMR.
Country of origin (country of the leading partner)	EC and China
Location: (more possible)	Beijing and Brussels
Reference documents (if any)	
Website:	http://www.euctp.org/index.php/en/agriculture-food-safety/animal-health.html
Contact:	
Lessons learnt, recommendations	Policy dialogues in technical assistance projects generate new collaborations between researchers and even private partners.

Best practice	Initiative
Title (and acronym if any):	The Netherlands government supporting the development of veterinary epidemiology in China
Highlights	
Sector/Priority area:	veterinary epidemiology
EU Contribution: **China Contribution:**	About €50 000 Euro unknown
Scope/Objectives :	supporting the development of veterinary epidemiology in China through: -developing training materials for CFETPV -sending Chinese experts to learn advanced veterinary epidemiology
Description:	Since 2015, China received financial support from the Netherlands government to support the development of veterinary epidemiology in China through developing training materials for CFETPV, and sending four Chinese experts to learn advanced veterinary epidemiology. The four Chinese experts (two persons per year) were sent to veterinary colleges in the Netherlands to carry out studies in advanced veterinary epidemiology (one month). These trainees will become trainers once back in China and train other local veterinarians.
Country of origin (country of the leading partner)	Netherland
Location: (more possible)	Netherland
Reference documents (if any)	
Website:	
Contact:	
Lessons learnt, recommendations	The train-the-trainer approach proved to be successful. Such bilateral collaborations enable focusing on a very specific topic that brings benefits to both governments and the researchers in both countries even if there is not a large budget. The collaboration between the veterinary colleges in the Netherlands and the Chinese experts will probably continue after the trainings are finalised.

Best practice	Project
Title (and acronym if any):	Collaboration on a research project of "eco-epidemiology and risk analysis of genotype shift of Japanese encephalitis virus in pigs and mosquitos"
Highlights	China-EU partners collaboration on Japanese encephalitis research
Sector/Priority area:	Collaboration on surveillance of vector-borne virus (Flavivirus) – a prioritized collaboration by LinkTADs
EU Contribution: **China Contribution:**	€ 0 1,270,000RMB (170,000 EUR)
Scope/Objectives :	The objectives of the project are (i) to explore the mechanisms of JEV genotype shift and identify the ecological and epidemiological factors associated with JEV genotype shift; (ii) to analyse the risk of JEV genotype shift on JEV control.
Description:	During LinkTADs implementation, the LinkTADs members of SHVRI, CIRAD and SVA co-applied for an international collaboration project from the Ministry of S&T of China (MoST) in 2014. The title of the project is "Eco-epidemiology and risk analysis of genotype shift of Japanese encephalitis virus in pigs and mosquitos", which starts from 01/09/2015 and ends at 01/12/2017. The research activities of the project include: (i) isolation of JEV from pigs and mosquitos in pig farms with different climates and identification of the genotypes of JEV isolates; (ii) detection of seroprevalence of JEV genotype I and genotype III in pig farms located at different climatic zones; (iii) collection of data necessary for eco-epidemiological analysis, such as pig density, vaccination, mosquito species, geographical distribution, climate, paddy fields, etc.; (iv) analysis of the ecological and epidemiological factors (e.g. pig density, vaccination, mosquito species, geographical distribution, climate, paddy fields) associated with JEV genotype shift and distribution; (v) analysis of the effect of JEV genotype shift on pig farms and the risk on JEV control. In 2015, scientists from CIRAD and SVA participated in the kick-off meeting of the JEV project in Shanghai. The partners of the consortium discussed the strategic and operational issues linked to the JEV project implementation and exchanged the knowledge and research projects on emerging swine diseases. Finally, potential collaborations in the future were identified. SHVRI and CIRAD have signed a LOA for the JE project study in December 2015. This agreement is to establish clear guidelines and define the mutual rights and obligations of the parties during the preparation, organization and supervision of the project. Between 6-13 April 2016, a scientist from CIRAD visited SHVRI and

	finalized a protocol for sample collection from pig farms. As an additional outcome of the JEV project, SHVRI and SVA have established a Joint Laboratory of Animal Infectious Disease in November 2015, the activities of which are as the following: -Enhancing research collaboration on selected topics like for example novel diagnostic assays for early detection of pathogens. -Jointly applying for projects from China and Sweden or the EU. -Exchange and training of scientists and students. -Exchange of disease information and protocols for diagnostic assays.
Country of origin (country of the leading partner)	China
Location: (more possible)	Shanghai
Reference documents (if any)	D7.8 Laboratory work programme report D7.4 Short-term visit programme report
Website:	
Contact:	Zhiyong Ma PhD, Prof Shanghai Veterinary Research Institute, Chinese Academy of Agricultural Sciences (CAAS), No 518 Ziyue Road, Minhang District, 200241, Shanghai, CHINA. Tel: +86-21-34293139 E-mail: zhiyongma@shvri.ac.cn
Lessons learnt, recommendations	This collaboration strengthened the friendship between China and EU scientists and opened more possible roads for deeper collaborations.

Best practice	**Initiative**
Title (and acronym if any):	The joint laboratories of Veterinary Microbiology between HVRI and SVA for collaboration on development of novel diagnostic assays for early diagnosis of animal diseases
Highlights	Collaboration for establishment of diagnostic technologies for early and rapid detection of animal pathogens
Sector/Priority area:	Veterinary microbiology

EU Contribution: **China Contribution:**	Research funds raised independently by each party, including grants from the government, other grant agencies, and individual donations, are owned by the individual party.
Scope/Objectives :	To enhance the control, improve the diagnostic capabilities, and increase the knowledge of animal infectious diseases.
Description:	Contents: Enhancing research collaboration on selected topics such as novel diagnostic assays for early detection of animal pathogens, jointly applying for projects from China and Sweden or the EU, exchanging and training of scientists, exchanging of disease information, and protocols for diagnostic assays. Start/end date : Sep 22, 2014/Sep 21, 2019. Main results and/or impact achieved : The collaboration within the joint laboratories between HVRI and SVA has improved the diagnostic capabilities and enhanced the control of important animal infectious diseases. A number of short-term visits and collaborative/exchange activities have been carried out. With collaborations of the both sides, an accompanying E^{rns}-based ELISA for marker vaccines against classical swine fever was developed, an updated PCR was established for African swine fever, also the potential of the real-time PCR assay performed on a portable thermocycler T-COR4 for disease surveillance was evaluated. The 1st Workshop of SVA-HVRI Joint Laboratory of Veterinary Microbiology on Swine Diseases was held in Uppsala in October 2015. During the meeting, the representatives of both sides discussed deeply for further collaborations in the future. The topics includes the early and high throughput detection of swine infectious diseases, regional eradication of CSFV, novel virus discovery and luminex antibody detection, etc.
Country of origin (country of the leading partner)	Harbin Veterinary Research Institute (HVRI), CAAS, China National Veterinary Institute (SVA), Sweden
Location: (more possible)	Harbin, China ; Uppsala, Sweden
Reference documents (if any)	Please give any references (Author (date). Title. Journal/publisher) or links supporting to online documents.
Website:	
Contact:	Dr. Hua-Ji Qiu (huajiqiu@hvri.ac.cn); Dr. Frederik Widén (frederik.widen@sva.se)

Lessons learnt, recommendations	Close collaboration in early and high throughput detection of animal diseases which are currently prevalent and economically important; exchange of experiences in disease eradication programs.

Best practice	**Programme**
Title (and acronym if any):	ESA-MoST Dragon 2 Cooperation programme
Highlights	Long-term scientific collaboration between EU and China. Post-graduate training
Sector/Priority area:	Earth observation application Though this is not directed related to Animal health, I had contact with members of this project while working on Avian influenza in China. The products of this programme, such as land use maps, are really valuable for animal health research.
EU Contribution: **China Contribution:**	
Scope/Objectives :	The Dragon 2 Programme is targeted towards land, ocean and atmospheric investigations in P.R. China. The expected benefit and contribution is to: -Promote the use of ESA, TPM and Chinese EO data for science and application development. -Stimulate scientific exchange in EO science and application by the formation of joint Sino-European teams. -Publish co-authored results of the research and applications development at the mid-term stage and at the end of the programme. -Provide training in processing, algorithm and product development from ESA, TPM and Chinese EO data in land, ocean and atmospheric applications.
Description:	ESA, together with the National Remote Sensing Centre of China (NRSCC), an entity under the Ministry of Science and Technology (MoST) of the P.R. China, have cooperated in the field of earth observation application development for more than 15 years. In 2004 a dedicated three year science and exploitation Dragon programme was initiated in 16 priority areas using ESA ERS and Envisat data in P.R. China.
Country of origin (country of the leading partner)	EU

Location: (more possible)	China
Reference documents (if any)	http://dragon2.esa.int/Dragon2_brochure_2011.pdf
Website:	http://dragon2.esa.int/
Contact:	The Dragon 2 programme coordinators, ESA - Yves-Louis Desnos, e-mail: yves-louis.desnos@esa.int NRSCC - Li Zengyuan, e-mail: zengyuan.li@caf.ac.cn
Lessons learnt, recommendations	This programme is a good example of long-term scientific collaboration between the EU and China. Especially as a result of the post graduate training, lessons learnt were: -Post graduate training is a key component of the Dragon 2 programme, and three advanced training courses have been organized in China. An advanced training course in land remote sensing was successfully held at Wuhan University, Wuhan in October 2008 and this was followed by an advanced training course in atmospheric remote sensing that was held at Nanjing University, Nanjing in October 2009. An additional land training course was held at Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences, Lanzhou in 2010. All of these courses were attended by 60 or more post graduate scientists from all over China. European and Chinese experts have given lectures and practical sessions on data processing, product development, validation and assimilation of EO and other data in atmospheric and land applications. In 2011, an advanced training course in ocean remote sensing will be held at East China Normal University, Shanghai, China (http://dragon2.esa.int/Dragon2_brochure_2011.pdf).

Best practice	**Programme**
Title (and acronym if any):	China Field Epidemiology Training Programme for Veterinarians (FETPV)
Highlights	European epidemiologists supporting a training program for Chinese veterinarians
Sector/Priority area:	Animal health / Epidemiology / Training
EU Contribution: **China Contribution:**	

Scope/Objectives :	The program aims to be a self-sustaining in-service training model that will inform evidence-based decision-making that will benefit the economy, the community and agricultural producers, including smallholders. It will do this by improving the knowledge, expertise and experience of veterinary field epidemiologists in government services. • Apply interdisciplinary (One Health) approaches in field epidemiology training. • Create a sustainable program for training skilled veterinary field epidemiologists for the future. • Standardize the knowledge and methodology on applied veterinary epidemiology for China. • Strengthen partnerships among national, provincial and international institutions and foster greater synergy and collaboration. • Nurture trainers and mentors within a national network for training veterinary epidemiologists in China. (http://www.china-fetpv.org/)
Description:	China faces complex geographic and demographic challenges in controlling animal diseases. For this reason capacity building must be based on a proven training model, provide minimum standards and also be flexible and adaptable. China needs a comprehensive Field Epidemiology Training Program for Veterinarians (FETPV) to bridge the gaps in veterinary epidemiology training in the country. The Ministry of Agriculture (MoA) of China has indicated an interest in building capacity for veterinary field epidemiology through FETPV and invested resources on epidemiology training and epidemiology studies in order to improve capacity to deal with important animal diseases. With the financial support from the United State Agency for International Development (USAID), drawing on approaches and practices developed by the Field Epidemiology Training Program (FETP) in public health and the Regional Field Epidemiology Training Program for Veterinarians (FETPV), and following two years of preparatory work and needs assessment, MoA partnered with FAO Emergency Center for Transboundary Animal Diseases (ECTAD) China, and successfully launched the China FETPV in November 2010. (http://www.china-fetpv.org/)
Country of origin (country of the leading partner)	
Location: (more	China

possible)	
Reference documents (if any)	
Website:	http://www.china-fetpv.org/
Contact:	**info@china-fetpv.org**
Lessons learnt, recommendations	Establishment of a sustainable training programme, in particular with training of trainers.

Best practice	**Project**
Title (and acronym if any):	ICONZ: Integrated Control of Neglected Zoonoses
Highlights	Improving human health and animal production through scientific innovation and public engagement
Sector/Priority area:	Zoonoses
EU Contribution: **China Contribution:**	Unknown
Scope/Objectives :	-To map global research into neglected zoonoses; -To obtain knowledge and information on the neglected zoonoses in terms of disease, epidemiology and burdens. This requires systematic collection of data on disease prevalence supported by studies to estimate their dual burden on people and on livestock, quantify under-reporting and identify communities and groups at risk; -To improve and develop control tools for the neglected zoonoses by identifying gaps and investing in the development of new tools needed to effectively control these diseases; -To improve and develop integrated control and prevention strategies promoting the concept of 'one health'. This involves dealing with health problems in people, their livestock and other domestic and wild animals they depend on for their livelihoods through the development of integrated 'intervention packages'; -To promote intersectoral collaboration in the control of neglected zoonoses; -To empower women in decision making related to control of neglected zoonoses in livestock through messaging cognisant of traditional knowledge and appropriate to the economic, sociological and cultural contexts of affected communities;

	-To transfer technologies and build capacity in developing countries to control neglected zoonoses; and -To ensure maximum benefit from the project by a pro-active programme of dissemination aimed at all relevant stakeholders especially by raising the profile of the neglected zoonotic diseases both internationally and within affected countries.
Description:	Globally, Neglected Zoonotic Diseases (NZDs) are disproportionately borne by communities in low resource settings, particularly in rural and peri-urban areas where socioeconomic activities maintain proximity to domestic or wild animals. Unlike 'emerging' zoonoses which attract considerable attention, the NZDs are normally omitted from major international and national policy frameworks, contributing further to the cycle of neglect through lack of awareness of their impact and a subsequent lack of funding for control. The poor bear perhaps the heaviest burden of the impact of NZDs, given they are at great risk of both contracting these diseases and not having the resources to seek medical treatment. Given the important poverty buffer of livestock and animal products to poor – particularly rural – livelihoods, the dual burden of disease both in humans and animals increases the social and economic impact of the NZDs. The situation is further complicated in that both production and companion animals of significant societal value may act as reservoirs from which these diseases are transmitted to man. The five year Integrated Control of Neglected Zoonoses (ICONZ) project brought together twenty-one European and African partners with the overall strategic objective of developing integrated control packages for eight key "neglected" zoonoses as defined by the World Health Organisation (WHO); anthrax, bovine tuberculosis, brucellosis, cystic echinococcus, porcine cysticercosis, leishmaniasis, rabies and zoonotic trypanosomiasis. Through a series of complementary and interdisciplinary actions, ICONZ outputs have – and will continue - to improve the political profile of this important group of diseases, whilst simultaneously benefitting both human health and animal production under the umbrella of a One Health approach. In the first three years, more than 22 000 animals and over 2000 households were surveyed in over 300 sites, in order to establish the baseline prevalence and socioeconomic impact of these eight diseases across Africa. This activity alone significantly contributed to the existing NZD knowledge

	base on continent, driving ongoing advocacy and policy activities as well as feeding into the design of the subsequent control interventions. The resulting quantitative and qualitative outcomes from the baseline surveys have been used to develop intervention case studies in the International Partner Co-operation Countries (ICPCs); Morocco, Mali, Nigeria, Uganda, Tanzania, Mozambique and Zambia. Through these field-based case studies, improved control and awareness of neglected zoonotic disease at both community and national/regional policy levels has occurred through the development and validation of packaged intervention strategies. These intervention strategies have been communicated through a variety of media including community meetings, peer reviewed publications, international stakeholder meetings and policy recommendations in affected countries and regions. The ICONZ concept centred on the requirement to develop and promote integrated control packages for NZDs in developing countries. It was anticipated that combining integrated, inter-programmatic, and inter-sectoral approaches to reach marginalized populations or geographic areas, based on risk stratification, should provide significant added value in terms of both improved human health and animal production. ICONZ successfully applied a matrix that considered the technical components of control of the eight NZDs in the context of broader requirements such as gap analysis, technology transfer and communications through a series of interrelated work packages.
Country of origin (country of the leading partner)	University of Edinburgh (project coordinator), United Kingdom
Location: (more possible)	Mulitple, but including Mali, Morocco, Mozambique, Nigeria, Tanzania, Uganda and Zambia
Reference documents (if any)	
Website:	**http://www.iconzafrica.org/** http://cordis.europa.eu/result/rcn/178078_en.html
Contact:	
Lessons learnt, recommendations	New technologies and research outcomes should be utilized to improve the control of neglected zoonoses by developing improved tools and identifying the situations in which they can be employed.

Best practice	Project
Title (and acronym if any):	Global Strategic Alliances for the Coordination of Research on the Major Infectious Diseases of Animals and Zoonoses STAR-IDAZ
Highlights	STAR-IDAZ involved partners from 16 countries around the world with organisations from a further 30 countries involved at a regional level through networks established for the Americas, Asia (including CAAS in China) and Australasia and Africa and the Middle East to complement the existing European network.
Sector/Priority area:	Infectious Diseases of Animals and Zoonoses
EU Contribution: **China Contribution:**	FP7 Project
Scope/Objectives :	Animal diseases can cause serious social, economic and environmental damage, and in some cases also threaten human health. An increasing number of the major disease problems or threats faced by the livestock industry are of a global nature. The overall aim of the network "Global Strategic Alliances for the Coordination of Research on the Major Infectious Diseases of Animals and Zoonoses" (STAR-IDAZ) was to improve coordination of research activities in this area so as to hasten the delivery of improved control methods. (http://www.star-idaz.net/wp-content/uploads/2016/04/S-I-Publishable-Summary-Final.pdf)
Description:	STAR-IDAZ allowed the establishment of an international forum of R&D programme owners/managers and international organisations for the purpose of sharing information, improving collaboration on research activities and working towards common research agendas and coordinated research funding on the major animal diseases affecting livestock production and/or human health. It built on the groundwork established by the SCAR Collaborative Working Group on Animal Health and Welfare Research (CWG), the EMIDA ERA-NET project and specific INCO-NETs involving partner countries. The scope of the project included coordination of research relevant to emerging and major infectious diseases of livestock, including fish and managed bees, and those infections of livestock that may carry the risk of disease threat to human health. Diseases of wildlife were also considered where they were identified as reservoirs of infection with emerging and major infectious diseases of humans or production animals. The project

	objectives were delivered through the following five Work Packages: WP1 - Project coordination, management, communication and dissemination; WP2 - Sharing information on existing research programmes; WP3 - Analysis of and responding to global, regional and industry sector priorities; WP4 - Networking of ongoing research activities on major issues; and WP5 - Developing a strategic trans-national animal health research agenda. (http://www.star-idaz.net/wp-content/uploads/2016/04/S-I-Publishable-Summary-Final.pdf)
Country of origin (country of the leading partner)	EU
Location: (more possible)	16 countries around the world
Reference documents (if any)	http://www.star-idaz.net/wp-content/uploads/2016/04/S-I-Publishable-Summary-Final.pdf
Website:	http://www.star-idaz.net/
Contact:	
Lessons learnt, recommendations	A Data Sharing Policy Statement was developed and agreed on by partners with the vision for the statement being that, as funders of research and/or research programme managers, we intend to work together to increase the availability to the scientific community and stakeholders of the research data we fund that is collected for the purpose of animal health and/or zoonoses research, and to promote the efficient use of those data to accelerate improvements in animal and public health. The Research Organisation Database, developed under STAR-IDAZ WP2, provides an overview of research centres, funding organisations, programmes and facilities, in the field of animal health across STAR-IDAZ partner and associated countries and a report has been produced. (http://www.star-idaz.net/wp-content/uploads/2016/04/S-I-Publishable-Summary-Final.pdf)

Best practice	**Project**
Title (and acronym if any):	Supporting the EU Access to Chinese Research & Innovation Programmes (ChinaAccess4EU)
Highlights	Mapping of the access opportunities in China; Dissemination of the results to European research organisations and multipliers; Monitoring of the participation of researchers from the EU in Chinese programmes; Provision of feedback and recommendations to the EC.
Sector/Priority area:	Science and Technology
EU Contribution: **China Contribution:**	Overall project value (EUR): 498.650 €
Scope/Objectives :	ChinaAccess4EU aims at increasing the awareness and dissemination in the Member States and Associated Countries of access opportunities of European researchers and research organizations in Chinese national research and/or innovation programs. The overriding purpose of the project is to help develop the reciprocity aspect of the EU-China Science and Technology agreement by identifying the Chinese programs open to EU researchers and promote their participation, and to provide outputs useful in the context of the Joint Committee meetings of the EU-China Science and Technology agreement.
Description:	To this end the project focuses on the mapping of the access opportunities in China, dissemination of the results to European research organizations and multipliers, monitoring of the participation of researchers from the EU in Chinese programs, and provision of feedback and recommendations to the EC. The project team is organizing two large dissemination/training workshops in Germany and France, and three small dissemination/training workshops in three other selected European countries in close collaboration with the National Contact Points of the FP7 program. The project team also prepared and conducted project dissemination & match-making events in China, which will be held in Beijing, Shanghai and Guangzhou (the three largest cities in China). The project team invited key stakeholders from research organizations, universities, government bodies, as well as EU-China S&T cooperation existing initiatives from both EU and China
Country of origin (country of the leading partner)	Portugal

Location: (more possible)	China, Portugal, Brussels, Germany, UK,
Reference documents (if any)	Strategy Paper http://www.access4.eu/_media/D12_-_Strategy_Paper_for_enhancing_reciprocity_in_EU-China_ST_Cooperatio....pdf
Website:	http://www.access4.eu/
Contact:	Dr. Sara Medina saramedina@spi.pt
Lessons learnt, recommendations	Three main strategic recommendations: -Europe-China Research Foundation: creation of a Europe-China Research Foundation would represent the materialisation of a common vision. -ChinaAccess Infodesk Office: the development of a ChinaAccess Infodesk Office would provide a valuable tool to guarantee information access and an adequate coordination of efforts with European actors interested in collaborating with China. -Diversification: stronger collaboration links at the regional level are necessary Other recommendations: -Improving information and communication strategies -Following Chinese STI landscape evolution -Rethinking cooperation instruments

Best practice	**Project**
Title (and acronym if any):	Dragon - Sustaining Technology And Research (Dragon STAR)
Highlights	-Promotion of opportunities in Chinese research programmes -Identifying and promoting opportunities for European researchers to participate in Chinese research and innovation programs -Monitoring the participation of EU researchers/innovation actors in Chinese programmes -Scoping the national Innovation Ecosystem in China -Supporting the EU-China S&T Policy Dialogue
Sector/Priority area:	Scientific, Research, Innovation, Technolog transfer, Scientific policy
EU Contribution: **China Contribution:**	Overall project value (EUR): 1.500.000 €

Scope/Objectives :	Taking into account the global significance of China in the financial world and its rapidly increasing role in the global research environment, Dragon-STAR supports the Sino-European collaboration in 4 levels: -Enhancing the quality of the Chinese participation in the Framework Programs and especially reinforcing the participation from less economically developed areas. -Supporting the reciprocity originating from the signed EU-China Scientific Cooperation Agreement and the other bilateral initiatives. -Supporting the bilateral cooperation in the broader field of innovation and especially technological cooperation between industrial players. -Supporting the ongoing bilateral Scientific Cooperation dialogue and the other related initiatives.
Description:	DRAGON-STAR is funded by FP7, aiming to support the Chinese participation in Horizon 2020, the reciprocity originating from the signed EU-China Scientific Cooperation Agreement, the bilateral cooperation in scientific, technological and industrial research and innovation fields, and the ongoing EU - China Innovation Cooperation Dialogue. The overarching practical aims of Dragon-STAR are to: -Analyse, evaluate and foresight current and future trends in Chinese research and technological development, and identify future cooperation opportunities; and support the scientific policy dialogue with useful information. -Investigate the cooperation opportunities and suggest a roadmap to jointly address specific societal challenges facing China. -Improve the quality of the Chinese participation in European funded initiatives Identify and support current technological and research bilateral collaboration opportunities. -Support the presence of European companies in the China, providing contacts, providing information on the regulatory framework, and supporting specific missions to China. -Actively encourage and support the reciprocity in the EU-China collaboration. This will be realized by enhancing the participation of European researchers in Chinese funded initiatives, and by investigating the possibilities of other joint research activities (twinning of labs, joint liaison offices, etc).
Country of origin (country of the leading partner)	Greece

Location: (more possible)	China, Greece, Italy, Portugal, Germany, Switzerland, Macao
Reference documents (if any)	1. Assessing the current ranking of the People's Republic of China in a set of research fields and identifying areas of common interest (China-EU) : http://www.dragon-star.eu/pack-download/china-research-status 2. EURAXESS LINKS CHINA, information about research jobs, funding and collaboration opportunities between Europe and China : http://ec.europa.eu/euraxess/links/china/index_en.htm 3. CHINA SME IPR Help-Desk : http://www.china-iprhelpdesk.eu/ 4. Network of Netherlands Officers for Science & Technology (NOST) in China : http://news.nost.org.cn/ 5. EU-China Environmental Governance Centre : http://www.ecegp.com/
Website:	http://www.dragon-star.eu/
Contact:	Epaminondas Christofilopoulos epaminondas@help-forward.gr
Lessons learnt, recommendations	The IPR protection issues, despite the recent efforts made by the Chinese government in improving this procedure, are still viewed as a barrier for promoting innovation, especially for foreign companies. From the standardization point of view, China tends to reduce market entrance barriers to foreign companies, although relevant policies still seem to favour Chinese companies over the foreign ones. Regarding public procurement, the Chinese government has recognized the importance of improving the efficiency in this process. Regarding the financial incentives, the government also offers a series of incentives to foreign-invested R&D centres, such as exemptions of customs duties on imported equipment, business and income tax deductions.

Best practice	**Project**
Title (and acronym if any):	Strengthening China Collaboration on ICT research with Europe (CHOICE)
Highlights	-Providing latest info on EU-China S&T R&D cooperation in ICT. -Supporting research and dialogue on ICT on LinkedIn, Twitter and Weibo. -Organized workshops to accelerate China-EU cooperation in the field of IoT, Immersive and Interactive Media, Industry IoT and exploring FIWARE

	opportunities. -Event organised in Chengdu and Lisbon to showcase EU-China ICT R&D cooperation success stories, to exchange on collaboration best practices and to provide participants with networking opportunities.
Sector/Priority area:	ICT, R&D
EU Contribution: **China Contribution:**	Overall project value (EUR) 735.866 €
Scope/Objectives :	CHOICE project emphasis was put on: 1) Identifying obstacles to reciprocity and encouraging a more balanced relationship with China based on reciprocity, especially supporting European nationals, companies and organisations willing to access Chinese research programmes; 2) Highlighting and showcasing both EU and Chinese excellence in ICT R&D; 3) Strengthening EU-China industrial ICT R&D cooperation, also with the view of preparing a roadmap towards a strengthened EU-China ICT R&D cooperation strategy for cooperation beyond FP7.
Description:	The CHOICE project aimed to provide timely input and follow-up on common ICT R&D priorities and future cooperation opportunities between the EC and China by assisting in focusing dialogue meetings and increasing their visibility through the delivery of workshops and events based around priorities identified in current dialogue meetings and providing inputs for subsequent dialogue meetings originating from the workshops, webinars and events. The CHOICE project addressed obstacles to reciprocity in EU China collaborative ICT R&D and encouraged a more balanced relationship between the EU with China in collaborative ICT R&D. In particular, by providing information and support for European nationals, companies and organisations willing to access Chinese research programmes. The CHOICE project highlighted examples of EU China excellence in ICT R&D through its dissemination activities and showcased EU and Chinese excellence in ICT R&D by developing a detailed online database and through its workshops, webinars and events. The CHOICE project strengthened EU-China industrial ICT R&D cooperation through business-to-business matching making activities and by disseminating information on models of clustering for cooperation. Based on the above work, the CHOICE project developed a roadmap towards a strengthened EU-China ICT R&D cooperation strategy for cooperation beyond FP7.

	The roadmap was accompanied by an action plan that provided a sustainability strategy for EU-China research cooperation outside of European funded research programmes.
Country of origin (country of the leading partner)	UK
Location: (more possible)	China, UK, France, Portugal
Reference documents (if any)	1. Roadmaps for international cooperation, European Commission staff working document (September 2014) : http://euchina-ict.eu/wp-content/uploads/2015/01/Roadmaps-for-international-cooperation1.pdf 2. IoT White paper (October 2014) : http://euchina-ict.eu/wp-content/uploads/2015/01/IoT-White-paper.pdf 3. Status Quo of 5G and Potential for Industry/Academia Partnerships, Nigel Jefferies (Huawei Technologies Co Ltd) (June 2015) : http://euchina-ict.eu/wp-content/uploads/2015/01/Status-Quo-of-5G-and-Potential-for-IndustryAcademia-Partnerships.pdf 4. Dragon-Sustaining Technology And Research (EU-China Collaboration) (2015-2018) : http://www.dragon-star.eu/dragon-star-plus/
Website:	**http://euchina-ict.eu/**
Contact:	Thomas Owens Thomas.Owens@brunel.ac.uk
Lessons learnt, recommendations	Developing Proposals to Chinese Funding Programmes Action 1: Pre-proposal preparation Recommendations: -Make an effort to understand as fully as possible the overall Chinese S&T policy and the structure of Chinese funding programmes and funding agencies. It is recommended to join the DragonStar mailing list (for instance, as the DragonStar project team sends Monthly Alert reports every month in regard to Chinese funding opportunities in English). -Track the website of the NSFC and other Chinese funding agencies. If possible, support from a translator is useful; or check with possible Chinese partners (if there are any) to help see when opportunities will be published. This would allow more time to prepare a proposal taking into account the short time frame that is often provided.

	Action 2: Partnership development Recommendations: -Establish partnerships with Chinese researchers, even if they do not lead to specific funding applications. A committed Chinese partner is important in a successful application for Chinese funding. It is highly recommended to visit the CHOICE project online database website, where a list of possible and interested Chinese partners who are active in international cooperation with Europeans in the ICT sector is available. In addition, by attending events organized by the CHOICE project and other project teams, European researchers can also initiate partnerships with Chinese researchers in the ICT sector. -Establish a strong personal relationship with Chinese researchers who are influential in their relevant research field. A popular term – "good cooperation basis" – is frequently used within funding calls, highlighting the importance of having proven long-term cooperation between Chinese and European researchers. Action 3: Proposal implementation Recommendations: -Ensure awareness of calls before they are officially published, and also be prepared in advance to promptly react once they have been. In general, this means that European researchers must be integrated with Chinese partners who are well networked with the Chinese research-funding establishment, as knowledge about future calls can be disclosed before official publication of the details on websites. Thus, sometimes the Chinese counterpart may be aware of interesting programmes and priority topics well in advance. Nevertheless, European potential applicants must keep a regular track of the calls for proposals.