

Franziska Bergmannn, Eduardo Herrmann | Steinbeis 2i GmbH (Ed.)

# Understanding the Chinese STI landscape in the context of EU-China innovation cooperation

ENRICH – European Network of Research and Innovation Centres and Hubs, China







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### List of abbreviations

AML Anti-Monopoly Law

CAS Chinese Academy of Sciences

CCM Chinese Co-Funding Mechanism

CPC Communist Party of China

EC European Commission

EU European Union

FAB Food, Agriculture and Biotechnology

FDI Foreign Direct Investment
GDP Gross Domestic Product

GHG Greenhouse Gas

GHG Information and Communication Technologies

IoT Internet of Things
IP Intellectual Property

IPR Intellectual Property Rights
JPI Joint Programming Initiative

JRC Joint Research Centre

JV Joint Venture

MoE Ministry of Education

MOST Ministry of Science and Technology NGO Non-Governmental Organisation

NSFC National Natural Science Foundation of China

R&I Research and innovation
R&D Research and Development
RMB Renminbi / Chinese Yuan

SME Small- and medium-sized Enterprise

SOE State-owned Enterprise

## **Executive summary**

China's Science and Technology (STI) market is a very dynamic sector offering considerable opportunities for potential collaboration. At the same time the European Union (EU) and China have a long track of cooperation on STI subjects. There are several points of coincidence, common trends and a political commitment to deepen existing collaboration.

A key question remains nonetheless, how can European organisations seize all potential opportunities and successfully collaborate with their Chinese counterparts?

This report provides current insights in that direction, by analysing the core elements shaping the Chinese STI landscape, highlighting trends and by identifying key challenges as well as main opportunities for international STI collaboration. This document pretends to deliver an overview on main issues to be considered by European organisations when intending to get engaged in STI collaboration with China.

A thorough documentary analysis has been performed and a set of key stakeholders has provided their views on the topics scrutinised. Indeed, whereas there is a common agreement on the strategic relevance of fomenting and reinforcing international STI collaboration between European and Chinese actors, there is also a clear view that it is a process requiring perseverance and decisive steps towards building up a relationship based on mutual trust.

### 1 Introduction

China has made an impressive progress on its journey from imitation to innovation in the last years. The rapid evolution witnessed in China has resulted, on the one hand, that cities like Shenzhen belong now to the world's largest innovation hubs and, on the other hand, China is now facing the unusual context that the country is losing low-skilled jobs to lower-costs labour countries. The paradigm of China being perceived as the world's manufacturing house is indeed changing. Moreover, on its race of becoming a high tech country, Chinese companies are following an aggressive policy of buying European top-notch enterprises. These are all reasons to take a closer look at China's rapidly changing STI landscape and to analyse what are the implications of all this changes on the EU-China STI collaboration.

This report presents a summary of the ENRICH project activities in order to analyse the underlying factors of the Chinese STI landscape in respect to their relevance and influence on EU-Chinese cooperation in this field. The information provided reflects a *status quo* analysis of current developments the Chinese science and innovation landscape, policies and ongoing activities within EU-China STI cooperation. It highlights trends and tendencies, as well as current opportunities and challenges for stakeholders directly involved in EU-China STI cooperation.

The presented information was gathered through a desktop research and was later validated and complemented through an online survey and three expert workshops. In the online survey, 68 STI stakeholders from the EU and China provided feedback and rated the findings. In June 2017, the findings were presented in an interactive workshop format to further experts and key stakeholders in Beijing, Shanghai and Brussels. Over 60 participants were representing European and Chinese government STI experts from public bodies, industry, research organisations and other STI service providers in these events. They contributed to this report through a frutiful exchange on valuable experiences in and know-how on EU-Chinese STI cooperation.