

Evaluation
Survey of the
China-Italy
Science,
Technology &
Innovation
Week 2015

march 2016





# **Executive Summary**

This report, edited by Svimez on behalf of Città della Scienza, aims at providing an evaluation of the China-Italy Science, Technology & Innovation Week 2015, held during November 2015 in five different Chinese cities (Beijing, Shanghai, Zhengzhou, Chongqing, Tianjin). The China-Italy Science, Technology & Innovation Week is the core event of the promotional activity aimed at promoting the Italian-Chinese cooperation in science and technology.

An evaluation survey has been submitted to the group of the Italian participants. In order to ensure the highest level of transparency, the survey compilation was designed through an online platform, where each participant had no access to others' answers.

The response rate was quite high, reaching almost the 80% of the total number of participants. This data per se shows good general feedbacks about the event.

The most relevant elements emerging from the survey are hereafter briefly illustrated.

First of all, an absolutely predominant share of participants thinks that the event has played a decisive role in increasing the scope of their Chinese-Italian cooperation activity in science and technology. The good results where further increased by the possibility to establish connections not just with the Chinese partners, but also within the group of Italian research centers and institutions. This can be considered as a key aspect, considering that informal relationships often constitute the pre-condition for long -term solid cooperation.

The good appreciation expressed by the Italian participants must be considered also in the light of the success in terms of teamwork and teambuilding within the very same group: the Italian entrepreneurial environment, in fact, has long lacked a real cooperative spirit as well as the common perception of being part of a unique country system.

At the same time, the Chinese counterparts seemed pleased by the attention and the detailed and efficient organization of the event, as well as by the highly innovative contents presented.



Criticalities emerged during the setting up of the so-called B2B (business-to-business) meetings. This is not surprising as far as concerns the Italian situation and the frequent lack of concerted actions, that often weakened the business initiatives carried out abroad. In particular, several participants recommended for the future a longer and more intense preparation phase in order to identify the best business interlocutors. In this sense, a better operational capacity is also recommended in the preparatory stage, for instance conducting a preliminary assessment of the business cooperation proposals content and definition. A large number of the interviewed participants hope for significant improvements in this sense. Furthermore, several participants also suggested the establishment of a core unit both for the Chinese and the Italian groups to supervise over what to do before and after each B2B meeting.

With regard to the areas and topics covered by the event, more than 60% of the participants considered the selection quite good; however, further suggestions emerged about additional fields to be included in the future editions as advanced materials and nanotechnologies. Just some participants were completely aware of the total areas and the topics involved, while the level of the speeches delivered was generally considered good. Less positive feedbacks emerged about the innovative nature of the contents as well as about the concreteness of the cooperation opportunities.

In conclusion, the participants revealed through the survey that the China-Italy Science, Technology & Innovation Week has been a valuable opportunity to deepen their understanding of a complex and multifaceted reality full of opportunities to be exploited. Considering all these results, almost all the participants are willing to join the next edition of the China-Italy Science, Technology & Innovation Week.



# China-Italy cooperation program: objectives

The China-Italy Science, Technology & Innovation Week aims to promote the cooperation between Italy and China in the field of innovation, science and technology in order to set up technological, productive and commercial partnerships specifically tailored for companies and research institutions. In the meantime, the program also aims to foster the internationalization of the Italian innovation and production system, that recently became a priority task for the Italian government.

For this reason, in 2015, at the Italian Ministry of Education, University and Research, a coordination committee for the China program was established, comprising all stakeholders from the worlds of research and universities. The committee was later opened to innovative start-ups, through MISE, and to the business world, with the participation of Confindustria (the Italian Confederation of Entrepreneurs).

Within this general institutional framework, the involvement of the various actors takes place during some key events, where representatives from the various institutions share projects, experiences, and have the chance to set up joint ventures or sign cooperation agreements.

In 2015 the China-Italy Science, Technology & Innovation Week took place during November 16-20 throughout five different cities:

- \* Beijing, November 16-17
- \* Shanghai, November 18
- \* Zhengzhou, November 18
- Chongqing, November 18-19
- \* Tianjin, November 20

The China-Italy Science, Technology and Innovation Week combined together the two main appointments of the Sino-Italian cooperation, namely the sixth edition of the China-Italy Innovation Forum and the ninth edition of the Sino-Italian Exchange Event.



# China-Italy Science, Technology and Innovation Week 2015: main events and evaluation process and methodology

## Main features of the China-Italy ST&I Week, November 2015

The activities conducted in 2015 have been presented in the "Activity Report 2015" drafted by Città della Scienza.

In 2015 the Italian delegation guided by the Ministrer for Education, University and Research Stefania Giannini was made up of 170 organizations comprising universities and research centers (46%), companies and innovative startups (35%), associations and public bodies. The geographical and sectorial distributions of the various participants was likewise interesting. As for the geographic origin, in fact, almost all the Italian regions sent a representative group of delegates. As for the sectors involved, instead, they matched the scopes included in the Italian national research plan. The Italian delegation was made up of about 200 participants. The China-Italy Science, Technology and Innovation Week 2015 program included 30 seminars on specific topics and more than 800 B2B prearranged meetings—focused on key scientific and technological sectors supported both by the Italian national research plan and the XII China's Five-years plan like: aerospace, agri-food, green chemistry, health/life sciences, clean-tech, energy, sustainable mobility, blue economy, new generation ICT, smart industry, creative design industry, smart cities & communities, cultural heritage technologies.

Among the most debated topics there were 30 projects presented just in the field of health and life sciences, one of the hot topic of the Innovation 2020 strategy launched in 2010 by the Chinese Academy of Science. Following there were 34 projects about smart cities and new generation ICT, representing one of the first seven Chinese strategic industries; 16 aerospace projects, where China is the fifth global investor after

<sup>1 -</sup> http://www.cittadellascienza.it/siee/2015/wp-content/mediafiles/2016/02/REPORT\_CINA\_2015.pdf



USA, Russia, Japan and France, with a 3,8 billion dollar investment in 2012.

Projects about design and creative industries were also quite appealing, thanks to a growing number of cooperation activities between Italy and the main Chinese universities; finally, the agri-food sector revealed considerable future perspectives in terms of a potential spending reaching 380 billion and more and more R&D activities.

The Chongqing stop has been particularly fruitful, thanks to the presence of the recently inaugurated Italian fifth consulate in China in the municipality with the highest and fastest GDP growth (13% per year).

The China-Italy Science, Technology and Innovation Week 2015 edition led to the conclusion of more than 29 agreements.

The numbers of the edition can be hereafter summarized:

#### PARTICIPATION:

- ⇒ 750 Chinese innovators in Beijing, with 500 Chinese organizations taking part to the two days events;
- ⇒ 580 Chinese innovators and 350 Chinese organizations in Chongqing;
- ⇒ More than 50 Chinese organizations and 100 Chinese innovators in Shanghai;
- ⇒ 76 Chinese organizations with 82 Chinese participants in Zhengzhou;
- ⇒ More than 60 Chinese organizations with 80 Chinese participants in Tianjin;
- ⇒ 170 Italian participants comprising universities, research centers; companies, startups, professional associations, consortiums;
- $\Rightarrow$  200 Italian participants.



## **Evaluation methodology**

The evaluation of a complex project requires a systemic approach in order to carefully depict the framework of qualitative and quantitative data available. This systemic approach is even more important if the evaluation seeks to capture the organizational structure, the results obtained, the predictable future outcomes and, finally, any possible change that is likely to improve the functioning or the effects of the organizational structure.

In order to do so, the survey is based on three different types of analysis:

- \* Analysis of the actions implementation processes;
- \* Analysis of the expected and actual outcomes;
- \* Analysis of the effects produced by the actions proposed.

Due to the nature of the event and the overall implications of such a complex program, the evaluation can't be based just on a quantitative analysis. For this reason the survey aimed at collecting opinions and impressions from the direct participants.

A survey questionnaire on the China-Italy Science, Technology & Innovation Week 2015 was therefore delivered in order to conduct a fieldwork investigation based on participants' feedback. The focus of the questionnaire was on the quality and the pertinence of the services provided by the organizers, on the most relevant aspects of the initiative, on the positive spillovers, on possible critical aspects and, finally, on the potential improvements suggested.

The main results of the survey will be graphically illustrated and commented in the following paragraph.



# Fieldwork survey results summary

# 1. General evaluation of the China-Italy Science,

# **Technology & Innovation Week**

The fieldwork survey was generally welcomed by the participants. Professors, researchers, company managers, private and public organizations directors filled the questionnaires. Considering the degree of involvement of the different participants, the highest number of responses came from the event speakers, followed by the participants (Tab.1.1).

Tab. 1.1. Role of the interviewed people during the China-Italy ST&I Week

Participants	26,0
Promoters	2,6
Promoters , Participants	2,6
Promoters , Speaker	1,3
Speaker	48,1
Speaker, Participants	19,5
Total number	100,0

The general evaluation was positive: more than the 80% of the interviewed people think that the event had a positive impact on the general Sino-Italian scientific and technological cooperation (Chart 1.1). This broadly positive assessment was furthermore confirmed, with a even higher percentage (more than 80%), both in relation to the general and the personal outcomes of the single participants or organizations (Chart 1.2).



Chart 1.1 Event rate of success in affecting the Sino-Italian scientific and technological cooperation relationships

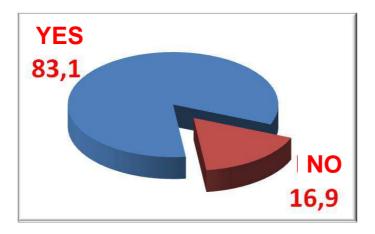
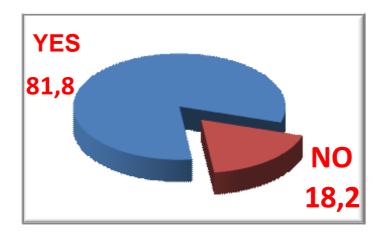


Chart 1.2 Event appropriateness in meeting the participants' needs and objectives and in developing new cooperation and business matching opportunities





## 2. Success and criticism about the event

Very good opinions were expressed about the event set-up and the organization, about the logistic aspects, the degree of involvement of participants and, finally, about the event program and schedule (good or excellent evaluation coming from the 70-80% of the interviewed people).

Less unanimously positive feedbacks came about the evaluation of the B2B meetings, about the promotional and communication activity, the effective possibility to meet potential business partners and, finally, about the interpretation services (Tab. 2.1). The Italian participants particularly stressed the need to improve the support services in terms of linguistic, administrative and legal consultancy. This seems to be one of the key aspect to be further enhanced. Single participants were the most frustrated by the language issues and the inadequacy of some B2B meetings. In order to improve the rate of success of the B2B meetings, the participants suggest a deeper preliminary preparation, together with a higher attention to the potential partners identification, a stronger encouragement toward a more technical and specific definition of the projects. Finally, the timing schedule should also be revised according to the effective transfers and locations.

Tab. 2.1. Main elements of success of the event
On a scale between 1 and 5
1 indicates a low level of satisfaction and 5 an excellent level

	1	2	3	4	5
Event setup and organization	1,3	1,3	18,2	37,7	41,6
Logistic operational aspects	0,0	5,2	18,2	51,9	24,7
Degree of involvement of the participants	1,3	9,1	15,6	48,1	26,0
Event program	1,3	3,9	19,5	51,9	23,4
B2B meetings setup	10,4	15,6	32,5	29,9	11,7
Promotional and communication activities	1,3	6,5	29,9	39,0	23,4
Potential partners/interlocutors identification	9,1	18,2	37,7	27,3	7,8
Language mediation services	2,6	7,8	23,4	39,0	27,3



# 3. Suggested improvements for the event program

Suggested improvements for the event program and organization can be easily traced according to less positive feedbacks and opinion collected. The 58% of interviewed people hope for a bigger attention to the operational results of the B2B meetings, while the 27% of participants thinks that the B2B part must be supported by a more defined platform of spaces and services to immediately put into effect the cooperation projects (Tab. 3.1).

Tab. 3.1. Suggested improvements for the event program

Wider and bigger preliminary information involvement campaig both in China and Italy	13,0
Bigger attention to the operational results of seminars and meetings	57,8
Setting-up of a specific platform to fasten the actualization of the cooperation projects	27,3
Other	3,9

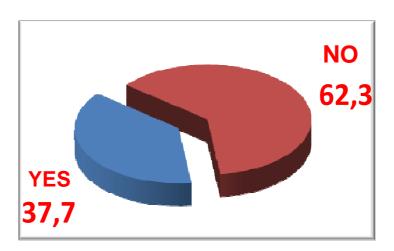


# 4. Suggestions regarding the sectors covered by the event program

With regard to the topics and sectors covered by the event program, more than 60% of the participants thinks that the selection was quite appropriate. However, further suggestions emerged about how to expand the areas of interest. Among the potential new scopes, in fact, some participants mentioned the nanotechnologies and advanced materials; others suggested to include also topics belonging to human and social sciences, by establishing connections with universities and research institutes based in the two countries. The questionnaire highlights that not all the participants were fully aware of the whole list of topics and sectors included in the event program and in the various cooperation projects (Chart 4.1).

#### Chart 4.1 Sectors included \*

\* Besides the sectors already included in the event program, are there any other interesting topic you suggest to include in the next edition?



# 5. Event participation

## 5.1 Singles days

The overall event and its general schedule received a quite good appreciation by the participants. Most of the interviewed people, in fact, expressed its appraisal by selecting the highest numbers in a scale from 1 to 5 (Tab. 5.1).

Tab. 5.1. Single days appraisal
On a scale between 1 and 5
1 indicates a low level of satisfaction and 5 an excellent level

	1	2	3	4	5
16/11, Beijing	2,9	7,1	25,7	42,9	21,4
17/11, Beijing	0,0	4,0	18,7	40,0	37,3
18/11, Zhengzhou	20,0	0,0	10,0	50,0	20,0
18/11, Shanghai	33,3	0,0	0,0	50,0	16,7
18/11, Chongqing	0,0	4,3	2,2	41,3	52,2
19/11, Chongqing	0,0	8,0	4,0	56,0	32,0
20/11, Tianjin	0,0	0,0	31,0	41,4	27,6

#### 5.2 Seminars and roundtables evaluation

The appreciation expressed about the seminars and roundtables was as well generally good. As for the opinions about the single days programs, most of the interviewed people expressed its appreciation by selecting the highest numbers in a scale from 1 to 5 (Tab. 5.2).

<sup>1 -</sup> It must be pointed out that, with regard to the Tab. 5.1, 5.2 and 5.3.1, the percentages about the level of participants' satisfaction refer to different total numbers of people attending the various events. Each day has therefore a different total number of answers and the percentage must be referred to it.



Tab. 5.2. Seminars and roundtables appraisal

On a scale between 1 and 5 1 indicates a low level of satisfaction and 5 an excellent level

	1	2	3	4	5
16/11, Beijing	6,0	14,9	16,4	43,3	19,4
17/11, Beijing	4,1	8,1	13,5	44,6	29,7
18/11, Zhengzhou	22,2	0,0	0,0	55,6	22,2
18/11, Shanghai	40,0	0,0	20,0	20,0	20,0
18/11, Chongqing	2,2	4,4	6,7	44,4	42,2
19/11, Chongqing	2,0	4,0	18,0	46,0	30,0
20/11, Tianjin	3,6	7,1	32,1	39,3	17,9

## 5.3 B2B meetings

With regard to the operational results of the B2B meetings the opinions collected were generally less positive than the average, as illustrated by the following charts. The most frequent criticism was directed to the general insufficient operational results following the meetings, requiring better future strategies (Tab. 5.3.1).

Tab. 5.3.1. Success rate of the B2B meetings
On a scale between 1 and 5
1 indicates a low level of satisfaction and 5 an excellent level

	1	2	3	4	5
16/11, Beijing	24,1	14,8	14,8	40,7	5,6
17/11, Beijing	12,5	14,1	14,1	42,2	17,2
18/11, Zhengzhou	37,5	12,5	0,0	37,5	12,5
18/11, Shanghai	50,0	16,7	16,7	16,7	0,0
18/11, Chongqing	5,0	10,0	17,5	37,5	30,0
19/11, Chongqing	7,1	9,5	19,0	40,5	23,8
20/11, Tianjin	8,0	4,0	28,0	36,0	24,0



Just the 30-40% of the interviewed participants expressed excellent or good opinions about the various aspects of the B2B meetings. In particular, it's important to note how the opportunities to establish an actual technological exchange between the two partners were actually scarce, while the general level of the technical, scientific and technological assets was located at a medium level. To overcome these issues and identify new strategies, further types and forms of mutual cooperation should therefore be taken into consideration.

Tab. 5.3.2. Qualifying aspects of the B2B meetings

	1	2	3	4	5
Scientific-technological level of the counterpart	7,8	19,5	41,6	28,6	2,6
Cooperation opportunities emerged	15,6	15,6	33,8	27,3	7,8
Technologies promotion opportunities in China	9,1	14,3	39,0	29,9	7,8
Technologies acquisition opportunities from Chinese partners	19,5	18,2	44,2	11,7	6,5

Tab. 5.3.3. Potential outcomes of the B2B meetings

	1	2	3	4	5
Partnership agreements (Letters of intent, Cooperation agreements etc)	15,6	16,9	31,2	22,1	15,6
Chinese market entry opportunities	18,2	15,6	40,3	23,4	18,2
Development of innovative joint projects	9,1	15,6	32,5	31,2	9,1
New businesses development (products, processes, companies)	20,8	22,1	33,8	19,5	20,8



## 5.4 Qualifying aspects and potential outcomes of the seminars

Among the most qualifying aspects of the seminars held during the event, the speakers' technical and scientific level stood out; less positive was the evaluation about the innovative contribution and the quantity of actual cooperation opportunities emerged.

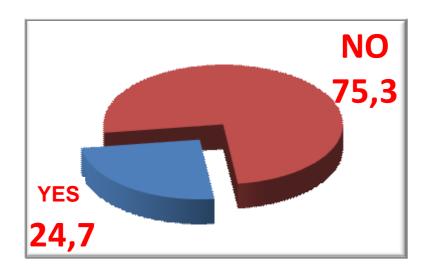
Tab. 5.4 Qualifying aspects and potential outcomes of the seminars

	1	2	3	4	5
Highly innovative contents	1,3	14,3	33,8	37,7	13,0
Speakers' technical and scientific level	2,6	2,6	24,7	46,8	23,4
Cooperation opportunities emerged	11,7	15,6	29,9	32,5	10,4

## 5.5 Initiatives/projects/cooperation started after B2B meetings

With regard to the less positive feedbacks collected on the operational results of the B2B meetings, they can be better understood by looking at the following questions.

Fig. 5.5.1. Initiatives/projects/cooperation started after B2B meetings

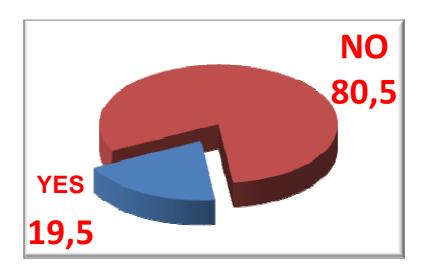




Just the 25% of the participants joining the survey confirmed that initiatives, projects and general cooperation were established after a B2B meeting with a Chinese counterpart (Chart 5.5.1). Less than 20% of them stated that the institution they belong signed one of more agreements during the event (Chart 5.5.2).

Even if this percentage might seem quite low, it must be taken into consideration that the conclusion of an agreement always requires preliminary preparation and fine-tuning activities.

Chart 5.5.1 Percentage of initiatives, projects and general cooperation established after B2B meetings



#### 5.6 Other significant outcomes of the event

Generally speaking, the event leaves room for future improvements, especially due to the number and type of expectations that were not met. Notwithstanding, general and positive feedbacks emerged with regard to the single activities, as revealed by the survey. Almost the 50% of the interviewed people agrees on the overall good outcomes of the event (Chart 5.3.1). Meanwhile, a share of almost 60% of the participants states that they would appreciate a deeper support in the long-term in order to nurture the cooperation established with the Chinese partners (Chart 5.3.2). In this sense, follow-up actions and institutional support initiatives would be crucial in order to maximize the positive outcomes of the event. All the participants agreed on the importance to deepen

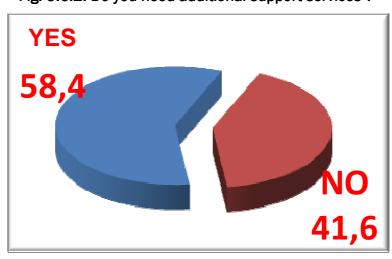


the mutual relationships in order to catch future chances. Furthermore, the event was a valuable opportunity for the Italian participants to connect not just with potential Chinese partners, but also with other Italian counterparts as companies and research institutes. This unexpected result strengthened the perception of a close group of actors as members of an actual country system. This attitude will definitely count during the future editions of the China-Italy Science, Technology and Innovation Week. According to the opinions collected, the Chinese counterparts similarly appreciated such a high degree of attention and efforts spent in the organization and preparation aspects, as well as the high profile contents delivered by all the participants.

NO 54,5 YES 45,5

Fig. 5.6.1. Are there other significant outcomes emerging from the event?





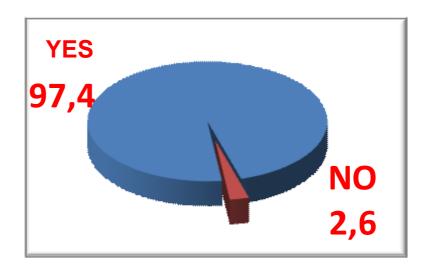


# 6. Participation to the 2016 edition

Almost all the participants confirmed their participation to the 2016 edition of the China-Italy ST&I Week, since the general perception of the event was that of a crucial appointment in the agenda of the companies or institutions they belong to. Suggestions for the next editions seem to be addressed to the need of more administrative, legal and linguistic support, together with a more detailed preparatory action with regard to the meetings and their follow-up monitoring actions.

In particular, the interviewed people also stress the important contribution of a better selection of the future participants, as well as of a bigger awareness of the area of business and research covered. The B2B meetings should therefore be more focused and a follow-up service should be equally provided, for instance through the involvement of the organizations as mediator in the following steps of finalization and implementation of the agreements (e.g. recall communications service). Furthermore, participant hope for a general more intense involvements of all the partners as part of a coordinated network; the common discussion of strategies to be pursued; a more effective finalization of the results acquired; the establishment, both for the Chinese and Italian counterparts, of a unique central body in charge of the coordination of past, current and future activities.

Chart 6.1 Percentage of people/institutions confirming their participation to the 2016 event





## Final remarks

The survey confirmed that the sino-italian program is relevant for both the Italian and the Chinese economic development.

Italy, in fact, is a leading country in several advanced industries that contribute to expand its appeal towards the Chinese partners. China, at the same time, is currently undergoing through a general upgrade of its traditional industrial landscape thanks to huge investments. These two reasons leave room for speculation over the current and future mutual opportunities for the two countries.

China is the world second largest economy and is presumably going to increase its absolute dimension. A medium and long-term planning conducted during the last decades has definitely contributed to build a solid research system made up of more than 2500 universities, academies, public and private research centers, technological parks, high technology development zones and big scientific infrastructures. In 2013, China ranked second for number of total investments in the R&D sector, as planned in the context of the XII Five-years plan. These investments are mainly directed to the upgrade of the various industrial sectors in order to ease the Chinese transition from a low value-added global producer to an independent and endogenous innovator, scaling-up the value chain and conquering the technological frontier. Product and process innovations are therefore a key step for this transition.

The Chinese research system supports the various scientific and technological strategies mainly through a top-down approach. The recent impressive Chinese rise as a science and technology superpower, in fact, is not just the result of the overall economic development, but also of the attentive planning and management of its education system in the field of science and technology. The Ministry of Science and Technology (MOST), through its think tank (CASTED, the Chinese Academy for Science and



Technology Development), is directly in charge of the R&D planning activities articulated through medium-term five-years plans, long-term 10/15 years plans.

In order to keep pace with the technological revolution briefly described, Italy has to intensively increase its cooperation and exchange activities with Chinese partners, stressing the importance of the strategies and programs in line with this objective.

The range of the most promising sectors includes: agri-food, environment and energy, automotive, big transportation infrastructures, technology and sustainability design, space, high energies physics, astrophysics, systems analysis, automation and robotic, earthquakes phenomena analysis. The companies engaged in these sectors could easily be involved in the establishment of research and technological transfers relationships, as a first step to enter new markets or reinforce their Chinese presence. In this sense, universities and research institutions could serve as a bridge thanks to their longstanding activity in solid international networks.

The accessibility of these opportunities could be increased through effective funding and co-funding strategies able to collect the necessary resources.

The China-Italy Science, Technology and Innovation Program fully responds to the urgent need to deepen the bilateral cooperation in the science and technology field. The program, in particular, aims at presenting a homogenous and integrated systems coordinating companies, research institutes, universities, national technological clusters, public-private laboratories, scientific and technological parks, incubators ecc.

The fieldwork survey highlighted a general positive feedback of the program main event, about its scientific and technological value, the actors involved and, finally, the unexpected opportunities emerged. This was further confirmed by the high percentage (80%) of the total participants that judged the event as a good occasion for their current and future cooperation projects. Moreover, the 97% of the total participants confirmed the actual intent of joining the next edition of the China-Italy ST&I Week that will take place in Italy in 2016.

<sup>2 -</sup> See MAE, Scienza e Tecnologia - Per una strategia italiana in Cina, 2015 .





