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NOTE

From: SFIC Secretariat
To: SFIC Delegations
Subject: Summary: Findings from the Toolbox survey

Delegations will find annexed to this Note the Summary on the Findings from the Toolbox survey, as approved for distribution by the SFIC plenary on 8 March 2017.

Summary:
Findings from the Toolbox survey

SFIC Toolbox Working Group

January 2017

INTRODUCTION AND ABSTRACT

The Strategic Forum for International Science and Technology Cooperation (SFIC) is an advisory group to the Council and the European Commission (EC) in the field of international cooperation in science and technology (S&T). In 2015, SFIC established a working group to develop a toolbox for international cooperation. According to the mandate for the working group, it is to develop a practical overview for the Member States, Associated Countries and the European Commission in their implementation of international S&T agreements and cooperation activities at bilateral and multilateral level.

In order to do so, the working group developed a questionnaire to gather information on relevant instruments for international cooperation from member states and countries associated to Horizon 2020 (MS/AC). 19 out of 43 MS/AC participated in the survey and provided information on their science, technology and innovation (STI) cooperation activities at bilateral and multilateral level.

The survey's findings reveal that most MS/AC have ongoing cooperation relations in STI with China, India, and the USA, irrespective of the instrument. Thematically, MS/AC on average focus their cooperation relations with third countries on the areas of engineering and technology and natural sciences.

International cooperation activities have increased recently. Different funding schemes (e.g. bilateral calls, multilateral calls) and joint institutions with third countries clearly reflect this general increase. International cooperation is highly bilateral, as bilateral calls are compared to others the most common instrument in international STI cooperation. In 2015, bilateral calls were, for instance, used by more than twice as many MS/AC as multilateral calls.

Participation

The questionnaire was sent to 43 MS/AC in June 2016. In total, 19 MS/AC have responded to the questionnaire. 15 out of the 19 responding countries are MS: AT, BE (BE-F, BE-Fl, BE-B), BG, CY, CZ, DE, DK, ES, FI, FR, LT, MT, PT, RO, SE; and 4 out of them are AC: BA, CH, IS, and NO.

Strategy for international cooperation

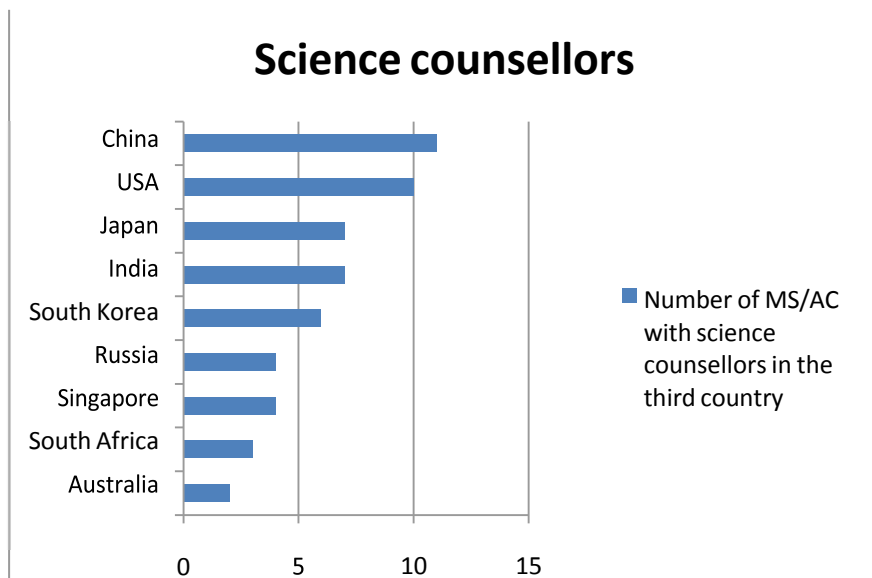
About half of the responding MS/AC (AT, CH, CZ, DE, ES, FI, FR, IS, LT, SE) already have governmental strategies, guidelines or roadmaps for international STI cooperation or are in the process of formulating one. The majority of those internationalization strategies, guidelines and roadmaps follow a thematic approach. A few of the internationalization strategies also combine a thematic approach with a regional focus.

Moreover, most of the responding MS/AC (those with an internationalization strategy and those without) have strategies dealing with internationalization in one way or another. This includes strategies with a specific regional or thematic focus (e.g. science diplomacy) and strategies by other national stakeholders than the government. The institutions that usually publish such strategies range from science foundations, academies, research performing organizations (RPOs), research funding organizations to higher education institutions.

Other responding MS/AC (BE, BG, CY, DK, MT) referred to bilateral agreements that they have instead of or in addition to internationalization strategies and that mainly build the basis of their internationalization activities.

Science counsellors

The majority of responding MS/AC (AT, BE, CH, CZ, DE, DK, ES, FI, FR, IS, LT, NO, SE) use science counsellors in their third country cooperation. China and the USA are those third countries, where most responding MS/AC have science counsellors. In China, 11 out of 19 responding MS/AC have science counsellors (AT, BE, CH, DE, DK, ES, FI, FR, LT, NO, SE). In the USA, this figure is 10 out of 19 (AT, BE, CH, DE, DK, ES, FI, FR, NO, SE). The below chart shows those third countries, where most MS/AC have science counsellors as well as the number of MS/AC per third country.

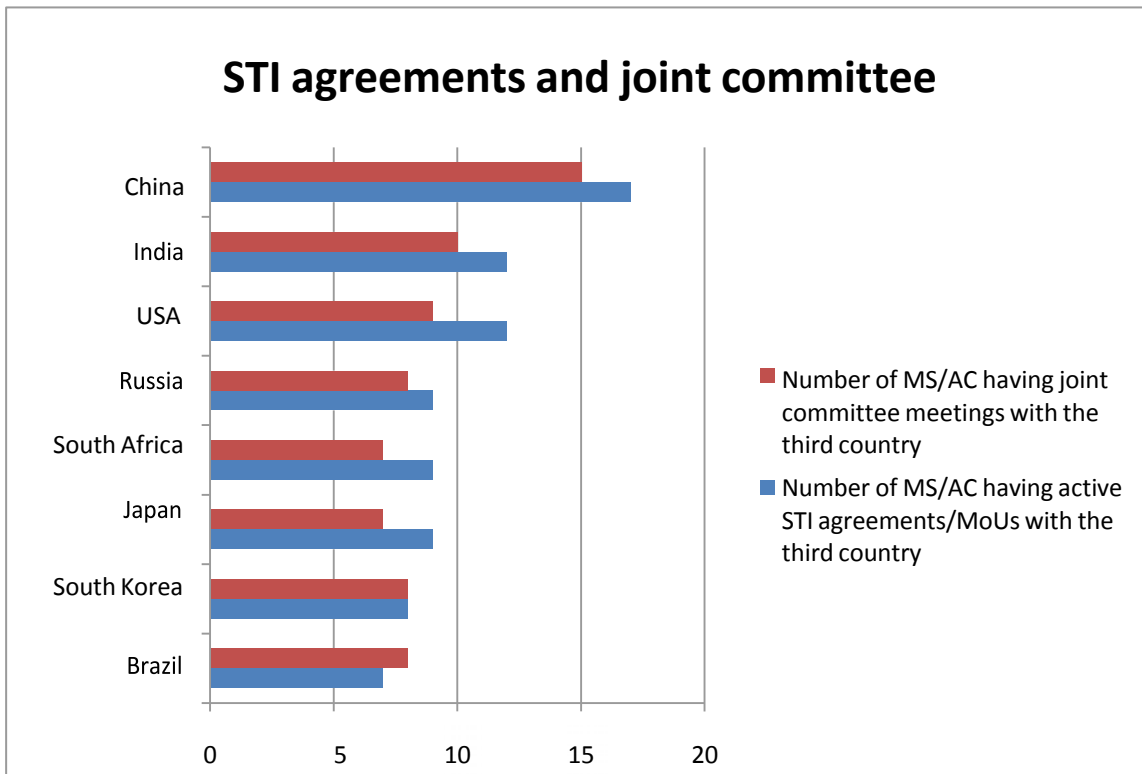


Different criteria determine in which third countries science counsellors are located. The three criteria that most MS/AC referred to are strategic objectives, importance of the third country in research and development (R&D), and cooperation agreements/activities.

The science counsellors of the responding MS/AC usually have similar tasks. In 12 of 19 responding MS/AC, science counsellors support bilateral cooperation in science and technology (S&T) and identify new cooperation opportunities. 5 of 19 responding MS/AC have science counsellors in third countries in order to get reports on topics and developments in science and research. The institutions that the science counsellors inform about ongoing developments and activities in the third country and that they report to are diverse. They are ranging from ministries (of research, science, education, foreign affairs, and economy) to local embassies and government agencies.

STI agreements and joint committee meetings

All 19 responding MS/AC have bilateral STI agreements or Memorandums of Understanding (MoUs) with one or several third countries and most of them also conduct regular joint committee meetings with them. The third countries, with which most of the responding MS/AC have an active STI agreement and regular joint committee meetings, are China, India, USA, Russia, and South Africa. With China, for instance, 17 out of 19 responding MS/AC have an active STI agreement and 15 out of 19 responding MS/AC conduct regular joint committee meetings. The chart below illustrates the number of MS/AC having joint committee meetings and active STI agreements with the third countries.



In the bilateral STI agreements/MoUs and joint committee meetings, MS/AC thematically prioritize the areas of engineering and technology and natural sciences. This becomes particularly apparent in MS/AC's cooperation relations with China, India and the USA.

National stakeholders involved in third country cooperation in S&T (amongst others the implementation of bilateral STI agreements and/or in joint committee meetings), are usually numerous and diverse. In most MS/AC are a multitude of stakeholders involved, such as ministries, universities, academies, RPOs, and research funding organizations.

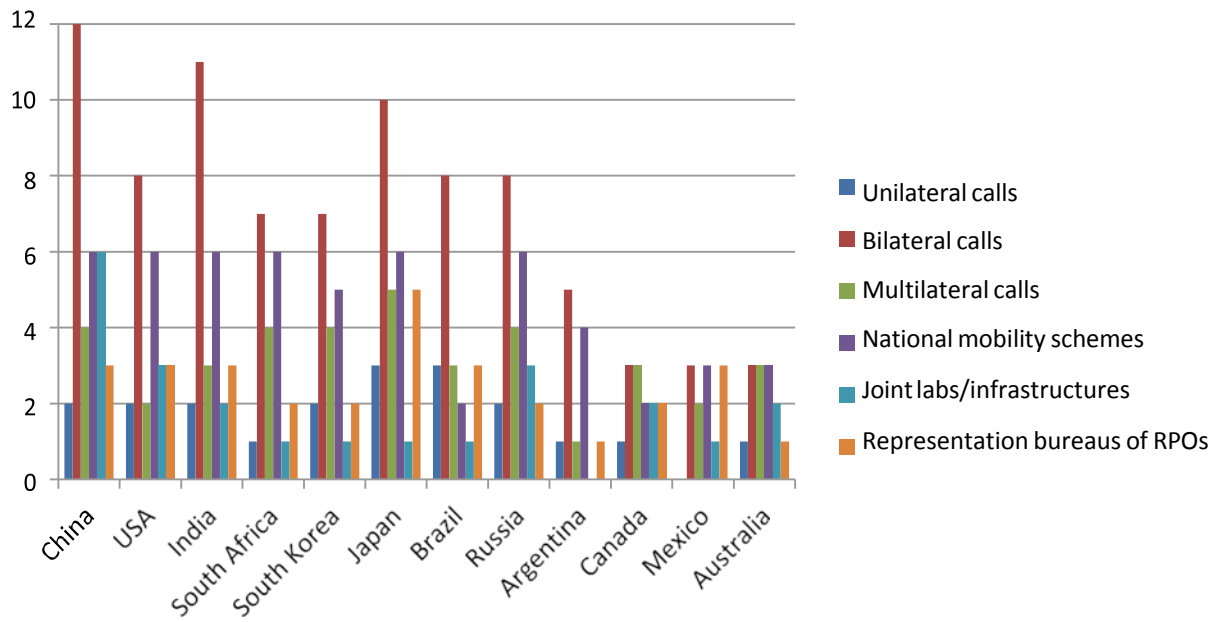
International funding schemes

The funding schemes and joint institutions that are part of this evaluation are unilateral, bilateral and multilateral calls, national mobility schemes, joint labs and infrastructures, and representation bureaus of RPOs. The schemes are funded through the ministry or an agency on behalf of the ministry.

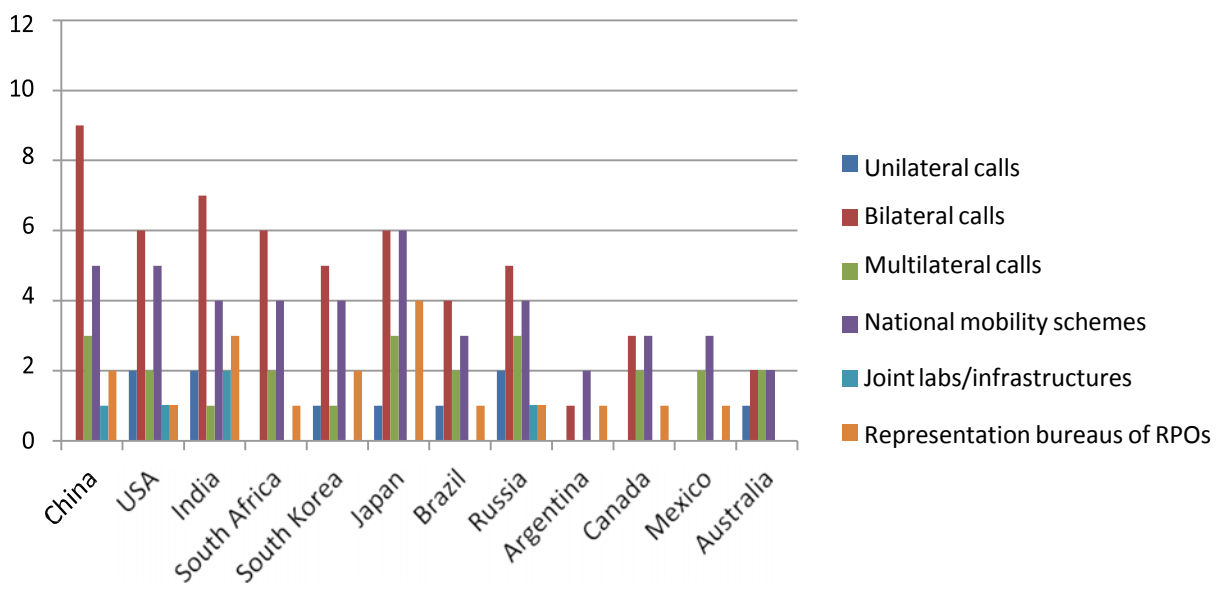
The charts below display those third countries that most MS/AC indicated to have a funding scheme or joint institution with in 2015 and 2010 and the number of MS/AC per funding scheme and joint institution. A comparison of the two charts demonstrates that the number of used funding schemes and joint institutions generally increased between 2010 and 2015. In 2015, MS/AC published twice as many bilateral and multilateral calls as in 2010.

Both, in 2015 and 2010, bilateral calls are the most common instrument. In 2015, they were on average used by more than twice as many MS/AC as multilateral calls. National mobility schemes are the second most common scheme with the majority of illustrated third countries. Representation bureaus of RPOs are on average more popular than joint labs and infrastructures; they are used by almost twice as many MS/AC as joint labs and infrastructures. Whereas joint labs and infrastructures were only rarely used in 2010, they were part of the cooperation activities of some MS/AC five years later.

International funding schemes: 2015



International funding schemes: 2010



International research marketing

With regards to activities in the context of international research marketing activities, two tools are used by a great majority of responding MS/AC. 15 out of 19 responding MS/AC use websites as marketing tools and 13 out of 19 organize events. Social media is used by half of the responding states. Other instruments, such as fairs, press releases, marketing material, lectures at foreign universities, and media/public relations are used by less than half of the responding MS/AC.

Success factors and risks

Lastly, the responding MS/AC provided insights with regards to success factors and risks in international STI cooperation. The following measures, activities, and instruments are according to the responding MS/AC particularly successful:

- trustful relationships/presence in the country,
- (joint) calls/funding,
- bilateral and multilateral cooperation,
- the EU's Research Framework Programme,
- commitment of partners/administrative facilitation.

The responding MS/AC observe the following risks and obstacles in their third country cooperation:

- political situation/culture,
- lack of funds/personnel,
- different framework conditions (IPR, (funding) rules, visa requirements etc.),
- lack of industrial cooperation,
- missing impact/difficult to evaluate.