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Horizon 2020 as a gateway for international cooperation?

Source: EC. Research and Innovation. International Cooperation Website

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Brussels, 28 July 2016

Executive Summary

Horizon 2020 is 'open to the world' and allows the participation of organisations from any third country in the world under certain conditions, which are listed in this report for every instrument of Horizon 2020. Third countries are defined as countries that are neither member states of the European Union, nor associated to Horizon 2020.

Despite the publication by the European Commission (EC) in 2012 of a new strategy aimed at increasing the research and innovation cooperation between Europe and the rest of the world, the first two years of Horizon 2020 have shown poor integration of institutions from third countries. The participation of third countries has indeed dropped compared to previous European framework programmes for research and technological development. One of the main reason is that some third countries that were automatically funded before do not benefit from this rule anymore. This report looks into the measures taken by the EC – which considers International Cooperation in Research and Innovation (INCO) a high priority – in order to combat this drop. It ranges from setting-up more co-funding mechanisms with third countries, to increasing INCO activities by supporting large-scale and visible initiatives such as the EU-China Food Agriculture and Biotechnology Flagship. For Swiss institutions, this means that having a link to these large flagships might prove increasingly important in the future to successfully use Horizon 2020 INCO opportunities.

Looking at to what extent Swiss institutions have cooperated with third country institutions via Horizon 2020, it appears that Marie Skłodowska-Curie Actions schemes as well as the collaborative projects under Part III 'societal challenges' are instruments where the cooperation with third countries is high. Moreover, our findings show that Horizon 2020 is considered by the Swiss scientific community as a very good way to engage in activities with a broader set of partners and countries and as well as to access new networks. However, Switzerland is not yet fully exploiting Horizon 2020's potential for cooperation with third countries. The report highlights that Horizon 2020's INCO opportunities are not well known and there is a lack of promotion on those opportunities. The communication between the relevant Swiss parties involved in INCO should be increased and the report gives concrete practical suggestions of what could be done.

Beyond these suggestions at practical level, the report also highlights that Horizon 2020 could be better embedded into Switzerland's INCO strategy. For example, the report shows that Horizon 2020 complements the more long-term partnerships supported by the Swiss bilateral programmes and acts as a door opener to new networks. Hence, promoting the use of Horizon 2020 in countries and regions where Switzerland has conducted exploratory missions between 2013 and 2016 could be of strategic use. Moreover, a mapping of the areas and the type of research covered by the multi-annual roadmaps and the co-funding mechanisms could prove useful to make sure that bilateral initiatives fill in gaps that Horizon 2020 do not cover and hence ensure that Swiss researchers have the widest opportunities possible to cooperate with third country partners. Finally, Swiss Higher Education Institutions should think of establishing grant support offices dealing with national, European and global funding. This would ensure that the different funding opportunities are promoted and used as strategically as possible.

As shown in the report, countries like Germany – adapting their INCO strategy according to the EC one and to the European Research Area– and Sweden – using the EC and ERA initiatives to extend their cooperation with third countries – are interesting cases to observe.

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List of acronyms

ACCRONYME	DEFINITION
AORA	Atlantic Ocean Research Alliance
ASEAN	Association of South East Asian Nations
AU	African Union
BMBF	German Federal Ministry of Education and Research
BRICS	Brazil, Russia, India, China, South Africa
BRICM	Brazil, Russia, India, China, Mexico
CELAC	Community of Latin American and Caribbean States
CHUV	Centre Hospitalier Universitaire Vaudois
CONACYT	Consejo Nacional de Ciencia y Tecnología
CREMLIN	Connecting Russian and European Measures for Large-scale Research Infrastructures
CSA	Coordination and Support Actions
CTI	Commission for Technology and Innovation
DG EAC	Directorate General for Education and Culture
DG RTD	Directorate General for Research and Innovation
EC	European Commission
EDCTP	European & Developing Countries Clinical Trials Partnership
EIT	European Institute of Innovation and Technology
ENP	European Neighbourhood Policy
EPFL	École Polytechnique Fédérale de Lausanne
ERA	European Research Area
ERAC	European Research and Innovation Area Committee
ERI	Education, Research and Innovation
ERC	European Research Council
ETHZ	Swiss Federal Institute of Technology Zurich
EU	European Union
FAB	EU-China Food Agriculture and Biotechnology Flagship
FET	Future and Emerging Technologies
FP7	Seventh Framework Programme for Research and Technological Development
FP9	Ninth Framework Programme for Research and Technological Development
GDP	Gross Domestic Product
HEI	Higher Education Institution
IA	Innovation Actions
IF	Individual Fellowships
INCO	International Cooperation in Research and Innovation
ITN	Innovative Training Networks
JPI	Joint Programming Initiatives
JTI	Joint Technology Initiatives
KIC	Knowledge and Innovation Community
KIC-Europe	Korean Innovation Office based in Brussels
LEIT	Leadership in Enabling and Industrial Technologies
MSCA	Marie Skłodowska-Curie Action
NCP	National Contact Point
NRF	National Research Foundation
NSF	US Science National Foundation
PP	Public Procurements
PPI	Public Procurements of Innovative solutions
PPP	Public-Private Partnerships
RIA	Research and Innovation Action
RISE	Research and Innovation Staff Exchange
SERI	State Secretariat for Education, Research and Innovation
SICA	Specific International Cooperation Actions
SFIC	Strategic Forum for International Science and Technology Cooperation

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SNSF	Swiss National Science Foundation
SSAJRP	Swiss-South African Joint Research Programme
S&T	Science and Technology
TPH	Swiss Tropical and Health Institute
US	United States of America
UNIBAS	University of Basel
UNIGE	University of Geneva
UNIL	University of Lausanne
USI	Università della Svizzera Italiana
UZH	University of Zurich
WP	Work Programme

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1   Introduction

1.1   Rationale and objectives

It is the right moment to take stock of the European Strategy[1] on International Cooperation in Research and Innovation (INCO) published in 2012 by the European Commission (EC) and implemented since 2014 mainly through the European Framework Programme for Research and Innovation Horizon 2020. Indeed, the **first results showing the participation of third countries (countries that are neither member states of the EU nor associated to Horizon 2020) in Horizon 2020 for the calls for proposals 2014 and 2015 are now available**. Moreover, European Commissioner for Research, Science and Innovation Carlos Moedas made '**Open to the world**' one of its three main priorities, meaning that the EC INCO strategy will gain importance in the years to come.

At the same time, SwissCore's 2012 report[2] on international cooperation in Science and Technology (S&T) concluded that using the European INCO instruments at disposal to support the Swiss INCO objectives is strategic, because the Swiss and European INCO strategies are compatible (Swiss and European S&T agreements with third countries have similar goals) and given the limited funding available in Switzerland for INCO activities.

However, the 2012 implementation report[3] on Switzerland's international strategy states that "*Given the uncertainty over Switzerland's involvement in research framework programmes post-2016 and on account of changes in the eligibility requirements regarding research framework programmes for BRICS[4] countries (which are no longer allowed to obtain funds from the EU to participate in research projects, which led to a decline in the number of applications from these countries in the first calls for proposals under Horizon 2020), it is currently **too soon to make predictions about the success of this approach**. This also means that **bilateral instruments and programmes with countries outside Europe could become more important in future**.*"

Given these facts, the paper will:
1) predict how the EC INCO strategy will evolve in the future, given the first results of participation of third countries in Horizon 2020 and Moedas' priority 'Open to the world' (chapter 2 and 3);
2) show the INCO opportunities that are offered by Horizon 2020 (and related programmes and initiatives) and how they have been used so far by Swiss institutions (chapter 4);
3) assess to what extent Horizon 2020 projects can be used strategically as a complement to other national initiatives for cooperation with third countries and whether Horizon 2020's INCO opportunities are known enough in Switzerland (chapter 5) ;
4) provide examples of whether and how other countries – Germany, Estonia, Sweden, Norway and South Africa – have been using Horizon 2020 INCO opportunities and if there is a strategy supporting it (chapter 6).

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[1] EC communication on Enhancing and focusing EU international cooperation in research and innovation
[2] SwissCore report on European and Swiss International Cooperation in Science and Technology
[3] State Secretariat for Education, Research and Innovation (SERI) report on the bilateral measures of the Confederation's international ERI strategy
[4] Brazil, Russia, India, China and South Africa (NB: South Africa is still eligible for EC funding in Horizon 2020)
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This will allow us to draw conclusions on how Swiss institutions could best grasp the INCO opportunities offered by Horizon 2020 (chapter 7). This last chapter will suggest a set of measures that can be taken by different stakeholders to that end.

1.2 Methodology and scope

On top of desk research (see footnotes and bibliography for reference) and attending relevant events in Brussels, discussions with several Swiss and European institutions (see list of contributors in references) contributed to the development of the paper. Moreover, the suggestions on how to increase the way INCO opportunities are promoted/communicated are based on a **questionnaire** (Annex III) sent to **all swissnex' directors and Swiss S&T Counsellors, as well as to all leading house coordinators at Swiss Higher Education Institutions (HEI).**

The specific focus on **South Africa** in some parts of the report was chosen because of the demand that spontaneously emerged from the University of Basel (UNIBAS) to learn more about Horizon 2020 opportunities to cooperate with South Africa. A **questionnaire** (Annex III) was developed and sent **to all Swiss institutions partnering with South African institutions in Horizon 2020** to find out how this type of multilateral cooperation via a Horizon 2020 project had strengthened their bilateral cooperation with South African partners and whether the project was strategically linked to other bilateral projects funded e.g. by the Swiss-South African Joint Research Programme (SSAJRP).

The status of Switzerland within Horizon 2020 is not discussed in this paper. With 'INCO opportunities', we refer to opportunities to cooperate with third countries (countries that are neither member states of the EU nor associated to Horizon 2020) in research and innovation. This excludes Switzerland whose association agreement to Horizon 2020 is limited to some parts of the programme until the end of 2016.

Finally, in order to predict how the EC INCO strategy will evolve in the future, this report takes into account the first results of participation of third countries in Horizon 2020 (calls for proposals 2014 and 2015), the development of the EC INCO roadmaps for the 2016-2017 and the future measures planed by the EC.

2 European INCO strategy

2.1 Background

On 14 September 2012, the EC published a communication[5] that announced the implementation of a new strategy for INCO among others by means of **strategic multi-annual roadmaps[6] that directly flow into the Horizon 2020 Work Programmes** (WP). These roadmaps set priorities for cooperation, assess framework conditions to optimise cooperation in priority areas and countries as well as help to focus on agreed priorities with those countries or region. They always are in line with the **overarching objective set by the EC INCO communication**:

CATEGORY	OBJECTIVES	TARGETED THIRD COUNTRIES

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[5] EC communication on Enhancing and focusing EU international cooperation in research and innovation

[6] EC implementation report of the strategy for international cooperation in research and innovation

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Countries covered by the European Neighbourhood Policy (ENP)[7] **They receive automatic funding from Horizon 2020**.	Develop a common knowledge and innovation space, including improving the research and innovation competences of these countries.	Algeria, Azerbaijan, Belarus, Egypt, Jordan, Lebanon, Libya, Morocco, Palestine, Syria. NB: Armenia, Georgia, Israel, Moldova, Ukraine and Tunisia belong to the ENP countries but are now **associated to Horizon 2020** and thus not 'third countries' anymore.
Industrial countries and emerging economies[8] **They do not receive automatic funding from Horizon 2020**, except in the following exceptional cases: • if there is a specific bilateral agreement between the EU and the third country[9]; • if the third country is explicitly identified in the relevant WP and call for proposal as being eligible for funding; • if the third country participation is deemed to be essential by the EC for carrying out the action.	Maintain EU competitiveness, jointly tackle global challenges through common innovative solutions, and develop enabling technologies by accessing new sources of knowledge.	Australia, Brazil, China, Canada, Hong Kong, India, Japan, Macau, Mexico, South Korea, Russia, Taiwan, United States of America (US).
Developing countries[10] **They receive automatic funding from Horizon 2020.**	Complementing the Union's external policies and instruments by building partnerships – in particular bi-regional partnerships – to contribute to the sustainable development of these regions and address challenges such as the green economy, climate action, improved agriculture, food security and health.	Afghanistan, American Samoa, Angola, Argentina, Bangladesh, Belize, Benin, Bhutan, Bolivia, Botswana, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Chile, Colombia, Comoros, Congo (Democratic People's Republic), Congo (Republic), Costa Rica, Côte d'Ivoire, Cuba, Djibouti, Dominica, Dominican Republic, Ecuador, El Salvador, Eritrea, Ethiopia, Fiji, Gabon, Gambia, Ghana, Grenada, Guatemala, Guinea, Guinea-Buissau, Guyana, Haiti, Honduras, Indonesia, Iran, Iraq, Jamaica, Kazakhstan, Kenya, Kiribati, South Korea (Democratic Republic), Kosovo, Kyrgyz Republic, Lao, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Maldives, Mali, Marshall Islands, Mauritania, Mauritius, Micronesia, Mongolia, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines,

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[7] EC website on European Neighbourhood Policy
[8] Participant Portal Horizon 2020 Online Manual
[9] So far, the EU obtains only one specific bilateral agreement of this type with the US, wherein US researchers are eligible for EU funding if participating in the health programme on the basis of a reciprocal EU - US/NIH arrangement.
[10] Horizon 2020 – WP 2016-2017: General Annexes

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		Rwanda, Samoa, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Solomon Islands, Somalia, South Africa, South Sudan, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Swaziland, Syrian Arab Republic, Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Tonga, Turkmenistan, Tuvalu, Uganda, Uzbekistan, Vanuatu, Uruguay, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe.

Table 1: Overview on country status in Horizon 2020

2.2 Multi-annual roadmaps: how does it work?

The EC INCO roadmaps are **the result of a priority setting exercise**[11] **between the EC, the EU member states, countries associated to Horizon 2020 and third countries** wherein one evaluates the countries' research and innovation capacity, the opportunities for and risks of getting access to new markets, the countries' contribution to meet the EU international commitments, as well as the available framework conditions to engage in cooperation with the EU.

The idea of having such roadmaps is to obtain a **strategic document** (reworked and published biannually and first used for WP 2014-2015) used as the base for bilateral negotiations and collaborations during Horizon 2020 WP preparations and Joint Committee meetings. On top of that, these roadmaps are one measure for the EC to **maximise synergies** between the EU and national roadmaps and programmes of the member states, and to **directly involve third countries** in the whole development process.

The **starting point of these roadmaps** are the bilateral agreements of the EU with targeted third countries **(S&T agreements)**. So far, the EU has concluded such international agreements with **20 countries**[12] and intends to establish more S&T agreements in the future. Most of these agreements are concluded for an indefinite period (or for five years with tacit renewal). Only the agreements[13] with Brazil, India, Russia, Ukraine and the US need to be formally renewed every five years.

Once the roadmaps have been broadly defined by the EC, they are distributed within the **Strategic Forum for International Science and Technology Cooperation (SFIC)** which is a dedicated configuration of the European Research and Innovation Area Committee (ERAC)[14]. SFIC's objective is to facilitate the further development, implementation and monitoring of the international dimension of the European Research Area (ERA). In practice, SFIC communicates its view on the priorities of some countries and regions (e.g. Brazil, China, Russia) to the EC to share information and consultation between partners with a view to identifying common priorities which could lead to coordinated or joint initiatives. The group also aims at coordinating activities and positions *vis-à-vis* third countries and within international

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[11] EC website on International Cooperation in Research and Innovation

[12] Algeria, Argentina, Australia, Brazil, Canada, Chile, China, Egypt, India, Japan, Jordan, South Korea, Mexico, Morocco, New Zealand, Russia, South Africa, Tunisia, Ukraine, US

[13] EPRS paper on EU scientific cooperation with third countries

[14] Switzerland enjoys the status of an observer within ERAC

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fora. All of that gives the possibility to **increase the exchange of how roadmaps are defined** and how cooperation in general is shaped.

Furthermore, in order to increase the scientific dialogue between the EU and third countries, **11 EU delegations abroad have S&T counsellors**[15]. The presence of **S&T counsellors from third countries in Brussels** (located in the 'Mission of their country to the EU') also intensifies this dialogue. So does the presence of some **non-ministerial national research stakeholders**, such as the Korean Innovation Office (KIC-Europe), the US Science National Foundation (NSF), the EU–Japan Centre for Industrial Cooperation or the *Consejo Nacional de Ciencia y Tecnología* (CONACYT) from Mexico.

So far, multi-annual roadmaps have been set up with **9 countries** (China, Brazil, South Africa, South Korea, Japan, US, Canada, Russia, India) and **2 regions** (Eastern Partnership and South Mediterranean countries). For each country and priority region an overview is provided on the way **the priorities are addressed in the first WP (2014-2015) in Horizon 2020**.

Taking the example of **South Africa**, the priorities addressed in 2014-2015 were the following: health, environment, research infrastructures, marine and maritime research as well as raw materials. As a result, the **following Horizon 2020 calls have been 'flagged'** to encourage the cooperation between the EU and South Africa:

YEAR	IDENTIFIER	SHORT TITLE
2014	INFRASUPP 6 (Part I: Research Infrastructures)	International cooperation for research infrastructures
	SFS 6 (Part III: Challenge 2)	Sustainable intensification pathways of agro-food systems in Africa
	WASTE 4 (Part III: Challenge 5)	Towards near-zero waste at European and global level - global waste dimension
	SC5-5 (Part III: Challenge 5)	Coordinating and supporting research and innovation for climate action - Climate change mitigation options
	SC5 13 (Part III: Challenge 5)	Coordinating and supporting raw materials research and innovation – Strategic international dialogues and cooperation on raw materials with technologically advanced countries
	ICT 39 (Part II: LEIT-ICT)	International partnership building in low and middle income countries
	SFS 18 (Part III: Challenge 2)	Small farms but global markets: the role of small and family farms in food and nutrition security
	WATER 5 (Part III: Challenge 5)	Strengthening international research and innovation cooperation in the field of water
	SC5 13 (Part III: Challenge 5)	Coordinating and supporting raw materials research and innovation – Strategic international dialogues and cooperation with raw materials producing countries and industry
	INT 1 (Part III: Challenge 6)	Enhancing and focusing research and innovation cooperation with the Union's key international partner countries

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[15] Australia, Brazil, Canada, China, Egypt, India, Japan, South Kora, Russia, US and Addis Ababa for the African Union

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	ISSI 5 (Transversal issue: Science with and for society)	Supporting structural change in research organisations to promote Responsible Research and Innovation

Table 2: Overview of key projects with South Africa in WP 2014-2015

2.2.1 Outlook on the next set of roadmaps

The main idea of the EC was to **align the multi-annual roadmaps with the two-year WP** in Horizon 2020 in order to adapt the priority countries/regions and collaboration areas on a regular basis (every two years) which leads to new and updated roadmaps for each new WP.

The second implementation report on INCO, including the new roadmaps, will be published on **29 September 2016** by the EC. This new set of roadmaps will influence the WP 2016-2017 as well as the last WP (2018-2020) of Horizon 2020. On top of the already existing 11 roadmaps which will be updated, we expect new roadmaps to be presented for **Australia, New Zealand and Mexico** as well as **for three new regions**: Community of Latin American and Caribbean States (CELAC), Association of South East Asian Nations (ASEAN) and the African Union (AU). The roadmap for South Mediterranean countries will be replaced by separate roadmaps for Enlargement countries and Southern Neighbourhood countries. On top of that, the EC is discussing the possibility to create **'living/ongoing roadmaps'**, which could be accessed online and adapted whenever necessary. The EC has noticed that the adaption of INCO roadmaps for each new WP might not be sufficient enough because some priorities might change faster (e.g. migration crisis).

It is interesting to see that **addressing regions and not only single countries has become an objective of the EC INCO strategy**. For cooperation with South Africa for instance, it means taking into account the updated roadmap with South Africa as well as the one with the AU which should focus on the following priorities:
- peace and security;
- democracy;
- good governance and human rights;
- human development;
- sustainable and inclusive development and growth and continental integration;
- global and emerging issues.

The following table gives a hint on the possible topics that explicitly encourage cooperation with the **AU** in Horizon 2020 Work Programme 2016-2017.

	TOPIC IDENTIFIER	TOPIC TITLE
2016	INFRASUPP-01-2016 (Part I: Research Infrastructures)	Policy and international cooperation measures for research infrastructures
	GÉANT Partnership projects (Part II: LEIT-ICT)	Trans-Atlantic submarine cable
	ICT-39-2016-2017 (Part II: LEIT-ICT)	International partnership building in low and middle income countries b) Coordination and Support Actions for Africa
	Health, Demographic Change and Wellbeing - Other action (Part III: Challenge 1)	Grant to the Global Alliance for Chronic Diseases

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	SC1-PM-06–2016 (Part III: Challenge 1)	Preventing Disease: Vaccine development for malaria and/or neglected infectious diseases (RTD)
	Health, Demographic Change and Wellbeing - Other action (Part III: Challenge 1)	First interim evaluation of the EDCTP2 programme
	SFS-41-2016 (Part III: Challenge 2)	EU-Africa Research and Innovation partnership on food and nutrition security and sustainable agriculture
	SFS-42-2016 (Part III: Challenge 2)	Promoting food and nutrition security and sustainable agriculture in Africa: the role of innovation
	Secure, Clean and Efficient Energy – Other actions (Part III: Challenge 3)	Study on a comprehensive EU approach as regards international cooperation in the energy area – the research and innovation perspective
	MG-3.6-2016 (Part III: Challenge 4)	Euro-African initiative on road safety and traffic management
	SC5-6b-2016 (Part III: Challenge 5)	Pathways towards the decarbonisation and resilience of the European economy in the timeframe 2030-2050 and beyond b) Assessment of the global mitigation efforts in the perspective of the long-term climate goal (2016)
	SC5-11-2016 (Part III: Challenge 5)	Supporting international cooperation activities on water
	SC5-28-2016 (Part III: Challenge 5)	Transformations to sustainability
	Climate action, environment, resource efficiency and raw materials – Other actions (Part III: Challenge 5)	Intergovernmental Panel on Climate Change (IPCC) secretariat
	SC1-PM-06-2016 (Part III: Challenge 1)	Vaccine development for malaria and/or neglected infectious diseases
2017	SFS-43-2017 (Part III: Challenge 2)	Earth observation services for the monitoring of agricultural production in Africa
	SwafS-14-2017 (Transversal issue: Science with and for society)	A Linked-up Global World of Responsible Research and Innovation(RRI)

Table 3: Overview of key projects with South Africa in WP 2016-2017

2.3 Open to the World strategy

In June 2015, European Commissioner for Research, Science and Innovation Carlos Moedas announced the three priorities for his mandate: **Open Innovation, Open Science and Open to the World**[16]. The ultimate goal of his 'Open to the world' strategy is a) to have a **united global research area**, centred around the ERA and where the ERA would be interlinked to other research areas around the globe, b) to tackle global societal challenges and c) to pursue 'science diplomacy', linking research and innovation to the broader external agenda of the EU.

To start with, the EC has proposed **Latin America and Asia** as relevant partner regions to increase their research and innovation collaborations and to work towards a global research area. One could therefore expect that the **roadmaps currently developed with CELAC and ASEAN to be of particular importance**. Moreover, progress towards the building of a 'Common Knowledge and Innovation Space'[17] with the Mediterranean Partner Countries (EU Southern neighbourhood) is also a priority of the EC. The updated INCO roadmap with South

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[16] EC report on Open innovation, Open science, Open to the world: A vision for Europe
[17] EC research press package

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Mediterranean countries will therefore be important. It must also be noted that Tunisia, Georgia and Armenia recently became associated to Horizon 2020 and **one could expect other countries of these regions to join in the future as well**. Finally, the revisited Lund Declaration on tackling societal challenges adopted on 4 December 2015[18] also pleads for a stronger **cooperation between European and global research in order to tackle global societal challenges**.

In the upcoming interim evaluation of Horizon 2020 – which will be articulated around Moedas' three priorities – and the outlook for the future European framework programme for research and innovation FP9 - **one can therefore expect the INCO component to be fully addressed**.

In this second chapter, we saw that the aim of the 2012 EC INCO strategy is to increase cooperation between the EU and third countries by means of multi-annual roadmaps (based on S&T agreements) that directly feed into Horizon 2020's WP. New roadmaps for 2016-2017 will soon be published and will also influence Horizon 2020's last WP 2018-2020. There will be more and more roadmaps targeting a whole region rather than a specific country. Finally, we also saw that INCO has become a policy priority for the EC and one can therefore expect that it will be an important element of the interim evaluation of Horizon 2020 and part of its successor programme.

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[18] 2015 Lund Declaration

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3 Has the European INCO strategy worked so far?

Despite the new approach to INCO launched via the 2012 EC INCO strategy as well as the new kick given by Moedas, first results of Horizon 2020 (WP 2014-2015)[19] have shown that the participation of third countries in Horizon 2020 has dropped compared to the Seventh Framework Programme for Research and Technological Development (FP7). Indeed, the **participation of third countries** (in collaborative projects) **has dropped from 4.91% in FP7 to only 2.21% (excluding Switzerland) in Horizon 2020**[20].

Statistics have shown that this decrease of INCO partners can mainly be explained by four different reasons:

1. One third of this drop can be explained by the new funding policy: **Brazil**, **Russia**, **India**, **China** and **Mexico** (BRICM) are no longer automatically funded for their participation in Horizon 2020[21] (as it was the case under FP7).
2. Around 15% of this drop can be explained by political tensions occurring in the **AU**, **Southern neighbourhood** and **Russia**.
3. Around 10% of this drop can be explained by the change in the status of **Ukraine**. Since 2015, Ukraine is indeed associated to Horizon 2020.[22]
4. One third of this drop can be explained by the lack of the **Specific International Cooperation Actions** (SICA)[23] that existed in FP7. INCO is indeed a cross-cutting priority of Horizon 2020, to be found in all priorities, and has no dedicated scheme like it was the case before.

This drop can be observed despite the fact that the number of topics that are flagged (i.e. explicitly mentioning in the call that cooperation with third countries or with one specific third country is encouraged) as particularly relevant for cooperation with third countries has risen from 12% in FP7 to 22% in the 2014 call for proposals under Horizon 2020 and to 27% in the 2015 call[24]. Another element that should have prevented this drop is the roadmaps developed, which are meant to encourage the cooperation in the areas indicated by the roadmaps. **One can argue that this drop is in contradiction with Moedas' 'Open to the world' objective.** From chapter 2, we made it clear that strengthening the cooperation with third countries is an aim at European level. However, Horizon 2020 has so far not been successful in increasing cooperation with third countries. The EC is aware of that and wants to act to increase third country participation in Horizon 2020.

3.1 The way forward

In order to increase the participation of third countries in the next calls for proposals of Horizon 2020, the EC foresees the following main measures.

First, the EC wants to agree on more co-funding mechanisms with third countries and better communicate on the existing ones so that European partners know about them. As we have seen in chapter 2, not all third countries are eligible for funding through Horizon 2020.

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[19] EC's Monitoring report 2014
[20] See Figure 1 in Annex I
[21] See Figure 2 in Annex I
[22] See Figure 3 in Annex I
[23] See Figure 4 in Annex I
[24] See Figure 1 in Annex I

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For the moment, **only developing and enlargement countries[25] are automatically funded by the EC**. It was a strategic move for the EC to not fund the third country contribution of the BRICM anymore as these countries had made considerable improvements over the past years in terms of scientific and economic investments and outcomes.

So far, the situation regarding existing **co-funding** agreements is the following:
- co-funding for **most or all thematic areas**: Republic of Korea[26], Mexico[27], China[28], Taiwan[29], Hong Kong and Macau[30], Russia[31];
- co-funding for **selected thematic area**: Australia[32] (Societal Challenge 1), Japan[33] (power electronics and critical raw materials);
- co-funding by **regions**: Canada[34] (Quebec), Brazil[35] (São Paulo, Santa Catarina, Goiás, Minas Gerais, Goiás, and Amparo à Pesquisa);
- countries where **no jointly agreed mechanism** for co-funding Horizon 2020 projects are currently in place: India[36], New Zealand[37], US[38].

All these agreements are different. In no case, the funding of projects is automatically provided, but in practice, the selection processes in third countries are rather light and virtually all projects are funded. **A representative example that such co-funding mechanisms bring good results is South Korea**. Indeed, statistics[39] show that the country has not experienced a drop in participation in the first two calls of Horizon 2020. A part of the explanation can be that the country has had a co-funding agreement with the EU for a long time already (already in FP7).

On the other hand, one may argue that co-funding mechanisms create a negative attitude towards potential third country partners. The EU has no control over the decision making-process of their counterpart. There is always the **risk that third countries might not get funded by national institutions** and hence, the project will fall apart (e.g. Russia where the government denied to provide financial support for a project due to political reasons).

Second, the EC has noticed that flagging seems to be insufficient for encouraging third countries to apply for more calls in Horizon 2020. Despite the fact that 80% more topics were flagged as specifically relevant for international cooperation in Horizon 2020 compared to FP7, only 50% of all projects with third countries belong to a flagged call. As a result, the EC has been taking additional measures to encourage the participation of third countries in the WP

[25] See Annex II
[26] EC Country Page of South Korea
[27] EC Country Page Mexico
[28] EC Country Page of China
[29] EC Country Page Taiwan
[30] EC Country Page Honk Kong and Macao
[31] EC Country Page Russia
[32] EC Country Page Australia
[33] EC Country Page Japan
[34] EC Country Page Canada
[35] EC Country Page Brazil
[36] EC Country Page India
[37] EC Country Page New Zealand
[38] EC Country Page US
[39] See Figure 5 in Annex I
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2016-17 calls: increasing the number of **joint**[40], **coordinated**[41] or **twinning**[42] calls with international partner countries by 20%; increasing the number of topics contributing to **global multilateral initiatives**[43] (e.g. in the area of health); increasing the **number and combined budget** of specifically targeted INCO topics by more than 20%.

Third, a key recommendation for the preparation of the 2016-2017 WP has been to increase INCO activities **through the support of 'flagship initiatives'** which are the large-scale and most visible targeted of INCO activities ("INCO initiatives of sufficient scale and scope"). These flagships are a result of negotiations between the EU and third countries on political priorities that eventually turn into specific calls for proposals, e.g. the Transatlantic Ocean Research Alliance (AORA)[44], the EU-China Food Agriculture and Biotechnology Flagship[45] (FAB), the Connecting Russian and European Measures for Large-scale Research Infrastructures[46](CREMLIN). Additionally, the EC is holding negotiations to create a new flagship with Africa in the area of food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bio economy (societal challenges 2). All of this shows, that **being part of these flagship initiatives** might become increasingly important to successfully partner with third countries via Horizon 2020.

Fourth, the EC will issue a call for the 2016-2017 WP named '**Service facility in support of the strategic development of international cooperation in research and innovation**' aiming at supporting and promoting INCO activities (like the international cooperation networks in FP7). This action will be the main body supporting the EC in bilateral, multilateral and bi-regional policy dialogues with third countries (and priority regions) as well as identifying barriers to and opportunities for increased INCO.

Finally, the EC would like to work on changing mentalities. Research is international *per se* and should not stop at the boundaries of Europe, especially when one speaks about tackling global challenges. However, as said above, involving third country partners seems not to be an automatism in European research framework programmes although statistics have shown that projects involving third country partners actually enjoy a **higher success rate**[47] (up to 17%), in particular with the BRICM countries[48].

In this third chapter, we have seen that the European INCO strategy has not been very successful so far, as the number of Horizon 2020 projects involving third countries has dropped compared to FP7. However, as INCO will clearly remain a priority (see chapter 2), the EC intends to take a series of measures to remedy to the situation. One can expect these measures to be deployed over the next years and to also influence the interim evaluation of Horizon 2020 and the next European Framework Programme for Research and Innovation FP9.

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[40] Calls that are evaluated and selected through joint evaluation and selection procedures.

[41] Calls that the EU and the third country evaluate and manage separately.

[42] There are two partners (e.g. EU-US twinning) working on the same call. However, they work independently and exchange their knowledge through joint workshops.

[43] The EU can provide funding for European entities participating in a project in the third country.

[44] Atlantic Ocean Research Alliance website

[45] EU-China Food Agriculture and Biotechnology Flagship website

[46] Connecting Russian and European Measures for Large-scale Research Infrastructures website

[47] See Figure 6 in Annex I

[48] See Figure 7 in Annex I

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4 Horizon 2020 INCO opportunities: rules and Swiss involvement

Compared to FP7[49], which had a specific action called 'activities of international cooperation' under the 'Capacities' specific programme[50], **INCO now is widely spread within Horizon 2020**. It is therefore hard to make direct comparisons between FP7 and Horizon 2020.

Third countries have the opportunity to participate in **all activities of Horizon 2020** with conditions[51] applying to third countries (see table below), except for the 'SME instrument', 'Access to risk finance', 'Fast Track to Innovation', 'prizes', 'Public Procurements (PP)', and 'Public Procurements of Innovative solutions (PPI)' and moreover, it must be noted that organisations from third countries **can coordinate projects**. Finally, some WP may restrict the participation of third country entities if these entities are unable to provide satisfactory security guarantees, if justified by other security reasons, or the participation of legal entities from member states is considered prejudicial in a certain third country's research and innovation programme.

The following table summarises **the requirements for third country partners' participation** in the different parts of Horizon 2020 (middle column) and shows the **number of projects involving Swiss and third country partners**[52] (right column).

HORIZON 2020	INCO OPPORTUNITIES	SWISS INVOLVEMENT
Part I 'Excellent Science'		
European Research Council (ERC)	Researchers **from anywhere in the world** and of any nationality can apply for ERC grants provided that at least 50% of the research they undertake will be carried out in a host institution located in the EU or associated country. The other 50% can be spent in an institution in a third country. Moreover, the ERC has signed a series of 'implementing agreements'[53] with the US, South Korea, Argentina, Japan, China, South Africa, and Mexico. They provide early-career scientists from those countries with the possibility to **join a research team run by an ERC grantee for a limited period.**	For the ERC calls 2014-2015 (without Advanced Grants 2015), 2 of the 77 ERC Horizon 2020 grantees based now in Switzerland were resident in a third country (US) at the time of application. There are no statistics available on how many researchers from third countries have used the 'implementation agreements' in place to join a team led by an ERC grantee in a Swiss host institutions.
Marie Skłodowska-Curie Action (MSCA)	Innovative Training Networks (ITN): the organisations should be established in at least three different EU member states or associated countries. **Additional participants from any organisation anywhere in the world can also join a network**. For European Joint Doctorates (subtype of ITN), **the participation of third country partners is even encouraged**.	For the ITN calls 2014-2015, 28 out of 87 projects with a Swiss participation also include third countries (US, New Zealand, China, Canada, Australia, Japan, Singapore, Tunisia, Ethiopia, Saudi Arabia, South Korea, India, Colombia, Brazil, Iran, Egypt, Russia, Svalbard and Jan Mayen, Monaco)

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[49] In total, Switzerland participated in 14 out of 1'393 INCO projects in FP7.
[50] See table 8 in Annex I
[51] Official Journal of the EU 'Participation and dissemination in Horizon 2020 and repealing regulation'
[52] Data was retrieved from the EC database CORDIS, and information given by the ERC, DG EAC and SERI in March 2016. The data might have changed by now (Tunisia, Armenia and Georgia are here considered as third countries).
[53] ERC Website on Opening ERC teams to the world

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	Individual Fellowships (IF): European Fellowships are held in a member state or associated country but open to researchers from third countries. Global Fellowships fund **periods outside of Europe** (with a mandatory return phase in Europe) for researchers based in the EU or associated countries.	For the IF calls 2014-2015, 9 out of 73 granted fellows of an IF in Switzerland were from a third country (China, Armenia, Colombia, Indonesia, India, Islamic Republic of Iran, New Zealand, US). For the same calls, 12 fellows based in Switzerland have used an IF for a secondments outside of Europe.
	Research and Innovation Staff Exchange (RISE): partner organisations should be from three different countries (and different sectors). At least two of these should be from the EU or associated countries. **Partners from elsewhere in the world can also join.**	For the RISE calls 2014-2015, 16 out of 18 projects with a Swiss participation also include third countries (Armenia, China, Egypt, Belarus, US, Australia, Japan, Russia, Argentina, Chile, Namibia, South Africa, Singapore, Brazil, India, Iran, South Korea, Costa Rica, Colombia, Mongolia, Paraguay, Philippines, Madagascar, Senegal, Burkina Faso, Mali, Uganda, Canada, Kenya, Vietnam, Tunisia)
Future and Emerging technologies (FET)	Most of the funding instruments are Research and Innovation Action (RIA), Innovation Actions (IA) and Coordination and Support Actions (CSA). Both RIA and IA must include at least 3 legal entities from 3 different member states or associated countries. For CSA, the conditions are at least 1 legal entity from the EU or associated country. **Additional participants from any organisation anywhere in the world can then join.**	1 out of 19 projects with a Swiss participation also includes a third country (Belarus).
Research Infrastructures (RI)	Most of the funding instruments are RIA, IA and CSA. Both RIA and IA must include at least 3 legal entities from 3 different member states or associated countries. For CSA, the conditions are at least 1 legal entity from the EU or associated country. **Additional participants from any organisation anywhere in the world can then join.**	10 out of 37 projects with a Swiss participation also include third countries (US, Australia, Philippines, Taiwan, Thailand, Indonesia, Malaysia, Belarus, Russia, Japan, Uruguay, China, South Africa, Madagascar, Tunisia, Armenia, Georgia)
Part II 'Industrial Leadership'		
Leadership in Enabling and Industrial Technologies (LEIT)	Most of the funding instruments are RIA, IA and CSA. Both RIA and IA must include at least 3 legal entities from 3 different member states or associated countries. For CSA, the conditions are at least 1 legal entity from the EU or associated country. **Additional participants from any organisation anywhere in the world can then join.** The LEIT also include Pre-commercial procurements and Public procurements of innovative solutions. **Third countries are completely excluded from these funding instruments.**	9 out of 142 projects with a Swiss participation (only for the subcategories ICT and space) involve third countries (Belarus, Mexico, Argentina, Georgia, Armenia, Guatemala, Canada, South Korea, Ethiopia, Zambia, Cameroon, Brazil, Senegal, Togo, Australia).
Access to Risk Finance	Third countries cannot participate.	Not relevant.

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Innovation in SME (SME Instrument and Fast track to innovation)	Third countries cannot participate.	Not relevant.
Prizes, PP, PPIs	Third countries cannot participate.	Not relevant.
Joint Technology Initiatives (JTI)	Third countries can join JTI as **Participating States** if the minimal eligibility conditions (**3 legal entities from 3 different member states or associated countries**) are met, in due consideration of any applicable derogations for Article 185/187 initiatives. **Third countries are excluded from the States Representatives Group (or Public Authorities Board) but may be invited to participate in meetings as observer.**	There are no JTIs that involve Switzerland and a third country. Overall, third country participation in JTIs is very low. Only Taiwan, China and Russia are each involved in one JTI project.
Public-Private Partnerships (PPP)	Most of the funding instruments are RIA, IA and CSA. Both RIA and IA must include at least 3 legal entities from 3 different member states or associated countries. For CSA, the conditions are at least 1 legal entity from the EU or associated country. **Additional participants from any organisation anywhere in the world can then join.**	There are no exact statistics available on which PPPs involve Switzerland and a third country.
Part III 'Societal challenges'		
	Most of the funding instruments are RIA, IA and CSA. Both RIA and IA must include at least 3 legal entities from 3 different member states or associated countries. For CSA, the conditions are at least 1 legal entity from the EU or associated country. **Additional participants from any organisation anywhere in the world can then join.** **Most of the calls where the involvement of partners from third countries is encouraged are to be found in the 'Societal challenges'.**	**Societal challenge 1 (Health, demographic change and wellbeing)** 14 out of 51 projects with a Swiss participation include third countries (Australia, US, Canada, Uganda, Tanzania, Mozambique, Ivory Coast, China, South Korea, South Africa). **Societal challenge 2 (Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bio-economy)** 8 out of 19 projects with a Swiss participation include third countries (China, Lebanon, Russia, New Zealand, Nigeria, Argentina, Canada, Egypt, Colombia, Morocco, Brazil). **Societal challenge 3 (Secure, clean and efficient energy)** 3 out of 37 projects with a Swiss participation include third countries (Australia, Morocco, South Korea). **Societal challenge 4 (Smart, green and integrated transport)**

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		2 out of 14 projects with a Swiss participation include third countries (Canada, Russia).
		Societal challenge 5 (Climate action, environment, resource efficiency and raw materials) 6 out of 19 projects with a Swiss participation include third countries (Japan, Chile, Tunisia, Egypt, Morocco, South Korea, Indonesia, South Africa, Kenya, Australia).
		Societal challenge 6 (Europe in a changing world - inclusive, innovative and reflective societies) 5 out of 13 projects with a Swiss participation include third countries (Belarus, US, China)
		Societal challenge 7 (Secure societies - protecting freedom and security of Europe and its citizens) There are no projects that involve Switzerland and a third country.
Specific objective Part III a 'Spreading Excellence and widening participation'		
Teaming Action	The conditions are at least 2 legal entities from a member state or associated country (one from a 'widening country' and the other from a research-intensive country). **Additional participants from any organisation anywhere in the world can then join.**	No Swiss projects.
Twinning Action	The conditions are at least 3 legal entities from a member state or associated country (one from a 'widening country' and two from a research-intensive country). **Additional participants from any organisation anywhere in the world can then join.**	1 out of 6 Twinning projects with a Swiss participation include a third country (South Korea)
ERA Chairs	The country hosting the ERA Chair must be a member state or associated country (which is a widening country). **ERA Chair positions are also available for researchers of any nationality.**	No Swiss projects.
Part 'European Institute of Innovation and Technology (EIT)'		
Knowledge and Innovation Community (KIC)	2/3 of the partners in a KIC must come from member states and associated countries. **For the other 1/3, third countries can join**.	No KIC involving Switzerland and third countries.

Table 4: Overview on participation rules for third countries in Horizon 2020

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4.1 INCO rules for Horizon 2020's complementary instruments

For the sake of completeness, the table below provides an overview of the INCO opportunities offered by the main programmes and initiatives[54] that are complementary to Horizon 2020.

Horizon 2020 COMPLEMENTARY INITIATIVES	INCO OPPORTUNITIES	SWISS INVOLVEMENT
Public-Public Networks 'ERA-NET Cofund'	The rules are the same as for Horizon 2020, i.e. additional participants from any organisation anywhere in the world can join as long as the minimum conditions of participations from member states or associated countries are met. The EC 33% contribution does not count the amount provided by the participant of a third country.	2 out of 9 projects with Swiss participation in 'Horizon 2020 ERA-Net Cofund' include third countries (Canada, Brazil, South Africa, Taiwan and South Korea). There is no Swiss involvement in ERA-Net or ERA-Net Plus under Horizon 2020.
Public-Public Networks 'Art. 185'	Art. 185 are open to third countries only if this is specified in the agreement set-up to launch the Art. 185 network.	3 out of 4 projects with Swiss participation include third countries (Canada, South Korea, Niger, Uganda, Burkina Faso, Cameroon, Congo, Gabon, Gambia, Ghana, Mali, Mozambique, Senegal, South Africa, Tanzania, Zambia).
Joint Programming Initiatives (JPI)	JPIs do not follow the Horizon 2020 rules and can decided by themselves how they include third country partners.	4 out of 5 JPIs with Swiss participation include third countries (Canada, Argentina, Japan, New Zealand, Australia).
Eureka[55]	Eureka is open to third countries. So far, Eureka has 41 member countries, including three third countries (Canada, South Africa, South Korea).	Switzerland participates in 2 Eurostars and 2 Eureka projects with South Korea, 5 Eureka projects with Canada, 1 Eureka project with South Africa, 6 Eureka projects with the US and 1 Eureka project with Taiwan.
COST	COST does not have members from third countries, but there are current discussions on the possibility for third countries to become members. Researchers from all over the world can already participate in COST actions under the principle of 'mutual benefits'.	For the 2016 approved COST actions, Switzerland participates in 13 actions involving third countries (Argentina, Brazil, Russia, Ukraine, New Zealand, Egypt, Singapore, Canada, French Polynesia, US, Georgia, Australia, Japan).

Table 5: Overview on participation rules for third countries in complementary programmes

The tables given show that Switzerland benefits from strong links with third countries not only in the parts where it participates as an associated country (MSCA ITN and RISE) but also in priority III 'societal challenges' where it is considered an industrialised third country. For example, 28 out of 87 of MSCA ITN projects with a Swiss participation also include third countries. It would be interesting to see more into details how those activities link to other projects funded by the Swiss National Science Foundation (SNSF) or bilaterally. For the societal

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[54] Retrieved from ERA LEARN 2020 website and information from SERI in April 2016

[55] Eureka projects are either funded by Commission for Technology and Innovation (CTI) or self-financed by companies that participate in this programme. Eurostars projects are funded by SERI.

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challenges, close to 25% of the projects with Swiss participation involve one or more beneficiary from a third country. This figure is quite stable across societal challenges, beside challenge 7 on 'secure societies'. These numbers show that Swiss institutions already benefit from quite a few possibilities to engage with third countries across nearly all scientific disciplines. This openness contrasts with bilateral opportunities, which are usually smaller and more limited in scope. One can therefore conclude that Horizon 2020 is indeed a valuable programme to strongly engage in cooperation with third countries and could be used strategically in addition to national initiatives. Furthermore, Swiss researchers should be encouraged to maintain their participation in those areas where Switzerland has already been strong as well as promote and enhance Swiss participation in those areas where there are potential for more cooperation (ERC, FET, RI).

In this fourth chapter, we have described how third countries can participate in the different Horizon 2020 instruments, as well as given the number of projects so far involving Switzerland and third countries. What we can notice is that the type of projects where Switzerland seems to have the strongest cooperation with third countries are MSCA ITN and RISE, and the collaborative projects under Part III 'societal challenges'. It can also be noted that the JPIs, ERA-Nets, Art. 185, Eureka and COST regularly include partners from third countries.

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5   Using INCO opportunities strategically to support bilateral cooperation

We have seen in the previous chapters that Swiss cooperation with third countries happens *per se* via Horizon 2020 projects. But is this cooperation strategically linked to other nationally funded projects of the 'Bilateral joint research programmes'? And could Horizon 2020 be used to support prospection in new countries of interest where bilateral research programmes do not exist yet?

5.1   Horizon 2020 to support the 2017-2020 prospecting phase

Switzerland's international strategy for Education, Research and Innovation (ERI) [56] was elaborated in 2010 and defined a set of priority third countries (Brazil, Russia, India, China, South Africa, Japan, South Korea) to cooperate with. **Bilateral research programmes have been established with all of these countries**. In addition, Switzerland supports two high-quality research institutes in the Ivory Coast and Tanzania. It is also worth noting that the Swiss Federal Institute of Technology Zurich (ETHZ) has an offshore campus in Singapore and the École Polytechnique Fédérale de Lausanne (EPFL) has one in Ras Al Khaimah, the United Arab Emirates. While the Bilateral joint research programmes used to be managed by Swiss HEI themselves, they are now run by SNSF, however the HEI still have the responsibility to promote scientific cooperation with key institutions in the country (and region) for which they operate as 'leading houses'.

PRIORITY COUNTRY	LEADING HOUSE	ASSOCIATED LEADING HOUSE
Brazil	EPFL	
China	ETHZ	University of Zurich (UZH)
India	EPFL	University of Lausanne (UNIL)
Russia	University of Geneva (UNIGE)	EPFL
South Africa	UNIBAS	Swiss Tropical and Health Institute (TPH)
Japan	ETHZ	
South Korea	ETHZ	UNIGE

Table 6: Overview of leading houses at Swiss HEI

As highlighted in the recent Swiss ERA Roadmap[57], "in 2011, an external study has been conducted by the Science Service of the *Università della Svizzera Italiana* (USI), which positively assessed these programmes. Overall, the evaluation showed that bilateral programmes as a whole were perceived as a successful funding instrument. Both the researchers and the programme managers agreed that the **programmes strengthened the scientific relationships with the partner countries**. The reported results were promising, anticipating the production of valuable scientific outcome. As no reasons to modify fundamentally the overall setting of these programmes, the choice of countries, and the organizational structure were provided, the programmes have been continued over the 2013-2016 period". For the period 2017-2020, the bilateral programmes will be pursued and managed by SNSF. The leading houses will only focus on **developing cooperation with relevant partners in the countries**

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and regions where exploratory missions have taken place in 2013-2016[58]. Horizon 2020 could be used strategically to strengthen cooperation with key institutions in those regions.

5.2 The case of South Africa

As the leading house for South Africa, UNIBAS is also mandated by SERI to cover the African continent in general. Calls for kick-starting projects are e.g. available for Cameroon, Ghana, Senegal, Kenya, Uganda, Mozambique and Zambia. As seen previously, all of these countries are eligible for funding under Horizon 2020 and, since a multi-annual roadmap (see section 2.2.1) will be developed for the AU, the opportunities for cooperation with these countries might increase for the remaining years of Horizon 2020.

Focusing on South Africa more specifically, there are 25 projects running between 2013 and 2017 funded by the SSAJRP that ran jointly by the SNSF and the National Research Foundation (NRF) in South Africa. For the calls 2014 and 2015 under Horizon 2020, 5 collaborative projects including Swiss and South African Partners have been funded (see list below).

HORIZON 2020	PROJECT	SWISS INSTITUTION	SOUTH AFRICAN INSTITUTION
Part I: Research Infrastructures	EVAg: European Virus Archive goes global	• UNIBAS	• National Health Laboratory Services • Agricultural Research
Part III: Challenge 1	TBVAC2020: Advancing novel and promising TB vaccine candidates from discovery to preclinical and early clinical development	• UZH • UNIBAS • ETHZ • UNIL • UNIGE • Centre Hospitalier Universitaire Vaudois (CHUV)	• Kwazulu Natal Research Institute for TB-HIV (K-RITH) NPC • Stellenbosch University • University of Cape Town
Part III: Challenge 5	GreenWin: Green growth and win-win strategies for sustainable climate action	• Ground Up Centre (Ground Up Association)	• University of Cape Town
Part III: Challenge 5	Ecopotential: Improving future ecosystem benefits through earth observations	• ETHZ • EPFL • UNIGE	• Council for Scientific and Industrial Research
Transversal issue: Science with and for society	TRUST: Creating and enhancing TRUST worthy, responsible and equitable partnerships in international research	• Council on Health Research for Development Association	• University of Cape Town • University of the Witwatersrand Johannesburg • The South African San Institute Trust

Table 7: Overview of Horizon 2020 projects with Swiss and South African participants

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What we would like to find out is whether there are any links between these five Horizon 2020 projects and the SSAJRP projects or other national or European funding instruments, whether the participation in those Horizon 2020 projects has allowed to start or to strengthen a bilateral cooperation between the Swiss and South African partners, as well as whether there are advantages or disadvantages of cooperating with one country (South Africa) via a multilateral project. To that end, we have conducted a survey[59] sent to all 12 persons dealing with those five projects at Swiss institutions.

The answers outlined the following main points:
- For the majority of the respondents, the Horizon 2020 project represents the **first cooperation** with South African partners. Only in two cases there had been a partnership existing before, either via a project funded by the SSJRP or the European & Developing Countries Clinical Trials Partnership (EDCTP) (Art. 185, see chapter 4).
- Only in one case, there is a connection with a bilateral project funded by the SSRJP.
- The only disadvantage of cooperating with South African partners via Horizon 2020 is the administrative burden (and the potential duplication if there is also a cooperation via the SSRJP).
- The main advantages of cooperating with South African partners via Horizon 2020 (compared to via a bilateral project) are the access to new partners in South Africa and **partners in other African countries**, the access to a wider expertise and experience, as well as the collaboration in a more diverse and multidisciplinary setting.
- In most cases, there is an interest to **pursue the cooperation** that has been engaged with the South African partners, either via another Horizon 2020 project or via the SSRJP.

In a nutshell, we can conclude that Horizon 2020 seems to be an **excellent 'door opener'** to cooperate with new partners not only in South Africa, but also in other African countries. Horizon 2020 allows to **benefit from other networks** and is therefore a suitable way for Swiss institutions to **start cooperation with relevant institutions in third countries**.

5.3 Knowledge about INCO opportunities and need for improvements?

We have seen that Horizon 2020 offers excellent opportunities to identify and start cooperation with relevant partners in third countries, as well as to strengthen cooperation with already identified partners. This was also confirmed by the answers of another survey[60] sent to all leading house coordinators, Swiss S&T counsellors in third countries and swissnexes. Overall, Horizon 2020 gives Swiss institutions the opportunity to work in a multilateral context, which means that **Swiss partners are given more credibility, prestige and impact** than in a bilateral project. In the case of Australia for instance, Horizon 2020 is a well-known and well respected programme amongst the Australian scientific community. However, it was also highlighted that the **uncertain status of Switzerland in Horizon 2020** leads to confusion as of what the exact possibility to involve Switzerland in a project is.

Whereas the previous section has highlighted that cooperation via Horizon 2020 offers Swiss institutions more benefits than drawbacks, the answer of the present survey rather show that the benefits and drawbacks are even:

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[59] See Annex III "survey questions for Swiss institutions involved in Horizon 2020 projects with South African partners"

[60] See Annex III "survey questions for leading house coordinators" and "survey questions for swissnexes and Swiss S&T counsellors"

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- **advantages**: multiple funding pots, added budget, avoiding redundancies, collaborative administration, more impact for the programmes, interesting connections, bigger and more diverse projects, information exchange, leverage size, learn from experiences, raising awareness for Europe, and help to assure a firmer institutional framework (enhance the involvement of government institutions).
- **disadvantages**: burden of fulfilling all criteria concerning a project, bureaucracy, complex to navigate, more complex project coordination, projects are more bulky, partners are not always obvious (while in bilateral programs participants are more visible), lack of efficiency, slow decision-making, and no clear focus. For the US for instance, the main drawback of Horizon 2020 – next to legal obstacles and Intellectual Property Rights conflicts – is that most projects are underfunded from the perspective of American institutions who know their exact overhead rate.

This second survey also clearly showed that the bodies responsible to promote bilateral cooperation with a specific country in general **know little about the opportunities** that Horizon 2020 offers in terms of cooperation with third countries (which programmes are open to third countries).

Moreover, there **is little direct promotion abroad** for the opportunities Horizon 2020 offers which could lead to a cooperation between Switzerland and third countries. In general, Swiss institutions rather refer to relevant websites, to multilateral networks promoting these opportunities or to local specialists. **The reasons for not promoting Horizon 2020's INCO opportunities vary from one country to the other**. Taking the industrialised third countries as a good example, the survey shows that due to the lack of European funding in Horizon 2020, the incentive to participate in Horizon 2020 decreases. Especially, if the co-funding agreements have not been established for all thematic areas (see section 3.1).

However, some S&T Counsellors do proactively inform about Horizon 2020 international cooperation opportunities on how to reach out to Swiss partners (e.g. informing their counterparts, participating in events e.g. the 'Destination Europe' events organised by the EC to promote Horizon 2020), but it is not the general rule. Finally, the leading houses first focus on promoting the bilateral instruments available. They would do a better promotion of INCO opportunities to Swiss researchers **if they received targeted information they could distribute**.

The results of the questionnaire have shown that different institutions reach out to the different **contact points** whenever questions regarding INCO via Horizon 2020 occur:
- Leading houses: the Euresearch Regional Office of their institutions.
- S&T counsellors: EU delegation in the corresponding third country, SERI, Swiss Mission in Brussels, SwissCore, Euraxess, Euresearch.
- swissnexes: Euraxess, SERI, EU delegation in the corresponding third country, SwissCore.

To conclude, from the results of the survey, we suggest the **following activities** to increase the promotion of Horizon 2020 international cooperation opportunities:
- For each WP period of Horizon 2020, Euresearch could put together a list (one list per third country or per region) of all calls encouraging the cooperation with third countries (flagging). They could send these lists to the leading houses, S&T counsellors abroad and

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swissnexes accompanied by short guidelines on how third countries and Swiss partners can participate.

- It is worth exploring how mailing lists can be established and used for a dynamic exchange of fresh and targeted information, for instance in the case of Africa: SERI, UNIBAS (leading house and Euresearch Regional Office), Euresearch National Contact Point (NCP) in charge of INCO Swiss S&T counsellor, and other Swiss relevant representatives present (e.g. in South Africa).
- Each leading house coordinator could organise a yearly workshop on the country/region gathering all researchers and institutions involved in bilateral projects, where Euresearch would present relevant Horizon 2020 INCO opportunities.
- SwissCore could present the results of this paper during the ERI network meeting in December 2016.

In this fifth chapter, we have seen that Horizon 2020 seems to be an excellent 'door opener' to cooperate with new partners. In that sense, it confirms that the programme should be used when it comes to developing cooperation with key institutions in countries and regions where exploratory missions have taken place in 2013-2016. We have also seen that Horizon 2020 INCO opportunities are not optimally promoted by the bodies in charge of promotion bilateral cooperation between Swiss and third countries institutions. We will come up with some recommendations linked to that in the final conclusion chapter of our paper.

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6 Horizon 2020 and INCO: the view of other countries

Chapter 5 showed how Switzerland uses Horizon 2020 as a means to start new cooperation with targeted third countries. This chapter aims to examine whether and how other countries use Horizon 2020 to reach out to third countries. It gives a brief overview on how other countries – Germany (comparable science structure as Switzerland), Sweden (chairing SFIC), Estonia (EU-13), Norway (associated country in Horizon 2020) and South Africa (third country) – realise their INCO strategy and if they see Horizon 2020 as a 'gateway for scientific cooperation with third countries', as well as what Switzerland could potentially learn from their approaches.

6.1 Germany

Shortly after Carlos Moedas' announcement of its 'Open to the world' strategy, the German Federal Ministry of Education and Research (BMBF) outlined in a policy paper[61] on the ERA that Germany would "review the extent to which its third country policy must be **updated and developed in relation to external EU policy**". Therefore, the current 'Strategy for the Internationalisation[62] of Science and Research' of the BMBF, which pursues four objectives – strengthening research cooperation with the global best, developing international innovation potential, strengthening long-term cooperation with emerging countries in education, research and development as well as assuming international responsibility and manage global challenges – will be refined **in the light of new developments in the ERA**[63].

The refinement of this strategy will among others be influenced by the upcoming **German position paper on the interim evaluation of Horizon 2020**, which will among others focus on INCO. Moreover, a conference in autumn on the interim assessment of the German ERA strategy[64] will also provide inputs to refine the current internationalisation strategy.

Overall, one can dare to affirm that Germany considers the European strategies as an overall framework in which the German strategies should fit in order to fully reap the benefits of the funding instruments available at European level.

6.2 Estonia

Estonia's INCO strategy[65] addresses the country's priority of achieving **an active and visible presence** in international research, development and innovation cooperation. Therefore, Estonia is fully engaged in the **initiatives of the ERA** and tries to make their INCO strategy fit into it. In practice this means engaging in **Horizon 2020, ERA-NETs, Article 185 and JPIs**. For now, Estonia cooperates with India and Russia via the ERA-Nets as well as via the Art. 185 BONUS[66] programme with Russia. Being a small country, Estonia uses the synergies offered by EU partnerships initiatives and cooperates with third countries in collaboration with other European countries.

Estonia also engages in **bilateral cooperation with neighbouring countries** (cooperation in development projects) and **regional cooperation** - Baltic States, Council of the Baltic Sea

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[61] BMBF Report on the ERA and the Funding of R&I by the EU
[62] BMBF's Internationalisation Strategy
[63] Report on international cooperation - Action Plan of the BMBF
[64] Website of EU office of the BMBF
[65] Estonian Research, Development and Innovation Strategy 2014-2020: Knowledge-based Estonia
[66] BONUS programme website
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States and the Nordic Council of Ministers - and in **international research infrastructures**. Finally, Estonia maintains **bilateral cooperation with third countries** based on various international agreements: Azerbaijan, Brazil, Canada, China, Egypt, India, Indonesia, Kazakhstan, South Korea, Mexico, the Philippines, Russia, Sri Lanka, Taiwan, Thailand, the US.

Estonia engages in international scientific cooperation by using the synergies offered by EU partnership initiatives within Horizon 2020, ERA-NETs, Article 185 and JPIs and therefore, one can conclude that Estonia increases the added value of its cooperation with third countries by using European initiatives.

6.3 Sweden

When it comes to INCO, the Swedish system functions on an open and "bottom-up basis", meaning that Swedish researchers have the **freedom to cooperate with the best researchers wherever they are**, be it within Sweden, in Europe or outside of Europe. The Swedish government supports cooperation with outside of Europe for instance through bilateral agreement with China, South Korea, Russia, India and Brazil, and via six major funding agencies, among others the Swedish Research Council and the Swedish innovation agency VINNOVA, but there is no national INCO strategy. Moreover, many universities have their own international strategies and have signed memoranda of understanding with third countries.

INCO is more structured in some trade areas of importance for the Swedish industry, for which the Swedish Ministry of Enterprise and Innovation has developed specific strategies that are implemented by various agencies such as VINNOVA. The Swedish International Development Cooperation Agency also funds research projects in South America, Africa and Asia following specific objectives in the area of development aid.

Looking at Horizon 2020 and ERA specifically, Swedish researchers are strongly engaged in projects and therefore **Horizon 2020 *per se* represents a channel to cooperate with third countries**, without having a strategy behind it. Moreover, it is worth noting that the country benefits from the joint actions initiated by the EC and SFIC in regions outside those where Sweden already has a strong collaboration, e.g. to foster cooperation with ASEAN, Africa, the Eastern partnership, Latin America, Oceania, and the Southern neighbourhood. Additionally, Sweden benefits from its Eureka membership to engage in cooperation with third countries (South Korea, India and Brazil).

Swedish researchers have the freedom to cooperate with the best researchers worldwide, be them in Sweden, in Europe or outside of Europe. Cooperation with third countries via Horizon 2020 happen *per se*, as Swedish institutions are strongly engaged in Horizon 2020 projects. Moreover, Sweden sees a benefit in the actions initiated by the EC and SFIC in regions where it does not have strong bilateral collaborations. The INCO policy and programmes of the EC can therefore be considered as a support.

6.4 Norway

Norway's international strategy [67] for scientific cooperation focuses on solving **global challenges** in the areas of climate, energy, environmental, marine resource and food security

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[67] Norwegian strategy for international cooperation 2010 – 2020

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as well as poverty, global health, migration, economic development, democracy-building, human rights and conflict resolution. In a nutshell, Norway has three ways to engage in cooperation with other countries. First, through the **Nordic cooperation** with Denmark, Finland, the Faroe Islands, Greenland, Iceland, Sweden and Aland. Second, Norway has developed roadmaps[68] for cooperation with **international key partners** – Brazil, Canada, China, India, Japan, Russia, South Africa and US – and the Research Council of Norway (RCN) manages the resulting **bilateral cooperation programmes**, e.g. the CHINOR programme (China), the INDNOR programme (India) and the South Africa-Norway programme for research cooperation.

Moreover, it is important to mention that Norway also aims at **expanding research capacity in development countries** by encouraging reciprocal cooperation with good researchers and research groups in these countries. Norway **invests 1% of its Gross Domestic Product (GDP) for knowledge based research in development countries**.

Although Norway's bilateral roadmaps are actually rather in line with the EC INCO multilateral roadmaps (see chapter 2), Norway has not necessarily used Horizon 2020 strategically to reach out to third countries. There are two main reasons for that: Norway enjoys a high budget in the field of research and innovation and does not need Horizon 2020 funding to support INCO; Norwegian institutions are internationally recognized in the fields of research where they excel and do not need the 'prestige' of Horizon 2020 to reach out to institutions from third countries. Moreover, it must be added that Norwegian institutions in general do not have a good track record of participation in Horizon 2020.

6.5 South Africa

South Africa primarily relies on its **bilateral partners for its scientific cooperation activities**. In Europe, the main partners are the United Kingdom, Switzerland, Germany, France and Norway. Cooperation with the African Union and the BRIC countries is also key for the setting up of joint programmes. Like the EC, South Africa has established roadmaps for scientific cooperation (see chapter 2). However, in contrary to the EC, the South African roadmaps are rather used to document ongoing relations (discussions, conclusions of agreements) with bilateral partners than as a means to define priority areas of cooperation.

South Africa indeed uses Horizon 2020 to reach out to European countries. Cooperation via Horizon 2020 mainly address South Africa's key priority areas: **health innovation, global and climate change, information and communications technology, social sciences and human capital development**. The running project **ESASTAP 2020**[69] (strengthening technology, research and innovation cooperation between Europe and South Africa) has proved efficient to increase the cooperation between South African and European institutions via Horizon 2020.

In general, one can argue that South Africa maintains a strong relationship with the EU in terms of scientific cooperation and that Horizon 2020 is a crucial programme to that end. However, the practice shows that Horizon 2020 is a gateway full of obstacles for getting involved with international partners. Although South African institutions

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[68] Norwegian roadmaps have the same function and content as the roadmaps of the EC, see Chapter 2.2
[69] ESASTAP 2020 website

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value Horizon 2020 opportunities, the high level of competitiveness and related low success rate are seen as a hurdle for their participation. Although South Africa does not need to seek co-funding sources such as the BRICM (see chapter 3), researchers still do not feel confident to apply for projects given the low success rate.

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7 Conclusion and suggestions

The seventh and last chapter answers the research questions defined in the first chapter and provides some of the Swiss research stakeholders with concrete suggestions on how to best use Horizon 2020 as a gateway for INCO.

7.1 Evolvement of the EC INCO strategy

How will the EC INCO strategy evolve in the future, given the first results of participation of third countries in Horizon 2020 and Moedas' priority 'Open to the world'?

As shown in the **second and third** chapter, the EC INCO strategy has **not been very successful so far**. The number of Horizon 2020 projects involving third countries has dropped compared to FP7. There are mainly four reasons explaining this phenomena. Firstly, the **BRICM countries** do not receive automatically funding by the EC for their participation in Horizon 2020 (as under FP7) anymore. Secondly, the political tensions occurring in the **African Union**, the **Southern neighbourhood** and **Russia** led to a drop of these regions' participation. Thirdly, **Ukraine** participates as an associated country in Horizon 2020 (whereas it was a third country under FP7). Finally, INCO is a cross-cutting priority to be found in all priorities in Horizon 2020 and has no dedicated scheme like SICA that existed in FP7.

Despite the decline of third country participation, Commissioner Moedas declared INCO as **one of the top priority** for his mandate. Accordingly, the EC is taking a **series of measures to increase** the participation of third countries in Horizon 2020:

- make the future multi-annual roadmaps to be published in the autumn more flexible and dynamic (with regular updates) as well as increasingly focus on regions rather than single countries;
- increase the number of co-funding agreements and increase the awareness that these agreements exist;
- increase the number of joint, coordinated and twinning calls;
- increase the number of topics contributing to global multilateral initiatives (e.g. in the field of health);
- increase the number and combined budget of specifically targeted INCO topics;
- better linking INCO initiatives of large scale and scope to Horizon 2020 (e.g. EU-China flagship on food, agriculture and biotechnology, or the future flagship with Africa on food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bio economy);
- launch of a call for a 'service facility in support of the strategic development of international cooperation in research and innovation';
- reinforce the cooperation between initiatives of member states and associated countries and EU initiatives via SFIC.

Furthermore, INCO will be **addressed during the interim evaluation of Horizon 2020**. The re-introduction of a specific programme targeted at INCO (as in FP7) has not been discussed, but the interim evaluation will surely propose further improvements that will be embedded in the 2018-2020 WP and will influence FP9.

Overall, one can conclude that despite the poor results of the implementation of the EC INCO strategy during the first two years of Horizon 2020, the EC INCO strategy is

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not deemed to failure, since targeted measures are being taken to increase the participation of third countries in the next WPs following the priorities of Moedas.

Therefore, it is important for Switzerland to maintain a strong involvement in SFIC in order to follow the developments of the EC INCO strategy and of the multi-annual roadmaps. The fact that they will increasingly address regions rather than single countries is an interesting development that can be seen as in line with the Swiss approach. The increasing linking of Horizon 2020 to large scale international initiatives in the field of research and innovation is also something that should be observed, as it might become increasingly important to successfully partner with third countries via Horizon 2020.

Furthermore, INCO should be addressed in the Swiss position paper on the interim evaluation of Horizon 2020, as it will be a cross-cutting issue tackled by the EC and gain importance in the last years of Horizon 2020. Finally, based on the results of the interim evaluation and the forecasts for FP9, a strategic approach could be developed in Switzerland in order to make sure that European funding serves the Swiss INCO objectives.

7.2 Swiss use of the INCO opportunities

What are the INCO opportunities offered by Horizon 2020 (and related programmes and initiatives) and how have they been used by Swiss institutions? Are Horizon 2020 INCO opportunities known enough in Switzerland?

As shown in chapter 4, **almost all action lines of Horizon 2020 are open to third countries** (except for Access to Risk Finance, Innovation in SME, Prizes, PP and PPIs) and each instrument has specific rules for the involvement of third country partners. The general rule for third country participation in collaborative research and innovation actions is quite straight forward: consortia must be composed of at least three entities from EU member states or countries associated to Horizon 2020; in addition to these three partners, any legal entity from anywhere in the world can be included in the consortium.

The funding from the third country party must be provided by the EC through direct funding (see Annex II for countries that are **automatically eligible for funding** in Horizon 2020) or by the third country party itself via **co-funding agreements** (see chapter 3.1). In some cases, the EC guarantees the funding part of the third country, if there is a bilateral agreement between that country and the EU, e.g. if the third country is explicitly identified in the relevant WP and call for proposal as being eligible for funding or if the participation of the third country is deemed to be essential for carrying out the action.

Looking at where Swiss institutions have had the highest number of cooperation with third countries compared to the overall number of projects, it appears that **especially MSCA ITN and RISE**, as well as the **collaborative projects under Part III 'societal challenges' are instruments where the cooperation with third countries is strong**. It can also be noted that the JPIs, ERA-Nets, Art. 185, Eureka and COST regularly include partners from third countries. Horizon 2020, however, offers opportunities for collaborating with third countries outside these areas were Swiss institutions could benefit, such as, among others, the ERC.

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However, despite ample INCO opportunities provided by Horizon 2020, chapter 5 outlined that little is known on the these opportunities and that there is **room for improvement regarding the communication of Horizon 2020's INCO opportunities** to certain Swiss stakeholders, i.e. Swiss S&T counsellors in third countries, swissnexes and leading houses.

A good channel of information on practical opportunities should be established between SERI, Euresearch, the leading houses, SNSF, the swissnexes and the Swiss S&T counsellors located in third countries. Whereas there is an existing communication channel on SFIC related issues between SERI, the SNSF and the Swiss S&T counsellors and swissnexes, there seems to be no established channel on more practical issues also involving Euresearch and the leading house coordinators.

For each WP period of Horizon 2020, Euresearch could put together lists of all calls encouraging cooperation with third countries (one list per third country or per region) and distribute them to the relevant parties together with information on how the funding part of the third country is provided. Finally, in the perspective that Switzerland should regain full association to Horizon 2020 as of 2017, S&T counsellors abroad and swissnexes can then use this occasion to proactively inform important contacts about the opportunities Horizon 2020 offers for a cooperation with Swiss institutions.
Finally, targeted events and workshops about one country or region could be organised regularly by the leading house coordinators in cooperation with Euresearch, and include both information on bilateral programmes as well as on Horizon 2020. This would increase the awareness that national and European instruments can be used in a complementary manner.

7.3   Strategic use of Horizon 2020 INCO opportunities

To what extent can Horizon 2020 projects be used strategically as complement to other national initiatives for cooperation with third countries? What is the advantage of cooperating with third countries via Horizon 2020? Are these opportunities used on an *ad-hoc* basis or is there a strategy behind it?

As shown in chapter 5, it seems that there is little strategy behind the use of Horizon 2020 to reach out to third countries. Institutions participating in bilateral projects with a target third country often do not consider using Horizon 2020 for their cooperation with this country. However, it was highlighted that cooperating with third countries **via Horizon 2020 has many advantages**, such as **access to new partners**, access to wider expertise and experience, and benefiting form a more diverse and multidisciplinary setting. Therefore, we can conclude that Horizon 2020 is an **excellent 'door opener'** which can support Swiss institutions to **start cooperation with relevant institutions in third countries**.

Moreover, chapter 2 highlighted that cooperation with third countries is often **thematically bound** (multi-annual roadmaps) and that co-funding mechanisms often **do not cover all topics and areas**. This should be taken into account when considering Horizon 2020 in the broader framework of a national INCO strategy.

As we have seen that Horizon 2020 can act as a good 'door opener' for relevant contacts in one region, the programme could be used to reach out to new partners in the countries and regions where exploratory missions have taken place in 2013-2016.
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Moreover, the SNSF could do a mapping of which areas are not covered for cooperation with third countries (multi-annual roadmaps, co-funding mechanisms) and the type of research funded (fundamental research, applied research, etc.) and fill in the gaps with bilateral initiatives (e.g. lead agency). This would ensure that Swiss researchers have the widest opportunities possible to cooperate with third country partners. Although this report does not focus on innovation funding opportunities, the same accounts for the CTI.

Finally, Swiss HEIs should think of establishing grant support offices dealing with national, European and global funding. This would ensure that funding opportunities are promoted and used as strategically as possible.

7.4   Learning from other countries

How are other countries — Germany, Estonia, Sweden, Norway and South Africa - approaching INCO opportunities in Horizon 2020? Do they consider Horizon 2020 as a gateway for cooperation with third countries? Is there a strategy supporting it?

Overall, the sixth chapter showed that there are several ways to reach out to international partners. Our findings suggest that some countries use Horizon 2020 proactively to engage in third country cooperation. Germany is actually **revising its INCO strategy to be in tune** with the EC INCO strategy and hence make better use of Horizon 2020 to cooperate with third countries. Estonia engages in international scientific cooperation by **using the synergies** offered by EU partnership initiatives within Horizon 2020, ERA-NETs, Article 185 as well as JPIs and therefore, one can conclude that Estonia increases the added value of its cooperation with third countries by using European initiatives. In Sweden, international scientific cooperation via Horizon 2020 happen *per se*, as Swedish institutions are strongly engaged in Horizon 2020 projects. Moreover, Sweden sees a benefit in the actions initiated by the EC and SFIC in regions where it does not have strong bilateral collaborations. The case of Norway shows that Norway has not considered Horizon 2020 as a means to engage with third countries. Norwegian institutions have the means to make use of their national projects to successfully reach out to third countries. Finally, from a third country's perspective, Horizon 2020 is clearly an important programme to cooperate with European institutions, but the programme remains a 'gateway full of hurdles' to cooperate with Europe.

To conclude, depending on the size of the country, the scientific base and the number of bilateral agreements with third countries, each strategy differs. It ranges from strategies fully embedded in Horizon 2020 to exploiting synergies offered by European funding. All in all, one can say that Horizon 2020 is indeed a useful programme to reach out to third countries in addition to the national opportunities at disposal. Countries like Germany — adapting their INCO strategy according to the EC one and to the ERA — and Sweden — using the EC and ERA initiatives to extend their cooperation with third countries — are interesting cases to observe.

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References

Various sources and information platforms contributed to this project paper in different forms and can be found hereafter.

Bibliography

Atlantic Ocean Research Alliance (AORA). 2016. Retrieved from http://www.atlanticresource.org/aora/ on 2 June 2016

Baltic Organisations' Network for Funding Science BONUS. 2016 Retrieved from http://www.bonusportal.org/ on 21 July 2016

BMBF. 2008. Strengthening Germany's role in the global knowledge society. Strategy of the Federal Government for the Internationalization of Science and Research. Retrieved from https://www.bmbf.de/pub/Internationalisierungsstrategie-English.pdf on 15 May 2016

BMBF. 2014. International Cooperation. Action Plan of the Federal Ministry of Education and Research. Retrieved from https://www.bmbf.de/pub/International_Cooperatin_Action_Plan.pdf on 15 May 2016

BMBF. 2015. The European Research Area and the Funding of Research and Innovation by the European Union. A contribution to the policy debate. Retrieved from https://era.gv.at/object/document/2205/attach/ERA_PositionPaper_english_Nov2015.pdf on 5 February 2016

Connecting Russian and European Measures for Large-scale Research Infrastructures. 2016. Retrieved from https://www.cremlin.eu/ on 21 July 2016

EC. 2012. Report on Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Enhancing and focusing EU international cooperation in research and innovation: A strategic approach. Retrieved from http://ec.europa.eu/research/iscp/pdf/policy/com_2012_497_communication_from_commission_to_inst_en.pdf#view=fit&pagemode=none on 8 February 2016

EC. 2013. EU-China Food Agriculture and Biotechnology Flagship. Retrieved from http://ec.europa.eu/programmes/horizon2020/en/news/towards-eu-china-food-agriculture-biotechnology-flagship on 2 June 2016

EC. 2013. Horizon 2020 Work Programme 2014 – 2015. Science with and for society. Retrieved from http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-swfs_en.pdf on 22 April 2016

EC. 2013. Horizon 2020 Work Programme 2014 – 2015. Spreading Excellence and Widening Participation. Retrieved from http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-sewp_en.pdf on 22 April 2016

EC. 2013. Horizon 2020 Work Programme 2014 – 2015. Table of contents and 1. General Introduction. Retrieved from http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-intro_en.pdf on 15 March 2016

EC. 2013. Official Journal of the European Union. Regulation (EU) No 1290/2013 of the European Parliament and of the Council of 11 December 2013 laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)" and repealing Regulation (EC) No 1906/2006. Retrieved from https://ec.europa.eu/research/participants/data/ref/h2020/legal_basis/rules_participation/h2020-rules-participation_en.pdf on 22 April 2016

EC. 2014. Commission Staff Working Document. Roadmaps for international cooperation. Report on the implementation of the strategy for international cooperation in research and innovation. Retrieved from http://ec.europa.eu/research/iscp/pdf/policy/annex_roadmaps_sep-2014.pdf#view=fit&pagemode=none on 8 February 2016

EC. 2015. Associated Countries. Retrieved from http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf on 22 February 2016

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EC. 2015. Australia – Country Page. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_australia_en.pdf on 4 April 2016

EC. 2015. Canada – Country Page. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_canada_en.pdf on 4 April 2016

EC. 2015. European Neighbourhood Policy. Retrieved
from http://ec.europa.eu/economy_finance/international/neighbourhood_policy/index_en.htm on 28 April 2016

EC. 2015. EU International Strategy for Research and Innovation. Retrieved
from http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=faq_1 on 15 March 2016

EC. 2015. EU International Strategy for Research and Innovation. Retrieved
from http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=faq_3 on 15 April 2016

EC. 2015. EU International Strategy for Research and Innovation. Retrieved
from http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=faq_6 on 15 April 2016

EC. 2015. Horizon 2020 – WP 2016-2017: General Annexes. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2016-2017/annexes/h2020-wp1617-annex-a-countries-rules_en.pdf on 5 May 2016

EC. 2015. New Zealand – Country Page. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_new%20zeland_en.pdf on 4 April 2016

EC. 2015. Republic of Korea - Country Page. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_korea_en.pdf on 4 April 2016

EC. 2015. Taiwan – Information for Participant Portal. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_taiwan_en.pdf on 4 April 2016

EC. 2015. USA – Country Page. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_usa_en.pdf on 4 April 2016

EC. 2016. Brazil – Country Page. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_brazil_en.pdf on 4 April 2016

EC. 2016. Community Research and Development Information Service CORDIS. Retrieved
from http://cordis.europa.eu/projects/home_en.html on 20 March 2016

EC. 2016. EU International Strategy for Research and Innovation. Countries. Retrieved
from http://ec.europa.eu/research/iscp/index.cfm?lg=en&pg=countries on 15 April 2016

EC. 2016. Hong Kong and Macao. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_hong_kong_en.pdf on 4 April 2016

EC. 2016. India – Country Page. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_india_en.pdf on 4 April 2016

EC. 2016. Japan – Country Page. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_japan_en.pdf on 4 April 2016

EC. 2016. Mexico – Country Page. Retrieved
from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_mexico_en.pdf on 4 April 2016

EC. 2016. Monitoring Report 2014. Retrieved
from http://ec.europa.eu/newsroom/horizon2020/document.cfm?doc_id=15108 on 22 April 2016

Corinne Köpfli (Student Trainee for Research)
Brussels, 28 July 2016

EC. 2016. Open Innovation, Open Science, Open to the world: A vision for Europe. Retrieved from http://bookshop.europa.eu/en/open-innovation-open-science-open-to-the-world-pbKI0416263/ on 16 June 2016

EC. 2016. People's Republic of China - Country Page. Retrieved from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_china_en.pdf on 4 April 2016

EC. 2016. Research and Innovation. Participant Portal H2020 Online Manual. Retrieved from http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/international-cooperation_en.htm#countries on 20 March 2016

EC. 2016. Russia – Country Page. Retrieved from http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_russia_en.pdf on 4 April 2016

ENPI. 2014. Research Press Package. *Towards a common Knowledge and Innovation Space.* Retrieved from http://www.enpi-info.eu/files/interview/Research%20Press%20pack%20EN_s2_version21FINAL.pdf on 15 May 2016

EPRS. 2015. EU scientific cooperation with third countries. Retrieved from http://www.europarl.europa.eu/RegData/etudes/BRIE/2015/564393/EPRS_BRI(2015)564393_EN.pdf on 21 April 2016

ERA LEARN 2020. 2016. Networks. Retrieved from https://www.era-learn.eu/network-information/networks on 4 April 2016

ESASTAP. 2016. Retrieved from http://www.esastap.org.za/index.php on 15 May 2016

Estonian Ministry of Education and Research. Estonian Research and Development and Innovation Strategy 2014-2020: Knowledge-based Estonia. Retrieved from https://www.google.ch/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjioN3AypXNAhXJCBoKHW0ZAYQQFggjMAA&url=https%3A%2F%2Fwww.hm.ee%2Fsites%2Fdefault%2Ffiles%2Festonian_rdi_strategy_2014-2020_en.doc&usg=AFQjCNGzu7y0sE03dbpcmgTqwEBavTQ6jQ&bvm=bv.123664746,d.d2s on 2 June 2016

EU Neighbourhood Info Centre. 2016. Research Press Pack. Towards a Common Knowledge and Innovation Space. Retrieved from http://www.enpi-info.eu/files/interview/Research%20Press%20pack%20EN_s2_version21FINAL.pdf on 16 May 2016

EU office of the BMBF. 2016. ERA-Konferenz. Retrieved from http://eubuero.de/era-konferenz on 9 June 2016

EU office of the BMBF. 2016. Internationale Zusammenarbeit (6. Herausforderung). Retrieved from http://www.eubuero.de/international.htm on 15 April 2016

EU Research. 2015. The Partial Association of Switzerland in Horizon 2020. Retrieved from https://www.euresearch.ch/fileadmin/redacteur/About_Euresearch/20150327_FAQ_Swiss_partial_association_in_Horizon2020.pdf on 27 June 2016

European External Action Service EEAS. 2016. Retrieved from http://eeas.europa.eu/index_en.htm on 22 April 2016

Luxinnovation. 2016. Horizon 2020. Retrieved from http://www.horizon2020.lu/Toolbox/FAQ/Non-EU-Partners on 21 April 2016

Research Council of Norway. 2011. Strategy for International cooperation 2010 – 2020. Retrieved from http://www.forskningsradet.no/servlet/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobheadername1=Content-Disposition&blobheadervalue1=+attachment%3B+filename%3D%22ADMInternationalstrategyFinal20110206.pdf%22&blobkey=id&blobtable=MungoBlobs&blobwhere=1274507237324&ssbinary=true on 12 May 2016

Research Council of Norway. 2016. Roadmaps for bilateral research cooperation with priority partner countries. Retrieved from http://www.forskningsradet.no/en/Article/Roadmaps_for_bilateral_research_cooperation_with_priority_partner_countries/1254013119815?lang=en on 3 May 2016

SERI. 2010. Switzerland's International Strategy for education, research and innovation. Retrieved from https://www.sbfi.admin.ch/dam/sbfi/en/dokumente/switzerland_s_internationalstrategyforeducatio

Corinne Köpfli (Student Trainee for Research)
Brussels, 28 July 2016

nresearchandinnova.pdf.download.pdf/switzerland_s_internationalstrategyforeducationresearchandinnov
a.pdf on 15 March 2016

SERI. 2013. Report on the bilateral measures of the Confederation's international ERI strategy. Retrieved
from https://www.sbfi.admin.ch/dam/sbfi/en/dokumente/bericht_ueber_diebilateralenmassnahmenderin
ternationalenbfi-
stra.pdf.download.pdf/report_on_the_bilateralmeasuresoftheconfederationsinternationale.pdf on 15
March 2016

SERI. 2016. Swiss Participation in European Research Framework Programmes: Facts and figures 2015.
Retrieved
from http://www.sbfi.admin.ch/php/modules/mediamanager/sendobject.php?lang=en&download=NHzLp
Zeg7t,lnJ6IzdeIp96km56Vlmhrn5pOqdayYLGH4tjTy4am06iDf76Af4SN0NTY0oau3aWWpI3J1JWn6A-- on
1 February 2016

SERI. 2016. Swiss National ERA Roadmap. Retrieved
from https://www.sbfi.admin.ch/dam/sbfi/de/dokumente/2015/11/Swiss%20National%20ERA%20Road
map.pdf.download.pdf/2016-04-29%20Swiss%20National%20ERA%20Roadmap.pdf on 14 June 2016

SERI. 2016. Botschaft zur Förderung von Bildung, Forschung und Innovation in den Jahren 2017-2020.
Retrieved from
https://www.sbfi.admin.ch/sbfi/de/home/das-sbfi/bfi-2017-2020.html on 20 May 2016

Swedish Research Council. 2015. The Lund Declaration 2015. Retrieved
from http://www.vr.se/download/18.43a2830b15168a067b9dac74/1454326776513/The+Lund+Declarat
ion+2015.pdf on 1 February 2016

Swedish Research Council. 2016. International collaboration. Retrieved
from http://www.vr.se/inenglish/international.4.69f66a93108e85f68d48000294.html on 14 June 2016

SwissCore. 2013. Reaching for the stars: European and Swiss International Cooperation in Science and
Technology. Retrieved
from https://www.swisscore.org/Lists/Public/Upload/20130328_INCO_ST_Report_Staeger_final.pdf on 1
February 2016

Tables

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Annex

Annex I: List of Figures

Figure 1

Indicator	All Horizon 2020	Horizon 2020 (2014)	Horizon 2020 (2015)	All FP7
Participations	2.21%	2.19%	2.28%	4.91%
Grant agreements	11.5%	11.89%	10.61%	20.49%
Budget	0.72%	0.52%	1.17%	2.02%
Topics (flagged)	21.11%			12%

Source: EC presentation on first results of Horizon 2020

Figure 2
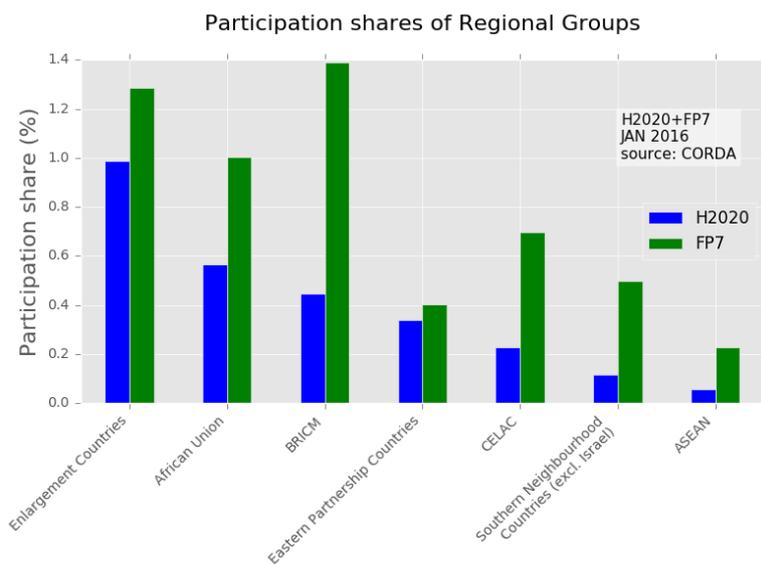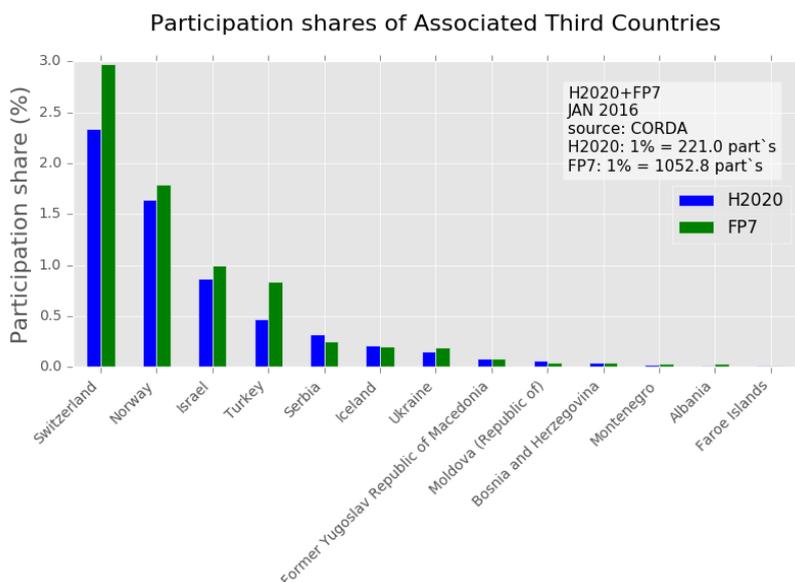
Participation shares of Regional Groups

Source: EC presentation on first results of Horizon 2020

Figure 3

Participation shares of Associated Third Countries

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Figure 4

Participation shares of Non-Associated Third Countries per Call year

Figure 5

Own and EC Contribution of participants from Non-Associated Third Countries

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Figure 6

Success Rates of Eligible Proposals for different numbers of Non-Associated Third Country applicants (coll. actions)

Source: EC presentation on first results of Horizon 2020

Figure 7

Success rates of proposals (in coll. actions) with applicants from various country groups (share of mainlisted proposals)

Source: EC presentation on first results of Horizon 2020

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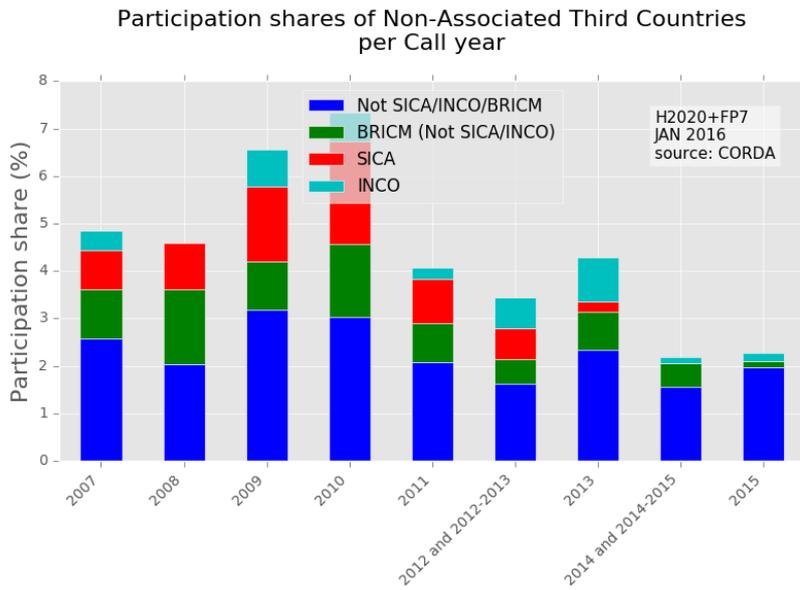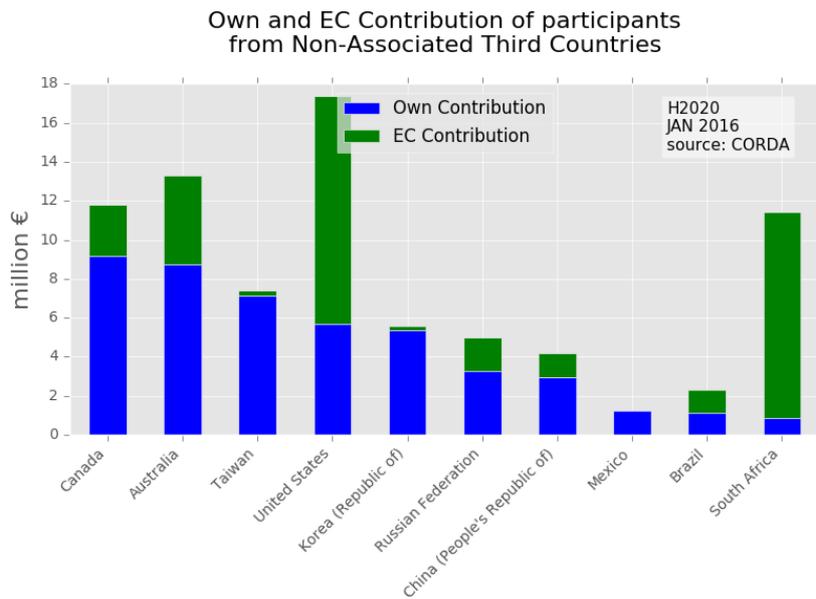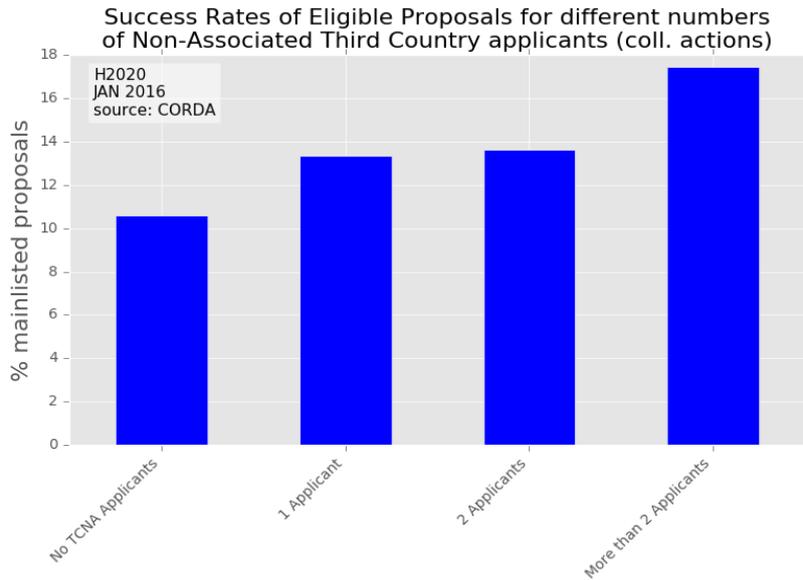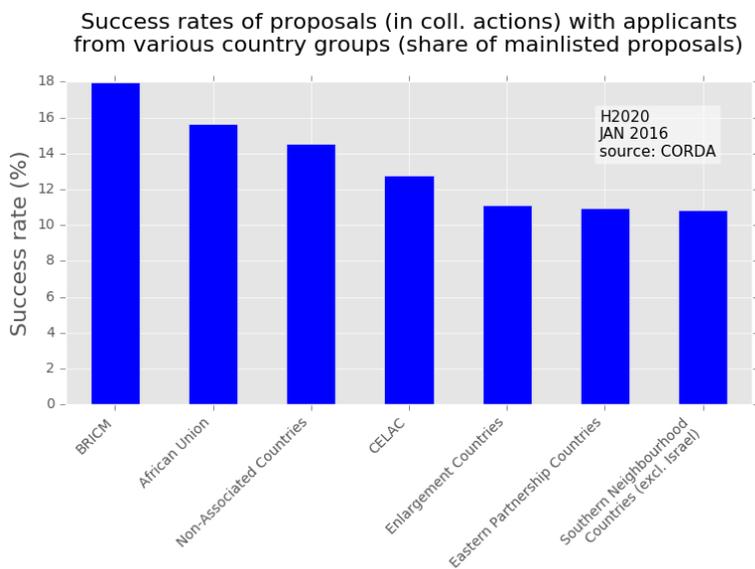
Figure 8
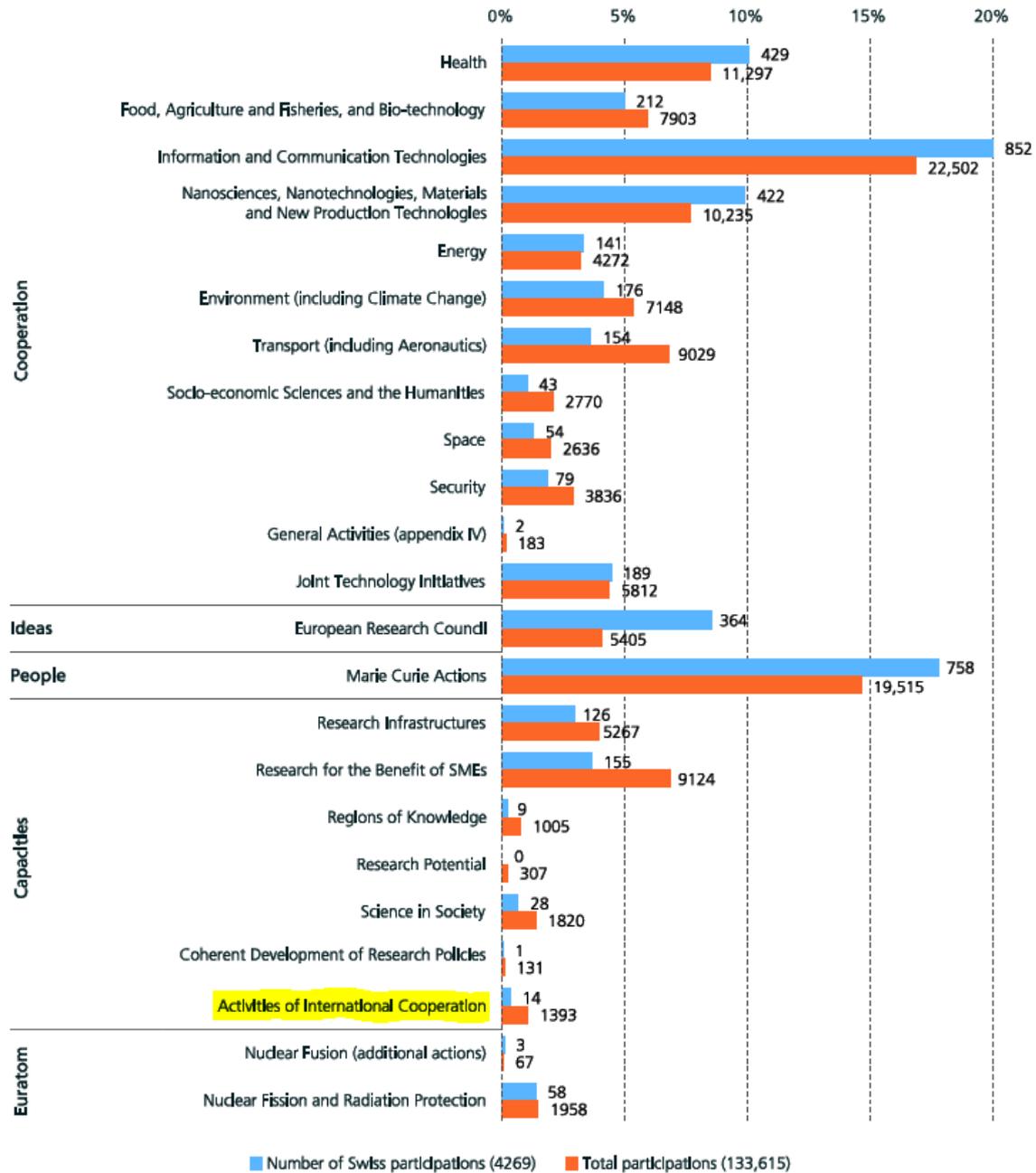
Source: SERI report on the Swiss Participation in European Research Framework Programmes

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Annex II: Country Overview[70]

Countries that are eligible to receive funding through Horizon 2020 grants:

- **Member States**: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

- **Overseas Countries and Territories** (OCT) linked to the Member States: Anguilla, Aruba, Bermuda, Bonaire, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Curaçao, Falkland Islands, French Polynesia, French Southern and Antarctic Territories, Greenland, Montserrat, New Caledonia, Pitcairn Islands, Saba, Saint Barthélémy, Saint Helena, Saint Pierre and Miquelon, Sint Eustatius, Sint Maarten, South Georgia and the South Sandwich Islands, Turks and Caicos Islands, Wallis and Futuna.

Legal entities from Associated Countries can participate under the same conditions as legal entities from Member States[71]:

- **Associated Countries[72]**: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Iceland, Israel, Norway, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Serbia, Switzerland, Tunisia, Turkey, Ukraine[73].

Third countries that are eligible to receive automatically funding from Horizon 2020 (except where this is explicitly excluded in the call text):

- **Developing and Enlargement countries:** Afghanistan, Algeria, American Samoa, Angola, Argentina, Azerbaijan, Bangladesh, Belarus, Belize, Benin, Bhutan, Bolivia, Botswana, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Chile, Colombia, Comoros, Congo (Democratic People's Republic), Congo (Republic), Costa Rica, Côte d'Ivoire, Cuba, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Eritrea, Ethiopia, Fiji, Gabon, Gambia, Ghana, Grenada, Guatemala, Guinea, Guinea-Buissau, Guyana, Haiti, Honduras, Indonesia, Iran, Iraq, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Korea (Democratic Republic), Kosovo[74], Kyrgyz Republic, Lao, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Maldives, Mali, Marshall Islands, Mauritania, Mauritius, Micronesia, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Palau, Palestine, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Rwanda, Samoa, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Solomon Islands, Somalia, South Africa, South Sudan, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Swaziland, Syrian Arab Republic, Tajikistan,

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[70] EC Participant Portal H2020 Online Manual on INCO

[71] Unlike as in FP7, Liechtenstein does not intend to associate to Horizon 2020.

[72] A third country that obtains an international agreement with the EU (see Rules for participants)

[73] Excluding legal persons established in the Autonomous Republic of Crimea or the city of Sevastopol.

[74] This designation is without prejudice to positions on status and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo declaration of independence.

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Tanzania, Thailand, Timor-Leste, Togo, Tonga, Turkmenistan, Tuvalu, Uganda, Uzbekistan, Vanuatu, Uruguay, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe.

Third countries that are not eligible to receive automatically funding from Horizon 2020[75]:

- **Industrialised countries:** Australia, Canada, Hong Kong, Japan, Macau, South Korea, Taiwan, US.
- **Emerging economies:** Brazil, China, India, Mexico, Russia.

In **exceptional circumstances**, industrialised and emerging economies can receive EU funding if:
- there is a **bilateral agreement** between that country and the EU;
- the country is **explicitly identified in the relevant WP and call for proposal** as being eligible for funding;
- their **participation is deemed by the European Commission to be essential** for carrying out the action.

International organisations, the majority of whose members are Member States or associated countries, and whose principal objective is to promote scientific and technological cooperation in Europe, are automatically eligible. Other organisations may be eligible if:
- funding is provided for in a **bilateral scientific/technological agreement** or similar arrangement between the EU and the organisation;
- their participation is deemed **essential** for carrying out the action as outlined above.

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[75] See Chapter 3.1 for co-funding agreements
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Annex III: Survey Questions

Survey questions for Swiss institutions involved in Horizon 2020 projects with South African partners

1. Does the Horizon 2020 project you are involved in provides a first opportunity for cooperation with the South African partner(s) or did you already cooperate with it/them in the framework of other projects? If yes, was it a project funded by the Swiss-South African Joint Research Programme (SSAJRP) or other programmes such as EDCTP (please mention which)?
2. Does the Horizon 2020 project you are involved in have any link with other bilateral projects you have undertaken or are currently undertaking with South African partners?
3. Can you say that your bilateral cooperation with South African partners has been strengthened via the Horizon 2020 project(s) you are involved in?
4. Will you engage in future bilateral cooperation with the South African partner(s)?
5. Are there advantages and/or disadvantages in cooperating with South Africa through Horizon 2020?

Survey questions for swissnexes and Swiss S&T counsellors

1. Are you aware of what Horizon 2020 offers in terms of cooperation with third countries (i.e. countries that are neither a member state of the EU, nor an associated country to Horizon 2020)? If yes, are you very familiar with these opportunities (which parts of the programme do you know best) or do you only have a general idea?
2. Do you promote these opportunities when connecting Swiss partners with partners in the country you are located in? If yes, how?
3. Who do you approach if you have questions on international cooperation opportunities in Horizon 2020? What type of support would be helpful for you so that you can better promote these opportunities?
4. In your view, what is the advantages and/or disadvantages of cooperating with the partners in the country you are located in via multilateral projects and programmes (like Horizon 2020) rather than on a bilateral basis?

Survey questions for leading house coordinators

1. Are you aware of what Horizon 2020 offers in terms of cooperation with third countries (i.e. countries that are neither a member state of the EU, nor an associated country to Horizon 2020)? If yes, are you very familiar with these opportunities (which parts of the programme do you know best) or do you only have a general idea?
2. Do you promote these opportunities when approaching partners in the target country you are responsible for (leading house)? If yes, how?
3. Who do you approach if you have questions on international cooperation opportunities in Horizon 2020? What type of support would be helpful for you so that you can better promote these opportunities?
4. In your view, what is the advantages and/or disadvantages of cooperating with the partners in the country you are targeting (leading house) in via multilateral projects and programmes (like Horizon 2020) rather than on a bilateral basis?

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