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NOTE		
From:	SFIC Secretariat	
То:	SFIC delegations	
Subject:	Input paper by the SFIC Science Diplomacy Task Force	

Delegations will find attached the input paper by the SFIC Science Diplomacy Task Force as endorsed by SFIC at its plenary on 2 March 2020.

Strategic Forum for International S&T Cooperation (SFIC)

Input Paper "Science Diplomacy"

Advancing the impact of Science Diplomacy at EU and Member States level through targeted support and improved coordination

Version 17.02.2020

INTRODUCTION

Why are we dealing with the topic of Science Diplomacy?

"Making 'Europe stronger in the world" is one of the six priorities (1) of the European Commission and is an important part of the portfolio of Commissioner Gabriel (2). The recent official policy papers assign to Europe a role of responsible global leadership (3), directed by a geopolitical Commission (4) to advance our values and promote and protect Europe's interest (5).). It is moreover worthy to notice that the essential role of European diplomacy is highlighted for a first time ever in the Commission's Work Programme for 2020.

Science Diplomacy in this context plays a key role in addressing complex transnational matters. However, the concept is still in evolution and there is currently no consensual, final definition. The most widely used definition is the one proposed in 2010 by the Royal Society (6) characterising Science Diplomacy as three processes, namely science in diplomacy (informing foreign policy objectives with scientific advice), diplomacy for science (facilitating international science cooperation) and science for diplomacy (using science cooperation to improve international relations between countries). Recent contributions have broadened this perspective to include definitions based on actor's motivation (national interests, regional interests, and global interests) (7).

Science Diplomacy can be understood as a "series of practices at the intersection of science, technology and foreign policy" as promoted by the Madrid Declaration on Science Diplomacy (8). The European Commission itself, based on the Communication from 2012 'Enhancing and focusing EU international cooperation in research and innovation: A strategic approach', has developed the concept of Science Diplomacy" (9) has embraced this concept through its policy declaration "Open Innovation, Open Science and Open to the World" in 2016: "Science Diplomacy is the use of science to prevent conflicts and crises, underpin policy making, and improve international relations in conflict areas where the universal language of science can open new channels of communication and build trust. Scientific evidence and advice are increasingly indispensable for anticipating needs and events and for making informed, forward-looking foreign policy decisions." (9a). Finally, the Open Europe document states that "Science Diplomacy can be an effective tool for the EU to strengthen its role as a global actor and to promote world peace and development." (9b).

Science Diplomacy is still a relatively new topic in the European External Action Service (EEAS) (10). However, **for many years EU Member States have had in place initiatives, mechanisms and networks of Science Diplomacy**. EU Member States have a great capital of Science Diplomacy experience on which they can draw, but this practice is fragmented, unrecognized, or lacking an overall model that can consolidate and leverage this know-how for Europe (11).

Within the new global, European and national policy contexts new actors have emerged beyond the governmental level, something that is also true for Science Diplomacy. Moreover, in some cases, specialised variants of the concept of Science Diplomacy have been developed, which for example focus more on data, health, water, security, and climate diplomacy, and hence on particular networks of experts. Both developments ask for improved interfaces between science and public policies and other practitioners, in order to improve dialogue and coordination among all relevant actors.

Science Diplomacy is often not fully exploited at all levels of governance, and especially at supranational levels. However, "more explicit Science Diplomacy strategies at sub-national, national and supranational levels would allow for a more effective alignment of interests and a more efficient coordination of resources" (12).

EU Science Diplomacy strategies, roadmaps and practices co-developed by the European Commission, the EEAS and Member States could strengthen universal scientific, democratic and European values. European scientific cooperation is a paramount example of integration and collaboration in the world, by which the EU can enhance its presence on the global stage, promote European values, and better position itself in strategic regions and topics. Moreover the EU can contribute to the solution of global challenges, foster academic freedom around the globe and contribute to productive and sustainable international relations. Conversely, diplomacy can also contribute to the support of the scientific community and has a particular role to play in the implementation of larger scientific initiatives. It is hence of utmost importance to further seize this potential and promote a clearer and more strategic role of EU Science Diplomacy. The integration of Science Diplomacy into EU foreign policy actually presents an opportunity also for Member States to strengthen and improve their Science Diplomacy efforts and achieve collective foreign policy goals that could not be achievable bilaterally (13).

This document reflects on future programming for Science Diplomacy in Europe using the experience acquired throughout various European projects. As a result of case studies and stakeholders dialogue the projects were able to characterize the meta-governance of Science Diplomacy, including which is the role of the European Union in the matter and how it relates to Member States. Also, the projects are embracing a very open, multi-governance, multi-stakeholder definition of Science Diplomacy, which enriches and increases its potential but also adds complexity and brings up distributed governance with a strong link to public diplomacy.

The <u>"Madrid Declaration on Science Diplomacy</u>" as joint statement endorsed by over 120 international experts was launched within the S4D4C project (14), identifying their vision for Science Diplomacy, its benefits and principles for good practice worldwide. This declaration, together with the results presented by the projects "<u>El-CSID</u>" (15) and InsSciDE (16) inspired the proposed lines of action that Horizon Europe could set up to foster the uptake of Science Diplomacy practices and strategies in Europe.

However, although the document provides a set of inputs to be considered for promoting Science Diplomacy strategies and activities on EU and national/regional level, we are aware of the potential risks and pitfalls that such a diversification of activities may pose. We therefore believe a careful reflection of using the various Science Diplomacy tools is necessary. Such a use should be **backed by a strong and excellent scientific basis** (for Science Diplomacy to fulfil its purpose scientific excellence is necessary) **and trusted networks of experts in order to foster a mindful and sustainable implementation of activities that have an added value for all partners**.

POTENTIAL ACTIVITIES IN THE FIELD OF SCIENCE DIPLOMACY CONCERNING HORIZON EUROPE AND THE EUROPEAN RESEARCH AREA

To provide a comprehensive, yet structured overview of measures perceived as relevant for the further development and implementation of Science Diplomacy related activities within the EU-Framework Programmes and the European Research Area we have used the following way of explanation:

- A) Time Frame: indicates if activities/measures are to be implemented in a short-term (around up to 1 year), medium-term (around up to 2 years) or long-term (more than 2 years) perspective.
- **B**) **Area of Activity**: indicates if the measure is related more to the EU-Framework Programme (and which part) or more to the European Research Area.
- C) Recommended Action: is the concrete activity/measure to be considered which will then also be described in more detail in the different sections of the paper.

The <u>Key activities</u> to be implemented are those regarded by SFIC as the most important ones for the enhancement of Science Diplomacy on European and Member State level.

The <u>Additional strategic and operational measures</u> described are further ideas stemming from the interaction with the SFIC Task Force with experts, policy makers, etc. and that have the potential to strengthen the Science Diplomacy elements in dedicated sectors, also in the interaction between Science and Foreign Policy.

TIME FRAME	RECOMMENDED ACTION	AREA OF ACTIVITY
SHORT-TERM	1. Inclusion of Science Diplomacy in the new EU STI International Cooperation Strategy	Strategic Level / European Research Area
MEDIUM-TERM	2. Creation of a EU platform for Science Diplomacy	Operational Level / Horizon Europe
	3. Supporting the development of training activities in the area of Science Diplomacy / Science Advice as well creation of Science Diplomacy networks	Operational Level / Horizon Europe
LONG-TERM	4. Development of an overall Science Diplomacy Roadmap including EU Commission, the EEAS and the Member States	Strategic Level / European Research Area
	5. Organisation of an Annual European Science Diplomacy Conference including a European Science Diplomacy Award	Operational Level / Horizon Europe
	6. Foster the integration of Science Diplomacy aspects in national STI strategies	Strategic & operational Level / European Research Area

1. <u>Key activities to be implemented from SFICs perspective</u>

Finally, and complementing this input, a <u>separate paper is under preparation by the Task Force, to</u> <u>describe specific ideas and topics related to Horizon Europe</u> that could be integrated into the Work Programme(s) throughout the coming years. This will strengthen not only the scientific backbone of the Science Diplomacy concept but also foster it's interaction with different specialised networks and communities (e.g. in the area of water, security, climate etc.).

Detailed Description:

1. Inclusion of Science Diplomacy in the new EU STI International Cooperation Strategy

An update to the international cooperation strategy (from 2012) is currently under preparation as part of the European Commission communication on a "revamped" European Research Area. Deliberations should pro-actively address foreign policy needs within international cooperation.

This new international cooperation strategic approach should also stimulate Member States and the EU to integrate Science Diplomacy as a key driver for the EU in the international arena all along the activities of Horizon Europe.

For the programming of Horizon Europe, it needs to be acknowledged that the programme itself is part of Europe's Science Diplomacy agenda, for example via its association agreements and funding conditions for international partners (Science Diplomacy among Member States). The EU should take into consideration the effects of science and technology cooperation with third countries in different categories. The outcomes of the association as a tool of Science Diplomacy should therefore be monitored. A common platform of the Commission, the EEAS and Member States would be the basis of reflections on future policies for association and international cooperation within the Framework Programme.

2. Creation of an EU Platform for Science Diplomacy

Inspired by the Cultural Diplomacy Platform initiated in 2016 (17), a 'Preparatory Action' could be launched to establish a related EU **Science Diplomacy Platform**. Knowledge exchange platforms for Science Diplomacy professionals and practitioners – both on- and offline – are of essence to cultivate a Science Diplomacy multi-agent nature. The platform can gather a comprehensive overview of Science Diplomacy activities within the EU and could therefore assist in implementing a European Science Diplomacy Roadmap. Its tasks could be threefold:

- (1) Monitoring the field: establish a corpus of relevant Science Diplomacy publications and key actors and keep an eye on European Science Diplomacy activities at different levels,
- (2) Awareness-raising: promote the relevance of Science Diplomacy activities throughout Europe, and
- (3) **Training**: provide an overview of and, as feasible, access to different on- and offline training possibilities for scientists, diplomats, science diplomats, and other relevant actors to strengthen scientific and diplomatic literacy on EU and Member States level.
- (4) **Networking**: Offer a summary of existing Science Diplomacy networks on regional, national, EU and international level and provide possibilities for their exchange and cooperation.

The EU Platform could be created under the umbrella of the Joint Research Centre's stakeholder engagement activities or as a separate (real or virtual) entity.

3. Supporting the development of training activities in the area of Science Diplomacy / Science Advice as well creation of Science Diplomacy networks

Although progress has been achieved in developing the European Research Area (18), the European Research and Innovation system is still fragmented, with some areas experiencing too slow progress. Further targeted reforms in Research and Innovation through a revitalised European Research Area are needed to create impacts on productivity, economic growth, job creation, inclusiveness, openness, well-being and sustainability.

Science Advice as one dimension of Science Diplomacy is working on improving the nexus between science and policy and the opportunities arising from this link should be further exploited.

Science Diplomacy is, for instance, used for supporting the achievement of the SDGs, for governing multilaterals spaces etc., and hence can also play a role for building a European identity, promoting European values and increasing regional security.

Within the Horizon Europe part related to "Widening Participation and Strengthening the European Research Area", the following activities related to Science Diplomacy could be envisaged:

• Developing training activities in Science Diplomacy and Science Advice: Through formal and informal education programmes for different stakeholders: policy makers, diplomatic bodies, researchers, research institutions, civil society initiatives on science diplomacy, etc. as well as secondments of researchers in Science Diplomacy, Science Advice organisms or diplomatic bodies and of diplomats in research organisations may contribute to knowledge exchange and better communication. These activities could be integrated in the EU Platform for Science Diplomacy at a later stage.

• **Promoting Science Diplomacy networks:** It is important to create platforms and interfaces for knowledge exchange for Science Diplomacy professionals. Whether virtual or offline this knowledge exchange for Science Diplomacy professionals and practitioners are of essence to cultivate its multi-agent nature. The launch of conferences on the matter or virtual platforms such as the Cultural Diplomacy Platform may contribute to this exchange. Moreover the creation of knowledge networks that include diplomats, researchers, policy makers and citizens can expand the mutual understanding and joint development of concepts and approaches in this context. These activities could be integrated in the EU Platform for Science Diplomacy at a later stage.

4. Development of an overall Science Diplomacy Roadmap including EU Commission, the EEAS and the Member States

In order to integrate Science Diplomacy Activities in EU policy making in general and Horizon Europe in particular, it is necessary to establish a general willingness among EU Member States to collaborate in matters of foreign and research policy issues. The European Commission, EEAS and the Member States are hence advised to integrate those aspects within a **European Science Diplomacy Roadmap**, aiming to revisit and clarify how Science Diplomacy can be applied in a coordinated way.

It is important to identify those situations in which European coordination is desirable to all actors involved. Only then can a coordinated approach become effective and only then does it make sense to initiate further strategic actions relating research policy and diplomatic instruments (19).

The EU should take a leadership role in mobilising science for the purposes of enhancing the EU's external relations and to better coordinate efforts between DG Research and EEAS and the Member States. That way, it is important to be as transparent as possible about the processes and create interfaces for partner countries to discuss, remain flexible and accompany the processes and discussions with adequate knowledge, allow for reflection points and provide support structures.

The EU Science Diplomacy Roadmap should also aim to further integrate science diplomacy in its open science agenda and set some clear priorities in line with what the EU wants to achieve as a regional and global actor (geo-political Commission).

Given the current geopolitical situation, the El-CSID Project suggested a triple focus for EU-science diplomacy (20):

- i) EU science diplomacy as tool for building European identity
- ii) EU science diplomacy as a tool for increasing regional security in the EU's neighbourhood
- iii) EU science diplomacy as a tool for realizing the sustainable development goals
- 5. Organisation an Annual European Science Diplomacy Conference including a "European Science Diplomacy Award"

Other strategic initiatives envisaged could be an **Annual Science Diplomacy European Conference** including a **European Science Diplomacy Award**.

The conference's aim would be to bring together central actors from the science as well as policy sphere – such as scientists, science advisors, science attachés, science counsellors and diplomats from the Member States / Associated Countries / Third Countries and the EU as well as thematic experts and citizens - around a current relevant topic in Science Diplomacy. This could represent a complimentary measure to the EU Platform for Science Diplomacy in order to enhance exchange, knowledge sharing and networking.

The "European Science Diplomacy Award" could highlight specific initiatives of EU funded Programmes such as Horizon Europe that have made an essential contribution to European Science Diplomacy efforts, thereby promoting European values and standards throughout the globe.

6. Foster the integration of Science Diplomacy and Science Advice aspects in national STI strategies

The current **Strategic Forum for International S&T cooperation**, as one of the ERA related groups has formed a **Science Diplomacy Task Force in 2019**. One of its aim is to **strengthen and coordinate Science Diplomacy and Science Advice Strategies between Member States (and Associated Countries), the European Union and other relevant stakeholders.**

As a first step, it is crucial to gain an understanding about current practises, capacities and existing strategies in Science Diplomacy within the Member States. Based on mutual learning, the mapping of present policies and needs as well as on the exchange within European and Member States' diplomatic bodies, integrating Science Diplomacy in future national strategies could be encouraged.

If necessary, support measures such as awareness raising and training activities could be envisaged for Member States / associated Countries to align the level of engagement and the capacities throughout Europe and help building bridges between the Science Diplomacy activities undertaken on MSC/AC and EU level.

Through promoting the integration of Science Diplomacy within the EU and national strategies, there is potential to increase the capacities for public sector innovation in foreign policy and international relations.

TIME FRAME	RECOMMENDED ACTION	AREA OF ACTIVITY
SHORT-TERM	A. Encourage the missions and partnerships to develop strategies for their international cooperation and related Science Diplomacy activities	Strategic and operational / Horizon Europe
MEDIUM-TERM	 B. Pillar 1 -Excellent Science ERC, MSCA, Research Infrastructures C. Pillar 2 - Global Challenges Strengthening Science Diplomacy Research (details will be in the separate paper) D. Pillar 3 - Innovative Europe 	All: Operational Level / Horizon Europe
	 Final S - Innovative Europe Science Diplomacy potential of Innovation networks E. "Widening participation & Strengthening ERA" Exploring the Science Diplomacy potential of COST 	
LONG-TERM	F. "Widening participation & Strengthening ERA" Consider a Mutual Learning Exercise in the area of Science Diplomacy	Member States level via Horizon Europe (PSF)
	 G. "Widening participation & Strengthening ERA" Launch of an annual EU science-policy-diplomacy fellowship scheme H. "Widening participation & Strengthening ERA" 	Strategic and operational / Horizon Europe
	Increasing strategic intelligence on foreign STI systems	Operational / Horizon Europe

2. Additional strategic and operational measures and activities for consideration

Detailed Description:

Within the current document "Orientations towards the first Strategic Plan for Horizon Europe" a very general reference to Science Diplomacy is made within the description of the six priorities of the European Commission. One of those priorities is "A stronger Europe in the world" where it is stated "The growing role of science diplomacy as a key element of EU external action should also foster mutual understanding, stability and progress".

This reference however, gives no indication if and how the Framework Programme would include Science Diplomacy aspects or activities, as it is felt the responsibility for that issue is partly based with the European External Action Service. However, all pillars of Horizon Europe do have crucial Science Diplomacy aspects and considerable potential. Moreover, including those aspects could also serve as a tool for mainstreaming the participation of researchers from the social sciences and humanities throughout the Framework Programme. As described above SFIC is also working on a separate paper outlining specific Science Diplomacy related topics for the inclusion into the work Programmes of the Clusters.

A. Missions and Partnerships

The Missions and Partnership initiatives should be encouraged to develop their individual strategies for international cooperation and Science Diplomacy as appropriate. However, as such dialogues with third countries on joint priority setting along these strategies can be lengthy and difficult; they should be focused on the large-scale initiatives.

The Commission may additionally consider to develop a "Booster of Science Diplomacy" for each large-scale initiative. Similar to the idea of the Common Dissemination Booster or Exploitation Booster, a **specific service could be made available to projects** that would like to reach out to target groups in the foreign policy arena for any possible need.

B. Pillar 1 - Excellent Science

To strengthen support to scientific networks outside Europe is key. The European Union has the possibility to reach out to mobile researchers, diasporas and use their availability to promote the European Research Area as a place of excellence where they come from and can function as ambassadors.

• Marie Skłodowska – Curie Actions

The Marie Skłodowska-Curie actions (MSCA) contribute to excellent research, boosting jobs, growth and investment by equipping researchers with the new knowledge, skills and international and inter-sectorial exposure to fill the top positions of tomorrow and solve current and future societal challenges. Therefore the alumni and MSCA fellows' network could be a big asset for the EU Science Diplomacy Strategy.

• ERC potential for Science Diplomacy

The European Research Council (ERC) also provides a forum for exchange between EC funded researchers whose research tackles on science in and for diplomacy (climate change, Arctic research, food security, etc.). The complementarity of 'bottom-up' and 'top-down' funding approaches in the EU Framework Programme for Research and Innovation (Horizon 2020) could be an asset for Science Diplomacy. Besides, ERC fellows represent the flagship of excellent science in the EU and should be considered as an asset within the EU Science Diplomacy Strategy, for their potential role as scientific ambassadors of EU as a global region of excellent and competitive science.

• Access to and participation in research infrastructures as a tool for Science Diplomacy

It is important to acknowledge actively and bring together the activities implemented in foreign countries through different stakeholders that are active in research-related activities. There is a wealth of activities that can be regarded with a "**Science Diplomacy lense**" and seen as a success, while few initiatives are currently highlighted such as SESAME.

C. Pillar 2 - Global Challenges: Strengthening Science Diplomacy Research

Science Diplomacy as a "discipline" is still young: it came up some 10 years ago and is booming since approximately 5 years, so clearly the conceptual frameworks are still under development. The variety of Science Diplomacy interactions, mechanisms and tools are all increasing and a critical understanding and scientific analysis of these practices will contribute to improving the overall practice by strengthening the community of scholars and practitioners.

A better understanding of historical and contemporary case studies will equally help to evaluate the impact of Science Diplomacy on the establishment and integration process of the EU. Also, there is a strong need for better understanding the interactions between science and diplomacy (e.g. if research performers are forced to report about all their foreign contacts (or just those to specific countries/regions) out of fear and exchange and mobility of researchers.

Lastly, in complement to Science Diplomacy general disciplinary advancement, the integration of specific Science Diplomacy topics within the clusters will help the diversification and specialisation of the Science Diplomacy community e.g. in the context of water diplomacy, green diplomacy including energy and climate, security diplomacy, etc. at the same time that it fosters more transdisciplinary research practices. For this, a separate paper is under development by SFIC.

D. Pillar 3 - European Innovation: Science Diplomacy potential of Innovation networks

Innovation networks such as ENRICH Innovation networks outside Europe allow the

European Union to reach out to new markets and use their availability to promote the European Research Area as a place of innovation that produces knowledge, goods and services in sectors of the scientific frontier and that has the potential to be a world reference in certain technologies. The activities of the ENRICH centres (21), global network of centres and hubs that promotes the internationalisation of European science, technology and innovation need to be assessed in the light of their input to innovation diplomacy and strengthened. They could, for example act as hubs for promoting European innovation and could play a facilitator role for Member States activities as well. As innovation is gaining importance, good practices of science attachés on how they promote innovation related issues for their countries abroad could be shared. On the other hand also risks regarding innovation should be addressed such as the awareness and risks related to weak enforcement of IP regulations, differences in rules, laws and judicial systems etc.

E. "Widening participation & ERA" - Exploring the Science Diplomacy potential of COST

Within the Horizon Europe part related to "Widening Participation and Strengthening the European Research Area", it is worthwhile exploring the potential of the COST (European Cooperation in Science and Technology) (22) Programme in promoting the advancement of Science Diplomacy as a cross-sectorial scientific field. COST supports the creation of open and inclusive research networks with the involvement of the 38 Member countries across Europe, including the countries of the Western Balkan and Turkey, as well as Israel as a Cooperating Member and South Africa as a Partner Member. Its networks welcome partners from the Eastern and Southern Neighbourhood and engage partners globally. Currently there are around 250 COST Actions running with 45000 researchers involved. Moreover COST could also be used in a bottom-up manner by scientists to develop an Action / or Actions related to Science Diplomacy specifically.

F. "Widening participation & Strengthening ERA" - Consider a Mutual Learning Exercise in the area of Science Diplomacy

A **Mutual Learning Exercise** could focus on the exchange of national practices regarding priority areas for advancing in the Science Diplomacy field, promoting positive incentives among stakeholders through communications and dialogue, enhancing training in all stages of the research careers and diplomats and policy makers. These priority areas could be analysed from three different perspectives: institutional, national and cross-border levels.

G. "Widening participation & Strengthening ERA" -Launch of an annual EU sciencepolicy-diplomacy fellowship scheme

It seems necessary to promote more science-policy interphase scenarios using mechanisms that have proven successful elsewhere (23). The launch of an EU science-policy-diplomacy fellowship scheme could be used to strengthen scientific expertise across the European Commission and the EEAS. The launch of an **EU science-policy-diplomacy fellowship scheme would allow scientists to have a better picture of the impact of research on European policy**, and would help building up capacities for better science advice and diplomacy practitioners. This scheme could be a tool under the direct responsibility of the EU Platform for Science Diplomacy, with the collaboration of different European Commission and EEAS departments acting as potential hosts for the fellows.

H. "Widening participation & Strengthening ERA" -Increasing strategic intelligence on foreign STI systems of interest:

Europe needs to understand better, how research systems and knowledge societies in other world regions of strategic interest function, how national innovation systems are structured in cooperation partner countries, who are the stakeholders and how they are interlinked. Thus, studies of national innovation system or similar can create a pool of European experts providing scientifically sound background knowledge for improving STI relations or contribute to specific diplomacy needs. In this context the role of the Joint Research Centre, or – if continued in Horizon Europe, the International Service Facility should be explored, while at the same time Member States could and should be encourages to join those activities as well.

Annex 1: Reviewed literature for the input paper

(1) https://ec.europa.eu/info/strategy/priorities-2019-2024_en

https://ec.europa.eu/info/priorities/stronger-europe-world_en

(2) <u>https://ec.europa.eu/commission/commissioners/sites/comm-</u>

cwt2019/files/commissioner_mission_letters/mission-letter-mariya-gabriel-2019_en.pdf

(3) <u>https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-</u> <u>commission_en.pdf</u>

(4) <u>https://ec.europa.eu/info/sites/info/files/comm-2019-00612-00-00-en-tra-00_0.pdf</u>

(5) <u>https://ec.europa.eu/info/sites/info/files/cwp-2020_en.pdf</u>

(6) The Royal Society & AAAS: «New frontiers in science diplomacy - Navigating the changing balance of power», 2010

https://royalsociety.org/~/media/Royal_Society_Content/policy/publications/2010/4294969468.pdf

(7) Science Diplomacy: A Pragmatic Perspective from the Inside" by <u>Vaughan C. Turekian</u>, <u>Peter</u>
 <u>D. Gluckman</u>, <u>Teruo Kishi</u>, and <u>Robin W. Grimes</u> (2018)
 http://www.sciencediplomacy.org/article/2018/pragmatic-perspective

(8) Madrid Declaration on Science Diplomacy (S4D4C H2020 project) <u>https://www.s4d4c.eu/s4d4c-1st-global-meeting/the-madrid-declaration-on-science-diplomacy/</u>

(9) European Commission Communication 'Enhancing and focusing EU international cooperation in research and innovation: A strategic approach' 2012,

https://ec.europa.eu/research/iscp/pdf/policy/com_2012_497_communication_from_commission_to _inst_en.pdf (9a) European Commission, Open Innovation, Open Science, Open to the World: A Vision for Europe (Luxembourg, Publications Office of the European Union, 2016), 74, http://publications.europa.eu/resource/cellar/3213b335-1cbc-11e6-ba9a-01aa75ed71a1.0001.02/DOC_2

(9b) https://op.europa.eu/en/publication-detail/-/publication/0dc27be9-de75-11e9-9c4e-01aa75ed71a1/language-en

(10) López de San Román, Alea, and Simon Schunz. 2018. "Understanding European Union Science Diplomacy." JCMS: Journal of Common Market Studies 56 (2): 247-266. https://doi.org/10.1111/jcms.12582.

Flink, Tim, and Nicolas Rüffin. 2019. "The current state of the art of science diplomacy." In Handbook on Science and Public Policy., edited by W. Canzler, Stefan Kuhlmann and D. Simon. Cheltenham: Edward Elgar.

(11) Ewert Aukes, Gonzalo Ordóñez-Matamoros, Stefan Kuhlmann (2019) "Meta-Governance for Science Diplomacy – towards a European framework". Science Technology & Policy Studies (STePS),University of Twente, the Netherlands (https://research.utwente.nl/en/publications/metagovernance-for-science-diplomacy-towards-a-european-framewor)

(12) Madrid Declaration on Science Diplomacy (S4D4C H2020 project) https://www.s4d4c.eu/s4d4c-1st-global-meeting/the-madrid-declaration-on-science-diplomacy/

(13) <u>http://www.insscide.eu/results/deliverables/article/policy-briefs</u>

- (14) <u>https://www.s4d4c.eu/</u>
- (15) <u>https://www.science-diplomacy.eu/science-diplomacy-projects/el-csid/</u>
- (16) <u>https://www.insscide.eu/</u>

(17) Early March 2016, the <u>Service for Foreign Policy Instruments</u> of the European Commission launched the Cultural Diplomacy Platform to support the EU institutions in the implementation of a new '<u>EU Strategy for international cultural relations</u>'. This Cultural Diplomacy Platform also stems from the <u>Preparatory Action 'Culture in EU External Relations</u>', which took place in 2013-2014. The Preparatory Action had been called for by the European Parliament in 2012 – following a resolution on the cultural dimensions of the EU external action adopted in 2011 – and implemented by the <u>Directorate General Education and Culture</u> of the European Commission.

(18) ERA Progress Report 2016 <u>https://data.europa.eu/euodp/de/data/dataset/era-progress-report-</u> 2016

(19) Tim Flink (2019): Wissenschaftsdiplomatie in der Europäischen Union: Praktiken und Perspektiven. Fo 1+2/2019.

- (20) https://www.el-csid.eu/reports
- (21) http://enrichcentres.eu
- (22) <u>https://www.cost.eu/</u>

(23) The American Association for the Advancement of Science (AAAS) has an annual scheme by which scientists (of any discipline and at any career stage) are deployed to different government department for 1-2 years to provide scientific support and expertise in their policies. In Europe, these are science – policy exchange schemes but they entail shorter periods of time. In the S4D4C project, the launch of the "Open Doors" scheme allowed five fellows to get exposed to different science and foreign policy Member Sates institutions.