

A Horizon 2020 project involving 11 European countries, 2018-2021 and targeting Diplomats, Scientists and Researchers, and Policy makers

Deliverable D9.5c

Impact Assessment Feedback (3 of 3)

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ABSTRACT

InsSciDE (*Inventing a shared Science Diplomacy for Europe*) seeks to engage historians of science and technology, networks of diplomats and scientists, and experts of strategy and policy makers, to increase understanding of science diplomacy and offer frameworks and guidelines for its use. This report outlines impacts of the InsSciDE project according to criteria outlined by D9.5a Impact Assessment Criteria. It takes quantitative and qualitative approaches to reporting impact and assesses the overall progress and trajectory of the project.

In the four and a half years since the project's launch, InsSciDE has accumulated and projected a rich knowledge base of science diplomacy that is affording insight into the complex history and nuanced applications of the practice. Our assessment points to InsSciDE's impact constituting a significant foundation with which a multitude of follow-up actions are possible. With members having established new international connections, opened up effective avenues for interdisciplinary dialogues and integrated SD into courses and events at their respective institutions, InsSciDE is well-positioned to continue and expand its legacy in the final phase of the project. Furthermore, considering the reactions and support garnered from stakeholders and reported by members, the assessment suggests that InsSciDE's future outputs are poised to serve as valuable resources in the continued theoretical and practical work on science diplomacy by the EU.

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InsSciDE PROJECT PARTNERS

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3.	Institut SYMLOG – Claire Mays	SYM	FR
4.	UNESCO – Ana Persic	UNESCO	INTL
5.	Universitetet i Tromso – Rasmus Bertelsen	UiT	NO
6.	Universidade Nova de Lisboa – Maria Paula Diogo	NOVA	PT
7.	(partner withdrawn)		
8.	Royal Institute of Technology – Nina Wormbs	KTH	SE
9.	Università degli Studi di Padova – David Burigana	UNIPD	IT
10.	Universität Wien – Katharina Paul	UNIVIE	AT
11.	Johannes Gutenberg University Mainz – Alexander Pruss	JGU Mainz	DE
12.	Swedish Inst. of International Affairs – Björn Fägersten	UI	SE
13.	Chalmers University of Technology – Anna Aberg	CHALM	SE
14.	U. of Veterinary Medicine Budapest – Matthew Adamson	UVM	HU
15.	University of Manchester – Simone Turchetti	UoM	UK
16.	(partner withdrawn)		
17.	Friedrich-Alexander-Universität Erlangen-Nürnberg – Maria Rentetzi	FAU	DE

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Final InsSciDE Impact Assessment

Outline & Survey Questions

Introduction

Science diplomacy is on a trajectory of increasing prominence, as a foreign policy tool, as a convening process for action against global challenges, and as an increasingly coherent socio-political phenomenon. The literature addressing the concept is growing steadily, networks aiming to advance the practice are expanding in size and number, and the term 'science diplomacy' is becoming familiar to more and more actors operating at this interface.

In tandem with these trends, InsSciDE has been one of several initiatives exploring the true potential behind the concept and testing new ways to train and engage actors in the practice. Over four and a half years, InsSciDE has conducted extensive research on the concept's historical roots in Europe and its strategic implications for the present. Without misconstruing history as direct lessons for the present, InsSciDE has unpacked offerings of social sciences for European science diplomacy policy. Along the way, the project developed practical resources, stimulated dialogue and facilitated networking across a vast landscape of science diplomacy stakeholders and scholars.

InsSciDE shaped its events, research, training programs and resources around twelve ambitious impact goals, constructed from observed needs half a decade ago and from the Horizon 2020 call to which the project was a response. Four categories characterise these fundamental objectives:

- to generate extensive knowledge and research
- foster international connections
- develop interdisciplinary and cross-professional linkages
- stimulate communication and awareness around science diplomacy.

Through this impact report, we consider how InsSciDE's final outputs and results align with these original goals. We reflect on how InsSciDE's achievements contribute to advancements in science diplomacy research and practice and evaluate the reach and visibility of the project's initiatives. Definitive and direct impact is difficult to pinpoint considering the short timeline on which we reflect, and the number of actors jointly affecting progress and change in the field. Therefore, in this report we assume a largely introspective lens, sharing representative cases of the various ways in which the project contributed to the SD discourse, created useful resources and generated awareness about the concept of science diplomacy and its complexities. We supplement observations and anecdotes with numerical analyses, evaluating online engagement with InsSciDE outputs and demographic compositions at events.

Bird's Eye: InsSciDE Initiatives and Outcomes

At the heart of InsSciDE's outputs are twenty-eight case studies that depict how science diplomacy manifests in diverse scenarios, pinpointing the actors and decisions that have shaped small and large aspects of today's world. They reveal and connect European experiences of science diplomacy in 5 thematic areas: Heritage, Health, Security, Environment and Space. The thematic research is complemented by two transversal research strands: one exploring science diplomacy as a social practice, and the other placing science diplomacy into political science theoretical and strategic frameworks. The cases' capacity to serve as teaching tools and to provoke an expanded perspective on science diplomacy has been successfully tested at InsSciDE events and the Warsaw Science

Diplomacy School, during which they were hailed as excellent instruments for learning about the complex and nuanced territories of science diplomacy.

InsSciDE's events were a cornerstone of the project's scientific approach, serving the two-fold purpose of bringing science diplomacy stakeholders together and testing the strength of InsSciDE draft products. The project's two dozen public conferences, webinars and immersive workshops have spurred further research, convened new science diplomacy networks and progressed theoretical discussions. With a proactive and motivated consortium, InsSciDE members have also carried their research to over two hundred events, exchanging and connecting with a rich diversity of participants in and out of Europe.

Two editions of the pilot training program Warsaw Science Diplomacy School (WSDS) generated a collection of training resources and a total of fifty alumni who have gone on to create their own international network for science diplomacy. The pilot training employed InsSciDE case studies, panel discussion and practical lectures to convey a multifaceted view of science diplomacy. A subset of the alumni carried over their training as lecturers in the Academy of Young Diplomats, hosted by the European Academy of Diplomacy (EAD). The excellent student reviews led EAD to adopt science diplomacy as a permanent aspect of their curriculum.

InsSciDE's Strategy Recommendation has already received praise from officials at the European Commission. The paper assesses the current state of science diplomacy in Europe and outlines priority areas for strengthening science diplomacy as a tool for the European Union's foreign policy goals. With a Theoretical Framework to complement the strategic insight, InsSciDE lays considerable groundwork for European agencies, from the European External Action Service (EEAS) to its science and research arms, to develop their role in science diplomacy.

All impact goals:

Knowledge & Research

- 1. Generate original and extensive research on science diplomacy addressing global challenges in environment, security, heritage and health.
- 2. Acknowledge the multiple sources of today's European diversity, (and) provide' strong policy implications, not just for scientific and cultural policy, but also for immigration, integration, education and external policies.
- Provide in-depth insights into the multiple ties and mutual influences between Europe and its neighbours, former colonies, other countries and regions, especially in the scientific sphere

International Connections

- 4. Provide enhanced coordination between the EU Member States and between the EU and its international partners
- 5. Facilitate Europe's future engagement with third countries
- 6. Impact the foreign policies of the EU and its member states

Interdisciplinary & Cross-professional Linkages

- 7. Create links between the social sciences and humanities in areas 'traditionally closed to these disciplines for instance in Space'.
- 8. Foster dialogue between diplomatic and scientific communities.

- 9. Create a new network of academics and practitioners in science diplomacy.
- 10. Contribute to the competitiveness of European enterprise

Communication & Awareness

- 11. Raise awareness among stakeholders that they can be practitioners of science diplomacy
- 12. Show that the language of science diplomacy doesn't have to be complicated.

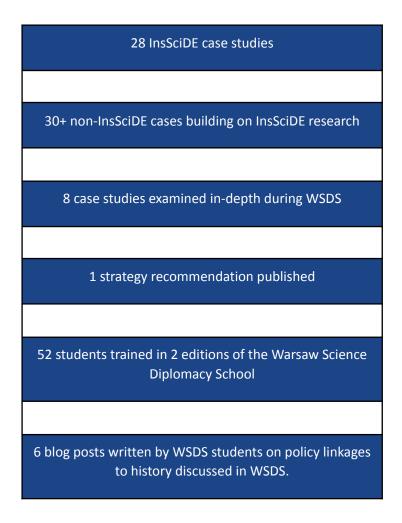
Knowledge & Research

The aim

InsSciDE aimed to generate original and extensive research on science diplomacy with a view of illuminating policy implications for the European Commission. The research was to critically examine the potential for science diplomacy to serve as a tool against global challenges. It also aimed to provide insight into the complex history of ties and influences between Europe and its neighbours, former colonies, other countries and regions, especially in the scientific sphere.

The contribution

In numbers



274 pages in InsSciDE Book of Case Studies

In samplings

InsSciDE's research delivers an expansive view of science diplomacy as a variable and context-driven practice. Through case studies collated in the accessible form of a harmonised collection (the book of case studies 'Inventing a shared science diplomacy for Europe: Interdisciplinary case studies to think with history') and as in-depth academic papers published in speciality journals, the research is illuminating insights into science diplomacy for a wide range of academic and practitioner audiences.

InsSciDE rested on the idea that revealing a deep and realistic picture of SD would be essential in order to apply it strategically. The project brought forward the 'dark side' of SD in research and in dialogue, probing Europe's history of global exploitation and the consequential power dynamics.

Daniel Gamito-Marques' case looks at science diplomacy as a tool used as far back as the 18th century when European diplomats leveraged scientific networks and geographical knowledge to advance imperial agendas.

Sam Robinson's case delineates tensions between wealthy European countries and Global South countries during the 20th century negotiations on the UN Convention on the Law of the Sea.

The module on 'Risk, safety and security in science diplomacy' was a signature feature of WSDS 2020 and 2021. It challenged students to consider the potential dangers in SD, from scientific espionage and data security to conducting science in a warzone. It was one of the most popular modules in both WSDS editions.

"There are hard aspects to carrying out research and we saw the risks and security aspects of it – the competitive nature of science diplomacy. That was a great reminder because sometimes we tend to only think about the positive aspects of science diplomacy. That was really important for us to realise."

By operating through an open-minded research lens, the case studies have revealed actors and actions of science diplomacy that are rarely or never discussed in the mainstream discourse.

Alexandros-Andreas Kyrtsis and Maria Rentetzi's case argues that insurers transformed their identities from lobbyists to backstage nuclear diplomats, based on examining the 1950s when third party liability insurance in the event of nuclear accidents emerged as a pressing issue.

InsSciDE elevates the idea that indigenous diplomacy and traditional knowledge are aspects of science diplomacy. Project research examines the notion primarily in the context of climate issues in South America and the Arctic.

The *Heritage* work package assumes the unique angle of exploring how archaeological field work acts as a venture of science diplomacy.

In the work package *Security* the connection between science/technology diplomacy and financial and legislative processes has been uncovered as a key issue that is rarely addressed. Work package members reflect this notion in their case studies and in further research plans.

InsSciDE established connections between its research and policy through events, through the WSDS program, and in a well-received strategy report.

Researcher Anna Åberg found opportunities to present the policy relevance of her InsSciDE research, firstly, at the Science Advice for Policy by the European Academies (SAPEA) conference at the European Commission, on a panel organised by InsSciDE and the EU SD Alliance. Secondly, in discussion and in interviews with stakeholders from ITER and, thirdly, at the Warsaw Science Diplomacy school where the students used the case to formulate policy advice for the EU as a part of their final presentation.

"Infrastructures, technologies, sciences are always intertwined with political, economic, and social values, and ethical norms. Science diplomacy must be aware of this intermeshing and these different values must be addressed together at all times – this is a very big challenge for science diplomacy!"

Through informal exchanges at conferences, InsSciDE members discussed policy implications of their research with diplomats, EU science diplomacy practitioners, international organisations (e.g. UN WFP, IAEA, CERN), government officials (e.g. German Federal Foreign Office, Austrian Ministry of Health, Portuguese Ministry of Science, Technology and Higher Education) and private stakeholders (e.g. Siemens, Akvaplan-niva).

A total of 14 InsSciDE's case studies were debated specifically for the purpose of identifying policy implications for present and future challenges. The debates took place in small groups with case study authors and international relations experts during WSDS as well as the first Open Conference in Krakow, yielding takeaways such as:

From the historical case on Mari and Near Eastern Archaeology, presented by Pascal Butterlin, young diplomats took takeaways such as promoting the importance of open dialogue and data sharing. As well as, strengthening the collaboration among scientists and between scientists and diplomats through exchanging know-how, good practices and reinforcing credibility of European Science Diplomacy.

From the historical case on European blood safety, presented by Katerina Vlantoni, young diplomats commented on collaboration as a strategy to address health challenges, recommending in particular to foster collaboration between patients' organisations, Ministries of Health, global organisations (WHO, Red Cross). In addition, they recommended standardising the process of blood safety among European countries, while acknowledging that it must be consistently revisited and improved (e.g. new diseases, definition of donor groups and "at risk" groups).

From the historical case on nuclear diplomacy, presented by Maria Rentetzi, young diplomats took takeaways such as pursuing unified European goals, and curbing national interests in science diplomacy. As well as, noting the importance of education: science and diplomacy in universities; emphasising the dangers of destructive science.

From the historical case on NATO and the emergence of environmental diplomacy, presented by Simone Turchetti, young diplomats took takeaways on raising awareness of environmental challenges through a variety of mechanisms such as sharing knowledge and curbing climate

¹ Scientific Advice under Pressure Conference, organised by Science Advice for Policy by the European Academies (SAPEA) taking place online and in Brussels on April 26-27.

change scepticism. As well as, communicating that the environment presents global, rather than national challenges.

Throughout the final WSDS presentations, students had to consolidate advice for pursuing one or two of these objectives in the context of their case studies – ITER, space, archaeology, and health. After group 'coaching' with Fägersten and Bertelsen, further discussion with their case study authors, and independent group work, the teams presented their advice and received feedback from subject matter experts.

Team ITER's advice included formalising exit/renegotiation strategies to mitigate intergenerational conflicts from political and demographic shifts and economic changes among member states or management.

Team Space advocated for a scientific collaboration and suggested that fundamental sciences might be classed as level 1 (complete openness – data, funding and methods are shared) and research with commercial applications might be level 3 (only final products are shared, like research papers or final technology).

Team Heritage proposed several pieces of advice such as to develop and upgrade common guidelines and codes of conduct for working with foreign scientists and carrying out research abroad (to be adopted by scientists in member states).

Team Health encouraged for a unified health data standards in the EU and investing in better communication mechanisms for scientists across Europe.

The InsSciDE strategy report was published by the Swedish Institute of International Affairs and received acclaim in particular from then-Science Advisor to the European External Action Service (EEAS). It outlines strategic objectives for the European Commission to strengthen its role in and capacity for science diplomacy. Prior to publication, the two cohorts of WSDS engaged with its draft components, debating how they connect with InsSciDE case studies and presenting their own recommendations on how to realize the strategic objectives. The publication was praised by then-Science Advisor of the European External Action Service, Jan Marco Müller:

"This is to congratulate you to your report "Leveraging Science Diplomacy in an Era of Geo-Economic Rivalry", which I found very insightful and which will certainly help us in developing the European Science Diplomacy Agenda. I have shared it widely among colleagues in the EEAS." Jan Marco Müller to Björn Fägersten, (03/2022)

New research endeavours have been initiated to build on and extend InsSciDE's work.

Jean Foyer's InsSciDE research on participatory indigenous mapping in Panama will be elaborated in a PhD thesis on the basis of a 3-year grant won from Paris 3- Sorbonne Nouvelle.

The European Research Council awarded an Advanced Grants to InsSciDE member Dr. Simone Turchetti for the project NEWORLD@A, which builds on research initiated and collaborations fostered in the InsSciDE project to examine science diplomacy processes that shaped the current system of global data exchange.

International Connections

The aim

The long form of InsSciDE's name, *Inventing a shared Science Diplomacy for Europe*, nods to the idea that the European Union develop and practise science diplomacy despite national connotations in the term. InsSciDE assumed the objective of enhancing connections between EU Member States and between the EU and its international partners. The project also aimed to develop international linkages that support future engagement with third countries and the pursuit of EU and member states' foreign policies.

The contribution

In numbers

Nationalities at WSDS	6 Continents 11 EU member-states 3 Accession states 35 Countries total
Countries in InsSciDE Consortium	10

In samplings

InsSciDE, in its essence as an international European project, is the first embodiment of the objective to enhance connections across Europe.

Internal theory seminars hosted quasi-monthly during approximately one year of the project left a notable impression on its participants. The sessions were small group discussions (anywhere from 3–10 InsSciDE members attended) in which participants selected and debated a research paper on science diplomacy. These sessions were especially fruitful for untangling opposing views that stemmed from disciplinary as well as cultural differences and contributed to strengthening the project network.

The connections formed between project members and outside participants have resulted in new and improved cross-European and global networks.

InsSciDE as a diverse network of scholars interested in the history of science diplomacy has supported the flourishing of the Commission on Science, Technology and Diplomacy (STAND)² in parallel with the project. STAND is a historical commission of the Division of History of Science and Technology of the International Union of History and Philosophy of Science and Technology (IUHPST/DHST). The network is concentrated in Europe but extends globally, including to China and Russia. Although the network has evolved separately, there has been significant overlap between InsSciDE and the network in events and collaborative works, with three out of nine officers on the Commission also being InsSciDE members.

² DHST Commission on Science, Technology and Diplomacy https://sciencediplomacyhistory.org/

A new research network linking Portugal, Spain, former Portuguese African colonies and South American countries has emerged to address the relationship between the global north and the global south. It builds on the research, events and contacts developed from InsSciDE and the Portuguese Observatory for the Anthropocene, which hosts the new network.

WSDS enabled students from every continent to come together in discussion. The Global Network for Science Diplomacy (GlobNetSD; name pending confirmation) was formed to maintain and leverage the vastly international connections established in WSDS. The group aspires to eventually open up to more international members and organise regular activities.

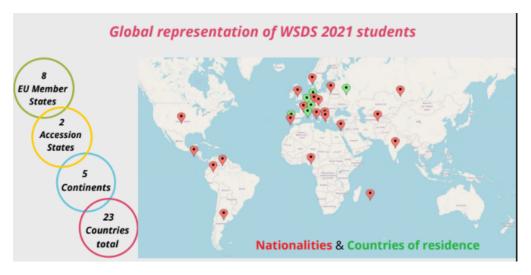
The case studies of InsSciDE supplement the largely Euro-centric views of science diplomacy that dominate the discourse. Cases from across the work packages delineate historical 'science diplomatic' connections between Europe and the rest of the world, hinting at non-Western practices and theories of science diplomacy. The cases also allow reflection on the different modes of international relations seen in SD. Future European research can build on these studies through direct partnership with the countries in question.

Matthew Adamson's case investigates the history of the first (abandoned) Moroccan reactor and the politics of the case. It is likely he will continue to examine nuclear energy and Morocco because of InsSciDE.

Sotiris Mikros's case study contrasts perceptions of security in the context of EU-Africa relations. The EU conceptualises security in terms of border security, whereas the key issues for Africa and especially for Madagascar have been food, water, and human security. These two contradictory perspectives on security yield two different perspectives on science diplomacy.

On the website of the EU Science Diplomacy Alliance, InsSciDE has helped organise a virtual Library in which visitors can browse science diplomacy related research and reports by the regions they address.

The two cohorts being hosted online contributed a truly global reach with trainees. Below is the



representation of WSDS 2021 illustrated on the map by both students' nationalities and country of residence, if different.

Interdisciplinary & Cross-professional Linkages

The aim

InsSciDE aimed to make space for social sciences and humanities in both the conceptualization and practice of science diplomacy. It sought to foster dialogue between science diplomacy stakeholders and to establish a network to serve science diplomacy practice as well as study. Identifying an often-neglected stakeholder in science diplomacy discourse, InsSciDE intended to include European enterprises in its initiatives.

The contribution

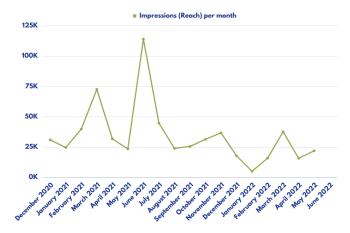
In numbers

Growth and Engagement on Twitter

New follower by month, December 2020-May 2022



Impressions (reach) of tweets by month, December 2020-May 2022



Diversity in WSDS training program

Diversity indicators of the first and second cohorts of WSDS students.

	WSDS 2020	WSDS 2021
Total	28 students	24 students
Countries	27 countries	23 countries
	10 EU Member States	8 EU Member States
	6 continents	5 continents
Disciplines	s 6 STEM, Health	
	13 diplomacy, International Relations	
	8 social sciences, humanities	
	1 international law	
Age	23-45	24-44
	Median: 31.5	Median: 34
Gender	19 females	16 females
	9 males	8 males

In samplings

WSDS facilitated networking between students and professionals who were broadly diverse across career level, age, profession and academic backgrounds (as well as geography, discussed above). Due to the unexpected need to transform WSDS to a virtual program, InsSciDE invented original, reproducible exercises to compensate for the lack of real-life cross-professional interaction.

Following completion of WSDS, many Alumni immediately took their collaboration further by co-writing articles for InsSciDE's guest series 'Student Takes'. Producing a joint tangible product outside of the structured training helped to further cement bonds. Almost half the total trainees that completed the program took up the initiative, yielding seven article posts in total.

'Mentor pairing' and 'SD Ally Talks' connected WSDS alumni directly with senior practitioners and experts in science diplomacy. The format allowed the alumni to learn from their meeting partners' experiences and talk with them on a personal level. Mentor pairing was organised for the 2020 cohort, entailing each student being matched with an expert compatible with their interests and background. Ally Talks were organised for the 2021 cohort and students chose one or more talks to attend, which were closed small group discussions between the experts and alumni from both cohorts. In informal conversations, several alumni made it clear that this bonus element was a very special and greatly enriching experience for them. This was especially the case for students matched with a specific expert.

Science diplomacy practitioners connected and exchanged with science diplomacy scholars in InsSciDE's thematic workshops and additional seminars organised under the InsSciDE framework. Each work package hosted practitioners relevant to their field in at least one workshop, performing roles such as giving feedback on theoretical framings and enriching discussions with a practitioner's viewpoint.

Work package Heritage's thematic workshop was attended by the EU counter-terrorism officer, museum curators, archaeologists and academics.

Work package Health's workshop included exchanges between STS researchers and global health practitioners and an official in the Austrian Ministry of Health.

A four-day workshop in Panama engaged practitioners of participatory mapping in Panama and Costa Rica. It brought together Panamanian and French academics, members of socio-environmental and/or indigenous NGOs and young technicians from communities that have participated in monitoring activities.

InsSciDE's Open Conferences deliberately engaged a wide range of disciplines and promoted interdisciplinarity as a greatly valuable goal in itself.

The open conference in Erlangen addressed interdisciplinarity head-on, with a theme of 'Science Diplomacy as an Intercultural Encounter'. The panel 'Environmental monitoring and indigenous community mapping in Panama: other sciences and other diplomacies' was introduced by EU Ambassador Chris Hoornaert in Panama and included InsSciDE researchers, a member of the NGO Almanach Azul, a diplomat from the Food and Agriculture Organisation (FAO) and an Indigenous Embera technician for environmental monitoring.

The Krakow conference paired over 100 young diplomat trainees from across the world with InsSciDE researchers. Most of the trainees learned about science diplomacy for the first time in the dynamic discussion format 'Fish Bowls', while InsSciDE researchers gained insight into the needs and interests of an incoming generation of diplomats.

InsSciDE prompted closer collaboration and exchange with Academies of Sciences and networks of Academies from Europe and from Africa. InsSciDE case studies have shown that Academies of Sciences (as well as academies of technology, engineering and medicine) are in effect active practitioners of science diplomacy. Case studies and events have raised awareness of the instrumental role that Academies may play in international relations through their publication and widespread dissemination, especially through the project's Book of Case Studies.

Pascal Griset's case study delivers a historical perspective on the role of Academies in deploying science diplomacy.

The work package *Science Diplomats* has placed particular focus on engaging with Academies on the topic of science diplomacy and established collaborations with Portuguese Institute of Diplomacy and the European Academy of Sciences.

InsSciDE's conference in Lisbon dedicated a full day to studying Academies' role in science diplomacy, in the process, bringing together both historical researchers and representatives from national European Academies and Academy networks from Europe and Africa.

As a result of InsSciDE activities with Academies, an edited volume on academies as science diplomacy actors is forthcoming by Griset and Maria Paula Diogo.

Communication & Awareness

The aim

InsSciDE aimed to show that the language of science diplomacy doesn't have to be complicated. It aspired to raise awareness among stakeholders that they can be practitioners of science diplomacy.

The contribution

In numbers

Utilising social media platforms such as Twitter, Facebook, and LinkedIn to spread project awareness, promote InsSciDE participation at events, and encourage interaction with case studies and deliverables has proven to be a successful strategy.

InsSciDE's social media presence suggests a sizable engaged audience and alludes to a good visibility of the material presented on the platform with over 2,700 followers on Twitter (@insscide eu). Analysing its analytics data provides insight into the project's expanding popularity and identifies the materials and information that its stakeholder followers find most helpful. Tweets are an explicit form of feedback on how InsSciDE events and products are thought to be valuable.

WSDS was the most stimulating InsSciDE "product" on social media. InsSciDE grabbed the chance to broaden the audience for our instruction while also increasing the project's and the WSDS brand's visibility. Twitter impressions throughout the 2020 and 2021 editions of the Warsaw Science Diplomacy School prove to be an example of this success.

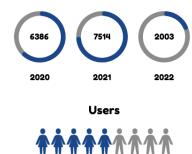
Twitter impressions (reach) during WSDS 2020 and 2021

	WSDS 2020	WSDS 2021
Day 1	5,283	13,887
Day 2	3,042	18,381
Day 3	2,715	11,181
Day 4	9,495	9,395
Day 5	6,469	12,284

Through its Facebook page, the InsSciDe project has been able to engage actively with an audience of 557 people. However, the number of people (outreach) who saw any content from the page, including posts, stories, ads, social information from people who interact with InsSciDE's project page tends to vary throughout the months.

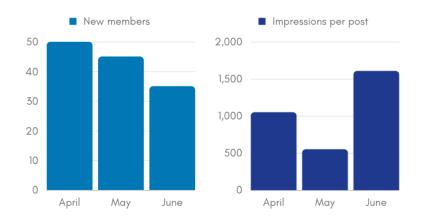
Facebook page outreach





Through LinkedIn, the project aims to create an open forum for all members to discuss science diplomacy topics. For this purpose, through a group that was jointly established by the three Horizon 2020 projects S4D4C, InsSciDE and EL-CSID, LinkedIn is largely utilised to connect with relevant stakeholders. Once the connection has been made, members are able to participate in and spread their own scientific diplomacy initiatives there.

LinkedIn Analytics EU Science Diplomacy group



In samplings

InsSciDE extended the reach of otherwise niche research topics to broader audiences.

Participants of WSDS delved deep into InsSciDE's case studies, dissecting the research to pinpoint the actors, interests and actions involved in science diplomacy. The format entailed frequent small-group discussions with the case study author or international relations experts, in which the diverse trainees drew on their own specialties and experiences to build their collective understanding of the case and its potential present-day implications. A representative quote from student evaluations states:

"When you put all these people together with very specialised knowledge and a common interest, that's when the magic happens. That was the best part of this course by far."

Social media has been used to stir conversations about SD, foster engagement during events and expand the audience for InsSciDE activities and subsequent initiatives.

During WSDS, InsSciDE generated online buzz around science diplomacy and visibility for the training program through its Twitter account. Participants interacted extensively with each other and with the InsSciDE Twitter account. Tweets by InsSciDE and WSDS participants were consistently categorised as 'Top' tweets about science diplomacy throughout the weeks of WSDS 2020 and 2021. The flurry of activity contributed to strengthening bonds between participants and stoked more interest in science diplomacy. The effect is represented in a spike in InsSciDE's following, high number of retweets and comments from followers not associated with the program.

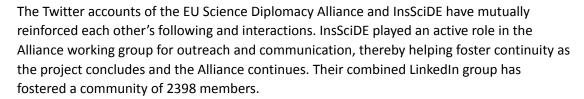
Throughout the two editions of the Warsaw Science Diplomacy School, a great number of participants, organisations and leading scholars took an active participation in Twitter by expressing their thoughts and experience throughout the hashtags #WSDS20 and #WSDS21.



Marga Gual Soler, PhD @margagual · Jun 25, 2020

This is truly amazing! #WSDS2020 managed to recreate online the inperson elements of a successful #sciencediplomacy course: relationships, trust-building, networking, experiential learning, teamwork, project-based learning.. and FUN!

Well done! So proud of @insscide_eu team! 🌕



The research process of several case studies included interviews and exchanges with actors who were confronted for the first time with the idea that they may themselves be a science diplomat.

Pierre-Bruno Ruffini studied the norms, activities and interactions of the EU's network of science counsellors through interviews with the counsellors. While their role aligns well with the popular notions of what constitutes a science diplomat, several of the counsellors did not immediately recognize themselves as a practitioner.

"While they do recognize the term SD, and agree that their field missions effectively implement SD for the EU, the SCs do not necessarily agree on its priorities or characteristics. None referred directly to the Commission's vision of SD as set out in recent years by Commissioner Carlos Moedas and the related strategic documents."

Informal exchanges have elicited many similar reactions, for instance from *WP Space* NASA and ESA officials who exchanged with members of *WP Space* and heritage preservation experts and archaeologists who attended professional gatherings with *WP Heritage*.

Activities tested in WSDS and InsSciDE events have been translated into an accessible collection of training resources, enabling future training and learning initiatives to learn from InsSciDE's experiences.

Training methodology developed by InsSciDE received stellar marks from its attendees, as described in a quote from student evaluations.

"We would really like to acknowledge the organisation and how well the time was managed as well as all the icebreakers and the yoga because it really made us feel that we were being taken care of."

Detailed descriptions of the exercises, methodology and study resources used in InsSciDE's training program and events enable future teaching initiatives to replicate successful aspects or further improve and develop the content to suit different audiences.

The exercises and games in the collection created a comfortable environment in their pilot applications which in turn facilitated communication among participants.

InsSciDE experimented with modes of engagement that were entertaining as well as educational and reported on the methods to allow its reproduction.

SciDipTrivia placed 20 online participants in teams and tested their knowledge in a fun and social atmosphere. The game enabled alumni of WSDS to continue building their connections and provided people interested in science diplomacy with a casual setting in which to meet virtually.

New teaching/training initiatives have blossomed from InsSciDE or been inspired by the work.

InsSciDE partner European Academy of Diplomacy (EAD) added science diplomacy to their curriculum for the Academy of Young Diplomats after a successful pilot organised by InsSciDE. The presentations and breakout groups were almost entirely led by alumni of WSDS, who benefited from the ability to network across cohorts and with the large group of international diplomat trainees. In the training, dynamic, concise presentations introduced facets of science diplomacy, such as its function in environment negotiations, the ocean or a global health crisis, and subsequent breakout groups allowed students to dig deeper into their topic of choice. In the breakout groups, the trainees debated potential approaches to global challenges, simulated science diplomacy scenarios or delved deeper into the topic presented in plenary. The workshop received an overall score of 4.3 and positive feedback from participants.

"Best session so far, liked science diplomacy topic and like to further knowledge on climate change diplomacy"

"... eye-opening to new dimensions of diplomacy"

"Inspiring, the speakers gave me useful insight on issues of Science, National branding and Cultural Diplomacy as well as insight on Arctic issues"

'Science Diplomacy Spring School' and an interdisciplinary master's degree program were organized at Padova University and a course program is underway at FAU.

Several InsSciDE members added lectures on science diplomacy to their standard curriculums. Maria Rentetzi organized a regular academic seminar in the winter 2021 on science diplomacy, involving two other InsSciDE members.

Annex

Annex A.

Sample of publications by InsSciDE members

Åberg, Anna. (2021). "Reciprocity and Compromise: Every-day Science Diplomacy in the Early History of ITER," In special issue "Nuclear Diplomacies", *History and Technology* 37 (1): 106-124. https://doi.org/10.1080/07341512.2021.1891851.

Adamson, M. (2021). "Orphaned atoms: The first Moroccan reactor and the frameworks of nuclear diplomacy," *Centaurus* 63 (2): 262-276.

https://doi.org/10.1111/1600-0498.12350.

Adamson, M. (2021). "Science diplomacy at the International Atomic Energy Agency: Isotope Hydrology, Development, and the Establishment of a Technique," *Journal of Contemporary History* 56 (3): 522-542.

https://doi.org/10.1177/0022009421997888.

Gamito-Marques, Daniel. (2021). "Science in the Service of Empire. Andrade Corvo, Barbosa du Bocage and the defence of Portuguese colonial aspirations in Africa." In *History of Science, Technology, and Medicine in Portugal*. Volume III: The Nineteenth Century, edited by Ana Carneiro, Isabel Amaral, and Teresa Salomé Mota, 119-139. (Lisbon, Portugal: Tinta-da-China, 2021).

Gamito-Marques, Daniel. (2020). "Science for Competition among Powers: Geographical Knowledge, Colonial-Diplomatic Networks, and the Scramble for Africa," *Berichte zur Wissenschaftsgeschichte* 43 (4): 473-492.

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Jean Foyer et David Dumoulin Kervran, « Mettre en récit les savoirs traditionnels », *Terrain* [En ligne], 73 | avril 2020, mis en ligne le 09 octobre 2020, consulté le 28 juin 2022. URL : http://iournals.openedition.org/terrain/20607; DOI : https://iournals.openedition.org/terrain/20607; DOI : <a href="https://io

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Kyrtsis, A. & Rentetzi, M. (2021). "From lobbyists to backstage diplomats. How insurers in the field of third party liability shaped nuclear diplomacy." *History and Technology*, 37 (1): 25-43. https://doi.org/10.1080/07341512.2021.1893999.

Mays, Claire, Laborie, Léonard, & Griset, Pascal (eds). (2022). Inventing a shared science diplomacy for Europe: Interdisciplinary case studies to think with history. Zenodo. https://doi.org/10.5281/zenodo.6590097

M. P. Diogo. (2021). "Breves reflexões em torno do Instituto de Investigação Científica Tropical: novos instrumentos de diplomacia tecnocientífica", in *Globalização em Português*, edited by Jorge Braga de Macedo, Manuel Alves da Rocha e Maria Manuel Romeiras (Lisbon: Principia, 2021): 222-225.

M. P. Diogo, A. Simões., and P.Urze. "Cartoon diplomacy. Enacting soft power during the 1890 British Ultimatum to Portugal," (accepted to be published in the British Journal for the History of Science)

Paillette, Céline. (2022). "Épidémies et sécurité sanitaire internationale, 1851-1951 : une approche globale," *Cahiers de la sécurité et de la justice* 54.

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Paillette, Céline. (2021). "L'action sanitaire extérieure de la France, 1949-1954. La nostalgie de l'influence, le pragmatisme multilatéral et les Europe(s) de la santé," *Bulletin de l'Institut Pierre Renouvin* n. 52, p. 37-45. DOI: 10.3917/bipr1.052.0037.

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Pichelstorfer, A., Paul, K. T. (2022). "Unpacking the Role of Metrics in Global Vaccination Governance," *International Political Sociology*, volume 16, Issue 2, olab031. https://doi.org/10.1093/ips/olab031.

Rentetzi, Maria. (2021). "From Securing the State to Safeguarding the Atom: The Relevance of History to Nuclear Diplomacy," *Science Diplomacy Review* 3 (1): 3-12.

Rentetzi, Maria, and Kenji Ito. (2021). "The Material Culture and Politics of Artefacts in Nuclear Diplomacy," In special issue of *Centaurus* 63 (2): 233-243.

https://doi.org/10.1111/1600-0498.12394.

Robinson, Sam. (2020). "Early Twentieth-Century Ocean Science Diplomacy: Competition and Cooperation among North Sea Nations." *Historical Studies in the Natural Sciences* 50 (4): 384–410. https://doi.org/10.1525/hsns.2020.50.4.384.

Robinson, Sam. (2021). "Scientific imaginaries and science diplomacy: The case of ocean exploitation," *International Journal of the History of Science and its Cultural Aspects*, Volume 63, Issue 1, Special Issue: Global Perspectives on Science Diplomacy.

https://doi.org/10.1111/1600-0498.12342.

Annex B.

Survey Questions for InsSciDE

Further actions

Have new **research** projects emerged from your involvement with InsSciDE? What is the geographical and disciplinary profile of those involved?

Have new **alliances**, groups or networks resulted from your involvement in InsSciDE? What is the geographical and disciplinary profile of those involved?

Have new **training** initiatives developed from your involvement in InsSciDE? What is the geographical and disciplinary profile of those involved?

Your experience

What has been the most fruitful aspect of InsSciDE in your view?

What did you enjoy the most about the project?

What was the most challenging for you personally?

What could have been done better?

Research impact

Please list any publications influenced or supported by your InsSciDE funds or involvement? Please list conferences or workshop at which you presented your InsSciDE research? Please share any notable reactions prompted by your topic.

Events

What was your major takeaway from the **Krakow** Open Conference? What could've been done better?

What was your major takeaway from the **Erlangen** Open Conference? What could've been done better?

What was your major takeaway from the **Lisbon** Open Conference? What could've been done better? What was your major takeaway from the thematic **workshop of your work package**? What could've been done better?

What other InsSciDE event was significant to you and why?

Policy

Have you ever discussed the policy relevance of your InsSciDE research? (In writing, at events, or other.)

Do you consider your case to be relevant for informing policy?