Water Diplomacy: New Ambition for the European Union, New Perspective on Science Diplomacy¹

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Abstract

Water diplomacy is a new EU diplomacy segment that has been developing recently in accordance with a growing importance of science diplomacy in the EU (EEAS) and EU's will to be accepted as a normative power and global player in terms of facing global challenges (water shortage and access to drinking water being part of them). In this context, water diplomacy can be approached from different perspectives: first, the EU's adaptability to new diplomatic trends, instruments, and strategies; second, its capability to use scientific expertise and sell scientific excellence in the global arena (and contributing thus to the EU's soft power), and, last but not least, the EU's potential to take advantage of combining different diplomatic levels (global, EU, member states).

The paper looks at the topic from all the three above mentioned perspectives. First, we argue that new processes, and mechanisms have been recently implemented in the area of EU water diplomacy. Those novelties bring also new practices to the diplomatic toolkit in general, getting closer knowledge, science, expertise and diplomacy. Second, in the context of the ongoing fragmentation of foreign policy dimensions, new specific domain called water diplomacy has been established, not only at the discursive level, but also in EU external action everyday practice.

From a methodological point of view, the project represents a case study based on qualitative and quantitative research methods combining primary data analysis and interviews with stakeholders both from the diplomatic and scientific communities at the EU and MS levels.

1. Science Diplomacy and Water Diplomacy

In the context of the academic debate on science diplomacy (and connections between science, knowledge and politics/policy), researchers have the choice to opt either for the American Association for the Advancement of Science (AAAS) taxonomy referring to science diplomacy as a three dimensional universe combining the science for diplomacy, science in diplomacy and diplomacy for science perspectives or for a more pragmatic approach defined by Gluckman who understands science diplomacy as a multilevel game motivated by different interests². However, the concepts of science diplomacy is still pretty fluid.

The ambiguity of the concept does not have to be perceived as a negative feature limiting further research in the field. On the contrary, it still offers many possibilities how to approach the complex universe of multilevel linkages between the worlds of science, knowledge and diplomacy.

¹ This paper is still work in progress. It is part of the S4D4C Horizont 2020 project - https://www.s4d4c.eu/.

² Peter Gluckman et al., "Science Diplomacy: A Pragmatic Perspective from the Inside", *Science and Diplomacy* 6, no. 4 (December 2017), https://www.sciencediplomacy.org/files/pragmatic_perspective_science_advice_dec2017_1.pdf (accessed January 3, 2019).

Nevertheless, in order to shed more light on the topic and not to get lost in this complicated environment, one should define its basic characteristics, perspective and scale.

First, science diplomacy is a trendy and mobilizing topic. It is perfectly fitted to the current situation when the role of expertise and knowledge has been questioned, the weight of public opinion has been rising and the public awareness concerning global environmental and societal challenges affects not only long term political visions but also every day stakeholder's practices. Second, science diplomacy has been developing as a network diplomatic model giving the possibility for different alliances, advocacy group and working groups to shape different political agendas. The implementation of science diplomacy methods (as broad and many they are) has been perceived as a sign of democratization and openness of diplomacy. Third, science diplomacy has an enormous soft power potential that can be beneficial for all members of the science diplomacy community.

The perspective we use to study science diplomacy is essential. As the main topic of this article is EU water diplomacy, we decided to combine the two of the above mentioned AAAS categories: science for diplomacy and science in diplomacy. The current study represents a foreign policy driven case, analysing primarily the ways how science can serve EU foreign policy goals and how can science provide foreign policy advice. Concerning the scale, we do not dispose of an analytical framework that could be applied to the specificities of a regional organization – such as the EU and its science diplomacy³, as Gluckman's definition fits better state science diplomacy.

In the context of broader methodological and theoretical challenges the study of science diplomacy poses, looking at specific foreign policy areas where science diplomacy methods have been used, can offer more insight into the mechanism of science diplomacy and the way how actors address global challenges. Science diplomacy is not limited by topics and agendas, it is rather a combination of reactive and proactive methods that use the potential of interactions between science and diplomacy. Although water diplomacy aims at using science diplomacy methods, contrary to science diplomacy in general, water diplomacy is defined by its topic – water or water management and its many roles and meanings in the international relations. Its scope is large but clear (in comparison for example with environment governance, a broader concept). The water diplomacy agenda has been growing, but it is still possible to write a list of main policy actions and areas. On the top of the list is stands water sanitation, access to drinking water, "good status" of water, etc⁴. The best way how to define water diplomacy is too stick to the thematical scope of water management and water governance related issues in diplomacy.

Water diplomacy is also a relatively new domain, both in terms of research and governance. It is mostly due to growing international ambitions of several actors in the field, but also to the changing security and environmental context that makes it urgent for states and international organizations to integrate the "water element" into the decision making processes, both in the pre-emptive and crisis management modes. The European Union, the main focus of this paper, has been searching to extend the scope of its water diplomatic activities in order to maximize its potential to shape global water governance. For this purpose, it has been attempting to adopt new administrative methods, innovative management styles and last but not least, to integrate the water dimension into its external action.

³ For an EU-role and policy makers' motivations approach, see an Alea Lopéz de San Román and Simon Schunz, "Understanding European Union Science Diplomacy", *Journal of Common Market Studies* 56, no. 2 (2018): 247–66, https://doi.org/10.1111/jcms.12582 (accessed December 21, 2019).

⁴ For more on EU Environmental policy and its wated dimension, see Henrik Selin and Stacey VanDeever, *European Union and Environmental Governance (Global Institutions)*, Routledge, 2015.

2. EU Science Diplomacy

International science cooperation has played a crucial role in European integration since the reconstruction after WWII to increase West European unity in political, economic and even military issues. To illustrate, even NATO has included the science element of the cooperation. However, there was no complex strategy of the scientific cooperation between European states, and the collaboration was established on a case-by-case basis. Moreover, the scientific cooperation among West European countries occurred predominantly apart from structure of European integration including European Organization for Nuclear Research (CERN), European Molecular Biology Organization (EMBO) or European Space Agency (ESA) that either were established outside the European institutions or were founded not only by European Communities' Member States but also by other European countries. The Euratom represented one of the rare examples of the intra-European science cooperation after WWII. Nevertheless, the aim of the international science cooperation still consisted in promoting European unity and in becoming competitive in the research market with the US domination after WWII. Therefore, until 1984 the European science diplomacy can be categorized as an intra-European foreign policy to increase the integration in West Europe and as a tool for becoming an important actor in the research next to the US. This interpretation is classified as science for diplomacy activities.⁵

In 1984, the first Framework Programme was introduced by the Single European Act with the target to share knowledge and capacities in Europe, to support research mobility and to create joint research centers. The top-down initiative of Framework Programmes and lately of Horizon 2020 is characterized not only by intra-European science cooperation but also by external science diplomacy activities with third countries.⁶ Framework Programmes promotes the norms of European research, namely cooperation in contrast to the USA, cohesion and enlargement combining elements of science for diplomacy and diplomacy for science alike. In 2000, the project of Framework Programmes was shielded by European Research Area (ERA) encompassing research activities, institutions, or individual scientists to facilitate sharing scientist knowledge, capacities, and responsibilities and to overcome the isolation of national research among the EU Member States and third countries alike.⁷

In 1993, Maastricht Treaty integrated science dimension into sectoral policies, in particular in trade policy⁸, and technical units in all Directorate-Generals of the European Commission were settled to communicate with the DG RTD which can be seen as the first step of the EU in the category of science in diplomacy.⁹ The increased role of science in EU sectoral policies reflected the global trend from the 1990s and 21st century of using science as an answer to grand challenges, e.g., infectious diseases; energy, food, and water security; terrorism and recently cybersecurity. However, the EU has still a lot of obstacles between diplomats and scientists to be overcome. Firstly, despite the establishment of technical units, sectorial DGs have not communicated adequately with DG RTD.

⁵ Josephine Anne Stein, "Science, Technology and European Foreign Policy: European Integration, Global Interaction", *Science and Public Policy* 29, no. 6 (2002): 463-5, https://academic.oup.com/spp/article-lookup/doi/10.3152/147154302781780787 (accessed January 15, 2019).

⁶ Allam Ahmed and Josephine Anne Stein, "The European Union as a Model of International Co-Operation in Science, Technology and Sustainable Development", *British Journal of Politics & International Relations* 9, no. 4 (2007): 654–69. https://doi.org/10.1111/j.1467-856X.2006.00274.x (accessed December 21, 2018).

⁷ Carlos Moedas, "Science Diplomacy in the European Union", *Science & Diplomacy* 5, no. 1 (2016), http://www.sciencediplomacy.org/perspective/2016/science-diplomacy-in-european-union (accessed January 7, 2019).

⁸ Riccardo Trobbiani, "Strengthening the Relationship between Science and Trade Policy in the European Union", *Science & Diplomacy* 6, no. 4 (2017), http://www.sciencediplomacy.org/article/2017/eu-trade-policy (accessed January 9, 2019).

Furthermore, they see the involvement of the DG RTD as an infringement into their internal affairs. Secondly, in most cases, officers in DG RTD have not had both, political and scientific background, so that they can hardly serve as a bridge facilitating the communication between the world of science and diplomacy. Thirdly, the scientist level of sectoral policies has not been connected to the European External Action Service (EEAS), and it remains separated until today. Fourthly, there is no complex strategy of EU science diplomacy, and the European Union is not endowed with EU science diplomats in contrast to a few EU Member States, e.g., France and the United Kingdom.¹⁰

3. EU Water Diplomacy

In compliance with the increasing phenomenon of science in diplomacy in worldwide politics, the European Union has tried to develop mechanisms and processes to become an important player in addressing grand challenges.¹¹ Water security is claimed to be one of the most crucial global issues because of omnipresent water use in human lives not only as a basic need but also in other spheres, e.g., in industry, energy, or agriculture. Growing population and climate change significantly influence water quality and water supply all around the world and water issues can become one of the causes of inter-state or intra-state conflict.¹² Since the EU is globally known for its high standard of water quality and the positive experience in cross-border cooperation within the EU borders, this image supports its trustworthiness in the field on a global scale. Therefore, there is a significant effort within the EU to create a complex framework for EU water diplomacy started in 2013¹³ with the first document dealing with the issue. In 2018, other Council conclusions on EU water diplomacy¹⁴ were released, and other documents related to the agenda (e.g., Water governance guidelines) are under the preparation.¹⁵ EU water diplomacy aims to be pre-emptive diplomatic tool "for peace, security and stability"¹⁶ using the long-term and positive experience of water cooperation within the EU.

3.1. EU Water Diplomacy as a New Element in EU External Action

European water diplomacy is a new strategy that combines features of science diplomacy, preemptive diplomacy and environmental diplomacy. The first Council Conclusions dealing with water diplomacy of the EU was released in 2013 whose principal target consisted in ensuring international peace and stability mainly in (semi-)arid regions by sharing positive European experience with transboundary water management with the Danube river basin incorporating the biggest amount of riparian states in the world.¹⁷ The Council conclusions over EU water diplomacy formulated in 2018 emphasized pre-emptive nature of the EU strategy to prevent or mitigate tensions and conflicts over water access and the role of the EU in guaranteeing human rights to safe drinking water and

¹⁰ Interview at Directorate-General for Research, Technology and Development (DG RTD), Brussels, February 26, 2019.

¹¹ Moedas, "Science Diplomacy in the European Union".

¹² E.g., Christina Cook and Karen Bakker, "Water Security: Debating an Emerging Paradigm", *Global Environmental Change* 22, no. 1 (2012): 97, https://doi.org/10.1016/j.gloenvcha.2011.10.011 (accessed April 18, 2019); or David Grey and Claudia Sadoff, "Sink or Swim? Water Security for Growth and Development", *Water Policy* 9, no. 5 (2007): 547-8,

https://iwaponline.com/wp/article-abstract/9/6/545/31241/Sink-or-Swim-Water-security-for-growthand2radiractedEram=fulltert (accessed April 21, 2010), Sandra Pastel and Aaron Wolf – Debudrating Conf

and?redirectedFrom=fulltext (accessed April 21, 2019); Sandra Postel and Aaron Wolf, "Dehydrating Conflict", Foreign Policy, no. 126 (2001): 60-7, https://doi.org/10.2307/3183260 (accessed January 18, 2019).

¹³ Official website of the Council of the European Union, "Water Diplomacy – Council Conclusions", 2013, http://www.europarl.europa.eu/meetdocs/2009_2014/documents/droi/dv/1407_councilconclusions_/1407_councilconclusi ons_en.pdf (accessed October 10, 2018).

¹⁴ Official website of the Council of the European Union, "Water Diplomacy – Council Conclusions", 2018,

http://data.consilium.europa.eu/doc/document/ST-13991-2018-INIT/en/pdf (accessed November 30, 2018).

¹⁵ Interview at European External Action Service (EEAS), Brussels, 25th February 2019.

¹⁶ Official website of the Council of the European Union, Water Diplomacy – Council Conclusions, 2018, 3.

¹⁷ Official website of the Council of the European Union, Water Diplomacy – Council Conclusions, 2013, 1-2.

sanitation as a part of UN 2030 Agenda and Sustainable Development Goals. Ensuring political stability and human rights, the EU uses the tool of trans-boundary water governance within its borders, which is believed to be applied in other areas.¹⁸

The water diplomacy is classified as an innovative approach of the European Union in external actions due to following reasons: (1) socio-economic human rights; (2) building on climate diplomacy experience; (3) high interdisciplinarity of water issues; and (4) consultation with assorted interested stakeholders. First of all, it is for the first time in the history of European integration that EU documents mention the socio-economic level of human rights, namely right to water and water sanitation, and the commitment of the EU to it. Secondly, even though European water diplomacy is considered to be the separated agenda, it is built on the experience from EU climate diplomacy, and it uses the positive aspects and transforms the non-functional ones. Thirdly, since water security pervades many other sectors, such as energetic, industrial, economic, food, environmental or social security, it is crucial to secure vertical and horizontal communication channels and processes within the EU structure. Last but not least, water security, water governance and water diplomacy on EU level include many stakeholders. It is not only about EEAS and other European units (e.g., water issues belong to the competency of various Directorate-Generals of European Commission dealing with the topic from different perspective – DG ENV, DG AGRI, DG RTD, DG DEVCO, DG NEAR, or DG TRADE), but also about the EU Member States, private companies, think-tanks and academic institutions consulted during EU official documents making.¹⁹

It is essential to accentuate that European water diplomacy and its general principles were proposed in Conclusions of the Council of the EU which have not legal effects but these documents (1) invite the EU Member States to take actions; (2) ask the European Commission to make a proposal on a concrete topic; or (3) coordinate and express European position on the international level.²⁰ Nevertheless, the repeated incentive of the Council of the European Union raised the awareness about water issues throughout EU institutions, and legally binding documents are under the preparation.²¹ Apparently, the European Union make efforts to become a global player in water security and to significantly contribute to addressing one of the biggest challenges in the third world.

3.2. The Soft Power Potential of Water Diplomacy

Thanks to Joseph Nye and his duality of power theory²², the concept of soft power become an established part of diplomatic theory and practice. In his later work, Nye introduced a new concept of smart power that combines both soft and hard power instruments. Smart power, by definition, can make use of science and expertise, it is knowledge based. In this context, science diplomacy can be seen as a smart power instrument. For the purpose of this paper, we stick to the soft power definition, it is theoretically better adapted to the study of science diplomacy in general and water diplomacy in particular. Soft diplomatic strategies have also been widely used in the EU external actions and place of the EU in the international arena relies mostly on its soft power elements.

Why it is relevant to look at water diplomacy from a soft power perspective? First, investing in water management and water diplomacy has a strong soft power potential. As public opinion has

¹⁸ Official website of the Council of the European Union, Water Diplomacy – Council Conclusions, 2018, 7.

¹⁹ Interview at EEAS, Brussels, 2019.

²⁰ Official website of the Council of the European Union, "Council conclusions and resolutions", https://www.consilium.europa.eu/en/council-eu/conclusions-resolutions/ (accessed June 9, 2019).
²¹ Interview at EEAS, Brussels, 2019.

²² See for instance: Joseph Nye, Bound to Lead: The Changing Nature of American Power, Basic Book, 1990.

become more important in international relations, it is very important for stakeholders to explain well the decisions and take into consideration their impact. Topics related to water resonate in the public sphere, they also represent an example of issues that can be positively framed. Every human being is sensitive to decisions and agendas that seek to improve well- being (or survival in the worst scenario) in the world. Focusing on water diplomacy topics can strengthen the emotional bond between the individual and the relevant stakeholders who take care of water. It can thus amplify the soft power of the relevant entity. Second, water diplomacy mobilizes a wide range of heterogenous societal and diplomatic actors, scientists and experts included. This network feature accentuates the openness in water governance and water diplomacy, another element that enhances soft power.

Last but not least, in the case of the European Union, the soft power dimension of water diplomacy is strengthened by its legitimacy in water management (especially water sanitation and the quality of drinking water) and transboundary cooperation inside EU borders. It gives the EU the possibility not only to export the visions and ideas how to deal with global water challenges but also the credibility in terms of best practices sharing.

3.3. Governance Practice of Water Diplomacy **3.3.1.** State Governance

EU Member States play an important role in tackling global water issues. On the one hand, the nation states bring the expertise in water management and governance on the European level and share it not only within EU borders but they sell its excellence as a part of its foreign policy. One of the most advanced countries in water management is the Netherlands because of the geographic position and conditions sharing its knowledge in various water issues, e.g., water quality and quantity, water sanitation, flood prevention, climate change mitigation and adaptation. Germany, Finland, Slovenia and Spain also represent countries associated with high activity in the agenda of water rights and water sanitation.²³ In any case, water issues have mobilized effort among all Member States which is illustrated by adoption by Council conclusions in 2013 and 2018 and by collective support for the Water Framework Directive revision.²⁴ One of the actual topics related to the EU water management concerns the re-use of water which also occurred in the programme of the Romanian presidency of the Council of European Union where water management is named as one of four priorities of the Council in the first period of 2019.²⁵

Besides, EU Member States engage in regional cooperation where they complement or substitute the European water diplomacy. National involvement is not directed only by the advanced expertise in water-related issues but also by historical relations with a concrete county. Water bilateral cooperation between states is often shielded by an international platform where other regional actors are involved. This is the case of EU-India Water Forum or EU-China Water Platform which is based on the mutual transfer of know-how in water management and governance between the EU and a target country however the EU Member States also participated individually in the dialogue. For example, Denmark, Estonia, Finland, France, the Netherlands, Portugal and Sweden

²³ Interview at EEAS.

²⁴ Interview at Czech Permanent Representation to the EU, Brussels, November 21, 2018.

²⁵ Official website oft he Council of the European Union, "Programme of the Romanian presidency of the Council of the European Union, 1 January – 30 June 2019", https://www.consilium.europa.eu/media/37974/romanian-presidency-programme.pdf (accessed June 10, 2019).

take an active part in European cooperation with China under the umbrella of EU-China Water $\mathsf{Platform.}^{26}$

3.3.2. European Union Water Governance

As mentioned above, EU water diplomacy is defined in non-binding documents, and therefore, the EU does not have a complex strategy for sectorial diplomacy. In practice, EU representatives and officers deal with internal or external water issues throughout the EU structure because water influences a lot of sectoral policies. However, without having a complex EU strategy for water diplomacy and authorized body, obstacles impeding fulfilling ambitions formulated in Council Conclusions cannot be overcome. Firstly, the personnel are highly understaffed; for example, in the case of the EEAS, there are one or two persons responsible for water related activities in EU external action service. Secondly, every region requires individual water treatment dependent on the unique geographic, political and socio-economic conditions and constellation.²⁷ Consequently, scientists need to be consulted to formulate an adequate response to water problems in concrete regions.²⁸ Nonetheless, the communication channels between DG RTD, which mediates know-how from scientific to diplomatic world, and EEAS are not direct and go through sectorial DGs which disintegrates transmission of information and does not response correspondingly to regional and potentially global water challenges.²⁹ Thirdly, the absence of EU water diplomacy causes the lack of financial resources for European foreign activities related to water problems.³⁰

With growing concern and advancing excellence in water management of nation-states, the EU water diplomacy can become an important player in ensuring water security in (semi-)arid regions. Furthermore, EU water diplomacy requires the interconnection of EU external action service and science knowledge in the field, which is also in accordance with the theory of science diplomacy, in particular science in diplomacy. European water diplomacy with a strong scientific background has the potential to become a groundbreaking example of sectorial science diplomacy of the European Union and to overcome a current gap between European diplomacy and science.

3.3.3. Global Water Governance

The EU and EU Member States' ambition is to use their capacities in the field embodied in high water quality standards and positive experience in trans-boundary water management and to become a significant actor on the global level. The EU, as a normative power,³¹ sees its commitment to protecting human rights to water access and water sanitation and political stability, peace and security in the third countries. However, up to the present, the EU cannot be considered as a global actor in water-related issues because the role of individual nation states is more significant than external activities of the European Union. Even though these actions often take place under the umbrella of the EU, the bilateral relations of EU Member States remain a crucial element for European engagement abroad. Established strategy, mechanisms and means of European water diplomacy are needed for reaching EU credibility and competencies in global water governance.

Conclusion and Future Research Options

²⁶ Interview Directorate-General for Environment (DG ENV), Brussels, February 27, 2019.

²⁷ Arun Elhance, "Hydropolitics: Grounds for Despair, Reasons for Hope", *International Negotiaton* 5, no. 2 (2000): 202, https://ukaz.cuni.cz (accessed March 10, 2019).

²⁸ Interview EEAS, Brussels, 2019.

²⁹ Interview DG RTD, Brussels, 2019.

³⁰ Interview EEAS, Brussels, 2019.

³¹ See more in San Román and Schunz, "Understanding European Union Science Diplomacy".

The European Union ambition to become a leader in the global water governance has been clearly defined in relevant documents and discourse, its authority in the area has been expanding. EU aspires at intellectual and normative leadership in global water governance, by diffusing ideas and knowledge and implementing new mechanism of cooperation. Nevertheless, water diplomacy is still not a well established diplomatic field. The relevant stakeholders still seek for effective management methods and processes how to integrate the water dimension into various areas where water comes into play, such as international cooperation and development, peace keeping operations, migration and other acute agendas deeply connected to the access to water and its quality.

These developments also motivate and call for further research of water diplomacy. They offer various ways how to look at the topic: from an EU studies perspective mostly rooted either in neo functionalist and constructivist approaches looking at the new diplomatic agenda and its narratives or using the green state and sustainability approaches (1) or opting for a global governance and global actorness perspective (2). In both possible scenarios, water diplomacy is a promising academic theme with a potential to link the debates evolving around the role of science/knowledge/expertise and diplomacy and the involvement of IR actors in global governance and global challenges.

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