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Science Diplomacy in Development Cooperation - A qualitative research of the Belgian case

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Diplomacy is the practice of conducting negotiations between representatives of states. It covers a diverse range of matters. Global issues that need global solutions also fall under this. The most prominent examples are climate change and the refugee crisis. It is a complex area which has known a lot of change in the previous centuries and which is still changing. Before the first modern diplomatic conference of the 'Peace of Westphalia' in 1648, diplomacy was only practised by small delegations of trustees of respective heads of state convening in luxurious castles for bilateral negotiations. Since the 19th century, states engage in multilateral diplomacy, where today diplomacy is concerned with the management of changing relations between states and between states and other actors. This is called polylateral diplomacy (Barston, 2006). No longer do diplomats just talk to other diplomats, they need to interact with a lot of stakeholders including the private sector, non-governmental organisations, scientists, activists and the media (Kickbusch, Silberschmidtb & Buss, 2007).

Recently new specific forms of diplomacy have been labeled by scholars, even though they have been practised implicitly already for some time. An example is Sports Diplomacy. Sports can expand the channels through which a government can communicate a diplomatic message to a much wider audience and to see whether the general public of the two countries would be accepting of a more formal diplomacy on a specific matter. A peculiar form of Sports Diplomacy is Ping Pong Diplomacy. This kind of diplomacy became famous for a series of ping pong matches between China and the United States which facilitated the restoration of China's seat on the United Nations Security Council, Richard Nixon's visit to China in 1972, and the normalisation of diplomatic relations between China and the United States (Murray, 2013). Other examples of specific types of diplomacy include Panda Diplomacy (McGeown, 2005), Digital Diplomacy (Bjola & Holmes, 2015), Cultural Diplomacy (Higgott, 2017), and Academic Diplomacy (Wallensteen, 2012). Each uses a different approach to initiate positive change in the public opinion.

The age of enlightenment brought a shift to reason in some areas of the world, which has only increased in the 20th century. With the need and demand for evidence and science-based policy, diplomats have also had to improve their engagement with scientists and scientific research. A policy or action that involves the engagement of scientific communities in transnational interactions is called Science Diplomacy.

Science Diplomacy encompasses diverse policies and practices and is generally categorised in three ways: Science in Diplomacy, Diplomacy for Science and Science for Diplomacy. All three link scientific research, scientists, diplomacy and policy officers but with a different end goal. Diplomacy for Science is about the facilitation of international scientific collaboration. In the other two types, the roles are reversed. In Science in Diplomacy, the scientists are prompted towards supporting foreign policy. And in Science for Diplomacy, science is used as a tool to build and improve relations between states. Scientific collaboration then provides collaborative relationships that are based upon a non-ideological basis, or at least recognised as such. The goal is to support Foreign Policy actions by mobilising scientific networks. Not only in bilateral relations but also when global issues need global solutions, Science Diplomacy can bring nations together when deciding on the way forward. These definitions were introduced in 2010 by the U.K. Royal Society and the American Association for the Advancement of Science (Van Langenhove, 2016).

For centuries, there has been a link between science and foreign affairs. When the economic and military power of a country were the most important assets in diplomacy, science was used to develop weapons and through innovation enhance the economy (James & Van Langenhove, 2017). With the evolution from war to peace, the societal relevance of science increased. The European Union, which started in 1950 as a peace project, makes use of this. One of the biggest EU programmes, Horizon2020, aims to increase scientific collaboration between European research institutions, through projects which are divided into three pillars: Excellent Science, Industrial Leadership, and Societal Challenges (European Commission, 2018). This international component to research is not new. Since the existence of universities, there have been exchanges between researchers. So, although not the main aim of the Horizon2020 programme, it creates an exceptional intellectual community which strengthens the European integration.

In the previous decades there has been a lot of research on linking scientists and policy officers in several policy fields and it seems that it is not an easy task due to very diverse reasons. These reasons may include a mutual distrust, scientific uncertainty, different attitudes toward information or different language use. See Walt (2005), Choi (2005), Bradshaw and Borchers (2000) and Choi (2003). This makes Science Diplomacy an interesting type of diplomacy, especially in times when scientific evidence

is not consistently accepted. One of the reasons for the decision of the United States of America to leave the Paris Agreement was that President Trump and other politicians are sceptical about the science behind climate change being induced by humans (Cama & Henry, 2017).

In the European Union the term Science Diplomacy was first used in the European Commission's 2012 Strategy on the EU's international cooperation in research and innovation (Houët, 2014). At the level of the European Union there has already been some research on the use of Science Diplomacy, see Moragues-Cánovas (2017), Van Langenhove (2017), and López de San Román and Schunz (2017). Furthermore, the use of Science Diplomacy in specific fields of international cooperation, for example climate change (Van Langenhove, 2016), the European Neighbourhood Policy (Houët, 2014), and the EU's regional and inter-regional processes in the Black Sea region (Boers, 2017) have been addressed. Nevertheless, there is still a lot of research needed.

Science Diplomacy, more than a concept

As the term Science Diplomacy has only been used for approximately ten years and there is no single accepted definition, it is important to clarify the concept, in which ways it can be defined and in which ways it can be assessed.

The question of what Science Diplomacy is, has been answered in various ways. Different researchers have defined the concept of Science Diplomacy, from a social construct (James & Van Langenhove, 2017) to an international policy instrument (Copeland, 2017). In this paper, the following definition is used: "A *policy or practice that involves the engagement of scientific communities in transnational interactions*." (Van Langenhove, 2017). Thus we consider Science Diplomacy, like the other types of diplomacy mentioned in the introduction, as a tool to reach a goal, and with Science Diplomacy this happens specifically through the engagement of scientific communities.

Three categories

As was mentioned in the introduction, Science Diplomacy covers different approaches to linking scientific research, scientists, diplomacy and policy officers with each a different end goal (Van Langenhove, 2017). These end goals are categorised in the following way.

Diplomacy for Science

In this category of Science Diplomacy, international scientific collaboration is facilitated or improved through actions of the diplomatic corps and foreign affairs ministry. An example of this type of diplomacy is inviting academics to official state missions. Heads of universities or scientific institutions joining the delegation sends the signal that academia are important and supported by the nation. It is a good way to encourage collaboration or strengthen the already existing collaborations with scientific institutions in specific partner countries. The aim is also to improve national capacity by benefitting from the science and technology capacity of other countries.

Science in Diplomacy

In Science in Diplomacy, scientists are prompted towards supporting foreign policy. This type of Science Diplomacy has gone through a long evolution as explained in the introduction. This can happen through the funding of research institutions with the specific assignment of 'policy supporting research'. Several working structures are possible in which scientists prepare positions, guidelines, and context analyses, or support the diplomatic actors through capacity building. A scientific institution may receive general funding or a precise amount for a concrete project in a given time frame when specific policy support is requested. However, governments may still choose to ignore what has been put forward by policy supporting research. The aim is to improve the quality of the foreign policy actions through the use of scientific knowledge.

Science for Diplomacy

Science for Diplomacy aims to support Foreign Policy actions by mobilising scientific networks. As such, it is the most intricate bond between science and diplomacy where science is used as a tool to build and improve relations between states. Scientific collaboration is used to provide collaborative relationships that are based upon a non-ideological basis, or at least recognised as such. This is most useful in a tense relation or situation where all partners are incapable of solving it by themselves. The

best known example of Science for Diplomacy is the extensive involvement of scientists and use of scientific research in the negotiations at the Conference of the Parties (COP) on climate change. The scientific evidence presented by the experts is expected to be non-ideological which serves as basis to start the political game of negotiations.

Overlap

In practice the different categories are not as clear as they appear on paper. A long-term goal of Diplomacy for Science may be to encourage the scientific institutions to work together on policy supporting projects as in Science for Diplomacy. It is also possible that the results of Science in Diplomacy are used for Science for Diplomacy, or the other way around.

Additionally there are also practices that do not fit clearly into one of these categories. An example is technology transfer. If the country acts with its diplomatic power to have good scientific collaboration for innovation and the development of new technologies, it counts as Diplomacy for Science. If the country encourages scientific centres to share their expertise, knowledge and technologies with other countries it does not count as supporting policy but rather as implementing policy. In this setting technology transfer can be considered a tool in Science for Diplomacy. Another example is the international action on climate change which requires all three categories. Also the governance of non-jurisdictional spaces like Antarctica does not fit within this framing (Gluckman et al., 2017).

More recently, new categorisations have been proposed in an attempt to clarify the concept and to make it purpose driven so policy officers can more easily engage with the concept (see Van Langenhove (2017) and Gluckman et al. (2017)). In this paper, the first categorisation which is more widespread, as described above, will be used.

Assessing Science Diplomacy

In *Tools for an EU Science Diplomacy* (Van Langenhove, 2017) a difference is made between Science Diplomacy policies and Science Diplomacy practices and the way of assessing them on willingness, capacity and acceptance of the actors or stakeholders in order to determine their impact. The actors are the foreign policy officers. The stakeholders are the scientific communities, science and technology policy officers, and the general public.

By defining a policy as a high-level overall plan embracing the general goals and acceptable procedures especially of a governmental body (“Policy”, n.d., para. 2) and a practice as an actual performance or application (“Practice”, n.d., para. 2), both can be seen as part of the translation of foreign policy to more concrete directions. Thus, when considering Science Diplomacy as a tool, the difference between a policy and a practice becomes unnecessary. Both are essential to reach the set goals. Therefore, the distinction will not be made in this research.

To assess the impact of Science Diplomacy we use the three dimensions identified by Kingah and Van Langenhove (2012). Together, the presence or lack of the dimensions gives a good picture of the impact. They also measure the perception and the barriers of using Science Diplomacy.

The first dimension of impact is the *willingness* to use Science Diplomacy. For the actors this entails their ambitions, how it fits with other foreign affairs policies and the belief it is a useful tool. For the stakeholders this also includes the willingness to have activities explicitly labeled as Science Diplomacy.

Secondly, the *capacity* is used to assess the impact of Science Diplomacy. For the actors this means being able to employ Science for Diplomacy goals, including the available resources and instruments to create but also to implement the policies and practices, and the interest of the scientific communities. For the stakeholders it indicates the capacity to engage in Science Diplomacy.

And thirdly, the *acceptance* of Science Diplomacy policies and practices. It determines if other actors accept the policies and if it is accepted that these activities are being labeled as Science Diplomacy by different actors, including those who develop the Science Diplomacy policies and practices. The acceptance of the claim of science being non-ideological is also assessed under this dimension.

Labelling

One can consciously label a policy or practice that involves the engagement of scientific communities in transnational interactions as Science Diplomacy, this is called *explicit* Science Diplomacy. One can also not label a policy or practice, they are then called *implicit* Science Diplomacy. This can happen for different reasons. For example because it brings no benefit, or even harm, to label a policy or practice as Science Diplomacy. Another possible reason is that the term is not known, or that the actors do not value the use of science themselves. As the term has only been used for approximately ten years it is interesting to observe if clear explicit labelling is used.

It is not certain that new practices are being implemented since the introduction of the term. This would mean that Science Diplomacy is just a case of labelling. The opposite would mean that a clear policy for Science Diplomacy ensures that Science Diplomacy is promoted in new policies and practices.

The link with Academic Diplomacy

While Science Diplomacy puts scientific research at the centre, Academic Diplomacy focuses on the role of academia and academics. Most scientists are connected to an academic institution, but this is not always the case. Organisations and companies increasingly have a research department and also think tanks unite researchers without an academic context.

As with Science Diplomacy, there has not been an established definition of Academic Diplomacy. It is therefore not defined which policies and practices fall under it. Whitling (2010) states that Academic Diplomacy incorporates elements from both political and culture diplomacy. In his research he used Academic Diplomacy as descriptive concept, to study the role of the foreign academic institutes in Rome in the post Second World War period (Whitling, 2010). It is an interesting case of transnational interaction of scientific communities due to the location of national academia in a foreign country.

In *Indian Ocean futures: new partnerships, new alliances and academic diplomacy* (Doyle & Seal, 2015) Academic Diplomacy is attributed an even bigger role, not only to enhance government objectives through independent science and research, publication and education-based activities, but also to enhance the objectives of business and civil society. Additionally, it is stated that academic communities are positively placed to engage in long-term research questions, especially when compared to other policy-making processes. In the paper, the use of academic and technological capacity of other nations in the interest of the Indian Ocean is studied through the newly established *Journal of the Indian Ocean Region*. This created an international intellectual community on the topic, based on independent, peer-reviewed and critical enquiry.

Deodato and Borkowska (2014) call Academic Diplomacy a soft power tool which, applied in and through higher education, is well suited for middle and long-time perspectives. They articulate very well the favourable conditions of Academic Diplomacy, also referencing the non-ideological base of research.

> "The favourable condition for diplomacy made by Academia is the high awareness and an unbiased perspective on historic, political, cultural and economic issues wherein multidisciplinary teams of independent scholars and scientists are able to position themselves. Exchange of ideas, information, arts and culture on the one hand and the cascade effect of education on the other facilitate the academic soft power performance. A positive agenda for cooperation is provided in spite of policy differences or embargos, creating a neutral platform for individual contact, and serves as a flexible, universally accepted vehicle for an approach with countries with which diplomatic relations have been strained or are suspended." (Deodato & Borkowska, 2014, p. 5)

A country can also have a concrete policy on Academic Diplomacy, separate from a potential Science Diplomacy policy, where academia are seen as partners and actors in foreign policies. Due to the link between academia and scientific research there is a substantial overlap between Science Diplomacy and Academic Diplomacy. Either way, notably because of the categorisation of Science Diplomacy into Diplomacy for Science, Science in Diplomacy and Science for Diplomacy, the term Science Diplomacy covers more policies and practices. For the rest of this paper Academic Diplomacy will therefore be considered as part of Science Diplomacy.

Methodology

In order to get a deep understanding of the use and perception of Science Diplomacy by policy officers, a qualitative research is needed. This will provide insights into the current state and uncover trends in thought and opinions.

Case selection

Development cooperation is a particular subfield of foreign affairs as there is an imbalance between the partners, at the level of financial means and of technical capacity. The aim of development cooperation is to create an impact for the local population. This can potentially also happen through programmes in the private sector or with civil society organisations and although less sustainable, without much interaction with the national government. Because of the reasons mentioned above, the already existing research in other fields of foreign affairs and the limited research in the field of development cooperation, it was chosen as the concrete policy field for this case study.

Belgium was chosen as case country, based on the grounds of location, the access to current practices and attitudes of the policy officers, as well as the fact that there has been limited in-depth research on Science Diplomacy at national level of European countries including Belgium.

Belgian development cooperation

The competence of foreign affairs in Belgium belongs to the federal, as well as regional and community governments. At the federal level, three members of the government jointly work on the external relations of Belgium. They are responsible for Foreign Affairs, for Foreign Trade and for Development Cooperation. These actions are supported by agencies funded by the respective governments.

In the federal government, the portfolio of development cooperation falls at present under minister Alexander De Croo. His cabinet translates the governmental declaration into annual strategic policy notes and is responsible for the distribution of the allocated budget over the different programmes. The Federal Public Service Foreign Affairs, Foreign Trade and Development Cooperation administers the public policy determined by the government, especially the designated Directorate-General for Development Cooperation. Enabel and BIO are the main executive agencies of the development cooperation policies. In each of the partner countries, there are embassies as well. The Belgian development cooperation is evaluated by the Special Evaluation Office. Lastly, the university platforms play an important role in the Belgian development cooperation, through the management of international research programmes and policy supporting research programmes.

The regional and community governments each also have a dedicated minister and department. In 1980, the Interministerial Conference on Foreign Policy (ICBB) was created to consult and prevent or resolve conflicts (of interest) between the different governments. Note that the partner countries are not the same for the different governments.

The main focus of this paper is on the federal government as they have the main competence of foreign affairs, but the Flemish government, Walloon government and the French community government are also addressed. As no research related to the topic of Science Diplomacy has been done yet on development cooperation in Belgium, the aim of this case study is to give an insight in a specific policy field, which can then be part of a wider assessment on the use of Science Diplomacy.

Research questions

Considering the literature review on the current status of Science Diplomacy, the selected case, the lack of literature on the topic for the selected case, and the aim of the research, following research questions are selected.

- *Is Science Diplomacy used as a tool for development cooperation in Belgium? If it is used, how?*

- ➢ *Are policy officers of development cooperation in Belgium willing, capable and accepting to use scientific research as a tool?*

- ➢ *In which ways can Science Diplomacy be better used for development cooperation?*

The answer to the first research question describes the current Science Diplomacy policies and practices, explicitly as well as implicitly, for development cooperation in Belgium. The answer to the second question outlines the perceptions of the use of Science Diplomacy by policy officers, their willingness, capabilities and acceptance, along with identified opportunities. Subsequently, this research tries to answer what possible improvements can be made to the policies and practices of development cooperation in Belgium, if this would be recommended.

Qualitative Research Design

The research conducted is split up in several parts. All of these parts are needed in order to produce the qualitative analysis of the use of Science Diplomacy in development cooperation in Belgium.

Policy analysis

To answer the first research question, policy documents, such as policy and strategic notes of development cooperation are assessed through an intensive reading. All these documents can be found on the public websites of the different governments. The time frame of the considered policy documents is the current legislature, which started for all levels of government in 2014. Some documents from earlier dates are still analysed because of their relevance.

The selected policy documents are coded for key words related to science, technology, academia, and Science Diplomacy. Each of the key words is counted separately, even if they are used in the same sentence. If multiple sentences use one of these words in a same paragraph, they are considered together.

Policy documents are prepared in the official language or languages of the respective government. There are no English versions available of all of these documents, therefore the key words are extracted from the Dutch or French texts.

Thematic analysis of interview data

The governmental declarations, policy notes, and strategic notes state the strategic decisions of the governments in Belgium. However, there are a lot of nuances and limitations not mentioned in these documents, nor in other written communication of the governments, public services, or agencies. To answer the second research question, the qualitative data is collected through semi-structured interviews with key people. This type of interview gives the interviewees the freedom to express their views in their own terms.

Similar to other policy fields, the creation of foreign affairs policies is a process which involves several actors at different stages. Using science as a diplomatic tool in development cooperation can be a strategic decision by a specific actor or a general policy. Therefore it is needed to get insights from diverse actors in several steps of the policy making processes. In this research, the focus is on the perspective of the policy officers. In future research, the stakeholders, including scientists, can potentially be included.

A diverse group of policy officers from several of these actors were interviewed. They were selected on basis of relevance to the topic and through identification by other key people. This method ensures that the interviewees are well-placed to give insightful answers.

The themes addressed in the interviews are the position of development cooperation within foreign affairs and existing frameworks, the current policies and practices, the three dimensions to assess the policies and practices of Science Diplomacy as described in chapter two, and potential opportunities.

The interviews provide comparable qualitative data which are coded for the mentioned themes. These are about the perspectives on willingness, capacity and acceptance of the use of science in development cooperation, the mentioned policies and practices, their perception of labelling and potential improvements, their involvement, the used frameworks, and being called a Science Diplomacy actor. These form the basis of the qualitative analysis.

The answer to the third research question is formulated based on the results of the first two research questions.

Policy analysis

In this chapter, the results of the intensive reading of the policy documents is documented. First the federal government is assessed, then the Flemish government, and afterwards, the governments of the Federation Wallonia-Brussels and Wallonia are addressed jointly due to their decision to integrate their policies for international relations. The government of the German-speaking community and the government of the Brussels Capital Region are omitted in this analysis as there are no dedicated policy notes on development cooperation.

Federal government

Before starting the analysis of the specific documents, we address the governmental declaration. Although there is a strong focus on the efficiency and the coherence of the policies and on cooperation with stakeholders, there is no mention of evidence-based policy nor the explicit mention of the scientific actors. Under the subtitle 'non-governmental cooperation', it is stated that the number of partners will be reduced in consultation with the sector. This fits in the economisation goal of the governmental declaration. Additionally, the word development cooperation is mentioned six times outside of the specific chapter, although never in the context of science-based policy making.

The federal government has furthermore different documents concerning the policy lines they follow. First of all, there is the law concerning development cooperation and the amendment to this law. The most important concrete documents are the Policy Notes. These are adopted each year for the coming year. Additionally, the administration of the Directoral-General Development Cooperation produces strategy notes for the different areas as well as some general strategy notes. All of the documents mentioned above are assessed in this analysis, in the order they can be found on the website of the federal government ("Beleidsdocumenten", 2016).

In the reading of the different bilingual documents, differences between in the use of the key words in the Dutch and French version were noticed. In one paragraph the word for technology is used in the Dutch text but not in the French text and in another paragraph the same word is used twice in the Dutch text and four times in the French text. For consistency only the Dutch version of the text has been taken into account.

Policy notes

The exact count for the four policy notes can be found in the table below, however, this does not give a good view on the evolution of science and technology in policy due to the small numbers. The description is more insightful, as it explains the context of the use of the key words.

Policy note	Science-	Techno-	Academic-
2015	1	3	0
2016	2	3	1
2017	2	5	0
2018	2	2	0

In the policy note for **2015** technology is mentioned three times, but mostly as a tool for engagement, never related to policies. University centres and scientific institutions are mentioned once as success stories in the framework of education.

In the policy note for **2016** the recommendations of the peer review 2015 of OESD-DAC (OECD, 2015) are addressed. The peer review identified the lack of cooperation between the different Belgian channels and actors as a point of improvement. A new partnership agreement with scientific institutions, universities, NGOs, labour unions and local governments has been put in place to address this issue.

Nevertheless it does not explain in which way the scientific centres will be able to support the policies. The other mentions of academics and technologies are also related to policy coherence through cooperation. The use of science and technology are also acknowledged as beneficial for cooperation programmes.

In the policy note for **2017**, under the budgetary remarks, the financing of science and technology, and scientific centres are mentioned. Furthermore technology is mentioned four more times, all of them examples of specific actions.

The policy note of **2018**, similarly to the one of 2017, mentions the scientific centres under the budgetary remarks. There are only only two mentions of technology, both pointing out the potential contribution of technology in the development of the world.

To sum up, each policy note underlines the specific scientific centres each time, as is also laid out in the law concerning development cooperation as well as the governmental declaration. In 2015 the universities got some attention, in 2016 the cooperation with different stakeholders was addressed and in 2017 there was a small increase in focus on technology with 5 mentions in a 22 page document. These four documents have even though no concrete mentioning of Science Diplomacy or the use of science in policy making.

Legislation

Belgian development cooperation has one specific law concerning the policy domain. This law passed on 19 March 2013 and was later amended on 16 June 2016. In the original law there is only one mention of the word technology under the article on sustainable development. The sentence states that the focus of technological development needs to be aligned with future as well as current needs.

The amendment to this law does not remove the part on technological development but even adds one mention of science. It regards the funding of recognised institutions. The amendment states that one of the reasons a recognised institutional actor may submit a subsidy application is with regard to activities of scientific research intended to support the policy of the Belgian development cooperation.

In 2013 policy support from scientific research was apparently not yet on the political agenda. The amendment in 2016 changed this. This amendment is only to the law concerning development cooperation. It can be interesting to see if similar amendments to add scientific policy support were made to other laws regarding foreign affairs.

Strategic notes

In the following table, the number of times a key word was used in the respective documents can be found. The number of pages of the strategic notes varies highly. Therefore, the count of key words is not very representative. The description is more insightful of nature.

Some of the strategic notes use references and footnotes. This in itself is already an indication that the policy is based on other sources, potentially academic. For the analysis of the strategic notes, the use of the key words in the footnotes are counted, the words in the references not.

Strategic note	**References**	**Science-**	**Techno-**	**Academic-**
Communication (28p)	x	2	1	0
Comprehensive Approach (11p)		0	0	3
Digital for Development (60p)	x	5	65	4
Fragile situations (40p)	x	0	0	1
Gender (14p)		1	0	0
Action plan gender (10p)		2	0	0
The right to health and healthcare (32p)		1	1	1

Addendum 'The right to health and healthcare' (12p)	x	0	0	0
Sexual and reproductive health and rights (37p)		5	0	0
Humanitarian help (24p)		0	1	0
Respect for the Rights of the Child in Development Cooperation (34p)	x	0	0	0
Agriculture and Food Security (20p)	x	7	0	1
Environment (24p)	x	11	12	1
Middle Income countries (22p)	x	1	4	0
Policy note Multilateral Development Cooperation - Part 1 (80p)		1	0	1
Policy note Multilateral Development Cooperation - Part 2 (96p)		17	2	0
Education sector (23p)		2	0	0
Development education (18p)		2	3	1
Development results (17p)	x	0	0	0
Belgian development cooperation and the local private sector: supporting sustainable, human development (19p)		1	6	0

In the strategic note **communication,** there were few mentions of the key words. Technology was mentioned one time as a component of a competitive environment. Scientific centres are mentioned twice, once as receiver of funding and once as actor in the development field. There is no mentioning of evidence-based policies.

The strategic note **comprehensive approach** is a general note for all departments of the federal government. It only uses the key word academic three times, of which one was in an example in a footnote. The aim is to invite other actors, such as academics, to take part in the comprehensive approach, though they keep their own policy autonomy. By not mentioning science and technology in this document from 2017, it seems that this type of policy support is not mainstreamed in the different departments yet.

The strategic note **Digital for Development** (D4D) has the most mentions of the key word technology, namely 65 on a 60 page document. This follows from the fact that the topic of the strategic note is digital technology. A lot of the mentions are used in examples of actives that have taken place on the ground.

The strategic note **fragile situations** has only one mention of one of the key words, namely scientific: Scientific evidence is used explicitly to back up a policy decision, although, the concrete academic studies are not listed in the references of the strategic note. None of the references are linked to specific paragraphs or statements. The document also mentions that it was drafted in cooperation with GRAPAX (Groupe de Recherche en Appui aux Politiques de Paix), without further explanation on which parts are research-based, and if this happened in collaboration with scientific institutions in the South.

On the website of the ministry, there are a couple of documents in the section on fragile situations by ACROPOLIS (ACademic Research Organisation for POLicy Support) on a framework for risk

management in fragile situations. In the strategic note, risk management is mentioned as one of the ten principles the Belgian development cooperation must wield in fragile situation, without mentioning further context or framework, even though they provide the framework for ACROPOLIS on their website. The strategic note dates from 2013 and the framework from 2017. The administration did not see the need yet to amend the strategic note after the publication of the framework.

The strategic note **gender** addresses the civil servants of development cooperation, but also all other actors such as NGOs, scientific and research centres, universities, and multilateral partners, to use the note and the adjoining action plan as a basis to integrate the gender dimension in all of their daily activities. In the action plan, scientific centres are mentioned specifically. The aim is to enable the experts on gender to produce articles, scientific colloquia, and engage in research programmes on the topic of gender and development. It is not mentioned if these results would be used in further policy making processes. Neither the strategic note nor the action plan make use of references, therefore it is not clear where this framework stems from.

Under the health theme there are two policy notes. 'The right to **health and healthcare**' is a policy note from the previous government, adopted by the former minister in 2008. It states that in order to achieve democratically and socially supported ownership of healthcare it is important to explicitly mention the relations with the stakeholders. This includes the relations between operational partners and academic institutions. It implies that in the partner countries academic institutions should be considered as a stakeholder in the quest for democratically and socially supported ownership. It does not imply that those academic institutions should have connections to academic institutions in Belgium and therefore it does not fall under Diplomacy for Science. In 2012, an addendum was added to the policy note, this addendum has no mention of the key words. On the contrary, the policy note has no list of references, but the addendum has.

In the policy note 'The Belgian development cooperation in the field of **sexual and reproductive health and rights**' from 2007, scientific institutions are mentioned five times, each time alongside universities. They are requested to continue and increase their operational, scientific, and policy-supporting research on sexual and reproductive health and rights. And additionally, to support their partners in the South with knowledge and transfer of expertise. The first is a case of Science in Diplomacy, the latter of both Diplomacy for Science and Science for Diplomacy. The note also includes a budget explanation in which universities and scientific institutions are mentioned explicitly to receive a percentage of the budget.

The Belgian strategy for **humanitarian help** contains only one mention of (new) technologies, as a tool for professional humanitarian aid organisations to learn new competencies.

The strategy note on **children's rights** does not use the key words. It does contain a list of references.

The strategy note **agriculture and food security** contains eight mentions of science, of which two are in a footnote. The footnotes in this document include academic papers. One of the three action areas is support, research, and innovation. Under this part, it says that Belgium will invest in scientific, technological, and institutional research and innovation within the agriculture and food security area. They reference a research that states that for each euro invested in research and innovation, 17 euro is earned. More interestingly, in the annex 'Intervention channels', under non-governmental cooperation, the text explicitly states that the Belgian cooperation involves the universities and scientific institutions in its political and policy choices. Many organisations and institutions take initiatives and develop activities in the field of development education without this being part of their reason for existence. This is a clear example of Science in Diplomacy. The note also contains a list of references.

The strategy note **environment** contains a lot of mentions of the key words, namely 12 for a 24 pages document. The twelve mentions of technology are mostly about technology transfer.

The strategy note **middle income countries** encourages technology transfer in three different cases. It is also mentioned once as a way for Small and Medium Enterprises (SMEs) into new local and international markets. The list of references of this document also includes academic sources.

In the chapter of the strategy note **multilateral cooperation,** part one, on geographical, thematic and sectoral perspectives, the Millennium Development Goals are not considered analytical or scientific instruments, but rather the result of a political consensus. It is also stated that there is a lot of potential to involve, among others, academia directly in multilateral development efforts, due to the engagement of international institutions in Belgium. This statement is not developed further. Part two of this strategic

note is a list of descriptions of the partner organisations. Therefore, all mentions of science (seventeen times) and technology (two times) are due to the word science in the name or mission of a partner organisation. These are, among others, United Nations Environment Programme (UNEP), World Health Organisation (WHO), Food and Agriculture Organization (FAO), CGIAR System Council, United Nations Educational, Scientific and Cultural Organization (UNESCO), and the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM). The Belgian partner institutions are not mentioned in this document.

The strategy note **education** does not mention science, nor technology. The strategy note on Digital for Development, which has a big technology focus, contains a part on education. In the note on education there are only two mentions of academia. Their presence as stakeholder is stated to be essential for the success of the level of education.

Additionally there is the strategy note **development education**, which has a higher use of key words. The main focus of the document is to use the already existing expertise of civil society organisations and scientific institutions on development education. These activities are already happening without the intervenance of the government.

The strategy note on **development results** does not use the key words. It does contain a list of references.

The last strategy note by DG Development Cooperation **Belgian development cooperation and the local private sector: supporting sustainable, human development** talks mostly about capacity building of technological innovation and knowhow. It expresses its support and sees the benefits for the local communities in the partner countries.

Flemish government

All policy papers, legal frameworks, and strategy papers can be found on the website of the department of foreign affairs ("Policy Framework", n.d.). They will be addressed in this order. The exact count can be found in the table. The description underneath gives more insight as it explains the context of the use of the key words.

Whereas the federal government has a policy paper each year, the Flemish government has one policy paper for the whole legislature. This document was difficult to analyse as there is not an exclusive dedicated chapter for development cooperation: the policy domain has its own sections and paragraphs throughout the document. The key word use in the documents of the Flemish government also differs from the key word use of the federal government. Words with the same meaning are therefore also included in the word count even though they do not explicitly say science, technology, or academic. The key words used in parts on foreign policy or foreign trade have not been included in the analysis.

Additionally, there are several country strategies, not exclusively for development cooperation partner countries but as well for trade partners such as the United States, France, and the Netherlands. As these strategies are country-specific and not concretely targeting development cooperation, they are not included in the analysis because the aim is to discover general policies.

Strategic note	References	Science-	Techno-	Academic-
Policy Note 2014-2019 (86p)	x	5	6	7
Framework decree on development cooperation (10p)		1	1	0
Decision to implement the Framework decree on development cooperation (16p)		0	0	0
Ministerial decree approving the rules of procedure of the Microfinance Advisory Committee (6p)		0	0	0

Flemish development cooperation in the year 2030 (35p)	x	1	4	0
Strategy paper Southern Africa 2016 (82p)	x	55	18	10

Before starting the analysis of the policy documents, it should be noted that the website of the Flemish government is clearly used as communication tool on the different international policies and programmes. The next extract from the general page on development cooperation also openly states the willingness to use the public sector to improve relations with the partner countries.

> "The mission of the General Representation of the Government of Flanders is to promote a better understanding of the region of Flanders and to facilitate cooperation and exchange between stakeholders in Southern Africa and Flanders, amongst others in arts and culture, research and innovation, education, language and youth policy." ("General Affairs", n.d.)

On the same page, seven diplomatic tools and priorities are mentioned: cultural diplomacy, academic diplomacy, economic diplomacy, good governance and human rights, public diplomacy, youth, and remembrance. The section on academic diplomacy starts with mentioning the objective, after which the Flemish education system is praised as being world top providing a lot of opportunities.

Policy notes

In the **Policy Note 2014-2019 Foreign Policy, International Business, Development Cooperation** the key word technology is used seven times, in the context of climate change mitigation. Furthermore, science is mentioned twice, in the context of encouraging evidence-based health care. More interestingly, academic diplomacy is mentioned four times explicitly. Following extract states the definition and twofold objective of academic diplomacy.

> Together with the knowledge institutes and Flemish ministers responsible for Innovation and Education, I look at how we can give maximum effect to the concept of academic diplomacy. We use the twofold objective:
> (1) actively support Flemish public knowledge institutions from a demand-driven approach to maximise the international opportunities for these actors; and
> (2) actively engage Flemish public knowledge institutions in the day-to-day implementation of the Flemish Government's foreign policy in order to contribute to the image of Flanders as an innovative and learning region of leading quality.

It states that academic diplomacy is used as tool to promote Flanders abroad, especially as trading partner. There is no concrete link with development cooperation or the three Southern African partner countries.

Legislation

In 2007, the **framework decree on development cooperation** was adopted. It only mentions technology once, in the definition of 'sustainable development', and scientific institutions also only once, in the definition of 'indirect actors'. Further on in the decree, 'indirect cooperation' is defined as forms of cooperation whereby the Flemish Government provides financing or co-financing of activities in the context of the development policy of an indirect actor. The indirect actors are mentioned a couple of times more in the decree but without focus on science or scientific institutions.

The Decision of the Flemish Government to **implement the framework decree** of 22 June 2007 on development cooperation does not use the key words.

The ministerial decree approving the **rules of procedure of the Microfinance Advisory Committee** does not use the key words.

Strategy papers

In the **concept note development cooperation anno 2030** scientific institutions are mentioned once when listing multi-actor partnerships. Technological evolutions and research institutions are seen as opportunities in the SWOT analysis, but they are not clearly addressed in the text.

In March 2016 an updated **Strategy paper on Southern Africa** was adopted. In the document, South Africa is mentioned 253 times and Mozambique and Malawi only 93 and 83 times respectively, although there is no priority among the three countries. It can be explained by the fact that South Africa is transitioning into an equal partner, while in Mozambique and Malawi the financial aid still makes up for

a fair share of the Gross National Income ("Vlaamse statistieken ontwikkelingssamenwerking buitenlands beleid", n.d.), 14% and 24% respectively versus 0.04% for South Africa.

Although the university development cooperation network VLIR-UOS is not funded by the Flemish government, they are mentioned in the strategy paper due to their important role. It is also stated that the cooperation with Southern Africa, in particular with South Africa, is mainly one between universities, other knowledge institutions, and companies. However, the strategy paper claims that this cooperation is dynamic and does not require government control, although the Flemish government has been able to play a facilitating role.

Academic diplomacy is again mentioned in this strategy paper, now concretely for development cooperation in Southern Africa, particularly in the sections *Promotion of the Flemish higher education in Southern Africa* and *Cooperation of government to government*. The paper states that it does not limit itself to facilitating contacts and networking between researchers and knowledge institutions, but also identifies opportunities, and contributes, where useful and relevant, to the design and implementation of projects that make these opportunities concrete. Via Flemish academic diplomacy, the strengths of the Flemish higher education provision as a whole and the existing Flemish scholarship programme for foreign students are promoted. Flemish academic diplomacy is also being deployed, at the request of stakeholders, for identifying and facilitating concrete opportunities for cooperation. This is an explicit use of Science Diplomacy.

Government of the Federation Wallonia-Brussels and the Walloon government

The website of Wallonia has pages dedicated to international relations, with a specific page for bilateral and multilateral relations ("Les relations bilatérales et multilatérales", n.d.). Unfortunately all the links on that page give an error message, still upon publication of this research. In the general section with publications, two interesting documents are listed: the last action plan of Wallonie-Bruxelles International from 2016 and a document on the bilateral agreements with Africa. The link to the first document redirects to an empty page, the second one is not publicly accessible.

The website of the Federation Wallonia-Brussels has dedicated pages for the department of international relations, including a page with relevant publications and documents. Development cooperation does not appear on the pages with objectives, activities, or publications.

There is no law on development cooperation on the level of Wallonia or the Federation Wallonia-Brussels.

Further research on the website of Wallonie-Bruxelles International shows a lot of empty pages, including the page dedicated to development cooperation. It was therefore difficult to understand if Wallonie-Bruxelles International has concrete strategy papers. Only the joint policy note for international policies for the legislature 2014-2019 by both governments was found and is therefore the only document addressed in the analysis.

Policy note

The policy note of 43 pages only contains a couple of mentions of the key words. Technology transfer is referenced as the focus point. Noteworthy is a practice that has not been specifically mentioned in the policy papers of the other governments, the creation of an academic chair. The aim of this chair on economy in African countries is to bring leading specialists in the subject together in order to create a network of expertise. It is explained that the chair will be able to organise annual conferences, award prizes to end-of-studies works, develop a specific research program, and establish bridges with the business field.

Thematic analysis of interview data

In this chapter the interviews with key people from the several relevant development cooperation actors of Belgium will be analysed. In a more extended research, policy officers of each of the governments, administrations, agencies, and organisations could be interviewed to compare the differences between the governments. However, this falls outside of the scope of this research. The next table lists the interviewed key people.

Name	Institution/organisation	Position	Date of interview
Inge Vandevyvere	VLIR-UOS	Programme manager	5/7/2018
Sebastiaan Druyts	Cabinet of minister for development cooperation Alexander De Croo	Advisor	12/7/2018
Annemarie Van Der Avort	Federal Public Service Foreign Affairs, Foreign Trade and Development Cooperation	Policy officer	19/07/2018
Guy Rayée	Federal Public Service Foreign Affairs, Foreign Trade and Development Cooperation	Adjunct of the Director-General Development Cooperation	23/07/2018
Kurt Petit	Enabel	Government advisor	24/07/2018
Sander Spanoghe	Foreign Affairs Flanders	Policy officer	31/07/2018
Simon Calcoen	Foreign Affairs Flanders	Policy officer	31/07/2018
Laurence Dewulf	Foreign Affairs Flanders	Programme manager	31/07/2018

First, we consider the changing political position of development cooperation within foreign affairs, afterwards the policies and practices mentioned by the interviewees. The remaining sections in this chapter each describe one of the three dimensions used to assess the policies and practices of Science Diplomacy as described in chapter two. The last part concludes with the opportunities for Science Diplomacy in development cooperation identified by the interviewees. Note that the examples given by the interviewees might not be comprehensive.

Positioning development cooperation

The role of development cooperation and therefore the role of the Attaché Development Cooperation at the embassies, the department development cooperation, and the position of the executive agencies, has been changing in the previous decades. As explained by Sebastian Druyts, there has been an evolution to integrate it into foreign affairs. The adoption of a comprehensive approach by the current government tries to break down the silos between diplomacy, defence, and development cooperation. This is called the '3DLO' approach: Diplomacy, Development, Defence, Law, and Order. The diplomatic career has also been unified for diplomatic affairs, consular affairs, and development cooperation. As Kurt Petit put it: "the ambassador, he is representing this global approach, he is not only the diplomatic side, but he is also responsible for the development side and the defence side." Additionally there is the aim to better integrate the executive agencies within the embassies and consequently improve their workings, as well as to join them at the same physical location. This also helps the visibility of the programmes, according to Kurt Petit, as the partner countries do not see the difference between the multiple actors, they see 'Belgium'.

Development cooperation has historically been rooted in exact sciences and was a very technical department, but now they are trying to move towards a more political approach, also with regards to the relations with partner countries. This way, Belgium can consider all the instruments when trying to achieve a goal in multilateral and bilateral relations. Sebastian Druyts gave the example of the Burundi case a couple of years ago. When the president decided to put aside the constitution and go for a third mandate, the Belgian government decided to suspend their development cooperation and to reorient it towards a more NGO focused cooperation. Laurence Dewulf also acknowledged that development cooperation is now "interfered with the political area."

Sebastian Druyts recollected an argument from professor Alexander Mattelaer, who is connected to the Egmont Institute and now Academic Director of the Institute of European Studies, about the changing

role of diplomacy given social media and fake news. It increases the need to have verified information on which to build policies.

Policies and practices

The situation of development cooperation and the history of the department is important to take into account when considering the current policies and practices, as well as their impact.

All interviewees were asked if they use science, scientists, or scientific research in their policy work. In this section the commonly mentioned policies and practices are summarised. Note that the policy analysis in the previous chapter already indicated that there are no explicit Science Diplomacy policies.

None of the interviewees had heard of the term Science Diplomacy. When the term was brought to their attention, the first thing that came to everyone's mind was policy supporting research. The ACROPOLIS programme, run by VLIR-UOS and ARES-CCD, came up as the main example on the federal level. Annemarie Van Der Avort explained that they usually disseminate their results through seminars and policy briefs, which makes it easy to further disseminate to other departments. The research group KLIMOS under the same programme was also mentioned by Simon Calcoen from Foreign Affairs Flanders. They support the research group to cooperate with South African research institutions.

Additionally, there are research programmes, managed by VLIR-UOS and ARES-CCD, for international cooperation with partners in the South. The Global Minds programme falls under this. One of the aims is to have capacity building of researchers in the South, through joint research or exchanges, both on the individual as well as the institutional level. For Flanders, capacity building also happens through the Special Programme of Research, Development and Research Training in Human Reproduction (HRP), and the Institute of Tropical Medicine Antwerp (ITM), as explained by Sander Spanoghe. They also have a specific form of policy supporting research, called implementation research, which aims to determine the best implementation approaches of policies. Through this approach, scientists become acquainted with the local context in the partner countries and the results can feed back into new policies. This type of research was not mentioned by the interviewees of the federal level.

Neither in these programmes, nor in the new structure for policy supporting research starting in January 2019, is it mandatory to have a partner research institution in the South, it is only recommended. Inge Vandevyvere stated that, in practice, it would be unthinkable for a consortium of researchers to get approved without having a partner in the South.

In Flanders there is no Flemish structure for policy supporting research anymore. Simon Calcoen recalled the existence of 'Steunpunt', an internal support service for several departments of Foreign Affairs Flanders, where policy supporting research questions could be asked. Due to budget cuts this was abolished. Now the policy supporting research happens depending on the programme. For access to health care, HRP gives the main input. They receive core support financing from the Flemish government. The board of HRP, of which the Flemish government is a member, decides on the research topics. Other policy supporting research happens by the Institute of Tropical Medicine Antwerp (ITM), the World Agroforestry Centre (ICRAF), the Clinton Health Access Initiative (CHAI), and the Flemish Institute for Technological Research (VITO). They each have a specific cooperation with the respective government on how to provide their services and if they get direct funding or not.

The cabinet and the Directorate-Generale can ask researchers some additional ad hoc questions. This is possible through the ACROPOLIS programmes, or by addressing scientists who are known through other research programmes. Annemarie Van Der Avort added that it is more difficult to ask these ad hoc questions if there is no available funding.

These ad hoc questions can be used to help prepare the positions of Belgium within the European Union or the United Nations, at international conferences such as climate conferences and UNEP meetings. This practice, although not structural, was mentioned by all interviewees working on the federal level. Although not well-developed, as brought up by Inge Vandevyvere and Guy Rayée, bringing scientists to international conferences is useful to promote the position of the Belgian government, mostly in the technical negotiations.

Another programme mentioned by the interviewees from VLIR-UOS, the cabinet, and the adjunct Director-General, are the scholarships for students of partner countries. Although not a strategic decision, all three agreed that it has a political dimension. It is well received by the partner countries and it also creates a network of contacts of young people with a university degree in the partner

countries. Guy Rayée called it a good investment, Sebastian Druyts called the potential benefits a side effect.

A new practice that was brought up by Sebastian Druyts and Guy Rayée is the annual prize 'Digital4Development'. It aims to bring attention to the possibilities to engage in development cooperation with digital technologies and also shows the public diplomacy side of Science Diplomacy.

Other practices mentioned include inviting rectors on missions to partner countries to promote international collaboration, have scientific consultants prepare the context analysis for country cooperation agreements, and support Belgian research institutions to formalise their cooperation with partners in the south. Examples of such Belgian institutions are CBIOS, ITM, VITO. Laurence Dewulf stated that the Flemish government supports these cooperations, although not necessarily with specific funding.

Laurence Dewulf even stated that research institutions have a societal role to fulfil. This connects well to development cooperation which aims to have an impact for the local populations. She said: "A research institute doesn't have to be totally politically neutral. It's their role to change things in the country. You cannot stick to reports and nice graphs and not make the bridge to the real world where the things actually change." Kurt Petit added that the role of academic institutions is also important in the evaluation phase of the programmes, as Enabel is a learning organisation.

Interestingly, as mentioned by Simon Calcoen, the Flemish department 'Economy, Science, and Innovation' (EWI) which is not part of Foreign Affairs Flanders, also engages in development cooperation. They specifically work together with VITO.

Considering the policies and practices mentioned, it is clear that there is quite some interaction and use of the scientific communities, although not all structured and institutionalised. Most of the practices are managed by VLIR-UOS and ARES-CCD.

Willingness

All interviewees were interested in the topic of Science Diplomacy and were happy to share what is currently happening. The words used to describe Science Diplomacy ranged from 'important', 'interesting', 'needed', over 'willing to continue the practices', to 'not always useful'. Sebastian Druyts stated that it will become more and more important. Most of the ambitions expressed by the policy officers are related to Science in Diplomacy as that is the category of policies and practices that is known best. In this section the willingness to use Science Diplomacy is summarised.

Indicated reasons to engage in Science Diplomacy include the importance to base all international foreign policies on scientific facts, the willingness to increase the strength of our voice through collaboration with research institutions, the need to promote science and to promote science as basis for policy making, a lack of expertise within the administration, as well as the need to be on top of technological developments in order to prevent misuse. This last reason was mentioned by both Sander Spanoghe in the case of access to health care and by Laurence Dewulf in the policy making process. A pragmatic reason to engage in Science Diplomacy and the evidence-based approach, also addressed by Sander Spanoghe, was the increasing resistance to the human rights-based approach.

However, not everyone was as excited to create explicit Science Diplomacy policies and practices due to several reasons. Simon Calcoen said 'scientists are not development actors'.

Guy Rayée stated that the current development cooperation policies are not Science Diplomacy as first and foremost they follow the political priorities made within existing frameworks. He does not expect this to change in the near future. He mentioned that some of his colleagues, with a lot of experience on the ground in the partner countries, do not favour scientific research. They do not believe that long-term research is relevant to their work and see the scientist as someone who is stuck in an ivory tower. Kurt Petit also found this belief in some of his colleagues. Other colleagues are more in favour of using science as a tool in their work. The very specific local context also makes it more difficult for scientist to come up with clear policy recommendations, in other words: "there is no magic formula."

Laurence Dewulf and Annemarie Van Der Avort wished that all programmes be evidence-based. However, Annemarie Van Der Avort added that a deterrent for scientists to engage in Science Diplomacy is the uncertainty that the research results will be used by the policy officers. According to Inge Vandevyvere, the research programmes are evidently part of good development cooperation

policies. With her experience as policy officer working closely with scientists, she is in favour of using the term Science Diplomacy, to improve the conversation between actors and stakeholders on the topic in Belgium.

Capacity

A substantial amount of potential barriers to effectively executing Science Diplomacy were identified by the interviewed policy officers. In this section the most shared barriers and potential reasons for these are outlined.

According to Inge Vandevyvere, the biggest barrier to proper policy supporting research in development cooperation is the difference in expectations from policy officers and researchers. In her perception, policy officers want fast answers and flexibility in the research topics, resulting in practical tools that do not need a lot of time to get acquainted with. The results of the current policy supporting research programmes are said not to be applicable enough for the policy officers. In contrast, the scientists expect time to conclude their research so that the results are qualified for publication. They do not want to be used as consultant, nor take part in the implementation. This tension was confirmed by Sebastian Druyts who stated that the government wants hands-on products, and by Annemarie Van Der Avort who claimed that it takes time for researchers to get acquainted with the administration in order to understand what is really requested from the policy supporting research. To address this issue, regular contact between the scientists and the policy officers is needed, so both sides can ask questions for clarification. Inge Vandevyvere added that trust is crucial in this regard. Guy Rayée formulated that it is important to find a 'win-win situation' where a scientist can become an expert in one of the policy areas and in that way contribute to the development cooperation policies.

A policy supporting research programme is successful when the results are translated into policy. The role of scientists in this translation, as well as the terminology used by both parties, constitute further differences between the views of policy officers and scientists. Annemarie Van Der Avort mentioned policy notes and seminars as good ways to disseminate results from policy supporting research programmes. Inge Vandevyvere made the remark that what happens with the policy notes tends to differ, it is possible that they are just disregarded. Some policy officers claimed that the results of the policy supporting research are not applicable enough. Kurt Petit does not feel the same way, as he said: "the proof of the pudding is in the eating, you have to implement [it], you have to use it and then you see how it can be modified, as well [how it can be] related to specific contexts."

The implementation research that is conducted by the Special Programme of Research, Development and Research Training in Human Reproduction (HRP) for the Flemish programmes in Mozambique has fewer of these problems as the starting premise is to be evidence-based. There is still a critical point where the results have to be translated for wider implementation at country level. As a lot of developing countries have decentralised governance, enough technical capacity is needed at all levels.

Capacity building of scientists is achieved through several programmes, both in Belgium as well as in the partner countries. Annemarie Van Der Avort said that capacity building is a constant point of attention because it depends mostly on individuals, this is also the case for Belgium. Kurt Petit stated that in order to create the context analysis for a programme report, they try to make use of local expertise. However, Sander Spanoghe and Simon Calcoen said that the chief difficulty in writing a Country Specific Policy jointly with the partner country is the lack of capacity, therefore the countries leave the writing to the Belgian administrations.

Inge Vandevyvere identified a human resource problem at the Directorate-Generale Development Cooperation due to a personnel stop. A lot of expertise has been lost, which makes good policy development more difficult. This issue was also raised by Guy Rayée, who stated that there is not enough staff to build capacity in house on all the policy fields and that there is no time to read all the reports published by the international organisations. The capacity issue also causes expertise from own research programmes to go unredeemed as there is no good follow-up.

The peer-review report from 2015 of the OECD (OECD, 2015) stated that one of the main issues was to trickle down to the local level. This was quoted by Sebastian Druyts and Guy Rayée. Kurt Petit addressed this by pointing out the discrepancy in the aim of development cooperation to have an impact on the local population, and the aim of general diplomatic relations with the governments of the partner countries.

Nearly all interviewees mentioned the reduced budgets of the administrations to limit the full engagement in Science Diplomacy. Not all programmes have a concrete budget line for policy supporting research and more would be possible with enough human resources.

Additionally the lack of means in the partner country creates a barrier. Even when a policy is accepted by the partner government it might not be feasible to be implemented on a massive scale due to a lack of capacity or financial means. Supporting the establishment of a sound fiscal system and building capacity are therefore part of the goals of development cooperation, in order to be able to implement policies and practices.

Acceptance

In this section the perception of the acceptance of Science Diplomacy policies and practices by other actors and stakeholders by the interviewees is summed up. As there are no clear explicitly labeled Science Diplomacy policies and practices, it is difficult to assess the explicit acceptance. Still there are some interesting cases of how the scientific evidence is dealt with.

Inge Vandevyvere thinks that a label which is internationally known can be useful, even though it is just labelling what already happens. Annemarie Van Der Avort gave the example of this practice happening in the technical working groups at the climate conferences, as well in the UN environment assembly of UNEP. It gives recognition to the scientists, especially the ones present at the meetings. Another benefit of using science in development cooperation according to Annemarie Van Der Avort is improvement of the governance of Belgian tax-payers' money.

Also, the Belgian policy officers need to accept the external expert input. Sander Spanoghe explains that: “sometimes people working on a programme think they know best themselves and sometimes they do. They might say this is very useful but I’m already overstretched, or their materials don’t fit in the thinking within the countries at ground-level.” This also links to the capacity dimension of Science Diplomacy.

Sebastian Druyts is not sure how science can be misused, especially the type of research into climate change mitigation. Some other types of scientific fields are too fluid, but still then the issue is the interpretation of the scientific research, not the science itself. As an example, he addressed the predicted doubling of population in Africa by 2050. It is a massive problem for the continent, although “the policy officers in Africa talk about the demographic dividend, and the fact that it is a huge potential.”

Sebastian Druyts says he never heard the claim that science would have a Western bias. With his involvement with the managing of the implementation of concrete programmes in Mozambique, Sander Spanoghe has a different experience. He states that a lot of times science contradicts culture, and that the cultural barriers are quite difficult to breach, but that thanks to science it is not totally impossible. In some policy fields it has happened that after the presentation of the evidence, the partner countries will not accept to label it as a policy, but they will still allow the programmes to be rolled out.

Additionally, some cultural absolutists say that they have their own culture and science. Especially when it is put into scripture, scientific evidence to the contrary is easily disregarded. Part of the problem is that a lot of those people tend to label science as ‘Western science’ and even Africans studying abroad become agents of the Western world. A way to overcome this issue, is to support the research institutions in the partner country locally.

Laurence Dewulf also experiences some resistance from the governments of the partner countries, “you have to find a balance between policy and research every time. There is of course the research, but also the context”.

Opportunities

Lastly we address the potential opportunities for Science Diplomacy in development cooperation, as perceived by the interviewees.

Sebastian Druyts was confident that there are a lot of Science Diplomacy practices in place already, and that there is no specific need to improve the policies or practices in that direction. The new structure for policy supporting research for development cooperation will also bring opportunities to engage with

untapped research areas, to seize already existing expertise, and to activate the embassies in deciding which research questions are addressed.

Guy Rayée added that researchers working in policy supporting research programmes should go on the ground and do capacity building locally in the specific context. The local context in a partner country where a programme will be implemented, is very specific. Conflict, fragility, corruption, poor or middle income are all aspects that need to be taken into account. It is difficult for scientists to capture this without being on the ground. Having them explain the results of the research directly where the policies would be implemented will have a better impact. This will also address the issue that the results have to be considered in a culturally sensitive way, as stated by Sander Spanoghe.

To address the issue of translating science into policy, capacity building of both scientists and policy officers to respectively write clearer usable results of the research and to be able to turn research results in policies is needed. This capacity building can potentially happen together, to really learn about each other's terminology and needs. Having a clear definition of the term Science Diplomacy might also help policy officers and scientists understand each other.

The majority of the interviewees expressed a wish for more structured scientific input in their work. Laurence Dewulf suggested that "if you go beyond your pure niche work, it's much easier to find possibilities to find cooperation. It's easier to be more innovative also."

Conclusion

Development cooperation is a particular subfield of foreign affairs, as there is an imbalance between the partners, at the level of financial means and of technical capacity. The aim of development cooperation is to create an impact for the local population, through Official Development Assistance, joint programmes, and capacity building. Although there is no necessity to use science, it occurs. This research addressed if this also happens in Belgian development cooperation, in which ways and what the perception is of the impact by policy officers.

Foremost, the literature review revealed that the definition of Science Diplomacy has not yet settled. What started off as a general term to indicate the use of scientific evidence in diplomacy, has now been further refined by academics to being a diplomatic tool. Recently a couple of policy officers of diplomatic corps have taken ownership of the concept (Gluckman et al., 2017) to move towards a more pragmatic and purpose-driven categorisation. It shows the willingness to engage with the topic, and to improve science and technology policies and foreign affairs policies.

The term Science Diplomacy was not known by the consulted policy officers. Therefore no policy or practice is labeled as Science Diplomacy, nor labeled evidence-based when it came to be with the support of scientific institutions. The evolutions at the European level apparently did not trickle down to the member states, although this had been recommended (Van Langenhove, 2017). Furthermore, the seminar on the topic organised by the Flemish department of Economy, Science, and Innovation (EWI) in December 2016 did not lead to concrete policies. The exception is the explicit mentioning of Academic Diplomacy by the Flemish government in their strategic notes, although this does not get linked to development cooperation explicitly.

Through the analysis of the policy documents and the thematic analysis of the interview data, Science Diplomacy policies and practices were discovered and listed. However, they are not explicitly used as a strategic diplomatic tool in development cooperation, instead they are used as tool to reach the set goals.

Policy areas related to (new) technologies, environment, technical fields, and health care make most use of research capacity and research communities in their practices. This is not an overall practice for all the different fields within development cooperation (on all levels), due to the capacity of the administrations and the limited budget. Political priorities decide which goals of development cooperation get funding for scientific research. Nevertheless, the federal government commits to funding research programmes and research institutions for policy supporting research in its annual budget.

First of all, the majority of the policy officers interviewed in the scope of this research are positive about the use of science and scientific communities in their work. Either way, some also mentioned that not all their colleagues felt the same way. They do not see the benefit of long-term research to support the

policies, as they believe that researchers live in an ivory tower and do not understand the specific local context of development cooperation.

Secondly, if there would be enough capacity, science would be used more, more consistently, as well as more strategically. The translation from science to policies is one of the main barriers to effectively engage with scientific communities. The responsibility of this translation is not clearly defined which results in misunderstanding between the two communities. However, this issue is not specific for development cooperation.

Finally, there are different perceptions on how well Science Diplomacy is accepted by the partner countries. When using Science Diplomacy as a tool in development cooperation, the cultural, religious, and political context needs to be taken into account.

As international institutions and other countries have started to take ownership of the concept, Belgium will have to keep up if it wants to join in the modernisation of soft power diplomacy. Due to the fragmentation of governance in Belgium, it is extra difficult to create a coherent Science Diplomacy policy. Especially when considering that the regions and communities hold the competences of research and universities respectively. The peer review from 2015 of OECD-DAC already stated that the lack of cooperation between the different Belgian channels and actors is an issue.

If a specific Science Diplomacy policy would be adopted in Belgium, it is recommended to integrate it in the comprehensive approach for all foreign affairs policies, as it is a diplomatic tool which can be used to improve relations between countries.

This research examined Belgian development cooperation, which has a strong technical component. Future research could assess the complete department of foreign affairs, especially considering the comprehensive approach. This research can then feed into a comparative research between different countries, both in Europe and beyond. It would also be interesting to have a comparative research between the different governments within Belgium, this would also help address the recommendation of the peer review of the OECD.

References

A propos du CWBCI. (n.d.). Retrieved from http://www.cwbci.be/cgi/bin3/render.cgi?id=0150196_enumeration&ln=ln1&userid=&rubr=gen

Agoro, R. (2018). African Diaspora Scientists as Development Catalysts. *Science & Diplomacy*, 7(2). Retrieved from http://www.sciencediplomacy.org/article/2018/africandiaspora-scientists-development-catalysts.

ARES-CCD. (2014). *Plan Strategique 2017-2026.* Retrieved from https://www.ares-ac.be/images/publications/ARES-CCD-Plan-stratgique-2017-2026.pdf

Barston, R. (2006). Modern diplomacy (3rd ed.). London: Routledge.

Bianca Debaets. (n.d.). Retrieved from http://be.brussels/over-het-gewest/de-gewestregering/bianca-debaets

Belgisch Staatsblad. Wet betreffende de Belgische Ontwikkelingssamenwerking (2013).

Bradshaw, G., & Borchers, J. (2000). Uncertainty as Information: Narrowing the Science-policy Gap. Conservation Ecology, 4(1).

BIO-Invest. (2018). Retrieved from http://www.bio-invest.be/

Bjola, C., & Holmes, M. (2015). *Digital diplomacy*. Routledge.

Boers, E. (2017). *Exploring the Impact of the EU's Promotion of Regional and Inter-regional Processes in the Black Sea Region through Science Diplomacy*. Brussels: Institute of European Studies.

Cama, T., & Henry, D. (2017). Trump: We are getting out of Paris climate deal. TheHill. Retrieved 12 January 2018, from http://thehill.com/policy/energy-environment/335955-trump-pulls-us-out-of-paris-climate-deal

Choi, B. (2003). Bridging the gap between scientists and decision makers. *Journal Of Epidemiology & Community Health*, 57(12), 918-918. http://dx.doi.org/10.1136/jech.57.12.918

Choi, B. (2005). Can scientists and policy makers work together?. *Journal Of Epidemiology & Community Health*, 59(8), 632-637.

Coopération au développement: Wallonie-Bruxelles a rayé 3 pays de sa liste prioritaire. (2018). Retrieved from https://www.rtbf.be/info/belgique/detail_cooperation-au-developpement-wallonie-bruxelles-a-raye-3-pays-de-sa-liste-prioritaire?id=9195710

Copeland, D. (2017). *It Won't Come Easy: Seven obstacles to a Science Diplomacy Renaissance*. Calgary: Canadian Global Affairs Institute.

Cull, N. (2006). "Public Diplomacy" before Gullion: The evolution of a phrase. *Center on Public Diplomacy Blog.* Retrieved from http://uscpublicdiplomacy.org/blog/public-diplomacy-gullion-evolution-phrase

Deadato, E., & Borkowska, I. (2014). *Universities as actors and instruments in diplomacy. The academic soft power potential*. Valdai. Retrieved from http://valdaiclub.com/files/10959/

Department. (n.d.). Retrieved from https://www.fdfa.be/en/department

Doyle, T., & Seal, G. (2015). Indian Ocean futures: new partnerships, new alliances and academic diplomacy. *Journal Of The Indian Ocean Region*, 11(1), 2-7. doi: 10.1080/19480881.2015.1019994

Enabel. (n.d.). Retrieved from https://www.enabel.be/

European Commission (2018), *Horizon 2020 structure and budget,* Retrieved from http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/applying-for-funding/find-a-call/h2020-structure-and-budget_en.htm

Federale regering. (2014). *Regeerakkoord*.

General Affairs. (n.d.). Retrieved from https://www.flanders.org.za/general-affairs

Gluckman, P.D., Turekian, V., Grimes, R.W. & Kishi, T. (2017). Science Diplomacy: A Pragmatic Perspective from the Inside. Science & Diplomacy, 6(4). http://www.sciencediplomacy.org/article/2018/pragmatic-perspective

Higgott, R. (2017). *Enhancing the EU's International Cultural Relations: The Prospects and Limits of Cultural Diplomacy.*Brussels: Institute of European Studies.

Houët, N. (2014). *Towards an EU science diplomacy, The coordination of science & technology policy in the European Neighbourhood.* College of Europe.

James, M., & Van Langenhove, L. (2017). The practice of Science Diplomacy studied from the Positioning Theory angle. In *3rd International conference on Public Policy.* Singapore.

Kickbusch, I., Silberschmidtb, G., & Buss, P. (2007). Global health diplomacy: the need for new perspectives, strategic approaches and skills in global health. *Bulletin Of The World Health Organization*, 85(3), 230-232. doi: 10.2471/blt.06.039222

Kingah, S., & Van Langenhove, L. (2012). Determinants of a regional organisation's role in peace and security: the African Union and the European Union compared, *South African Journal of International Affairs*, 19(2), 201-222. doi: 10.1080/10220461.2012.706890

Lansloot, T. (2018). Belgische staatsstructuur compliceert buitenlands beleid. Retrieved from https://doorbraak.be/icbb-compliceert-buitenlands-beleid/

Les relations bilatérales et multilatérales. (n.d.). Retrieved from http://www.wallonie.be/fr/dossier/les-relations-bilaterales-et-multilaterales

López de San Román, A., & Schunz, S. (2017). Understanding European Union Science Diplomacy. *JCMS: Journal Of Common Market Studies*. http://dx.doi.org/10.1111/jcms.12582

McGeown, K. (2005, May 03). *China's panda ambassadors*. Retrieved from http://news.bbc.co.uk/2/hi/asia-pacific/4508873.stm

Moragues-Canovas, M. (2017). *European Science Diplomacy at the Crossroads of Research & Innovation and EU´s External Action and Foreign Policies* (Master of Science). Vrije Universiteit Brussel.

Murray, S. (2013). Moving beyond the ping-pong table: sports diplomacy in the modern diplomatic environment. *Public Diplomacy Magazine*, (9), 11-16.

Nye, J. (2008). Public Diplomacy and Soft Power. T*he ANNALS Of The American Academy Of Political And Social Science*, 616(1), 94-109. doi: 10.1177/0002716207311699.

OECD (2015). *OECD Development Co-operation Peer Reviews: Belgium 2015*, OECD Development Co-operation Peer Reviews, OECD Publishing, Paris, https://doi.org/10.1787/9789264239906-en.

Ontwikkelingssamenwerking. (n.d.). Federale Overheidsdienst Buitenlandse Zaken. Retrieved from https://diplomatie.belgium.be/nl/Beleid/Ontwikkelingssamenwerking

Overheid. (2017). Belgium.be. Retrieved from https://www.belgium.be/nl/over_belgie/overheid

Practice. (n.d.). In Merriam-Webster's online dictionary (11th ed.). Retrieved from http://www.m-w.com/dictionary/practice

Policy. (n.d.). In Merriam-Webster's online dictionary (11th ed.). Retrieved from http://www.m-w.com/dictionary/policy

Policy Framework. (n.d.). Retrieved from https://www.fdfa.be/en/policy-framework
Schoemakers, I. (2009). Op haar post. In gesprek met vrouwelijke topdiplomaten. Amsterdam: Uitgeverij Archipel.

Rat für Entwicklungszusammenarbeit, Solidarität und Integration in der Deutschsprachigen Gemeinschaft. (n.d.). Retrieved from http://www.ostbelgienlive.be/desktopdefault.aspx/tabid-221/218_read-30106/

Regering van het Brussels Hoofdstedelijk Gewest. (2014). Gewestelijke Beleidsverklaring.

Regierung der Deutschsprachigen Gemeinschaft Belgiens. (2017). *Regierungserklärung*.

Special Evaluation Office. (n.d.). Retrieved from https://diplomatie.belgium.be/en/policy/development_cooperation/how_we_work/special_evaluation_office

Van Langenhove, L. (2016). Science Diplomacy: New Global Challenges, New Trend. RSIS Commentary.

Van Langenhove, L. (2017). *Tools for an EU Science Diplomacy*. European Union.

Vlaamse regering. (2014). *Regeerakkoord Vlaamse Regering 2014-2019.*

Vlaamse statistieken ontwikkelingssamenwerking buitenlands beleid. (n.d.). Retrieved from http://www.statistiekvlaanderen.be/statistiek-ontwikkelingssamenwerking-buitenlands-beleid

Wallensteen, P. (2012). *Academic Diplomacy : The Role of Non–Decision Makers in Peacemaking.* In Peacemaking: From Practice to Theory (pp. 457–476). Santa Barbara. Retrieved from http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-163348

Wallonie-Bruxelles International. (n.d.). Retrieved from http://www.wbi.be/en/frontpage

Walt, S. (2005). The relationship between theory and policy in international relations. *Annual Review Of Political Science*, 8(1), 23-48.

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