# The Merits and Demerits of Fragmentation in the Global Water Governance Architecture:

## The cases of the High Level Panel on Water and the UN Water Dialogues

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# Abstract

The global water governance architecture (GWGA) is fragmented, with many organizations working towards sustainable management of water resources. Growing concern over the onset of a global water crisis and the ambition expressed in the Sustainable Development Goals begs the question whether this architecture will be able to deliver on what the world needs.

Proposing an adapted typology of fragmentation, this research explores the level of fragmentation of the global water governance architecture and its consequences. It then delves into two initiatives that have emerged in response to this fragmentation. The first initiative concerns a High Level Panel on Water, which can be characterized as a club or minilateral approach. Its options and limitations regarding the management of fragmentation in the global water governance architecture are described. The second initiative is a series of Water Dialogues held in the United Nations General Assembly, in combination with the proposal for a UN intergovernmental body on water. This multilateral initiative takes a more traditional approach to the integration-fragmentation dichotomy. The research explains the options and limitations that these Dialogues offer for managing fragmentation, and describes the merits and demerits of fragmentation according to the participating UN Member States.

A mapping exercise reveals the GWGA to be characterized by elements of cooperative and conflictive fragmentation, but showing potential for synergies through strengthened coordination. Consequences of this fragmentation include the emergence of minilateral arrangements, such as the HLPW. While this Panel has succeeded in pushing water higher on the global political agenda, it has not demonstrated it could address structural problems in the GWGA. The UNGA Water Dialogues have not been able to do so either, but rather resulted in negotiation gridlock. Both responses were confronted by considerable stability of equilibrium in the GWGA. It was concluded that the merits and demerits of fragmentation do indeed play a major role in proposals and strategies for institutional development in the GWGA.

Suggestions for further research includes: theoretical exploration of the GWGA concept and the adapted fragmentation typology used in this study; examination of the HLPW Valuing Water discourse and its uptake among GWGA stakeholders; and exploration of the looming norm conflict regarding the "integration paradox".



**Keywords**: global governance architecture, global water governance, institutional complexity, fragmentation (management), High Level Panel on Water

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# Table of Contents

# List of tables



# List of figures

# List of abbreviations

| | |
|---|---|
| AOSIS | Alliance of Small Island Developing States |
| AMCOW | African Ministers' Council on Water |
| CEB | (UN) System Chief Executives Board for Coordination |
| CESCR | Committee on Economic, Social and Cultural Rights |
| CRED | Centre for Research on the Epidemiology of Disasters |
| ECOSOC | (UN) Economic and Social Council |
| FAO | (UN) Food and Agriculture Organization |
| GDP | Gross Domestic Product |
| GEMI | Integrated Monitoring of Water and Sanitation Related SDG Targets |
| GLAAS | Global Analysis and Assessment of Sanitation and Drinking Water |
| GWGA | Global Water Governance Architecture |
| GWH | Geneva Water Hub |
| GWP | Global Water Partnership |
| HELP | High-level Experts and Leaders Panel on Water and Disasters |
| HIC | High Income Country |
| HLPF | High-Level Political Forum on Sustainable Development |
| HLPW | High Level Panel on Water |
| IBW | Intergovernmental Body on Water |
| ICJ | International Court of Justice |
| ICWE | International Conference on Water and the Environment |
| IHP | International Hydrological Programme |
| IWRM | Integrated Water Resources Management |
| JMP | Joint Monitoring Programme for Water Supply and Sanitation |
| LDC | Least Developed Country |
| LIC | Low Income Country |
| LLDC | Land Locked Developing Country |
| LMIC | Lower Middle Income Country |
| MDG | Millennium Development Goal |
| OECD | Organization for Economic Co-operation and Development |
| PGA | President of the United Nations General Assembly |

| | |
|---|---|
| PBI | Programme Budget Implication |
| SDG | Sustainable Development Goal |
| SIDS | Small Island Developing States |
| SIWI | Stockholm International Water Institute |
| SWA | Sanitation and Water for All |
| UMIC | Upper Middle Income Country |
| UNCHE | UN Conference on the Human Environment |
| UNDESA | UN Department of Economic and Social Affairs |
| UNECE | UN Economic Commission for Europe |
| UNEP | UN Environment Programme |
| UNESCO | UN Educational, Scientific and Cultural Organization |
| UNFCCC | UN Framework Convention on Climate Change |
| UNGA | UN General Assembly |
| UNICEF | UN Children's Fund |
| UNISDR | UN Office for Disaster Risk Reduction |
| UNSC | UN Security Council |
| UNSG | UN Secretary General |
| UNSGAB | UN Secretary-General's Advisory Board for Water and Sanitation |
| VWLC | Valuing Water Leadership Coalition |
| WASH | WAter, Sanitation and Hygiene |
| WBG | World Bank Group |
| WEF | World Economic Forum |
| WESP | World Economic Situation Prospects |
| WFD | (EU) Water Framework Directive |
| WHA | World Health Assembly |
| WHO | World Health Organization |
| WINS | Water Information Network System |
| WRI | World Resources Institute |
| WWAP | (UN) World Water Assessment Programme |
| WWC | World Water Council |
| WWDR | World Water Development Report |
| WWF | World Water Forum |

# 1. Introduction

Water is essential to human well-being, environmental sustainability and economic prosperity (ECOSOC 2017). Water connects nearly all aspects of life on earth, making this resource and its governance both a powerful enabler as well as a major inhibitor to poverty eradication and sustainable development. Currently, there is growing concern over a global water crisis among public, private and civil society actors (OECD 2017a, WEF 2017, water.org 2017). Over two billion people still have no access to safe drinking water and sanitation, while ever more people face water-related disasters and water scarcity (WHO 2017). Floods have become more frequent, affecting almost 2.5 billion people between 1994 and 2013 (CRED 2015). At present, two thirds of the world's population (4 billion people) lives in areas affected by severe water scarcity for at least one month a year (Mekonnen & Hoekstra 2016). Moreover, water supply becomes more erratic and uncertain as a result of climate change. At the same time, demand for water will rise exponentially due to population growth, rising incomes and urbanization. Without urgent action, water scarcity is expected to cost regions such as the Sahel and the Middle East up to six percent of their GDP by 2050 (World Bank 2016). Despite this crisis, frequently referred to as a crisis of governance (UNESCO 2006, OECD 2011a), water remains undervalued and mismanaged (UNSGAB 2015).

The 2030 Agenda for Sustainable Development recognizes the need for transformative change in both the water sector and sustainable development as a whole (UNGA 2015). It was adopted in 2015 by the United Nations General Assembly (UNGA) and presents an ambitious plan of action, set out in seventeen integrated Sustainable Development Goals (SDGs). This includes a dedicated Water Goal, SDG6, which aims to ensure availability and sustainable management of water and sanitation for all by 2030 (UNGA 2015). The SDGs build on the preceding Millennium Development Goals (MDGs) while taking a more comprehensive and integrated approach. Accordingly, while the MDG targets related to water focused mainly on drinking water and sanitation, SDG6 includes additional targets on water quality, water use efficiency, resource management and ecosystems. This dedicated Water Goal is considered a hard-fought and explicit acknowledgement of the importance of water to sustainable development (UNSGAB 2015, OECD 2017a).

Achieving our global water goals requires adequate governance systems and implementation across all levels of governance (UNESCO 2006, UNGA 2015). While the global dimension of water-related problems has long been neglected, it is increasingly recognized that local, national, and basin-level water issues are interlinked within a global water system (Vörösmarty et al. 2013). Awareness of climate change and global trade flows as global drivers of water-related problems have resulted in more attention to international water politics and multilateralism (Pahl-Wostl 2015). Over the past several decades an institutional complex has emerged, which is hereafter referred to as the global water governance architecture (GWGA). It encompasses an extensive web of organizations, regimes, and other forms of principles, norms, regulations, and decision-making procedures, both within and outside of the United Nations (UN). While this diversity of institutions in the GWGA has considerable merits, the resulting institutional complexity also presents significant challenges (Pahl-Wostl 2015). In response to these challenges various initiatives have emerged advocating for change (UNSGAB 2015, Hungary 2016).

## 1.1. Problem description

In light of the ambitious 2030 Agenda, both policymakers and scientists have raised their concern regarding the ability of the GWGA to support the pursuit of the water-related goals and targets. In 2006 the "Delivering as One" report by the UN High-level Panel on System-wide Coherence already recognized the fragmented nature of the water sector, as well as the competition for limited resources, lack of a collaborative framework and little evidence of impact. It concluded that the fragmented institutional structure did not offer the appropriate framework to effectively address these issues (UNGA 2006). More recently, several UN Member States and international organizations have stated that the current system cannot deliver what is needed for effective water governance (Gupta et al. 2013, UNSGAB 2015). Similarly, various academics argue that existing water governance, particularly its global dimension, is only loosely institutionalized and hence not sufficiently equipped to deal with increasing pressure on water resources (Dellapenna et al. 2013). Longstanding criticism regarding the GWGA often concerns fragmentation, and how this results in a lack of leadership, inadequate funding and pervasive policy gaps (UNGA 2006, Pahl-Wostl, Gupta & Petry 2008). However, fragmented institutional architectures can also offer benefits that a fully integrated institutional framework could not. Examples of this are flexibility across issues and adaptability over time in the case of the institutional complex for climate change (Keohane & Victor 2011). This research takes a look at the merits and demerits of fragmentation in the institutional complex for water, as they are considered important elements in proposals for future institutional development. By doing so, it aspires to contribute to the debate regarding the apparent lack of consensus in academic literature on the consequences of fragmentation (Biermann et al. 2009).

The current GWGA covers a wide array of institutions. However, there is no UN agency that has water as its exclusive mandate (Gupta et al. 2013). Instead, there are over thirty UN entities that deal with water in some way, in many cases treating it as a marginal issue (UNSGAB 2015). UN-Water was established in 2003 as an inter-agency mechanism for the coordination of UN activities on water, but its effectiveness has been disputed (Baumgartner & Pahl-Wostl 2013). In recent years, various high-level panels have been established in and outside of the formal UN structure. Moreover, there is a myriad of non-UN international organizations working on global water governance. Examples include the Global Water Partnership (GWP), Sanitation and Water for All (SWA) and the World Water Council (WWC). There is also a variety of international conferences and forums that meet on a regular basis, but there is no cohesive engine that binds them (OECD 2017a). As such, the current GWGA is considered highly fragmented, while its coordinating capacity is deemed inadequate (UNGA 2006, Pahl-Wostl, Gupta & Petry 2008, OECD 2015a, Winpenny et al. 2016). With the multitude of actors and processes at different levels, global water governance has become exceedingly complex. The responsibilities and mandates of the various institutions can be ambiguous and often overlap (Pahl-Wostl 2015, OECD 2016). As a result, actors in the GWGA have raised concerns about a lack of institutional awareness among their peers, which constrains discussions and decision-making (UNGA 2017a). This results in the need to determine the type and degree of fragmentation in this institutional complex.

While the need for a different approach to the GWGA is increasingly recognized, what changes are desired remains heavily debated (Pahl-Wostl et al. 2013, Woodhouse & Muller 2017). In recent years, a wide variety of initiatives has emerged in response to the fragmentation and resulting complexity of the GWGA. This research focuses on two of those responses, which are distinctly different but nonetheless related. The two are chosen because they represent the most recent examples of respectively 'minilateral' and multilateral responses to GWGA fragmentation.

The first response is the newly emergent High Level Panel on Water (HLPW), launched early 2016 by UN Secretary-General (UNSG) Ban Ki-moon and World Bank Group (WBG) President Jim Yong Kim. The HLPW had a two-year mandate geared towards achieving SDG6 and other water-related goals and targets. The Panel sought to 'motivate effective action' relating to water and 'advocate on financing and implementation' (HLPW 2016b p4). In contrast to other high level panels, the HLPW's membership consisted exclusively of incumbent Heads of State and Government. This feature was to enable the panel to provide much-needed leadership for a comprehensive approach to water. Another interesting aspect of the HLPW is its link with the former UNSG's Advisory Board on Water and Sanitation (UNSGAB). UNSGAB was established in 2004 and brought together a group of eminent persons to advise on solving the main global water and sanitation challenges. Their outcome report (UNSGAB 2015) included several recommendations on the structure of the GWGA, some of which were expected to be taken up by the HLPW. This positioned HLPW to play a key role in shaping the debate on transformative change for the GWGA and raises the question how it sought to manage fragmentation.

The second response are the Working-Level Dialogues on Water that were held in the UN General Assembly (UNGA) on the integration and coordination of UN work on water-related goals and targets. The dialogues were the result of the UNGA resolution on the International Decade for Action, "Water for Sustainable Development" 2018-2028, which was adopted in December 2016. The general objective of this international decade is to create "greater focus on the sustainable development and integrated management of water resources … in order to help to achieve internationally agreed water-related goals and targets" (UNGA 2016 p4-5). It also requested the president of the UNGA to convene two working-level dialogues "to discuss improving the integration and coordination of the work of the UN on water-related goals and targets" (UNGA 2016 p5-6). Two working-level dialogues took place in 2017 and included discussion of a proposal for the creation of a UN Intergovernmental Body on Water for the 2030 Agenda. The initial responses to this proposal ranged from strong support to fierce opposition and provide an interesting view on the political lay of the land regarding change in the GWGA.

## 1.2. Research aim

In the context of the 2030 Agenda, the aim of this research is to contribute to a better understanding of the merits and demerits of fragmentation in the GWGA, by highlighting two initiatives that have emerged in response to this fragmentation (HLPW and UNGA Water Dialogues), and determining how they seek to manage fragmentation.

The thesis first provides a map of the current GWGA and determines the degree of fragmentation in the GWGA as well as its consequences. This gives a first look into the merits and demerits of fragmentation.

Second, the research examines the emergence of the HLPW as a response to the (consequences of) fragmentation in the GWGA. Conceptually, the Panel is considered a club or "small-n agreement" (Biermann et al. 2009) and a form of minilateralism (Naím 2009). As such, the Panel is expected to have particular options and limitations regarding the management of fragmentation in the GWGA. The research aims to provide an understanding of these options and limitations and considers whether or not this response implies de-fragmentation.

Third, the research explores the set of Working-Level Dialogues on Water held in the UNGA, in combination with the proposal for a UN intergovernmental body on water. Distinctly different from a club-like perspective, this response takes a more traditional approach to the integration-fragmentation dichotomy. The proposal in question called for an integrated and comprehensive regime for water, fuelling the debate in the UNGA. The research aims to provide an understanding of the options and limitations that such a proposal offers for managing fragmentation. It delves into the emergence of the dialogue, its driving actors and outcomes. More importantly, the research considers the merits and demits of fragmentation according to the UN Member States that participated in the dialogues. This resulted in a synopsis of the current political state of affairs in GWGA. Where possible, points of convergence that subsequent dialogues could build upon are identified and potential avenues for follow-up are presented.

## 1.3. Research questions

The research thus answers the following general research question:

- *What are the merits and demerits of fragmentation in the global water governance architecture, and how do different responses seek to manage this fragmentation?*

It does so by focusing more specifically on the following specific research questions:

1. *What is the degree of fragmentation in the global water governance architecture and what are the consequences for governance?*
2. *Why did the High Level Panel on Water emerge, and what are its options and limitations for the management of fragmentation?*
3. *Why did the series of UN General Assembly Working-Dialogues on Water emerge, and what are its options and limitations for the management of fragmentation?*

## 1.4. Methods

This study is first and foremost a qualitative research. The next chapter provides a conceptual framework regarding fragmentation in global governance architectures pertaining to water, based on literature study. It builds on the notion of global governance architecture by Biermann et al. (2009), merging it with global water governance (Pahl-Wostl, Gupta & Petry 2008) to conceptualize the GWGA. The conceptual framework further incorporates concepts such as institutional complexity and fragmentation management (Zelli & Van Asselt 2013), degrees of fragmentation and its consequences (Biermann et al. 2009) and minilateralism (Naím 2009).

The third chapter addresses the degree of fragmentation in the GWGA and identifies the consequences this has for its governance (specific research question 1). The first step in this process is a mapping exercise that provides an overview of the most significant actors in the GWGA, their responsibilities and mandates. The next step is an analysis of the degree of fragmentation in this architecture and identification of major consequences. The majority of the chapter relies on literature study, including academic papers on the institutions of global water governance (e.g. Pahl-Wostl, Gupta & Petry 2008, Woodhouse & Muller 2017), policy papers and official documentation of the relevant institutions. Some contextual input is drawn from interviews held in the context of the HLPW (an overview of respondents can be found in Annex I) and participant observation during the UNGA working-dialogue on water.

Chapter four explains the emergence of the HLPW as a response to the fragmentation in the GWGA and its consequences. The chapter aims to provide an understanding of the options and limitations of the Panel for managing this fragmentation (specific research question 2), and considers whether this response implies de-fragmentation. The research first provides an analysis of the Panel's inception, driving actors, modus operandi and achievements. Some academic literature, *inter alia* on clubs, small-n agreements and minilateralism, is used to put the panels emergence in perspective. However, most of the data was gathered using semi-structured interviews and text analysis. Ten semi-structured interviews were held with five representatives of HLPW member states and five representatives of UN organizations. Sampling occurred through chain-referral, or snowball sampling. Four interviews were conducted in November 2016 at the Budapest Water Summit in Hungary. Three were conducted in December 2016, two by telephone and one at the Planetary Security Conference in The Hague, The Netherlands. The remaining three were conducted in July 2017 at various UN organizations in Rome, Italy. Most of these interviewees were high-ranking officials representing their country in the HLPW or leading in the field of water at their respective organizations. The small number of interviews is seen as a limitation of this study, and resulted from the difficulty of gaining access to these high-level representatives. The interviews were semi-structured based on key subjects, including the emergence of the HLPW, its mandate, and the need for transformative change. The basis for the questionnaire can be found in Annex II. Text analysis was performed on a wide range of official documentation, press statements, presentations and background notes (e.g. HLPW 2016b).

Chapter five deals with a different type of response to fragmentation in the GWGA, namely the set of Water Dialogues held in the UNGA. A special focus is the proposal for a UN intergovernmental body on water, to which these dialogues are implicitly linked. The options and limitations of this proposal in terms of fragmentation management are analysed, as well as UN Member States perspectives on the merits and demerits of fragmentation (specific research question 3). The vast majority of data for this chapter was obtained through remote participant observation during the two Water Dialogues. Both working-dialogues were recorded and are available on the UN video portal "UN Web TV", which allowed for a complete transcription of over eight hours of debate, including statements by 72 participants. Where appropriate, these data are supplemented by text analysis of relevant documentation.

The final chapter presents the overall conclusion and discussion of the research. It brings together the conclusions of the previous chapters and answers the general research question. To conclude, the chapter presents suggestions for further research as well as potential avenues for political follow-up.

# 2. Conceptual framework

The first aim of this chapter is to provide the basis for accurate and consistent use of concepts throughout this study. As Oran Young put it: "We are all free to attach whatever meanings we choose to key concepts. Nonetheless, it is essential to use concepts precisely and consistently" (Young 2013 p88). The second aim of this chapter is to present the intended contribution to the existing body of literature on fragmentation of global governance architecture, and for global water governance (GWGA) in particular. The main concepts are defined and their relation to the research explained, followed by further theoretical considerations and associated hypotheses (an overview of the hypotheses is given in Annex III). The chapter concludes with an overview of the conceptual framework.

One of the main drivers of this research is the lack of consensus in academic literature on the consequences of fragmentation in global governance architecture, as identified by Biermann et al. (2009). A wide variety of perspectives exists, ranging from mostly negative to predominantly positive. Analysis of the nature and degree of fragmentation has since been performed for a variety of issue areas in the environmental policy domain, most commonly for climate change. However, until now, the water realm has not been the subject of such studies. This research aims to fill this gap by providing an analysis of fragmentation in the GWGA in chapter 3.

Moreover, the merits and demerits of a fragmented governance architecture are professed to play an important role in proposals and strategies for future institutional development in various environmental policy domains (Biermann et al. 2009; Zelli & Van Asselt 2013). This research examines whether this holds true for the water realm as well (hypothesis i). It identifies the merits and demerits of the fragmented GWGA and examines their influence on two recent responses that seek to manage this fragmentation in chapters 4 and 5.

In order to facilitate the abovementioned analysis a number of concepts need further explanation and conceptualization. This section starts with an elaboration of what is meant by GWGA, building on the notions of global water governance (Pahl-Wostl, Gupta & Petry 2008) and global governance architecture (Biermann et al. 2009). It then delves into fragmentation of such architectures and various related elements (Keohane & Victor 2011; Zelli & Van Asselt 2013).

## 2.1. Global water governance architecture

To obtain a better understanding of fragmentation in the GWGA it is important to be aware of its origins. One building block is the concept of water governance, defined here as "the social function that regulates development and management of water resources and provisions of water services at different levels of society and guiding the resource towards a desirable state and away from an undesirable state" (Pahl-Wostl 2015 p26). It incorporates both Oran Young's notion of the social function (Young 2013 p88) and the widely used definition attributed to Rogers and Hall (2003). Pahl-Wostl's definition is chosen because it reflects both a comprehensive approach and practical considerations, as well as analytical rigor. Similar definitions are used by the Global Water Partnership (GWP), the World Health Organization (WHO) and the UN Educational, Scientific and Cultural Organization (UNESCO; 2006).

This context of water governance serves as a backdrop against which the concept of global water governance has emerged. This global perspective on water governance is in fact quite recent (Pahl-Wostl 2015) and the dimension has been neglected and disputed for a long time (Pahl-Wostl et al. 2002). However, drivers of water governance have become increasingly global. Massive flows of virtual water are connected to food trade. Various water-related problems cannot be solved at the local, national or basin level alone. Climate change severely impacts water governance and management. These issues underpin the importance of addressing water governance at a global level and explain why multilateralism has received increasing attention in international water politics (Gleick and Lane 2005; Conca 2006; Varady & Iles-Shih 2011). Gupta and Pahl-Wostl (2013) also identify several political reasons for water governance at the global level, including preventing free-riding, policy coherence, sharing information and experience, and transfer of technologies and resources. The definition for global water governance in this research is based on Pahl-Wostl, Gupta and Petry (2008), who define it as "the development and implementation of norms, principles, rules, incentives, informative tools, and infrastructure to promote a change in the behaviour of actors at the global level in the area of water governance" (Pahl-Wostl, Gupta & Petry 2008 p422).

Another major building block is the theory of global governance architectures. Now widely used in literature, a global governance architecture is defined as "the overarching system of public and private institutions that are valid or active in a given issue area of world politics. This system comprises organizations, regimes, and other forms of principles, norms, regulations, and decision-making procedures" (Biermann et al. 2009 p15). Governance architectures are considered akin to and interchangeable with institutional complexes. The term global (water) governance architecture is used when referring to the subject of this study. The term institutional complex is applied in a more general context. This research favours the term institutional complex over regime complex because, arguably, it does not imply a normative bias towards or against centralized institutional settings (Zelli & Van Asselt 2013). Institutional complexes are often characterized by high degrees of fragmentation, as discussed in the following section.

Increasingly there has been mentioning of a global water architecture, which is considered here a shorthand for GWGA. The UN Secretary-General's Advisory Board on Water and Sanitation (UNSGAB) report (2015) prominently featured the notion of global water architecture and put forward recommendations on how to improve it. One year after this report, a proposal for 'a more effective global water architecture for the 2030 Agenda' was presented, advocating for a UN intergovernmental body on water (Hungary 2016). Most recently, OECD Secretary-General Angel Gurría emphasized the need for a robust global water architecture when he pleaded for putting water at the centre of the global agenda (OECD 2017a). In addition, there is some academic literature referring to GWGAs, most notably Schnurr (2008) and Brüntrup et al. (2014). Nonetheless, not a single definition of the GWGA is provided in any of these documents. On a positive note, this provides more freedom to define the concept. In this research, the GWGA is defined as the overarching system of public and private institutions that are valid or active in global water governance, which comprises organizations, regimes, and other forms of principles, norms, regulations, and decision-making procedures.

## 2.2. Fragmentation of institutional complexes

The GWGA represents an institutional complex, comprising all institutions that govern the environmental policy domain (Wilderberg 2016). The study of institutional complexes, in contrast to the study of a single regime, is relevant because of the proliferation of interdependent and interconnected institutions concerned with global water governance. The water realm is not regulated by any single international regime, nor is dominated by one. As Gupta et al. (2013 p2) put it, "the water field has no natural centre of gravity at the global level". Instead it can be considered a "patchwork of international institutions that are different in their character (organizations, regimes, and implicit norms), their constituencies (public and private), their spatial scope (from bilateral to global), and their subject matter (from specific policy fields to universal concerns)" (Biermann et al. 2009 p16). This is what is understood in this study as the fragmentation of the GWGA.

In line with the work of Biermann et al. (2009) and Zelli and Van Asselt (2013), this study considers fragmentation to be a relative concept that is an inherent structural characteristic of institutional complexes. It is considered to be a scale of which the extremes, complete anarchy on the one hand and universal integration on the other, are theoretically conceivable but non-existent in practice. An important aspect is that the concept of fragmentation is considered value-free. It is neither negative, nor positive, and it does not imply a bias towards any particular institutional setting. Where this study diverges somewhat from the typology by Biermann et al. (2009) is the consideration that the concept of architecture is value-free as well, and that the existence of an "architect" is not assumed. This study recognizes that architectures are likely to be the result of incremental processes and institutionalization, and that therefore no single architect exists. Instead, this study assumes the existence of a multitude of architects actively and deliberately designing elements of global governance architectures over time. Architects do not necessarily need to be aware of each other's existence. It is even conceivable that multiple architects are working on the same element at the same time whilst being ignorant of each other's activities.

## 2.3. Types and degrees of fragmentation

To what extent an institutional complex is fragmented can be determined as the "degree of fragmentation", a typology developed by Biermann et al. (2009). It allows for comparative analysis of different issue areas, but also for the study of overarching phenomena. In this case the latter is more relevant, as characterizing the fragmentation in the GWGA helps to identify some of its other elements, such as its consequences, responses and management options. The original typology uses three criteria to distinguish between degrees of fragmentation. These are the "institutional integration and degree of overlaps between decision-making systems; existence and degree of norm conflicts; and type of actor constellations" (Biermann et al. 2009 p19).

- *Institutional integration* describes to what extent the arrangements of institutional complex are integrated. A higher degree of institutional integration indicates a more centralized institutional complex, and more overlap and alignment of decision-making systems.
- *Norm conflicts* concern the relationship between norms and principles of different institutions, and indicate to what extent they are integrated or conflicting.

- *Actor constellation* is considered a measure of an institutional complex' inclusivity of actors, and describes to what extent membership of various institutions overlap, and who are excluded.

Building on these criteria, the authors introduce three types of fragmentation: synergistic, cooperative and conflictive fragmentation. These types and criteria are not discrete values, but they are rather part of a continuum.

- *Synergistic fragmentation* is characterized by a core institution which includes (nearly) all countries and offers effective, detailed general principles regulating policies in separate but integrated institutional arrangements.
- *Cooperative fragmentation* can be described by a number of loosely-integrated institutions with their own decision-marking procedures, where there is ambiguity about the relationship between the norms and principles of different institutions, and or the core institution does not comprise those countries important in the issue area.
- *Conflictive fragmentation* occurs when the institutional complex consists of different institutions that show very limited connectedness and or have distinct and unrelated decision-making procedures, adhere to conflicting sets of principles, norms and rules, and have dissimilar memberships and or are driven by coalitions of actors that are indifferent to, or even seek to benefit from, such conflicts. (Biermann et al. 2009)

This typology has been used extensively to characterize and analyse the fragmentation of issue areas in the environmental policy domain. Nearly a decade after its publication it continues to be widely cited in academic literature. However, so far the typology appears not to have been applied to the water realm. Chapter 3 of this study makes an attempt at doing so, thereby answering specific research question number 1. Consequently, this led to a possible critique of the typology.

**Table 1.** Original typology of fragmentation of governance architectures (Biermann et al. 2009)

| | *Synergistic* | *Cooperative* | *Conflictive* |
|---|---|---|---|
| Institutional integration | One core institution with other institutions being closely integrated | Core institutions with other institutions that are loosely integrated | Different, largely unrelated institutions |
| Norm conflicts | Core norms of institutions are integrated | Core norms are not conflicting | Core norms conflict |
| Actor constellations | All relevant actors support the same institutions | Some actors remain outside main institutions, but maintain cooperation | Major actors support different institutions |

In this typology, the first criterion that interacts with the type of fragmentation concerns "institutional integration and degree of overlaps between decision-making systems" (Biermann et al. 2009 p19). The issue with this criterion is that integration can be considered the conceptual opposite of fragmentation. If fragmentation is supposed to be a value-free relative concept, then so should integration. Nonetheless, while this criterion is certainly a relative concept, its usage implies a bias towards more integration leading to synergistic fragmentation. Even if only implicitly, a synergistic degree of fragmentation is generally viewed as preferable over conflictive fragmentation. Thereby, this study argues, the introduction of institutional integration defeats the value-free presumption of fragmentation. It also appears to view institutional integration as akin to centralization, whereby a higher degree of institutional integration reflects a governance architecture centralized around a decreasing number of core institutions. From the perspective of this study, the criterion thereby neglects the possibility of coordination among multiple non-hierarchically ordered institutions. This holds true especially for global water governance, in which there is no natural centre of gravity (Gupta et al. 2013) and where UN-Water endeavours to coordinate the activities on water of over 30 UN institutions.

In an attempt to resolve this perceived flaw, the overarching conceptual framework for this study splits the criterion of institutional integration into two separate criteria: institutional centralization and institutional coordination. Without intending to overcomplicate the original typology by introducing myriad criteria, the framework thus provides an additional dimension that allows for more contrast in comparative analysis between issue areas of the environmental policy domain.

## 2.4. Merits and demerits of fragmentation

The analysis of the GWGA is meant to produce insights in, and contribute to the debate on the relative merits and demerits of stronger or lesser degrees of fragmentation. In this study these merits and demerits are considered to be associated with, but not entirely analogue to, the consequences of fragmentation as structured by Biermann et al. (2009): "(1) the relative speed of reaching agreements; (2) the level of regulatory ambition that can be realized; (3) the level of potential participation of actors and sectors; and (4) the equity concerns involved" (Biermann et al. 2009 p24).

The first argument for using the merits and demerits is that it recognizes their inherent normative character, whereas consequences might imply a certain objectivity. The second reason this research prefers to focus on merits is that Biermann et al.'s consequences are somewhat restrictive, in the sense that it risks overlooking other merits that fall outside these four aspects. Nonetheless, the structure of consequences around these four aspects does present a valuable framework because of its hypotheses regarding overall governance performance.

Regarding the speed of reaching agreements, a merit of fragmentation is that small-n agreements may be able to reach a negotiated outcome faster than traditional multilateral arrangements (hypothesis ii). An example is the "club"-approach favoured by Victor (2007) in global climate governance. A demerit is that short-term success in small-n agreements may not improve overall performance of governance in the long-term, if structural regime elements are not sufficiently resolved (Van Asselt 2009; hypothesis iii). The HLPW proves to be an interesting test case for this set of consequences.

An area where fragmentation and the emergence of small-n agreements could prove to be a merit is ambition. Smaller groups of most important countries may produce more progressive and far-reaching agreements (hypothesis iv). Such a "narrow but deep" agreement may be preferable, even with a limited degree of participation, over "broad but shallow" agreements that require the consensus of all countries (Aldy, Barrett & Stavins 2003). Jänicke and Jacob (2006) suggest that fragmentation may enhance overall governance performance through regulatory diversity and innovation (hypothesis v). This could apply to the HLPW, as some members considered it to be a parallel track to traditional processes that seeks out innovative solutions. On the other hand, long-term performance remains an issue, as over time some actors will want to see earlier small-n agreements incorporated in potential overarching agreements, which will likely run into resistance from countries that were previously not involved. Additionally, small-n agreements decrease the possibility of package deals that could otherwise help to "enlarge the pie".

The third area of consequences with a bearing on overall governance performance is participation. Arguably, a higher degree of fragmentation leads to reduced entry costs for other actors. Private actors may engage in rule-making more easily in a loose network of public(-private) institutions (hypothesis vi). The merit lies in the involvement of more relevant actors and related areas than would be expected for a fully integrated governance architecture. At the other end of the spectrum the involvement of too many different actors pulling in different directions may overcomplicate interaction and decision-making.

Fragmentation may also produce merits in terms of equity, through tailor-made solutions for certain groups of actors. An example of this in global water governance is the GWP, with its variety of regional water partnerships nested under their global umbrella. At the same time fragmentation leads to equity concerns. Bilateral and small-n agreements are expected to grant influential countries more bargaining power (hypothesis vii). Traditional multilateral agreements on the other hand, allow coalitions of smaller countries that enable them to protect their collective interest (hypothesis viii). Unity provides bargaining power and decreases the risk of coerced bilateral agreements with powerful countries resulting in suboptimal negotiation outcomes; safety in numbers. Hence, more powerful states may seek to advance fragmentation in order to maintain control (Benvenisti & Downs 2007; Karlsson-Vinkhuyzen & McGee 2013) (hypothesis ix). It allows "forum shopping" for agreements that serve their interests best. Such behaviour, even if implicit, may also be expected in the debate on fragmentation in the GWGA.

Finally, in addition to the consequences organized around these four areas, a fifth area is added that concerns more generic consequences as well as specific consequences that do not fit in in one of the above. These include some of the merits of fragmentation identified by Keohane and Victor (2011): flexibility across issues and adaptability over time. Flexibility across issues means that rules may be adapted to accommodate different conditions under different issues or for different sets of actors. This is partly overlapping with the issue of equity, but in this case focuses on more than the interests of specific actor constellations. The adaptability over time accounts for changes over time in related issue areas or domestic politics of engaged countries, which are likely to change at a different pace. Conversely, fragmentation can also be associated with chaos, an overabundance of veto points and entrenchment that discourages both public and private actors to invest resources into the issue area.

## 2.5. Further theoretical considerations

Chapter 3 maps out the GWGA by building on Wilderberg (2016), who employs a network approach for mapping institutional complexity. An important aspect here is the (perceived) scale of the problem, as it has an effect on the ultimate degree of fragmentation (Biermann et al. 2009; Zelli & Van Asselt 2013). The scale is presented by providing a delineation and framing of the domain in question. The emphasis of the chapter is on assessing the type and degree of fragmentation in the GWGA. Subsequently, the merits and demerits that result from this type and degree of fragmentation are identified.

The two subsequent empirical chapters concern two initiatives in global water governance that are presented here as two responses to the current fragmentation. Analysis shows that the emergence of the two is related, but that the types of response could not be more different. The first initiative examined is the HLPW; in many respects an example of a "club" (Keohane & Victor 2011) or "small-n agreement" according to the typology on degrees of fragmentation (Biermann et al. 2009). In addition to this the concept of minilateralism is introduced (Naím 2009). This allows the study to contrast minilateralism with the option for multilateralism, the other response to fragmentation which is discussed in the chapter that follows.

The set of working-dialogues on water held in the UN General Assembly, described in chapter 5, is the most recent example of an attempt to negotiate a response to the fragmentation in the GWGA in a multilateral setting. The consequences of fragmentation are expected to have an effect on negotiation dynamics (Zelli & Van Asselt 2013). Moreover, if these negotiations would produce any significant outcome it would be expected to be unwieldy (Keohane & Victor 2011). Hence, it is expected that building a club-oriented regime parallel to the institutional complex is more feasible than re-opening negotiations on an integrated regime. Nonetheless, the combination of both responses presents an opportunity for comparative analysis, similar to what Eckersley (2012) presented for climate negotiations.

Analysing the two responses yields insights into the merits and demerits of fragmentation, additional to those identified in the first empirical chapter on mapping. Both responses are expected to be confronted by considerable "stability of equilibrium", the immobility of the institutional complex that results from high transaction costs as well as power- and interest-based dependencies (Zelli & Van Asselt 2013). The study examines elements of reactive and proactive fragmentation management (managing consequences or drivers of fragmentation), who are the driving actors, and what their motives are. Thereby, it aims to identify the options for and limits to the management of fragmentation.

## 2.6. Overview of the conceptual framework

This section presents the adapted typology of fragmentation of governance architectures, followed by an overview of the conceptual framework applied in this study.

As argued earlier, the adapted typology replaces the criterion of "institutional integration" with the two criteria of "institutional centralization" and "institutional coordination". The interpretation of institutional centralization is for a large part similar to the original criterion of institutional integration by Biermann et al. (2009). It describes to what extent an institutional complex is regulated or dominated by one or more regimes that form a natural centre of gravity, and looks at the degree of overlap between

decision-making systems. Therefore, a certain measure of hierarchy can be expected. The second criterion, institutional coordination, describes to what extent the institutions of an institutional complex maintain some form of coordination. This coordination is considered to operate independently of hierarchy, meaning it can occur both in cases of centralized as well as decentralized institutional complexes. Theoretically, a centralized institutional complex with weak coordination may be as effective, in terms of overall governance performance, as a decentralized institutional complex that engages in comprehensive coordination. The separation of these two criteria aims to eliminate the potential bias of measuring the degree of institutional integration, and should add additional contrast for comparative analysis of relatively similar issue areas in the environmental policy domain.

**Table 2.** Adapted typology of fragmentation of governance architectures, based on Biermann et al. (2009)

| | *Synergistic* | *Cooperative* | *Conflictive* |
|---|---|---|---|
| Institutional centralization | Strong centralization around a single core institution | Centralization among multiple core institutions | Mainly decentralized institutions, largely unrelated |
| Institutional coordination | Comprehensive coordination involving all relevant institutions | Coordination limited to core institutions, or weak overall | No coordination among institutions |
| Norm conflicts | Core norms of institutions are integrated | Core norms are not conflicting | Core norms conflict |
| Actor constellations | All relevant actors support the same institutions | Some actors remain outside main institutions, but maintain cooperation | Major actors support different institutions |

The consequences of the various types and degrees of fragmentation are grouped similarly to the framework by Biermann et al. (2009), with one exception. The (relative) speed of reaching agreements, the level of regulatory ambition, and the level of potential participation are all maintained. The consequences grouped under equity concerns in the original framework that appear relevant in the GWGA are related to issues surrounding the stability of equilibrium and whether a response that seeks change is able to break it. Hence, the grouping of equity concerns is redubbed to “stability of equilibrium concerns”.

The adapted typology of degrees of fragmentation, together with the consequences has led to the following overview of the conceptual framework used in this study:

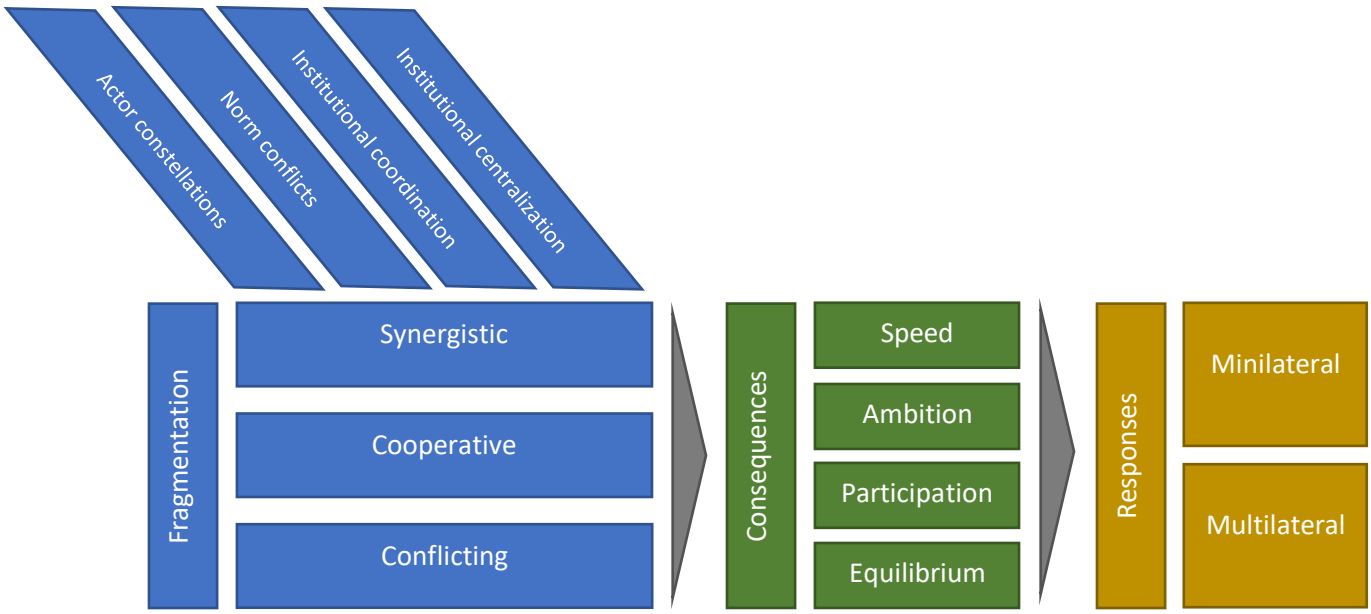


**Figure 1.** Overview of the conceptual framework

In conclusion, this study provides a contribution to addressing the lack of consensus in academic literature on the consequences of fragmentation in global governance architectures. It does so by providing an analysis of the type and degree of fragmentation of the global governance architecture for water, which thus far appears not to have been produced. The consequences of fragmentation are assessed in terms of merits and demerits. These become apparent through typifying the GWGA as a whole, as well as by examining two different responses to fragmentation in more detail.

On a conceptual level, this study provides a working definition of the previously undefined GWGA. In addition, the conceptual framework means to offer a constructive critique of the degree of fragmentation typology by Biermann et al. (2009), which should ultimately result in a higher-contrast typology.

# 3. Mapping the Global Water Governance Architecture

The current global water governance architecture (GWGA) is considered complex and highly fragmented by a wide range of actors, including several UN Member States (UNGA 2017a), international organizations (OECD 2015a; Winpenny et al. 2016) and academia (Pahl-Wostl, Gupta & Petry 2008; Baumgartner & Pahl-Wostl 2013). A vast number of organizations is involved with the GWGA, with seemingly duplicate names, ambiguous roles and overlapping responsibilities. The GWGA in its current state is a challenge to navigate, let alone coordinate, and it is unclear to which degree of fragmentation this leads. Therefore, various UN Member States have expressed the need to better understand this institutional complex (UNGA 2017a). To this end, this chapter examines the type and nature of fragmentation, as well as the ensuing merits and demerits.

In order to provide some context, the chapter first briefly describes the development of the GWGA over the past four decades, followed by a graphical overview of the institutional complex. The chapter then delves into the mandate, membership and focus area of various key actors in the GWGA. This serves to corroborate the fragmentation claim, and enables the determination of the degree of fragmentation in the GWGA and its consequences, thereby answering the first specific research question:

> *"What is the degree of fragmentation in the global water governance architecture and what are the consequences for governance?"*

## 3.1. Introducing the field

As defined in the conceptual framework, the GWGA is “the overarching system of public and private institutions that are valid or active in global water governance, which comprises organizations, regimes, and other forms of principles, norms, regulations, and decision-making procedures”. In this study the mapping of this institutional complex is set up around organizations, because they provide a logical structure. Important non-organizational institutions (principles, norms, regulation, decision-making procedures) are elaborated upon along the way.

The organizations that are valid or active in global water governance are abundant and diverse. The vast majority are large multilateral arrangements. Based on their membership these organizations can be divided in intergovernmental institutions (public) and transnational institutions (public-private and private). A further distinction is made between UN and non-UN intergovernmental institutions. There are also ‘minilateral arrangements’ (Naím 2009) that encompass a relatively small number of members and are often characterized by exclusive membership. Finally, dedicated and non-dedicated institutions are distinguished, based on the extent to which water is a central element of their mandate or mission.

The resulting ‘map’ is by no means exhaustive, but it aims to incorporate all of the major institutions in the GWGA. The map may also be biased, as determining what institutions are most important is a normative exercise. A certain degree of objectivity is aspired by predicating the selection on institutional attributes such as *inter alia* convening power, thematic contributions and membership. Recognizing these shortcomings, the following sections aim to shed light on the development and current state of the GWGA in an organized manner.

### 3.1.1. Historical overview

The GWGA developed over approximately half a century. The UN Conference on the Human Environment of 1972 put the environment on the international political agenda, which mentioned water alongside 'land, flora and fauna' in Principle 2 of its report (UNCHE 1972). The first time water became the topic of a dedicated global conference was at the UN Conference on Water in Mar del Plata in 1977. Its outcomes paved the way for integrated water resources management (IWRM) and the International Drinking Water Supply and Sanitation Decade proposed for 1981-1990. Nevertheless, the 80s were considered by many to be a lost decade in terms of water (Scheumann & Klaphake (2001). The Brundtland report 'Our Common Future' (1987) provided one of the most widely recognized definitions of sustainable development and it spoke of common challenges such as population growth, food security, ecosystems and energy. Water, however, did not claim a particularly central role.

In the 1992 outcomes of the UN Conference on Environment and Development (UNCED), also known as Agenda 21 of the Rio Earth Summit, water featured more prominently (UNCED 1992). Earlier that year, a preparatory International Conference on Water and the Environment (ICWE) produced 'the Dublin Statement on Water and Sustainable Development' with four guiding principles. These would play a significant role in the establishment of the Global Water Partnership (GWP) and World Water Council (WWC) in 1996 (Woodhouse & Muller 2017). The latter would organize the first World Water Forum (WWF) in 1997, laying the foundations for what would become the world's biggest three-yearly event related to water. Meanwhile in 1993, 22 March was designated as World Water Day by the UN General Assembly (UNGA).

**Table 3.** Watershed moments in the development of the global water governance architecture.

| | |
|---|---|
| 1972 | UN Conference on the Human Environment |
| 1977 | UN Conference on Water at Mar del Plata |
| 1981-1990 | International Drinking Water Supply and Sanitation Decade |
| 1987 | Brundtland report 'Our Common Future' |
| 1992 | International Conference on Water and the Environment, Dublin |
| 1992 | UNCED Rio Earth Summit, Agenda 21 |
| 1993 | World Water Day established by UNGA |
| 1996 | Establishment of the Global Water Partnership and World Water Council |
| 1997 | First World Water Forum, organized by the World Water Council |
| 2000 | MDGs and water target 7.C established |
| 2003 | UN-Water established |
| 2005-2015 | International Decade for Action – Water for Life |
| 2004 | UNSGAB established |
| 2010 | Human right to water and sanitation explicitly recognized by UNGA |
| 2010 | MDG target for safe drinking water met |
| 2015 | SDGs and the Water Goal established |

Following the UN Millennium Summit in 2000 the Millennium Development Goals (MDGs) were established. While water was not as high on this agenda as some might have hoped, a water target was established as part of the environmental sustainability goals to "halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation" (UN 2015 p58). Due to the fragmented responsibilities and competencies relating to water governance in the UN system a pressing need for coordination became apparent. Subsequently, the UN System Chief Executives Board for Coordination (CEB) established UN-Water in 2003 as an interagency coordination mechanism. Given the challenge of achieving the MDGs, the UNGA proclaimed 2005-2015 as the International Decade for Action 'Water for Life', in order to motivate action towards fulfilling international commitments on water (UNGA 2003). In early 2004, then UN Secretary-General Kofi Annan created the UN Secretary-General's Advisory Board for Water and Sanitation (UNSGAB) to provide high-level leadership necessary to spur the international community into action.

A decade after the Millennium Summit, 2010 proved to be a watershed year as a result of two achievements. First, the UNGA explicitly recognized the human right to water and sanitation, and acknowledged its importance in relation to the realization of all human rights in a resolution (UNGA 2010). Second, by the end of 2010, 89% of the world's population used improved drinking water sources, thereby meeting the MDG target for access to safe drinking water (UNICEF 2012). After five more years of hard work, however, the world still missed the target for basic sanitation by a longshot (UN 2015). Building on the MDGs, the Sustainable Development Goals (SDGs) were established in 2015. They included a long-awaited dedicated goal for water, committing the international community to "ensure availability and sustainable management of water and sanitation for all" by 2030.

### 3.1.2. Schematic overview

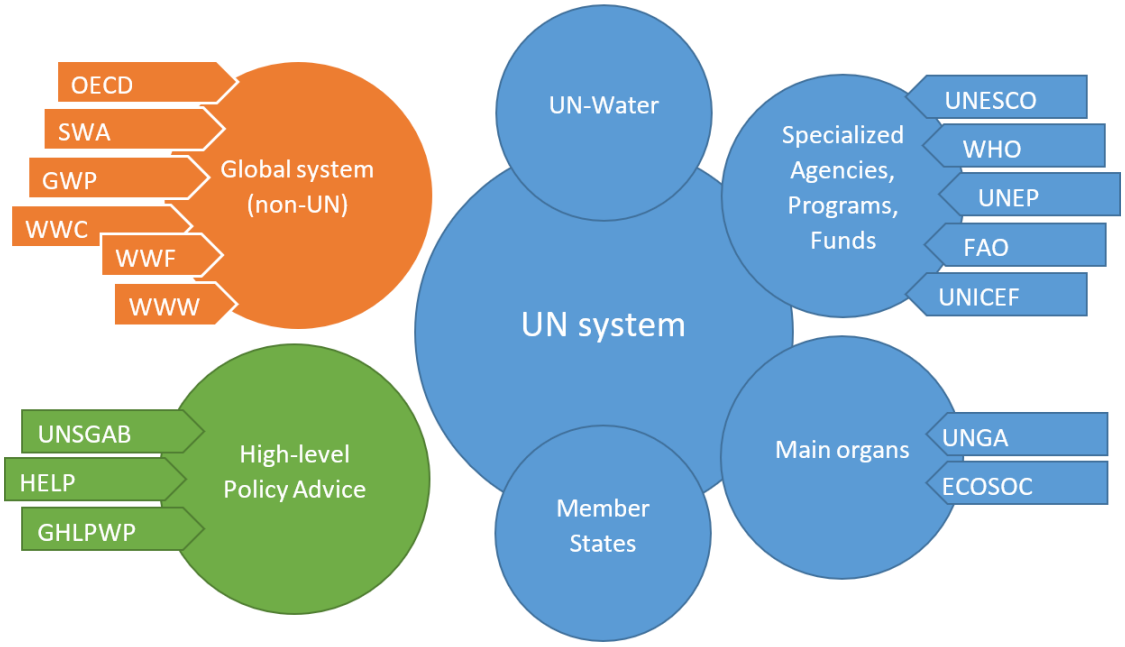


**Figure 2.** Schematic overview of the global water governance architecture institutions examined in this chapter

## 3.2. Examination

The following sections list the key actors in the GWGA, and explore their mandate, membership and focus area in relation to SDG6 and other water-related goals and targets. Selection of the key actors is based on inter alia convening power, significant thematic and or financial contributions, involvement in monitoring and evaluation of global targets, and membership. Regular appearance in academic literature is also taken into account. For example, the UN's main organs as well as the multi-stakeholder fora that have been identified have the ability to bring together a great deal of actors through their convening power and significant membership. The UN specialized agencies that are highlighted contribute on both thematic and financial levels, while also undertaking significant monitoring and evaluation efforts. Other intergovernmental platforms such as the OECD, and institutions for high-level policy advice represent both thematic contributions and convening power.

UN institutions are a central focus of this study because of the concerns that the UN institutional complex for water is insufficient in light of the targets set in the 2030 Agenda. These sections also serve to validate that there is no central authority or focal point for water where decisions are made. The subsequent sections focus on non-UN intergovernmental institutions, transnational institutions, and institutions focused on high-level policy advice. These sections provide a display of the wide range of public and private actors that engage in water-related issues on a global level, parallel to the UN.

### 3.2.1. UN-Water coordination mechanism

UN-Water was established in 2003 by the UN System Chief Executives Board for Coordination (CEB) as "the inter-agency mechanism that promotes coherence in, and coordination of, UN system actions aimed at the implementation of the agenda defined by the Millennium Declaration and the World Summit on Sustainable Development as it relates to its scope of work" (UN-Water 2017b p1; 2017c). The need for coordination arises from the absence of a UN body exclusively dedicated to water and the existence of over 30 UN organizations involved in water and sanitation, who aspire to 'deliver as one'.

Leadership of UN-Water is provided by a management team and a technical advisory unit. Its members include 31 UN agencies, programmes and other entities that deal with water-related issues. They are represented by UN-Water Senior Programme Managers, who together constitute the chief operational decision-making body that provide overall governance and strategic direction. The Senior Programme Managers mainly engage through expert groups, task forces, and or projects and initiatives. The expert groups deal with substantive issues. Task forces mainly handle coordination of world water days and water decades. Projects and initiatives concern monitoring, including the Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) and the affiliated WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP).

UN-Water's partners include over 35 international organizations, professional unions, associations and other civil society actors. All of them are actively involved in water, international in structure and membership, and have the willingness and capacity to contribute. UN-Water receives its funding from voluntary contributions, mostly by national development cooperation agencies (UN-Water 2017d). While the mechanism coordinates the work of over 31 UN entities, which are accountable to UN Member States, there is no direct link between UN-Water and UN Member States.

UN-Water has proven to be a mechanism that can effectively bridge the gap between theoretical academia and practitioners of global water governance. At the same time, in terms of leadership and reform its role is very limited. UN-Water influences the procedural aspects of global water governance, but fails to improve system output such as intergovernmental decision-making and securing financial resources (Baumgartner & Pahl-Wostl 2013). In 2009 an external review was conducted based on the mechanism's outputs and in-depth discussions with key stakeholders. Criticism concerned its limited impact, ambiguous leadership, lack of an appropriate accountability mechanism and limited contribution to monitoring and reporting of water-related targets (Keen & Ratynska 2009). Building on this criticism there have been various calls for strengthening UN-Water's governance. Some changes have been implemented. For example, UN-Water is now chaired by a UN executive, instead of a lower-grade UN official as was the custom until 2012. Another significant development was the establishment of the Integrated Monitoring of Water and Sanitation Related SDG Targets (GEMI) in 2014, dedicated to providing a coherent monitoring framework for SDG target indicators not already covered by JMP and GLAAS (UN-Water 2017e). Together these three initiatives form the Integrated Monitoring Initiative for SDG6, thereby responding to the 2009 external review criticism. Meanwhile, another external review of UN-Water is underway (UN-Water 2017f).

### 3.2.2. UN main organs

The UN has five active main organs, which arguably all have some bearing on water-related issues: the General Assembly (UNGA), the Economic and Social Council (ECOSOC), the Security Council (UNSC), the International Court of Justice (ICJ) and the UN Secretariat.

The UNGA is the main deliberative, policymaking and representative body of the UN, representing 193 UN Member States. The full membership meets each September for the general debate, thereby starting a new 'session' that lasts until the following August. Its President serves a one-year term (2017d). The UNGA has adopted various resolutions that influenced the GWGA. Two resolutions proclaimed 'water decades' for 1981-1990 (UNGA 1980) and 2005-2015 (UNGA 2003), which played significant roles in agenda setting. In 1997, the UNGA adopted the Convention on the Law of Non-navigational Uses of International Watercourses: an important step in international water law, even though it took 17 years to enter into force and has so far been ratified by merely 36 states (UNTC 2017). Another milestone was the Assembly's recognition of the "right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all other human rights" (UNGA 2010 p2). This built on a 2003 general comment by the Committee on Economic, Social and Cultural Rights (CESCR), which stated that "everyone is entitled to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses" (CESCR 2003 p1).

The UNGA also provided the GWGA with the overarching frameworks of the Millennium Development Goals (MDGs 2000-2015) and the Sustainable Development Goals (SDGs 2015-2030) as part of the 2030 Agenda for Sustainable Development. It acts as a platform for the four-yearly meetings of the High-Level Political Forum on Sustainable Development (HLPF) which reviews the commitment and progress to the 2030 Agenda. In terms of water, the MDGs strongly focused on drinking water and sanitation. The SDGs on the other hand encompass a broader set of issues. The dedicated goal for water, SDG6, aims to "ensure availability and sustainable management of water and sanitation for all" (UNGA 2015).

In addition to drinking water and sanitation, SDG6 also focuses on water quality, water use efficiency, resource management and ecosystems. It acknowledges the interrelation and interdependence between SDG6 and the other goals of the 2030 Agenda. Fourteen out of the sixteen goals have a direct (3) or indirect (11) link with SDG6 (UNESCO 2016). SDG6 is divided into six main targets and two targets regarding financing and governance. Each target has one or two indicators to monitor progress. Indicators have one or more 'custodians', typically a UN body, which provides data for follow-up and review. An overview is presented in the figure below.

ECOSOC is the main UN body for coordination, policy review and dialogue on the three pillars of sustainable development – economic, social and environmental. It can make recommendations on these issues and it guides the implementation of internationally agreed development goals. The Council consists of 54 UN Member States serving three-year terms, elected by the UNGA (UN 2017a). ECOSOC supervises the UN's subsidiary and expert bodies, including the various specialized agencies, programmes and funds that are active in the realm of water. These include *inter alia* WHO, UNICEF, UNEP, FAO and UNESCO. ECOSOC also oversees the UN's functional commissions, regional commissions and other bodies. Relevant to the GWGA is the Economic Commission for Europe (UNECE). In 1992 UNECE produced the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, one of UNECE's five negotiated international environmental treaties (UNECE 1992). It obliges its parties to cooperate and create joint bodies on an international level. As of March 2016, the Convention is open to all UN Member States, including those outside of the UNECE regional commission, giving it a global character (UNECE 2017).

The ICJ is the UN's principal judicial organ and offers arbitration in cases of transboundary water disputes, such as the 2016 case of Chile vs. Bolivia regarding the status and use of the river Silala (ICJ 2017, Reuters 2016). According to Mershel (2017), there is a slow but steady trend of states referring water disputes to the ICJ.

The UNSC debated the linkages between water, peace and security for the first time in November 2016, following an initiative by Senegal (UN 2016). In June 2017, UN Secretary-General Guterres briefed the UNSC on water in a discussion on preventative diplomacy and transboundary waters. Guterres referred to water as a possible catalyst for cooperation among countries (even those who do not maintain friendly relations) and urged countries to invest in water security (UN 2017c).

The Secretariat can be seen as the executive arm of the UN. It is organized along departmental lines and home to several institutions relevant to the GWGA. This includes the UN Department of Economic and Social Affairs (UNDESA) and the CEB on an overarching level, as well as the Special Envoy of the Secretary-General for Disaster Risk Reduction and Water (UN 2017b).

### 3.2.3. UN specialized agencies, programmes and funds

The UN system consists of several institutions dealing with water issues, each with their own leadership, membership and budget. Programmes and funds are nested directly under the main UN organs. Specialized agencies are autonomous organizations that are coordinated by ECOSOC (at the intergovernmental level) and the CEB (at the inter-secretarial level). The majority of these institutions treat water only as a marginal issue. Five specialized agencies, programmes and funds most relevant for

the GWGA are discussed in the following sections. They were selected *inter alia* because of their thematic contributions and financial commitment to water issues and their custodianship of SDG6 target indicators. They are regularly mentioned as having a key role in the pursuit of SDG6 (UNGA 2017a).

| INDICATORS | TIER | CUSTODIANS |
|---|---|---|
| **6.1.1** Proportion of population using safely managed drinking water services | I | WHO, UNICEF |
| **6.2.1** Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water | I | WHO, UNICEF |
| **6.3.1** Proportion of wastewater safely treated | II | WHO, UN-Habitat, UNSD |
| **6.3.2** Proportion of bodies of water with good ambient water quality | III | UN Environment |
| **6.4.1** Change in water-use efficiency over time | III | FAO |
| **6.4.2** Level of water stress: freshwater withdrawal as a proportion of available freshwater resources | II | FAO |
| **6.5.1** Degree of integrated water resources management implementation (0-100) | II | UN Environment |
| **6.5.2** Proportion of transboundary basin area with an operational arrangement for water cooperation | II | UNESCO, UNECE |
| **6.6.1** Change in the extent of water-related ecosys-tems over time | III | UN Environment |
| **6.a.1** Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan | I | WHO, UN Environment, OECD |
| **6.b.1** Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanita-tion management | I | WHO, UN Environment, OECD |

**Figure 3.** List of SDG6 indicators and their custodians (UN-Water 2017a).

### WHO (Specialized agency)

The World Health Organization (WHO) directs and coordinates UN international health work (WHO 2006 p1). The World Health Assembly (WHA) is its main decision-making body, annually bringing together health ministers from its 194 Member States. The 34 members of the Executive Board (health experts designated by Member States) are elected by the WHA for three-year terms (WHO 2017a).

The water focus of WHO mainly concerns water, sanitation and hygiene (WASH) and water quality. WHO plays a key role in preventing transmission of waterborne diseases, promoting health-based regulations and effective risk management practices. WHO also works with health ministries to ensure water quality and reduce water-related health risk in case of major emergencies. Moreover, it monitors global

sanitation-related disease, access to safely managed sanitation and safely treated wastewater. It also implements the UN-Water initiative Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS), by providing information and data. Together with UNICEF, WHO runs a Joint Monitoring Programme (JMP) for water supply, sanitation and hygiene, maintaining a global database and providing progress estimates (WHO 2017b). WHO is custodian for SDG6 target indicators 6.1.1, 6.1.2 on water and sanitation (with UNICEF) and 6.1.3 on wastewater (with UN-Habitat and UN Statistical Division).

### UNICEF (Fund)

The UN Children's Fund (UNICEF) provides long-term humanitarian and development support for children and their families (UNICEF 2017a). It mainly works through country offices in 190 countries and territories. Its headquarters in New York provides overall management. Its work is guided and monitored by a 36-member Executive Board consisting of government representatives, elected by ECOSOC for three-years terms (UNICEF 2017b).

UNICEF's work on water chiefly relates to WASH activities in over 100 countries, which provide clean water and basic toilets for millions of people. UNICEF focuses on children's access to nearby and safe water and ending the practice of open defecation. It also promotes good hygiene practices. Furthermore, UNICEF facilitates school programmes and provides WASH-related emergency relief (UNICEF 2017c). It acts as a custodian to SDG6 target indicators 6.1.1 and 6.1.2 on water and sanitation together with WHO. UNICEF is by far the largest financial contributor to SDG6 of the UN Development System (Dalberg 2017).

### UNEP (Programme)

The UN Environment Programme (UNEP or UN Environment) is the leading UN authority advocating for the global environment and promoting coherent implementation of the environmental pillar of sustainable development (UNEP 2017a). The UN Environment Assembly, containing all 193 UN Member States, is in charge of decision-making. Between sessions, UNEP is governed by an open-ended Committee of Permanent Representatives (UNEP 2017b).

UNEP focuses on a wide range of water topics, mostly geared towards the environment, such as freshwater ecosystem health, water pollution, and the monitoring of water quality. Its goal is "to support human well-being, promote inclusive growth, enhance environmental health, and boost resilience while reducing risk" (UNEP 2017c). UNEP also plays a significant role in advancing integrated water resources management (IWRM) and increasing water-related ecosystem resilience to conflict and natural disasters (UNEP 2017c). Accordingly, UNEP holds the custodianship of five SDG6 target indicators: 6.3.2, 6.5.1, 6.6.1 on ambient water quality, IWRM implementation and water-related ecosystems respectively (individually) and 6.A.1 and 6.B.1 on financing and governance (both with WHO and OECD).

### FAO (Specialized agency)

The UN Food and Agriculture Organization (FAO) is an intergovernmental forum and knowledge organization which aims to "achieve food security for all" and ensure that "people have regular access to enough high-quality food to lead active, healthy lives" (FAO 2017a). FAO has 194 Member States and works in 130 countries. It is directed by the FAO Conference that is organized every two years. The Conference elects the FAO Council that serves as the interim executive organ, consisting of 49 Member States serving three-year terms (FAO 2017c).

FAO's water-related work includes *inter alia* governance of food production systems, ecosystem services, food security, biodiversity, and climate change mitigation and adaptation (FAO 2017b). Water for agricultural production (about 70% of all freshwater use) is considered a driver of food security, ending hunger and poverty alleviation. Irrigation can significantly increase food production, but water management needs to be improved to reach higher levels of water productivity. To this end, FAO offers technical assistance, training and capacity building for IWRM. Its mandate on water also entails provision of information and knowledge, policy and legal advice, and contributing to the international water agenda. FAO is the custodian for SDG6 indicator targets 6.4.1 and 6.4.2 on water use efficiency and water stress. FAO is home to the most quoted source on global water statistics, AQUASTAT (FAO 2017b).

#### UNESCO (Specialized Agency)

The UN Educational, Scientific and Cultural Organization (UNESCO) is responsible for coordinating international cooperation in the fields of education, science, culture and communication (UNESCO 2017a). It has 195 members and is governed by its two-yearly General Conference, which elects the intersessional Executive Board of 58 members which ensures overall management (UNESCO 2017b).

UNESCO runs a range of science programmes including the International Hydrological Programme (IHP), the only UN intergovernmental programme devoted to water research, resources management, education and capacity building. IHP is governed by the Intergovernmental Council, composed of 36 UNESCO Member States, elected by the General Conference for four-year terms. The programme focuses on information provision, research and education. Among others, it developed the Water Information Network System (WINS) which supports operations, management and decision-making for sound governance. The programme also concerns water-related disasters and adaptation measures, groundwater research, activities regarding water scarcity and quantity, water for human settlements and ecohydrology, and improving water education. Together with UNECE, IHP serves as a custodian for SDG target indicator 6.5.2 on transboundary water cooperation (UNESCO 2017c).

Another significant programme led and administered by UNESCO is the UN World Water Assessment Programme (WWAP). It provides a periodic overview of the status, use and management of freshwater resources. Through the World Water Development Report (WWDR) the WWAP seeks to meet "the growing requirements of UN Member States and the international community for a wider range of policy-relevant information, timely and reliable information in various fields of water resources development and management" (WWAP 2016 p3).

### 3.2.4. Intergovernmental platforms, non-UN

There are rather limited opportunities for intergovernmental exchange on water within the UN. The IHP of UNESCO offers the only intergovernmental programme on water in the UN system. However, IHP does not focus on policymaking and it does not carry the same authority or representativeness as for instance ECOSOC or the UNGA. UN-Water coordinates effectively at the science-policy interface, but offers no mechanism for intergovernmental interaction. Alternative platforms for intergovernmental processes have emerged and are discussed below.

#### *OECD*

The Organisation for Economic Co-operation and Development (OECD) is an intergovernmental organization that aims to "promote policies that will improve the economic and social well-being of people around the world". It has 35 member countries across the globe, mainly advanced economies, but also works closely with emerging economies. The OECD publishes around 250 new reports annually on a wide range of topics (OECD 2017b). In 2009 the OECD created the Water Governance Programme, advising governments on designing and implementing better water policies (OECD 2011b). Through its multi-level governance framework it identified seven categories of water governance deficits. In 2013 it launched the OECD Water Governance Initiative, an international multi-stakeholder network, which among others resulted in the twelve OECD Principles on Water Governance (OECD 2015b). Its Secretary-General, Angel Gurría, present himself as an advocate determined to put water higher on the global agenda (OECD 2017a).

#### *Other processes*

Other platforms for intergovernmental processes in the GWGA include ministerial meetings, regional frameworks, and bilateral treaties on water. Regular ministerial meetings include those as part of the three-yearly World Water Forum and the two-yearly meeting of the Sanitation and Water for All partnership (SWA). Both allow for policy debate and prioritization of the water agenda. The G20 also touches on water issues regularly, for instance at its 2017 Global Forum for Food and Agriculture that focused on agriculture and water (G20 2017).

The African Ministers' Council on Water (AMCOW) is both a ministerial meeting and regional framework, which has resulted a number of commitments by the political leadership of its members. One example is the Ngor Declaration, which acts as a roadmap for implementing SDG6 in Africa (AMCOW 2015). Another interesting process on the regional level is the European Union's Water Framework Directive (WFD) adopted in 2000. It offers a case study of the implementation of IWRM at a regional level, although its performance in terms of innovative governance is contested (Behagel & Arts 2014).

Last but not least, there are approximately 900 bilateral to global water treaties that govern various aspects of transboundary water (UNEP 2002). While such treaties deal with a very limited number of states, these agreements can have significant regional impacts and potential global implications.

### 3.2.5. Transnational institutions

Over the years, various organizations outside of the UN have emerged that provide a platform for regular dialogue on water. To some extent this substitutes the lack of an agreed-upon dedicated platform for water in the UN. To be fair, there is the yearly UN World Water Day on 22 March which facilitates various celebratory events held across the world. But this is more of a vehicle, rather than a central platform that relevant stakeholders rally around. Water is also discussed as part of the UN High Level Political Forum for follow-up and review, but only about every four years for as much as two hours (UNGA 2017a). The following multi-stakeholder fora might also have emerged if the UN did provide a comprehensive platform for water dialogue, but its absence the lack of such a platform has made them all the more relevant.

### *World Water Council and Forum*

One of the most important events in the realm of water is the three-yearly World Water Forum (WWF) organized by the World Water Council (WWC). The Council brings together almost 400 institutions, providing a multi-stakeholder platform for debate, exchanging experience, and facilitating efforts towards a common strategic vision on water. The mission of the WWC is "to promote awareness, build political commitment and trigger action on critical water issues at all levels, to facilitate the efficient conservation, protection, development, planning, management and use of water in all its dimensions on an environmentally sustainable basis for the benefit of all life on Earth" (WWC 2017a). The Forum was organized for the first time in 1997. Its 7$^{th}$ edition in 2015 brought together over 40.000 participants (WWC 2017b). In comparison, in the same year COP21 in Paris of the UNFCCC had approximately 36.000 participants (UNFCCC 2015). The 8$^{th}$ edition of the WWF took place in March 2018 in Brazil.

### *Global Water Partnership*

The Global Water Partnership (GWP) is a global action network open to all organizations engaged in water resources management. It has over 3.000 partner organizations in public, private and civil society sectors across levels (GWP 2017a). The partnership is governed by the Global Water Partnership Organisation which is was established in 2002 (Fromageau 2012). The partnership advocates to prioritize water on policy agendas, produces and communicates knowledge, and builds capacity. With a focus on integrated water resources management (IWRM) it aims to enable effective water management at all levels. GWP has a diverse and multi-stakeholder network in 183 countries employing over two decades of experience in IWRM (GWP 2017a). The partnership also employs 86 self-governing Country Water Partnerships and 13 Regional Water Partnerships. Its most significant impacts are governance improvements resulting from enabling environments, institutional arrangements, and management instruments (GWP 2017b).

### *Sanitation and Water for All*

Sanitation and Water for All (SWA) is a global partnership that aims to achieve universal access to clean water and adequate sanitation, in line with SDG targets 6.1 and 6.2. Its 186 partners can be divided in five constituencies: countries, private sector, civil society, research and learning, and external support agencies. The partnership aims to catalyse political leadership and action, increase accountability and efficient use of scarce resources, while working towards a common vision of sanitation, hygiene and water for all. SWA supports its country members in strengthening planning processes and organizes a two-yearly high-level meeting on ministerial level where commitments are made. Progress on these commitments is monitored, which strengthens mutual accountability (SWA 2017).

### *World Water Week*

World Water Week (WWW) is an annual week-long conference on water that takes place in Stockholm, Sweden, organized by the Stockholm International Water Institute (SIWI). It is a multi-stakeholder platform for over 300 collaborating organizations to "exchange of views, experiences and practices between the scientific, business, policy and civic communities". It focuses, among others, on the science-policy interface, interdisciplinary partnerships, ground-breaking research and awarding outstanding achievements. Some 3300 participants attended its 2017 edition (SIWI 2017).

### 3.2.6. High-level policy advice

The GWGA includes several institutionalized high-level groups of people bound together by a common goal. The high-level character points to elevated status or eminence resulting from participants' expertise and or position in an organization. Such high-level panels have become abundant in the UN system and the realm of sustainable development. The following section introduces some of the recent high-level panels in the water sector.

#### *UN Secretary-General's Advisory Board for Water and Sanitation*

The UN Secretary-General's Advisory Board for Water and Sanitation (UNSGAB) was created in 2004, when then UN Secretary-General Kofi Annan called for the formation of a group of eminent people who could advise him on how to address the global water and sanitation problem. Their mandate was to suggest attainable recommendations and a concise action plan, and provide high-level leadership to spur the international community into action on the MDG targets for water and sanitation. During its eleven years of operation, the advisory board consisted of roughly 20 members. Former chairpersons include former Prime Minister of Japan, Ryutaro Hashimoto, and King of the Netherlands, Willem-Alexander. Also among its members were various ministers and UN executives (UNSGAB 2015). The advisory board's outcome report was presented in 2015, entitled 'The UNSGAB Journey'. The report outlined 'unfinished business' in the form of priority recommendations for action and structural recommendations for the GWGA. The structural recommendations called for *inter alia* the establishment of a UN Intergovernmental Committee on Water and Sanitation, the formation of a UN Scientific and Practice Panel on Water and Sanitation and strengthening the UN-Water coordination mechanism (UNSGAB 2015). Its recommendations have been widely distributed, but so far remain unimplemented.

#### *High-level Experts and Leaders Panel on Water and Disasters*

The High-level Experts and Leaders Panel on Water and Disasters (HELP) started as an expert panel at the request of UNSGAB in 2007. During a UN Special Thematic Session on Water and Disasters in 2013 it was decided to strengthen the panel by inviting political leaders into the panel and giving it its current name. The panel is chaired by Special Envoy of the UN Secretary-General for Disaster Risk Reduction and Water, Dr. Han Seung-soo. There are two vice chairs and 20 other members. In addition to ministers and UN executives, its membership also includes the heads of multi-stakeholder water organizations such as the World Water Council and the Global Water Partnership (HELP 2017a). HELP's action focus lies with promoting awareness of the urgency of adaptation to water-related disasters, prioritization of water and disasters in Agenda 2030, assisting monitoring, and promoting a platform for regular dialogue on water and disasters at the UN. The panel also supports the Special Envoy in his duties. It has played a key role in the organization of the UN Special Thematic Sessions on Water and Disasters, and it has published a special issue of the journal Water Policy in 2015 containing cases on water and disaster from the panel (HELP 2017a).

#### *Global High-Level Panel on Water and Peace*

The Global High-Level Panel on Water and Peace is an initiative of fifteen co-convening countries, launched in November 2015 and concluded in September 2017. Its task was to develop "a set of proposals aimed at strengthening the global framework to prevent and resolve water-related conflicts, and facilitate the use of water as an important factor of building peace and enhancing the relevance of

water issues in national and global policy making." The panel was chaired by Danilo Türk, former president of Slovenia. Its secretariat was located with the Geneva Water Hub (GWH), a joint project by the Swiss government and the University of Geneva. Its fifteen panel members were nominated by the co-convening countries, mostly ministers and academics, who served in an individual capacity. This gave the panel relative independence (GWH 2017). In September 2017 the panel launched its final report, 'A Matter of Survival', presenting its non-binding policy proposals. Among others, the panel suggested the UNGA should convene an intergovernmental Global Conference on International Water Cooperation. A strong integrated monitoring system should be developed, and the existing fragmentation of the institutional landscape for water should be overcome. Moreover, the panel argued that a mechanism (not an organization) would be necessary to pursue "agency" as an increased capacity for cooperation. The final report was also presented at the 2018 World Water Forum in Brasilia (GWH 2017b).

#### *High Level Panel on Water*

The High Level Panel on Water is a group of eleven incumbent Heads of State and Government, co-convened by the UN Secretary-General and the President of the World Bank Group. It is the most recent example of an institution engaged in high-level policy advice, and it draws interest because of its exclusive membership at the highest political level. It was launched in April 2016 and concluded in March 2018. Its mandate was to "motivate action" and "advocate on financing and implementation". It sought to focus the public policy dialogue, and steer civil society and private sector initiatives towards SDG6. At the same time, it promoted efforts to mobilize financial resources and increase investment in the water realm (World Bank 2016). Its outcomes are examined in the following chapter.

## 3.3. Fragmentation

The previous sections reveal a patchwork of international institutions in the GWGA that vary in character, constituency, spatial scope and subject matter. As such, based on the description by Biermann et al. (2009), the GWGA can rightfully be considered fragmented. The following section evaluates the degree and type of fragmentation more in-depth, as well as the resulting consequences.

### 3.3.1. Degree of fragmentation

The fragmentation assessment is based on the four criteria that were identified in the conceptual framework: institutional centralization, institutional coordination, norm conflicts and actor constellations. This section helps determine the overall degree of fragmentation and specific elements of synergistic, cooperative and conflictive fragmentation. In terms of scale, the section assesses the GWGA as a whole, and pays attention to the distinction between UN institutions and non-UN institutions.

#### *Institutional centralization*

The results of the mapping exercise show only limited centralization in the GWGA. There is no significant centralization around core institutions, in contrast to for example climate change (UNFCCC, Kyoto Protocol) and the ozone layer (Vienna Convention, Montreal Protocol). However, the institutional complex is not fully decentralized with largely unrelated institutions either.

There is a central role in GWGA for the 2030 Agenda and SDG6 in particular, which can be considered a normative nodal point. But SDG6 does not provide an international bureaucracy dedicated to water for administrative support, data collection and policy development. In terms of organizations, there appears

to be no natural centre of gravity, as suggested by Gupta et al. (2013). The UN-Water coordinating mechanism is positioned in a very central manner, but the mechanism lacks the organizational strength, political gravitas and effectiveness to be considered the institutional complex' core institution (Baumgartner & Pahl-Wostl 2013). In terms of other UN institutions active and valid in the GWGA, there is not a single one dedicated to the water realm. Segmentation along sectoral lines makes it challenging to determine an identifiable core. However, closer examination reveals that some institutions exert more influence than others. Some of this influence results from financial expenditure on SDG6 (UNICEF), but more is linked to custodianship of SDG6 target indicators (*inter alia* FAO, WHO, UNESCO, UNEP and UN-Habitat).

In contrast to most UN institutions, most key actors in the GWGA outside of the UN are in fact dedicated specifically to water. Nonetheless, with the multitude of actors there is no convincing centre of gravity among the transnational institutions that all others rally around. The two most central nodes would be the GWP and the WWC. The former has an impressive network of partner organizations. The latter has tremendous convening power through the WWF, where institutions for high-level policy advise choose to present their outcome reports. However, while both the GWP and WWC are considered strong on promoting awareness, they are weak in terms of decision-making and hold little sway over the institutions of the UN (Gupta et al. 2013).

### *Institutional coordination*

While there may be limited centralization in the GWGA, there are serious attempts at coordinating its institutions. Most of this coordination can be attributed to UN-Water. It has linkages to over thirty UN bodies and another thirty plus transnational institutions, involving almost all relevant actors. Additionally, there is substantial coordination between UN institutions directly, for instance in terms of publications. As much as 75% of all major public reports on SDG6 published by the UN Development System was written by two or more UN institutions. This is the highest share of co-produced major public reports of all SDGs (Dalberg 2017).

UN-Water successfully influences procedural aspects (*inter alia* legitimacy, accountability, awareness), but it has not been successful in improving GWGA output, such as political decision-making and financial resources (Baumgartner and Pahl-Wostl 2013, respondent 9). Given its limited staff and resources, it has succeeded in coordinating UN activities on specific water-related themes. However, in order to effectively steer UN agencies and transnational institutions the mechanism would require more political power and resources (Gupta et al. 2013, respondent 10).

Additional (indirect) coordination efforts include the work of institutions outside of the UN system, such as the OECD Water Governance Initiative, WWF, Sanitation and Water for All, and the GWP. While the efforts of these partnerships and multi-stakeholder networks can supplement the work of UN-Water, they have not proven to be more effective in steering the GWGA.

Overall, at least some form of coordination is existent among nearly all key actors in the GWGA. There is significant coordination between UN institutions on publications and research programmes. However, system-wide coordination is perceived as weak and in urgent need of improvement (UNSGAB 2015).

### *Norm conflicts*

When it comes to norms, the GWGA includes core norms that are integrated among most if not all key actors, but also norms of a conflictive nature. The set of norms that all key actors profess to adhere to is the 2030 Agenda for Sustainable Development and SDG6 in particular. There is differentiation among institutions that focus on a specific target of SDG6, but there is no explicit animosity towards individual elements of SDG6. Many of the key actors in GWGA also observe IWRM as their core norm. But this notion is contested because of its water-centric nature. Some institutions prefer a focus on 'adaptive' water management or apply a 'nexus' approach. Especially the latter is seen to bridge the gap with other sectors, as it does not present water as the centre of the universe (Gupta et al. 2009). This debate is expected to go on, but while these norms differ, they do not necessarily conflict.

A more pressing concern is the question whether water should be seen as an issue area in itself or as a crosscutting issue. Because of its relevance to so many sectors, actors from different issue areas of sustainable development perceive water's value for various purposes differently. This leads to perhaps the most persistent ongoing norm conflict: the perception of water as a social, economic or political good; as a sacred commodity, ecosystem medium or human right (Gupta & Pahl-Wostl 2013). This boils down to the value of water, which thus far poses an unresolved norm conflict in the GWGA.

### *Actor constellation*

The GWGA is characterized by membership overlaps between the various institutions. This is especially true for the UN institutions that are part of the GWGA. Generally focused on issue areas other than water, most of them have a membership that consists of nearly all nation states. Conversely, UN-Water does not involve states at all (except as voluntary financial contributors). Instead, it is open to all UN institutions dealing with water-related issues, while transnational institutions may apply for partner status (provided they meet several criteria). With the exception of the OECD and SWA, all major intergovernmental and transnational institutions of the GWGA are involved through UN-Water.

When it comes to transnational institutions, membership varies widely but also overlaps. The variation can largely be attributed to the different natures and characters of the organizations. So far there is no evidence of major actors deliberately supporting different institutions because of conflicts. However, forum shopping is considered widespread (Woodhouse & Muller 2017).

Of the institutions examined in this chapter, those concerned with high-level policy advice are by far the least inclusive, generally counting between ten and twenty members. As they are set up as minilateral arrangements this comes as no surprise. By what process these memberships are established is often ambiguous. What is interesting is that even in these institutions of few members, their membership shows definite overlaps. The governments of Hungary, Senegal, Japan and Morocco (2 out of 4) and The Netherlands and Jordan (3 out of 4) were all represented in multiple high-level policy advice institutions.

Overall, there appear to be no conflictive actor constellations in the GWGA in the sense that major actors intentionally support different institutions. At the same time, it must be noted that given the plethora of institutions differences in support will likely persist. What remains remarkable is the lack of UN member state involvement in the UN-Water coordination mechanism, and the relatively small number of voluntary financial supporters. It can be argued that it was deliberately designed this way to prevent

politicization and to allow for diplomatic manoeuvring among UN institutions (Gupta et al. 2013), but it also prevents member states from investing financial resources in an already stunted institution (respondent 10).

In conclusion, the GWGA can be considered minimally centralized, slightly coordinated, containing institutions that adhere to both integrated and conflictive norms, while displaying significant overlap in membership.

### 3.3.2. Type of fragmentation

The GWGA cannot be considered *synergistic*, as there is not one single core institution which includes (nearly) all countries and offers effective, detailed general principles for regulating policies in integrated institutional arrangements. It does contain some synergistic elements, such as the integration of SDG6 as a core norm in all major institutions. Furthermore, the GWGA holds potential for additional synergy, given the interrelated nature of the focus areas of the institutions involved, as well as opportunities for improved coordination by a strengthened UN-Water.

The GWGA rather seems to be characterized by *cooperative* fragmentation, as it consists of a number of loosely-integrated institutions with their own decision-making and monitoring procedures, and some ambiguity about the relationship between the norms and principles of different institutions. There are no apparent opponents within the GWGA. The overall working relationship between institutions is friendly and this there is some (albeit weak) system-wide coordination and joint monitoring for SDG6.

*Conflictive* fragmentation is not what characterizes the GWGA, but the institutional complex does show signs of conflictive elements. This is particularly the case where institutions show very limited connectedness, have unrelated decision-making procedures, and adhere to conflicting norms. The different perspectives on the use of IWRM, adaptive water management and the nexus approach are thus far non-conflictive, but debate on the value of water is a cause for concern if it remains unattended.

To sum up: the attributes of the institutional complex – minimally centralized, only slightly coordinated, containing institutions with some norm conflict and great overlap in membership – result in a predominantly cooperative fragmentation with conflictive elements, but showing potential for synergy.

### 3.3.3. Consequences for governance

The degree of fragmentation in the GWGA – predominantly cooperative – has consequences for its governance and overall institutional performance. These consequences can be assessed and grouped in terms of speed, ambition, participation, equity and commitment.

Institutional complexes with high degrees of fragmentation may result in higher *speed* of decision-making, resulting from opportunities for minilateral (small-n) agreements to reach agreements faster compared to a multilateral setting. Accordingly, the GWGA has recently seen the emergence of various minilateral arrangements, such as UNSGAB and the HLPW. It is easier and therefore faster to set up arrangements with a small number of actors, than to come to UN wide consensus on new agreements. However, questions exist whether the quick success of minilateral agreements will last in the long run, especially if they do not solve structural problematic regime elements (Biermann et al. 2009). The following chapter illustrates this for the HLPW.

In terms of *ambition*, higher degrees of fragmentation are said to make it more difficult to achieve agreements that are both broadly supported and ambitious (Aldy, Barrett & Stavins 2003). Multilateral arrangements hence lead to broad-but-shallow agreements. Arrangements negotiated by a smaller number of actors may prove to be more ambitious (narrow-but-deep), but run the risk of being rejected by those not included in the decision-making process. The UNSGAB recommendations are considered an example of such a narrow-but-deep agreement, which has consequently resulted in very little uptake and follow-up among countries and institutions. More fragmentation can also lead to more regulatory diversity and innovation (Jänicke & Jacob 2006). Such diversity is demonstrated by for example the variety of monitoring frameworks on SDG6, including GEMI, JMP and GLAAS.

Fragmentation could lead to better inclusiveness and *participation* due to reduced entry costs for private actors (hypothesis vi; Zelli & Asselt 2011). This is corroborated by the high degree of participation in for instance the WWF and GWP. But the cooperative fragmentation of the GWGA with such a high number of organizations and lack of focal point creates the risk that private actors (both corporate and civil society) need to spend excessive time and resources on a variety of partnerships and multi-stakeholder arrangements. This raises the concern that less powerful stakeholder groups may not have the capacity to participate, while only bigger and more powerful actors expand their reach.

As regards *equity*, a fragmented architecture may offer solutions specifically tailored to circumstances. The GWP with its regional partnership is a good example of this. However, the lack of a global focal point also results in the concern that less powerful states (downstream countries for example) have no public arena to stand up to powerful states. If the institutional complex were more centralized, less powerful states could seek safety in numbers and hence obtain bargaining power. Powerful states may therefore turn to fragmentation to maintain control. The chapter on the working-level dialogues on water held in the UNGA provides some clear indications that this is the case for the GWGA as well.

Finally, the degree of fragmentation also presents consequences grouped in this study under *commitment* (including political leadership, financial and other resources). Dispersed institutions are associated with chaos and gridlock, and deter public and private actors from committing resources (Victor & Keohane 2011). Current funding for SDG6 is considered insufficient, and sources of finance are dispersed as a result of fragmentation (Dalberg 2017, WBG 2017). As such, the lack of leadership and financial resources is considered both a driver and consequence of fragmentation in the GWGA. To break this cycle, water needs to be lifted higher on the political agenda and requires involvement of the highest political level (Ünver 2008, UNSGAB 2015, OECD 2017).

## 3.4. Concluding remarks

This chapter has sought to determine the degree of fragmentation in the GWGA and identify its consequences for governance. Mapping the GWGA has resulted in an overview that shows as a patchwork of international institutions that vary in character, constituency, spatial scope and subject matter. Hence, the GWGA can rightfully be considered fragmented.

As for the criteria to distinguish between degrees of fragmentation, the results of the mapping exercise show only limited *centralization* in the GWGA. There is no significant centralization around core institutions, but the GWGA is not fully decentralized either. SDG6 is considered a normative nodal point

and there is some degree of centralization around 'custodians' of SDG6 target indicators. *Coordination* takes place among nearly all key actors in the GWGA, but system-wide coordination is perceived as weak and in urgent need of improvement. There is some non-conflictive *norm differentiation* over IWRM, adaptive water management and nexus approaches. Most concern goes out to the perceived 'value of water', which is seen as an unresolved problematic regime element. *Actor constellations* appear to be non-conflictive. There is a great deal of overlap of membership among UN institutions (which was expected), but also among transnational instructions (which also display variations) and high-level policy advice institutions (even with their limited membership).

The characteristics of the GWGA – minimally centralized, only slightly coordinated, containing institutions with some norm conflict and significant overlap in membership – result in *predominantly cooperative degree of fragmentation with conflictive elements, but showing potential for synergy*.

The following consequences for governance can be distilled:

- Speed: There is an increasing number of minilateral arrangements in the GWGA. Their emergence is generally accomplished faster than that of multilateral arrangements, and they are also expected to reach agreement faster. However, one can doubt their long term effectiveness if problematic regime elements are not resolved.
- Ambition: These minilateral arrangements can be more ambitious than multilateral ones, but also risk rejection by the wider public (e.g. UNSGAB).
- Participation: Fragmentation allows involvement of extremely wide range of actors, but the multitude of fora can also be a burden on actors with limited capacity and resources.
- Equity: The lack of centralization results in the lack of a public arena for dispute settlement. This is partly taken up by the ICJ, but occurs out of sight. Powerful states may seek fragmentation to maintain power, as examined in the chapter on UNGA water dialogues.
- Commitment: the degree of fragmentation leads to a lack of commitment – of both political, financial and other resources – which in turn leads to more fragmentation. Breaking the cycle is said to require involvement of the highest political levels.

# 4. Fragmentation and the High Level Panel on Water

The High Level Panel on Water (HLPW) is the most recent addition in terms of high-level policy advice to the institutional complex for water. In this research the HLPW is understood as a minilateral response to fragmentation in the GWGA. This chapter provides a better understanding of the HLPW's inception, the way in which it operated, and its options and limitations for the management of fragmentation. Thereby, the second specific following research question is answered:

> *"Why did the High Level Panel on Water emerge and what are its options and limitations for the management of fragmentation?"*

Based on interviews and literature, the chapter first focuses on the panel's emergence and its mandate, followed by an examination of the Panel's membership and driving actors. Subsequently its modus operandi are studied. The chapter then explores how the panel deals with fragmentation. Finally, its outcomes are discussed.

## 4.1. Emergence and mandate

### 4.1.1. Inception

The idea for an intergovernmental panel on water was first expressed publicly by Mexican President Enrique Peña Nieto at the September 2014 Climate Change Summit in New York. He proposed "a forum to develop new efforts for adaptation … to be better prepared against the impacts of hydro-meteorological events that are becoming increasingly intense" (Mexico 2014 p8). Mexico subsequently presented the proposal at the 2015 World Water Forum (WWF; Conagua 2015a). It was taken up in the meeting's Recommendations, which underlined the need to reinforce the process to create an intergovernmental panel on water under the UN. The Recommendations also referred to the outcomes of the 2013 Budapest Water Summit and the 2014 Lima Ministerial Declaration on Climate Change, Education and Awareness-raising, in which the need for "a robust intergovernmental institutional mechanism" was emphasized (WWF 2015 §38).

In September 2015, the UN adopted Agenda 2030 and its SDGs. In comparison to its MDG counterpart, SDG6 on water is far more ambitious. Instead of aiming at halving the proportion of people subject to a lack of safe drinking water or sanitation, SDG6 aims at bringing the number of people affected to zero. Moreover, SDG6 saw the introduction of additional targets on reducing pollution, water-use efficiency, IWRM and water-related ecosystems.

Shortly after the adoption of the 2030 Agenda, the UN Secretary-General's Advisory Board for Water and Sanitation (UNSGAB) presented its final report. Two recommendations stood out in particular (respondent 7):

- "Form high-level alliances to tackle priority water-related challenges that are ripe for action", *inter alia* "convene a Heads of State Panel on Water for global advocacy around water resilience and adaptation"
- "Establish a UN Intergovernmental Committee on Water and Sanitation"

The first recommendation bared a strong resemblance to the Mexican proposal for an intergovernmental panel on water, while the second aligned with the 2013 Budapest Water Summit recommendation for a robust intergovernmental institutional mechanism. The report did not specify who should be responsible for taking action on the matter.

In the interim (September 2015), President Nieto had met with potential partners, including the President of the WWC and a Senior Director of the Water Global Practice of the World Bank Group (WBG), to discuss the proposal for an intergovernmental panel on water (Conagua 2015b, ANEAS 2015). In November 2015, the Senior Director in question announced that the UNSG was working on a WBG proposal for an intergovernmental "Heads of State panel on water" (WBG townhall 2015). This turn of events illustrates how the proposal for what would become the HLPW, was in its early stages chiefly a Mexican initiative, and was later submitted to the UNSG as a WBG proposal.

The HLPW was formally announced in January of 2016 at the World Economic Forum (WEF) by the UN Secretary-General (UNSG) and WBG President. They stressed their aim to mobilize urgent action on SDG6 and water-related targets. As described in the previous chapter, high-level panels are not uncommon in the water realm (e.g. UNSGAB, HELP, GHLPW). The relative novelty of the HLPW was that its membership would be made up exclusively by heads of state and government. It was also revealed that the Panel would be co-chaired by the presidents of Mauritius and Mexico, reportedly chosen for the diverse and representative water challenges their countries face (Guardian 2016).

The announcement was generally received positively. Media suggested that the panel would yield significant influence because heads of state and government have sway over international financial institutions such as the World Bank (as shareholders and clients) (Guardian 2016). WEF representatives argued that the water issue is "rarely discussed by those with the power to address it" and that "there has never been a coordinated political momentum." And while the water community has excelled at analysing the problem and creating solutions, it has never permeated to the highest political levels (Guardian 2016).

The official launch of the Panel took place on April 21, 2016 in New York. The UNSG and WBG President confirmed the co-chairs (Mauritius and Mexico) and announced the appointment of eight additional incumbent Heads of State and Government (Australia, Bangladesh, Hungary, Jordan, The Netherlands, Senegal, South Africa and Tajikistan) and two Special Advisors to the Panel (Dr. Han Seung-soo, former Prime Minister of the Republic of Korea, and Manuel Pulgar-Vidal, Minister of State for the Environment of Peru). The Panel's membership was altered slightly after its initial announcement.

### 4.1.2. Mandate

The first version of the mandate stated that the Panel would motivate action and advocate on financing and implementation (WBG 2016). Motivating action would entail efforts to shift the focus of public policy dialogues, civil society and private sector initiatives more towards SDG6. Advocating on financing and implementation would involve promotion of efforts that mobilize financial resources and to scale-up water investment. This mandate left a great deal open to interpretation, partially because a more detailed plan would be defined by the members themselves. Subsequently, the Panel members presented an Action Plan at their second meeting during the September 2016 UNGA.

The Action Plan specified that over the course of its two-year mandate the Panel would focus on the achievement of SDG6, as well as contributing to other goals that rely on water resources. The Action Plan built on the notion that the world – governments, societies and the private sector – needs to change the way it uses and manages water. The HLPW was intended to accelerate that transformation. The two objectives of the mandate were adjusted somewhat, but their scope remained the same:

- *Motivate Effective Action – by changing the way that the world thinks about water, and by shining a light on examples of policies, institutions, and programs that could help the world onto a more sustainable pathway, the HLPW can help motivate effective action across governments, civil society, and the private sector.*
- *Advocate on Financing and Implementation – by promoting efforts to mobilize and target financial resources, scale-up investment, and encourage innovation and partnerships, the HLPW can help the world improve water and sanitation related services, as well as build more sustainable and resilient societies and economies.* (HLPW 2016)

The Panel was given a two-year mandate, from early 2016 until early 2018. This is in contrast to the timeframe used by the for instance UNSGAB, which lasted for over a decade (2004-2015). It can be argued that the lengthy duration of UNSGAB was motivated by the fact that its mandate was closely linked to the MDGs which would last until 2015. As the mandate of the HLPW was linked to SDG6, lasting until 2030, this raises the question why the HLPW's mandate would be limited to two years. The relatively short timeframe can generally be explained by two factors: (1) the Panel's intent to bring about transformational rather than incremental change, and (2) political realities and resources.

According to the Action Plan, the Panel intended to promote and accelerate the transformative process in the way the world uses and manages water. As one Sherpa put it: "The strength of the Panel is its discontinuity. You set something in motion and you let it go. The process cannot belong to the Panel, it has to belong to the world. And with any luck, that process will instigate an even bigger transformation" (respondent 3).

Another, more "practical" reason for the two-year mandate were the political realities that Panel Members faced as Heads of State (respondent 6). All Panel Members are either democratically elected representatives or political appointees who are bound by their respective domestic politics. Most serve terms-of-office that are limited to a few years. A significantly longer Panel mandate would increase the risk of its Members losing their position as Head of State and subsequently leaving the Panel. Such a situation would likely weaken the Panel's standing and influence.

Moreover, one Sherpa put forward the argument that the Panel is very "resource heavy". There were multiple senior members of the ministry of foreign affairs "heading meetings and flying around the world, with a week or two of preparation for each meeting. Let alone the engagement of the leaders themselves" (respondent 1).

Overall, there seems to have been general agreement among Panel Members on the two-year mandate.

### 4.1.3. Reasons for emergence

Based on the prelude and the final mandate it seems the emergence of the HLPW was driven by a number of interrelated factors:

*International policy context/ambition*: The overarching element that provides the context for its emergence is the establishment of SDG6 and the concern that its implementation is too slow for it to be achieved by 2030. The slow implementation is attributed mostly to the lack of political leadership and insufficient financial flow into the water sector. Both have been identified as consequences of fragmentation in the previous chapter. As such, the HLPW is considered a reactive response to the fragmentation in the GWGA. This also supports hypothesis i, stating that the merits and demerits of fragmentation play an important role in proposals and strategies for future institutional development of the GWGA.

*Initiative and leadership*: The initiative that got the ball rolling can be traced back to the Mexican proposal for an intergovernmental panel on water. This was subsequently taken up by the WBG, which in turn presented it to the UNSG. In terms of gaining momentum, both Mexico and the WBG appear to have been a crucial factor, although the idea for an intergovernmental process had been expressed and reiterated several times by different actors.

*Previous international action*: An important enabling factor was the conclusion of UNSGAB, itself a *de facto* high-level panel advising the UNSG. Its concluding report called for the formation of high-level advocacy initiatives on water, most notably a heads of government panel (UNSGAB 2015, Slatyer 2017). Moreover, the conclusion of UNSGAB resulted in an even bigger leadership gap, raising the question of follow-up. “UNSGAB was a significant help in achieving MDGs, but who fills the vacancy after its completion in 2015?” (Hiroki 2017). One Sherpa confirmed that “the HLPW itself is the basic mechanism for follow-up for the previous UNSGAB” (respondent 6). But while UNSGAB has been instrumental to its emergence, the HLPW has not presented itself as UNSGAB’s successor. On the contrary. The Advisory Board was not referenced in any of the official HLPW documentation. This apparent disregard can be explained by the fact that the Panel was envisioned to be an independent body (Hiroki 2017), and too close an association with UNSGAB might have negatively affected the Panels’ credibility.

## 4.2. Membership explained

Particularly in the early stages of the Panel, its Membership underwent some changes because of political realities. For example, the Jordanian Prime Minister stepped down in June 2016, after which his successor took his place on the Panel (Washington Post 2016). The Peruvian special advisor also stepped down when elections in Peru resulted in a new regime and its newly elected President expressed interest in becoming a member of the Panel. This development raised Panel Membership to eleven and resulted in the composition shown in Annex IV, which was maintained for the majority of the Panel’s mandate.

In order to be able to describe the Panel’s options and limitations for the management of fragmentation, the following sections first take a closer look at the composition of the Panel, exploring both leaders’ personal profiles and their countries’ national interests. Due to the informal nature of the underlying process it is difficult to assess how exactly the selection came about and why particular Heads of State and Government were asked to join the HLPW. One Sherpa stated that much of the early process was

quite informal and very dependent on personal communication between UNSG and the WBG President (respondent 6). Nonetheless, it is possible to derive some commonalities between HLPW Members that help explain both why they were invited to join and why they took the invitation. This allows for an examination of the Panel's representativeness as well as its options for managing fragmentation.

### 4.2.1. National challenges

The first and foremost common factor between Panel Members, not surprisingly, is their countries' strong national interest relating to water. Many of the world's water-related challenges exist in one or more of the Panel Member countries. These issues range from the human need for safe drinking water and sanitation, to transboundary cooperation and water-related disasters. Correspondingly, the HLWP includes Members whose countries are still a long way from reaching SDG6.

#### *Drinking water and sanitation (SDG 6.1 and 6.2)*

The MDG target on halving the proportion of the global population suffering from a lack of access to safe drinking water might have been achieved several years in advance of 2015, but achieving access for all is still a long way off in several Panel Member countries. According to UN figures from 2015, Tajikistan and Senegal have safe drinking water coverage around 75%, some 15% below the global average. South Africa and Peru have their work cut out for them as well, as they hover around the global average of 89% coverage. The MDG target on sanitation was not achieved in 2015 and remains an area of concern. Bangladesh and Senegal had access to sanitation coverage just below 50% in 2015, 20% below global average. While above the 2015 global average, South Africa (73%) and Peru (77%) also had some ways to go towards access to sanitation for all (WHO 2018).

#### *Water quality and wastewater (SDG 6.3)*

The safe treatment of wastewater is an emerging challenge, especially for countries facing rapid urbanization and population growth. In recognition of this challenge, the proportion of safely treated wastewater was introduced as an indicator for SDG 6.3 on water quality and wastewater. Especially Tajikistan (12%) and Bangladesh (17% treated) are facing a serious challenge in this regards, according to the 2017 edition of the World Water Development Report (WWDR 2017).

#### *Water use and scarcity (SDG 6.4)*

More than half of the panel members are expected to deal with high levels of water stress by 2020. Water stress is defined as the total annual freshwater withdrawals presented as a percentage of the total annual available freshwater resources.

The World Resources Institute (WRI) conducted a study looking into future country-level water stress, taking a business-as-usual scenario for the year 2020. At 96%, Jordan will have the highest projected water scarcity. It ranks 15$^{th}$ on WRI's Aquaduct Projected Water Stress Country Rankings. In addition, high levels of water stress are projected to occur in Mexico (74%), Peru (67%), Australia (66%), Tajikistan (66%), and South Africa (60%). Bangladesh, Hungary, Mauritius, the Netherlands and Senegal are projected to experience medium to low levels of water stress (WRI 2015). The Guardian reported that one of the reasons Mexico was chosen as co-chair was the representativeness of its challenge facing large scale water shortages associated with a booming developing economy (Guardian 2016).

*Water resources management and transboundary cooperation (SDG 6.5)*

Water resource management is in many cases complicated by the transboundary nature of the resource. On a country level this results in the need for transboundary cooperation, especially when a country is dependent on upstream riparians for its water resources. This can be expressed in a dependency ratio: the percentage of total renewable water resources originating outside of the country. Based on data from FAO's AQUASTAT, Hungary (94% dependence), Bangladesh (91%) and the Netherlands (88%) rank among the top countries globally in terms of dependency on upstream countries for their renewable water resources (FAO 2014).

When combining this dependency ratio with numbers water stress, it can be derived what percentage of a country's total annual freshwater withdrawals is dependent on inflow from upstream countries. The Netherlands, Hungary and Jordan are dependent on upstream countries for respectively 68%, 50% and 24% of their annual freshwater withdrawals. Such a dependency can create challenges, which in turn increases the need for transboundary cooperation in water resources management.

*Water-related disasters (SDG 11.5)*

Finally, water-related disasters are a major concern for many of the HLWP Members. While water-related disasters are not formally a part of SDG6, they are incorporated in SDG target 11.5 and considered part of the 'water-related goals and targets'. A tool has been set up by the WRI to project global flood risk and its consequences depending on flood protection. Among others, this enables the assessment of the annual average population affected by floods and the expected affected gross domestic product (GDP, dollars).

According to these projections, Bangladesh faces over 2.6 billion dollars in annual expected affected GDP as a result of floods, which accounts for 1.2% of GDP loss on an annual basis. Moreover, one percent of its population is expected to be affected by floods annually, equalling 1.6 million people. Mexico follows closely behind in terms of affected GDP (2.4 billion dollars), although the percentage of GDP loss is significantly lower. Overall, seven HLPW Members can each expect over 100 million dollars affected GDP annually.

Small island developing states (SIDS) such as Mauritius are especially vulnerable to water-related disasters. They face the direct consequences of rising sea levels, ocean acidification, and increasingly frequent extreme weather events, but also salinization of soils and aquifers. Moreover, solving their local issues requires a global response. Mauritius was reportedly chosen to serve as co-chair because of its diverse range of water-related challenges related to climate change, representative for other SIDS (Guardian 2016).

### 4.2.2. International leadership and networks

A second common factor among HLWP Members is that dealing with national challenges has enabled many of them to take on international leadership roles in the water realm. Such leadership can result *inter alia* from success in achieving previous goals and targets, access to expertise and resources, and organizing platforms for water dialogue.

Mexico, for instance, achieved and exceeded the MDG targets on both access to safe drinking water and sanitation. Far more than halving the population suffering from lack of access to water and sanitation, Mexico decreased the proportions to one-fifth and one-third of the 2000 benchmark, respectively.

The three developed economies (Australia, Hungary and The Netherlands) are donors in terms of water and sanitation-related aid, whereas the remaining eight members are net recipients. Hungary started to earmark funds for water and sanitation in 2015, initially committing 5 million US dollars. In the ten years preceding the HLPW (2006-2015), the Netherlands and Australia committed on average respectively 227 and 85 million US dollars per year, according to OECD data on aid flows (OECD 2018). But perhaps more importantly, the three developing countries offer knowledge and capacity building. The Netherlands, a low-lying delta country like Bangladesh, has dealt with flood risk for centuries. Subsequently it has built a broad knowledge base regarding water management. Australia also showcases comprehensive expertise on drought management and water use efficiency. Hungary has significant groundwater supplies and knowledge on developing water resources and groundwater management.

Several Members have hosted one or more regional water weeks: South Africa (Africa Water Week 2009), Senegal (Africa 2014), Mexico (Latinoamérica 2014) and Jordan (Arab 2011, 2013, 2015). International summits have been organized by Mexico, Tajikistan, The Netherlands and Hungary. These include, respectively, the 2006 World Water Forum in Mexico City, the 2010 Conference on the Midterm Comprehensive Review of the "Water for Life" decade in Dushanbe, the biannual Amsterdam International Water Week, and the 2013 Budapest Water Summit.

The leadership roles of Panel Member governments bring along the added benefit of networks. Many have relevant connections in associated organizations and partnerships through the participation of government representatives. Senegalese Minister of Hydraulics and Sanitation, Mansour Faye, is Vice Chair of the Global High-Level Panel on Water and Peace. King Willem-Alexander of the Netherlands and Prince El Hassan bin Talal of Jordan are both former Chairs of UNSGAB. Dr. Han Seung-Soo, HLPW special adviser, is Founding Chair of the HELP.

Regarding coalitions within the UN membership, six Panel Members are part of the UN Group of Friends of Water, including Steering Committee members Tajikistan and Hungary. South Africa provides an opening into the BRICS association of major emerging economies and the UN G77 coalition of developing nations, the latter over which South Africa presided in 2015. Taking an even broader perspective, the OECD is currently led by Secretary-General José Ángel Gurría, former Secretary of Foreign Affairs of Mexico and member of the same political party as Mexican President Nieto.

### 4.2.3. Personal profiles

Beyond national interests, leadership and networks, it appears that the personal profiles of Heads of State and Government have also played a noteworthy role in the Panel's formation. Eight of the eleven leaders have some professional connection to water or sustainable development in general. As the Heads of State and Government are the actual HLPW Members, rather than their government as a whole, it stands to reason that the leaders' affinity with water and sustainable development would raise their commitment to the Panel while at the same time increasing the Panel's legitimacy.

Some of the leaders have a very clear profile in terms of water. Mexican President Nieto was the first to suggest an intergovernmental panel on water in 2014, while Hungarian President Áder has been patron of the Budapest Water Summit and opened the 2015 WWF in South Korea. President Kuczynski of Peru founded Agua Limpia in 2007, an NGO dedicated to providing communities with access to safe drinking water. Other leaders have formerly fulfilled government positions relating to water. Prime Minister Turnbull of Australia was previously Minister for the Environment and Water. Jordanian Prime Minister Al-Mulki is a former Minister for Water and Irrigation. And President Sall of Senegal has served as the Minister of Mines, Energy and Hydraulics. President of Mauritius Gurib-Fakim and Prime Minister of Bangladesh Sheikh Hasina, the only two women on the Panel, have both received awards in sustainable development related fields. President Gurib-Fakim, a renowned scientist and Professor of Organic Chemistry, is the recipient of the L'Oréal-UNESCO Prize for Women in Science. Prime Minister Sheikh Hasina won the UN Champions of the Earth award in the Policy Leadership category "in recognition of Bangladesh's far-reaching initiatives to address climate change" (UNEP 2015). In addition, three leaders have a rather direct affiliation with the WBG and the wider UN-system. Former Panel Member Abdullah Ensour previously served as Governor of Jordan to the World Bank. Peruvian President Kuczynski is a former World Bank economist. And President Gurib-Fakim has been a member and scientific adviser on a wide variety of international (UN) research programmes.

### *Position and political weight*

The Panel was explicitly intended to bring the discussion to the highest political level, which is why its members would have to be Heads of State or Government. Their respective roles and responsibilities vary. Depending on the system of government, their powers diverge from predominantly ceremonial to full-fledged executive. In this regard, the more powerful Heads of State and Government could be expected to have a greater capacity to deliver results. At the same time, however, those fulfilling more ceremonial duties might be in a better position to steer their time and energy towards the Panel.

There can be significant debate about the powers vested in Heads of State and Government, especially when comparing between different countries, all with their own constitutions. Here the contrast between leaders is presented in broad strokes to allow some comparison later on. The Panel consists of four Prime Ministers, who are all Heads of Government and therefore wield significant influence. There are five Presidents who yield similar influence, either because they serve in a presidential republic or because they fulfil both the role of Head of Government and Head of State.

This leaves two Presidents in parliamentary republics, serving as Heads of State in a predominantly ceremonial capacity. Most executive powers, such as cabinet selection and spearheading legislative initiatives, are reserved for their respective Heads of Government.

### *Challenges in continuity*

Due to the political nature of their office, all HLPW Heads of State and Government were at risk of losing their positions. This was an important reason to set the Panel's mandate to two years (respondent 6): considered long enough to produce meaningful outcomes, but short enough to fit within the political lifespan of the various leaders and minimize the risk of losing a member.

As pointed out before, there were some changes to the Membership in the early stages, but the Panel remained stable until early 2018. The one major change during this time was that co-convener UNSG Ban Ki-moon reached the end of his second and last term, and was succeeded by António Guterres on January 1st 2017. This appears to have had no negative affect, however, as UNSG Guterres was no less supportive of the Panel than his predecessor. During the Panel's mandate WBG President Jim Yong Kim was reappointed, and Prime Minister Rutte of the Netherlands, Prime Minister Turnbull of Australia and President Áder of Hungary were re-elected.

It was not until the end of the Panel's mandate that complications occurred. Due to pressure from within his party, President Zuma of South Africa resigned a month before the HLPW mandate would end (Guardian 2018). His early departure had no apparent ramifications. Nearing the end of the HLWP mandate, both President Kuczynski of Peru and President Gurib-Fakim of Mauritius were forced to step down, but only after the Panel concluded (CNN 2018).

Hence, it turned out to be a good thing the HLWP mandate was not extended beyond the original two years.

### 4.2.4. Representativeness

The UN Charter points out that geographical representativeness is one of the factors that should be taken into account when setting up organs not open to universal membership (Parry, Grant & Barker 2009). The composition of the Panel suggests a clear effort was made to reach an adequate degree of representativeness, in terms of geography as well as other aspects.

Based on the five-continent model used by the UN, each continent is represented by at least one panel member. The continent with the smallest number of UN Member States, Oceania (29), is represented by one panel member. The other continents are represented by two or more Panel Members. A Sherpa of the panel expressed his approval of the geographical allocation, calling it "well balanced" (respondent 6).

In terms of development status and income groupings the panel is reasonably representative as well. The panel includes three developed economies, one economy in transition, and seven developing economies (UNDESA 2017). Moreover, based on the World Economic Situation Prospects of the UN (2018) all income groupings in terms of GNI per capita are represented by the Panel: high-income (HIC), upper middle income (UMIC), lower middle income (LMIC), and low-income countries (LIC).

In addition to these classifications, there are several other groupings that are often used in UN context. These include Least Developed Countries (LDC), Land Locked Developing Countries (LLDC), and Small Island Developing States (SIDS). Membership of the HLPW includes countries in all three groupings.

The aspect in which the Panel is not as representative is gender. Only two of the eleven Panel Members women: Gurib-Fakim of Mauritius and Sheikh Hasina of Bangladesh. But to be fair, compared to the global average the Panels' ratio is slightly better (1/8 women Heads State and Government globally versus 2/11 in the HLPW).

**Table 4**: Overview of HLPW members, geographical location, country classification (UNDESA 2017) and income grouping based on GNI per capita (World Bank 2018). *The Kingdom of the Netherlands includes overseas territories (special municipalities and unitary states) which are listed as SIDS (UNDESA 2018).

| HLPW member | Continent | Sub-region | Country classification | GNIpc income grouping | Other groupings |
|---|---|---|---|---|---|
| Mauritius | Africa | Eastern Africa | Developing economy | UMIC | SIDS |
| Mexico | Americas | Central America | Developing economy | UMIC | |
| Australia | Oceania | Australia (&NZ) | Developed economy | HIC | |
| Bangladesh | Asia | Southern Asia | Developing economy | LMIC | LDC |
| Hungary | Europe | Eastern Europe | Developed economy | HIC | |
| Jordan | Asia | Western Asia | Developing economy | LMIC | |
| Netherlands | Europe | Western Europe | Developed economy | HIC | SIDS* |
| Peru | Americas | South America | Developing economy | UMIC | |
| Senegal | Africa | Western Africa | Developing economy | LIC | LDC |
| South Africa | Africa | Southern Africa | Developing economy | UMIC | |
| Tajikistan | Asia | Central Asia | Economy in transition | LMIC | LLDC |

## 4.3. Modus operandi

The set-up of the Panel was largely based on informal processes between the UNGA and WBG President. There was no identifiable set of rules and regulations or legal basis that governed the Panel. Its UN status also remained unclear. While convened by the UNSG, the HLPW itself was not presented as a UN institution. As such it did not use UN logo's in its main publications, such as its action plan and outcome document, but instead used more neutral symbols. On the other hand, the HLPW had (and still has) an operational website that is part of the UN website system and uses UN symbols in its joint statements. Moreover, the co-conveners' organizations (UN Secretariat and WBG) hosted and staffed the Panel's secretariat (Australian presentation 170615). This provided the bureaucracy for coordination and communication, for *inter alia* publications and press statements. The financial burden, however, as carried mainly by the Panel's members. Throughout the process, decision-making remained consensus-based (respondent 1).

### 4.3.1. Workforce

Given the wide range of responsibilities of the members as heads of state and government, and the difficulties of bringing them together, the majority of the actual work was executed by their representatives. These representatives, often referred to as Sherpas, were designated by their heads of state as their deputies. This representation generally solves three issues: Sherpas can dedicate more time to the process, are much easier to bring together logistically; and generally have a more thorough understanding of the subject matter than their heads of state and government (respondent 3).

The Sherpas of the panel members had various backgrounds. Some were permanent representatives at the UN mission in New York, others were high-ranking government officials, civil servants or special envoy for water.

While such a distribution of the workload sounds logical, it also raises questions regarding the politics and actual leadership in the Panel. As one Sherpa put it, "I wish it was political. … This is all bureaucratic nonsense. Everyone is thinking for the politicians, and tries to keep the process away from politics. This solves nothing" (respondent 3).

### 4.3.2. Meetings

Over the course of its two-year existence, the HLPW has met several times in a variety of settings. The meetings can broadly be divided between member meetings on the one hand and Sherpa meetings on the other (cf. Annex IV). Sherpa meetings served both a preparatory purpose (paving the way for the member meetings) as well as an executive purpose (carrying out decisions made by HLPW members).

#### *Member meetings*

There have been four official member meetings at which three or more members were present. These meetings were closed to the public and took place in the margins of other major events to alleviate the logistical challenge of bringing these leaders together.

The first meeting was at the official launch of the panel on April 2016 in New York, at the same day of the formal signing ceremony of the Paris Climate Agreement of UNFCCC COP21. The proceedings of the HLPW meeting remained confidential and its outcomes were not publicized, other than a joint statement which reaffirmed the Panel's direction. It would develop a comprehensive narrative on water, endorse exemplary water policies and institutions, and advocate on water financing for impact (HLPW 2016a). The meeting was attended by the Presidents of Mauritius, Hungary and Senegal. The other members were mostly represented by other government officials, e.g. ministers of foreign affairs, environment and natural resources, and water and sanitation.

The second meeting took place during the annual meeting of the 2016 UNGA. Even though at the UNGA the agendas of heads of states tend to be overbooked, at least a decent number of them is gathered around a single square mile (respondent 3). At the meeting the membership issued a 'Call to Action', calling upon fellow heads of state to take action on water (HLPW 2016c). The Panel also approved and presented the HLPW Action Plan, laying out the key considerations and principles guiding the Panel's work, as well as nine "areas of action, ... which together represent a "comprehensive agenda for action" (HLWP 2016b p5). At the second meeting the heads of state of Hungary, Bangladesh, Senegal, Peru and Australia were present, while the other six members were represented by one of their ministers or HLPW Sherpas.

The third meeting was organized in the margins of the Budapest Water Summit (BWS) in December 2016. It was attended by the heads of state of Hungary, Mauritius, Bangladesh and Tajikistan, who also took part in several sessions of the BWS. At the meeting the HLPW reviewed progress since their previous meeting in September, and focused mainly on the challenge of financing for water infrastructure. The Panel also met with senior representatives of multilateral development banks (HLPW 2016d). This resulted in the commitment to move towards doubling the current level of investment in water infrastructure and improving efficiency regarding access and disbursements of financial resources (respondent 3). While it remained unpublicized, many respondents confirmed that at this meeting there was major internal contestation over a Hungarian proposal for an UN intergovernmental body on water

(respondents 1, 2, 3, 4, 6). This would later perspire to be a main driver for the UNGA working-level water dialogues discussed in the next chapter. In the HLPW, however, the proposal encountered too much resistance to be carried forward.

It was reported that the panel members would meet for a fourth time in Cancun, Mexico, in May 2017 (IISD 2017, HELP 2017b). This meeting would have taken place during the 2017 Global Platform for Disaster Risk Reduction, but the gathering never evolved into an official meeting.

The fourth and final official meeting of Panel members took place during the 2017 UNGA. This was the first meeting with the new UNSG, Antonio Guterres. The meeting focused on the outcomes that would be reported in March 2018 and reviewed some of the practical initiatives it had undertaken, such as the adoption of the UNGA Resolution on the International Decade for Action for water (HLPW 2016c). The heads of state of Hungary, Mauritius, Bangladesh, Tajikistan and The Netherlands attended the meeting.

It is interesting to note that over the course of its two year mandate the panel has never met in full. In fact, there has not been a single meeting at which even half of the official Panel members were present. Moreover, it would appear that three of the eleven heads of state have not attended a single official meeting (President Nieto of Mexico, President Zuma of South Africa, and Prime Minister Al-Mulki of Jordan). The fact that the Panel has not met in full can be explained by the wide range responsibilities and crowded agendas of the Panel members, and is therefore not particularly concerning. The complete absence of three members does raise serious questions about their commitment.

### *Sherpa meetings*

The HLPW member meetings were significant because of their procedural importance and publicity, but the Sherpa meetings were the arena of substantive discussion. The Sherpas met at least fourteen times between April 2016 and March 2018. These meetings took place in nearly all countries of the Panel members, with the exception of Australia, Jordan and Senegal.

In the interest of transparency, the Panel's secretariat published brief meeting notes on these gatherings on the HLPW website. However, this was discontinued for unknown reasons after the HLPW member meeting at the UNGA in September 2016.

### *Other gatherings*

In addition to member meetings and Sherpa meetings, the Panel also organized several meetings with external partners. An example of this is the meeting held with the multilateral development banks in Budapest.

The HLPW also organized an open session and public consultation during the World Water Week in Stockholm, where over 200 stakeholders from the wider water community participated. They expressed their expectation, including hopes for a focus on implementation and long-term impact (HLPW WWW summary note 2016).

Additionally, HLPW members and Sherpas have represented the Panel at a wide variety of international and national venues. For instance, statements were delivered on behalf of the HLPW at the launch of the World Water Development Report (March 2017) in Durban, South Africa, and at the Global Platform for Disaster Risk Reduction in Cancun (May 2017).

## 4.4. Managing fragmentation

The options and limitations the HLPW had for managing fragmentation are considered dependent on the institutional setting of the Panel and its internal politics. The options and limitations are subsequently expressed through the Panel's actions geared towards conflictive consequences resulting from fragmentation in the GWGA (reactive management), and actions aimed at resolving conflictive attributes of the institutional complex (proactive management).

### 4.4.1. Institutional setting

Its institutional setting provided the Panel with significant influence relative to other institutions for high-level policy advice, such as the HELP and GHLPWP. This can mainly be attributed to the involvement of heads of state and government. "When they are having a conversation with financial actors and tell them things need to change, that will have an impact" (respondent 3). Another important element is the fact that these heads of state can bring to bear the full force of their national bureaucracies, including ministries of foreign affairs, infrastructure, health and environment (respondents 3, 4). Involvement of the highest political level also makes it more likely for the Panel's activities to be picked up by media outlets, which is demonstrated by the coverage of the Panel's launch by The Guardian newspaper (Guardian 2016).

Then there is the two-year mandate of the Panel, which can be considered a double-edged blade. On the one hand this time constraint limited the Panel in terms of their activities. Long-term planning, for instance the UN Water Action Decade, would be possible only if the initiative could stand on its own by the time of the Panel's conclusion in March 2018. On the other hand, the short timeframe forced the Panel to come up with solutions quickly, prompting efficient operations. But in terms of the timeframe, in the end the decisive factor was the set of political realities the members had to deal with. As demonstrated in the section on membership, within a month of the Panel's conclusion three of its members resigned as head of state and left office.

### 4.4.2. Reactive management

The emergence of the HLPW itself can be considered an example of reactive fragmentation management, as it was a response to the conflictive consequences that resulted from fragmentation. The pervasive lack of leadership in the GWGA was at least partially alleviated by the involvement of the Panel's eleven heads of state, the UNSG and the WBG President. However, the issue with this sort of response is that it leaves a leadership vacuum the moment it is discontinued. Therefore, it is more akin to the management of symptoms than it is to finding a cure for the underlying cause.

The Panel also addressed the issue of financing in the GWGA. In contrast to its temporal contribution to leadership, efforts on funding may prove to be more long-term. This depends on the question whether the ten largest Multilateral Development Banks the HLPW met with will follow the recommendation of (more than) doubling available finance.

### 4.4.3. Proactive management

Any initiative that seeks to influence conflictive attributes of the GWGA is considered here as proactive management of fragmentation. The conflictive attributes have been identified in the previous chapter as part of the four criteria determining the overall degree of fragmentation. Therefore this section

considers HLPW initiatives that sought to alter the degree of institutional centralization, improve institutional coordination, resolve norm conflicts, or improve actor constellation and representativeness among GWGA institutions.

The Panel did not initiate a process that directly influenced the degree of institutional centralization in the GWGA. This was considered, however, when Hungary put forward a proposal to the HLPW calling for a UN intergovernmental body on water. This proposal built on the final recommendations of UNSGAB. Such an institution would provide a dedicated UN body for comprehensive and integrated follow-up and review on SDG6 and enable regular dialogue among governments and other major stakeholders. Furthermore, it would seek to strengthen UN-Water which was envisioned as the intergovernmental body on water's secretariat (Hungary proposal 2016). The issue remained contested and HLPW membership could not reach a consensus. The most it would do was encouraging the consideration of an intergovernmental institutions, without any further specification.

In terms of institutional coordination, the adoption of the Water Action Decade for Sustainable Development did represent a step forward as it supports coordination and capacity building by offering a "platform for policy dialogue, exchanges of best practices and building global partnerships" (HLPW 2018 p31). To what extent this Water Action Decade can improve coordination remains to be seen. The HLPW also recommended to strengthen UN-Water, but did not put forward any suggestions how to achieve this.

The HLPW also engaged in addressing a major norm conflict of the GWGA: the value of water. Through its Valuing Water Initiative, the HLPW recognized "the full range of direct and indirect benefits and risks associated with water, which may be cultural, spiritual, emotional, economic environmental or social" (HLPW 2018 p16-18). It produced 5 Principles for Valuing Water, meant to aid the sustainable, efficient and inclusive allocation and management of water resources, and pricing of water services. These principles will be promoted by the Valuing Water Leadership Coalition (VWLC 2018). Further research over a prolonged period of time will be required to assess whether these initiatives can bridge the norm conflict over the value of water.

## 4.5. Outcomes

Hypothesis ii states that small-n agreements may be able to reach a negotiated outcome *faster* than traditional multilateral agreements. Hypothesis iv states that smaller groups of the most important countries in a certain field may produce *more progressive and far-reaching agreements*. Hypothesis v states that fragmentation may enhance overall governance performance through *regulatory diversity and innovation*.

This section assesses the speed, ambition/depth and innovation of the HLPW, by assessing both the initial expectations and the outcomes of the Panel. This assessment is based on the Panel's Action Plan (HLPW 2016b) and Outcome Report (HLPW 2018) as well as information provided by respondents at the start of the Panel. The Action Plan and Outcome Report contain three foundations for action, five themes, as well as options for catalysing change.

### 4.5.1. Foundations for action

*Water data*

The Action Plan mentions several possible priority actions, such as raising awareness, encouraging development of integrated accounts and indicators and a level playing field for data analysis and application. It also proposed a challenge for water data innovation, encouraging better communication and collecting data.

In the end, the Panel came up with a World Water Data Initiative and guidance material, and suggested strengthening water data responsibilities among multilateral agencies and a global framework for access to water data. It organized three technical workshops and an innovation challenge on water data for farmers. It therefore seems to have met at least part of its ambition, and introduced an innovative approach of working with a challenge.

*Valuing water*

The Panel intended to, among other actions, encourage stakeholders to distil core principles and a methodology, after which the Panel would articulate a narrative on valuing water. It also planned to encourage a lighthouse initiative to support countries in policy implementation, as well as a Valuing Water Leaders Coalition.

The Panel facilitated a global conversation with multiple stakeholders, and developed five key (albeit general) principles for valuing water. A lighthouse initiative was established within the HLPW, and a Valuing Water Leadership Coalition was launched (VWLV 2018). The outcomes have note proven to have been particularly innovative or ambitious, which may be explained by the sensitive nature of the topic. On a positive note, the principles may prove a small but decisive step in moving the debate on this issue forward.

*Water governance*

Possible priority actions mentioned in the Action Plan include developing principles for integrated water resource planning, endorsing useful governance agreements/instruments, encouraging dialogue as well as research regarding the role of water in social challenges.

However, the Panel only ended up highlighting the 12 principles of water governance that the OECD Water Governance Initiative had developed. No further outcomes are described.

### 4.5.2. Themes

*Improving access to safe water and sanitation*

According to the Action Plan, the Panel was to promote efforts to reach all people with access to safe water and sanitation focusing on innovative approaches, behaviour campaigns, institutions of service delivery, and the role of gender. It aimed at providing water and sanitation services for 10 billion people.

The outcome of this was rather abstract, similar to aim itself. The Panel committed itself and encouraged member states to support several initiatives, establish a multi-stakeholder sector review process and pursue innovative and sustainable financing strategies.

### *Sustainable cities and human settlements*

The Panel was to encourage innovative, integrated ways of managing water in cities, by focusing on integrated urban water management and water/migration. It already referred to existing initiatives (Habitat 3 New Urban Agenda, Urban Water Alliance), and proposed a meeting of major urban water programmes for coordination and alignment.

The Outcome Report states, rather vaguely, that the Panel "has engaged the science and practitioner communities to further develop the main [integrated urban water management] principles" (HLPW 2018 p29). It thus does not seem to have reached particularly ambitious or innovative outcome in this field, although it did come up with quite detailed recommendations.

### *Water and the environment*

The Action Plan states, again rather vaguely, that the HLPW would encourage integrated approaches to infrastructure and scaling up wastewater treatment, promote improved water quality, and endorse action and research that advances understanding of environmental water allocation.

The Outcome Report reaffirms these priority actions and adopted a roadmap on water use efficiency. It also supported 'nature' as the 2018 World Water Day theme. It mentions quite general environmental goals as recommendations. Its results thus do not seem very ambitious nor very innovative.

### *Water infrastructure and investment*

The HLPW intended to encourage member states and Multilateral Development Banks (MDBs) to increase (resiliency of) infrastructure investment, political leadership and funding support to key projects.

The Panel has consulted the ten largest MDBs and the Green Climate Fund and worked together with the Roundtable on Financing Water infrastructure (involving the OECD, WWC, WBG). It has also consulted with water operators, investment funds and civil society organizations. The results of these consultations are not described. Some recommendations are quite specific, such as "More than double available finance […], and; invest at least one-third of international climate finance in water-related projects that improve climate adaptation and strengthen climate mitigation" (HLPW 2018 p27).

### *Resilient economies/societies and disaster risk reduction*

The Action Plan stated the Panel would encourage the creation of a UN platform for sharing of lessons, science tools, and technology/policy reforms for water use efficiency; initiate an analysis of water crises risks from climate change and good practices on managing mega floods and droughts; and launch a Challenge on innovative solutions to improve water use efficiency.

The Panel raised awareness for preparedness and resilience to water-related disasters at the UN Global Platform for Disaster Risk Reduction and called for action on the topic at a UN Special Session on Water and Disasters during the 2017 World Water Day celebrations. It refers to the HELP principles on investment and financing for water-related disaster risk reduction and good practices/lessons of megadroughts at COP23. The Panel also helped set up an "alliance of alliances" to increase knowledge and tools for understanding the impacts of water-related disasters.

### 4.5.3. Catalysing change, partnerships and international cooperation

The HLPW intended to raise political awareness and leadership on water and mobilize stakeholders. Possible priority actions included encouraging consideration of an inter-governmental platform of water cooperation under the UN and supporting the call for a Water Decade for Sustainable Development (initiative by Tajikistan); promoting regional water summits and a UN Special Session on Water and Disasters; improving the narrative on how to change the world thinks about water; encouraging country action and collaboration, promoting funds and initiatives for water, as well as capacity building/training/exchanging best practices; encouraging the development and exchange of knowledge on deltas etc., promoting support for transboundary issues; as well as involvement of Young Water Leaders.

The Panel's output on this topic includes a study which found the water sector to be relatively under-invested in innovation and in need of creative breakthroughs (e.g. data collection, application of new technologies). The Panel therefore established a Water Innovation Engine. Regarding cooperation, the Panel fosters and recommends (UN support for) partnerships as well as registering these in the Water Partnership Catalogue. It has engaged with many stakeholders in global forums. It also recommends strengthening UN support for member states and coordination of water matters by UN-Water, considering creating an intergovernmental multi-stakeholder platform as well as (bi)annual Global Water Conferences and a global intergovernmental scientific platform on water (initiative by Mauritius) (respondent 1). The Water Decade was established, although this cannot be attributed solely to the HLPW. The Panel proposed to dedicate one year to each issue mentioned in its outcome document. The outcome report does not mention results in terms of summits, transboundary issues or young water leaders.

## 4.6. Concluding remarks

The Panel has certainly lifted water to a higher political level and provided an integrated overview of SDG6-related water issues with its 'Agenda for Water Action'. It also brought together a lot of work already underway and came up with relevant recommendations. For some topics, the Panel experimented with innovative approaches. However, the depth and ambition of the results do not seem to stand out from multilateral action. This may be explained by the short duration of the Panel, expectations beforehand and the fact that (hypothesis iii) the Panel was not able to resolve structural issues in the realm of global water governance. The issue of GWGA fragmentation became of a topic of debate in relation to the Hungarian proposal for the establishment of a UN Intergovernmental Platform for Water. Disagreement among members prevented the Panel from moving forward on this topic, and several respondents explicitly stated they wanted to steer away from institutional development discussions in the Panel. The Panel did succeed in addressing the intricate topic of valuing water, and has arguably paved the way for further action in this regard. However, results from follow-up mechanisms such as the Valuing Water Leadership Coalition have yet to emerge.

# 5. Fragmentation and the UN Water Dialogues

The second response to fragmentation of the GWGA investigated in this thesis is the (multilateral) series of UNGA Working-Level Dialogues on Water. Through a mapping exercise of these Dialogues, this chapter sheds light on the politically contested nature of the fragmentation debate. It focuses on the perspectives of Member States regarding the merits and demerits of fragmentation and coordination in the GWGA, thereby answering the third and final specific research question:

- *Why did the series of UNGA Working-Level Dialogues on Water emerge, and what are its options and limitations for the management of fragmentation?*

First, the Dialogues' creation and mandate are described. Next, the chapter elaborates on the Dialogues' participants. This is followed by a section on the process of the Dialogues, as well as participants' perspectives on the nature of the problem. Thereafter, the options and limitations for managing fragmentation are identified, and main areas of agreement and contestation are explained. Finally, the outcomes and opportunities for follow-up are distilled.

## 5.1 Emergence and mandate

### 5.1.1. Inception of the Water Action Decade and Water Dialogues

The UNGA Working-Level Dialogues on Water (hereafter referred to as Water Dialogues) were introduced in the resolution on the Decade of Action "Water for Sustainable Development" (2018-2028). This resolution was initiated by Tajikistan and supported by the HLPW. It was sponsored by 176 UN Member States and subsequently adopted by the UNGA in December 2016.

Some changes were made to the resolution over the course of its development, and these changes already give a glimpse of the different positions in the fragmentation debate. Whereas an earlier version of the resolution rather critically stated that SDG6 remained largely uncovered in UNGA and ECOSOC agendas, the final version only states these agendas need to better reflect SDG6 and water concerns. While this change presumably persuaded more sceptical Member States to sponsor the resolution, it also watered down the urgency of the matter. Another concession appears to be the resolution's emphasis on the use of existing funds to plan and organize activities. This would preclude additional financial costs or so-called programme budget implications (PBIs), which would have made it more difficult to pass the resolution as it would likely generate pushback among more sceptical Member States.

The most significant change to the original resolution, however, did not water down the resolution. Instead, it added action oriented substance, by introducing a request to the President of the UNGA (PGA) to convene two working-level dialogues to "discuss improving the *integration and coordination* of the work of the UN on the water-related goals and targets under its sustainable development pillar" (UNGA 2016 p5-6, emphasis added by author). Thus, the resolution focused on two elements of the overarching conceptual framework used for this study, but excluded norm conflicts and actor constellations. This could be interpreted as a sign that the initiators did not think there was a problem of conflicting core norms or (exclusion of) actors, or perhaps these issues were seen as less urgent (or already addressed elsewhere). The introduction of this clause coincided with resolution sponsorship by Hungary, who had

been pushing for a debate on this matter to promote their proposal for a UN intergovernmental body on water (IBW; respondent 2). Moreover, Hungary was the only member of the HLPW that did not sponsor the first version of the Water Action Decade resolution, despite the fact that the HLPW action plan had already recognized the Panel's support to the Decade. This leads to the supposition that Hungary played a significant role in the emergence of the Water Dialogues and may have even made its support for the resolution contingent on the inclusion of that clause, although this remains unconfirmed.

The adopted resolution invited the PGA to appoint two co-moderators (one from a developed and another from developing country), who would prepare and facilitate the Dialogues. Early 2017, the PGA appointed Tajikistan and Hungary as co-moderators (UNGA 2017b). The reasoning behind this was not made explicit, but Tajikistan appears an obvious choice as champion of the resolution, and it reaffirmed the role of Hungary as a key actor in this process.

### 5.1.2. Mandate

The mandate of the Water Dialogues was largely based on the operational paragraph in the resolution for the Decade of Action. The first gathering of the Dialogues was to facilitate a discussion among UN Member States on improving the integration and coordination of UN activities on water-related goals and targets, "with a particular emphasis on the 2030 Agenda for Sustainable Development, while preserving its integrated and indivisible nature" (UNGA 2016p5-6). The second gathering would serve to "take stock of the discussions at the first dialogue and to exchange views on the relevance of possible next steps". The Dialogues were intended to be informal, inclusive and with a broad range of relevant participants, unrestricted in number.

The Water Dialogues took place in the UNGA on the 22$^{nd}$ of March and 30$^{th}$ of May 2017. Both days foresaw a discussion between Member States, building on a high-level opening segment and two expert panel discussions, dedicated respectively to:

- The implementation of water-related SDGs: addressing challenges and seizing opportunities through strengthening cooperation and partnerships.
- Role of the UN system: improving the integration and coordination to support the Member States and other relevant stakeholders in the implementation and follow-up of water related SDGs. (UNGA 2017b)

## 5.2 Participation

The resolution of the Water Action Decade stipulated that the Water Dialogues should include the participation of Member States; relevant regional and international organizations; relevant UN system entities; and other relevant stakeholders (UNGA res v2 p6). No participant list has been made available, but analysis of the Dialogues' video recordings enabled reconstruction of such a list. Transcription of these recordings resulted in a total of 97 statements over the course of the two days, delivered by 56 different Member States and 16 other stakeholders.

### 5.2.1 Member States

Representatives of at least 120 of the 193 Member States of the UNGA were present during at least one of the two days of the Dialogues. Of those Member States, 56 participated in the Dialogue through delivery of statements. While this is indicative of the interest in this topic among nearly two thirds of UNGA membership, it must also be noted that few participants stayed for the entirety of the meetings.

UNGA Member States are organized in a variety of formal and informal groups, with different purposes and memberships. During the Dialogues, there were two coordinated inputs on behalf of such groups; by the EU (supported explicitly by Slovenia, Germany, France, The Netherlands, Spain, Finland, UK and Portugal) and the Alliance of Small Island Developing States (AOSIS; supported explicitly by Maldives, Cabo Verde and Cuba). The AOSIS joint statement is considered a good example of less powerful countries seeking coalition in multilateral fora in order to protect their collective interest, corroborating hypothesis viii. Other coalitions or major political groups, such as the G77, did not present joint statements.

Although the Dialogues were co-moderated by two HLPW member countries (Hungary and Tajikistan), not all HLPW members were present during the Dialogues. South-Africa was represented, but did not participate. Bangladesh, Senegal and Mauritius were absent.

### 5.2.2 Other stakeholders

The EU and the OECD, both observers to the UNGA, also participated in the Dialogues. The involvement of the EU is not uncommon, but relevant in this process, given the initiative of several EU Member States proposing a UN intergovernmental body on water (IBW), which played a significant role in these Dialogues. The OECD's involvement was linked to its engagement in the GWGA through *inter alia* its Water Governance Initiative and their twelve principles on water governance (OECD 2015b). Moreover, early 2017 OECD Secretary-General Ángel Gurría personally called for a new "global water architecture" as according to him the UN was not yet up to the task (OECD 2017a).

Relevant UN-system entities that were represented included UNICEF, UNESCO, UN-Water, and the UN Special Envoy for Disaster Risk Reduction and Water. With regard to other relevant stakeholders, major multi-stakeholder organizations (GWP, WWC, SWA), civil society (Women for Water) and the private sector (International Federation of Private Water Operators) were represented.

### 5.2.3 Scheduling conflicts

Over a third of UNGA membership did not show up for either one of the Dialogues. This may be partially explained by other events that were being organized at the same time. The first day of the Dialogues was held during World Water Day celebrations. Although this brought many relevant actors to New York, it may also have resulted in competition over participants for events organized simultaneously. For example, concurrent to the Dialogue, the UN Special Envoy for Disaster Risk Reduction and Water organized an event on "Priority Actions for Water and Disasters in the Next Decade", drawing around 100 representatives from the permanent missions in New York (HELP 2017b). Mauritian Ambassador and Sherpa to the HLPW Jagdish Koonjul delivered the closing remarks at this event.

As described in chapter 3, the fragmentation of the GWGA creates the risk that non-state actors need to spend excessive time and resources on a variety of partnerships and multi-stakeholder arrangements, and lead to relatively high entry costs. This may also hold for smaller country representations such as Mauritius, for whom it can be difficult to participate in simultaneous events due to the (un)availability of staff. The Mauritian Ambassador's absence at the Water Dialogues indicates Mauritius' prioritization of the theme of water and disasters over integration and integration of water in the UN system, which in turn can be explained by the country's vulnerability as a SIDS.

## 5.3 The Dialogue process

The first Dialogue was meant to identify gaps and challenges in the integration and coordination of UN work on water-related goals and targets, and discuss appropriate recommendations. The second Dialogue would discuss (the relevance of) possible next steps. In order to provide some structure to the Dialogues, the PGA and co-moderators produced a concept note which identified guiding questions on the following five issues (Dialogue concept note 2017):

1. Gaps and challenges in SDG6 implementation
2. Improving integration and coordination of policies and UN work
3. Cooperation among Member States and stakeholders
4. Partnerships for capacity development
5. Focusing on the role of women

By also focusing on cooperation with stakeholders, partnerships and women, this list thus included one other aspect of fragmentation: actor constellations.

The Dialogues were envisioned to be inclusive, open-ended, informal and interactive. But the institutional setting raises the question to what extent they could be, considering their location (the massive UN Trusteeship Council Chamber), number of participants (over half of UNGA membership present) and customary UN interaction (delivery of prewritten statements).

The co-moderators succeeded in guiding the Dialogue process in a very orderly manner, but could not persuade participants to engage in informal dialogue instead of broadcasting prewritten statements. Moreover, because of time constraints, no participant delivered more than one statement per day to allow everyone to have their say. Therefore, what had been intended as a Dialogue turned into a large series of monologues.

Most statements had no bearing on what had been said by previous participants, which can at least partially be attributed to the majority of statements being prewritten. It also hints at the highly politicized nature of the debate. But even when participants responded to ideas or proposal made by prior speakers, the latter had no opportunity to respond, preventing actual dialogue.

## 5.4 Perspectives on fragmentation

The initial correspondence concerning the Dialogues was in line with the language used in UNGA resolution on the Water Action Decade. The various letters by PGA Thomson, the concept note and the program referred to "improving the integration and coordination of the work of the UN" on water. As put forward in the conceptual framework of this thesis, integration is considered the conceptual

opposite of fragmentation. Therefore, the phrasing of the resolution and correspondence suggests that fragmentation exists as apparently integration can be improved. However, the word fragmentation itself is not mentioned in any of the preparatory materials.

Despite the general lack of interaction between Member States, the large variety of statements did produce an opportunity to distil insights regarding prevailing perspectives on fragmentation of the GWGA. Each of the first four issues in the concept note was touched upon by at least half of the active Member States. The fifth question on the role of women, however, was addressed by only 13 out of 56 Member States.

The issue of fragmentation in relation to the GWGA was addressed explicitly by around 40 percent of participating Member States (21 out of 56), as well as by six other participants. The vast majority of those Member States (17 out of 21) acknowledged fragmentation in the GWGA and identified it as *inter alia* a "significant problem", "serious issue" and "unhelpful", albeit to different degrees of severity.

Several of these Member States were quick to nuance their statements by offering alternative perspectives on the issue. The UK recognized the widespread consensus on the generally unhelpful degree of fragmentation, but added that this also reflected the very breadth of SDG6. "Its diversity on one side results and contributes to fragmentation on the other" according to the UK representative (Statement UK). In that same vein, the US downplayed the issue by stating that what some participants refer to as fragmentation is simply the engagement by multiple entities on water, calling it "unavoidable, and not necessarily a bad thing" (Statement US). The underlying argument being that a wide range of skills is needed to tackle water challenges, and that the variety of organizations and partnerships contributes to building the global capacity that is needed.

Five Member States had a different view on fragmentation altogether. Japan raised the question whether the current system should be referred to as fragmented as such, or whether it is merely a lack of coordination. Similarly, Turkey argued that the issue of fragmentation could "be addressed through better dialogue, coordination and coherence" rather than by intergovernmental bodies or umbrella organizations (Statement Turkey). The Russian Federation and Cuba went a step further and argued that defragmentation of the GWGA through establishing an intergovernmental mechanism would actually lead to detrimental fragmentation in 2030 Agenda as a whole. Moreover, India argued that the fragmentation in the GWGA is not greater, and perhaps even smaller, than for some of the other SDG's.

Of the Member States that recognized fragmentation as a conflictive issue, about half substantiated their statements. A number of consequences of fragmentation in the GWGA and recurring arguments for addressing its conflictive elements emerged from the Dialogues. These arguments showed a clear correlation with the challenges that were identified in the Dialogues' summary, and are further described in the next sections:

- Lack of clarity on existing water-related institutions
- Current UN system not up to the task
- Need for better integration and prioritization of water in other SDGs
- Limited support to Member States (funding, capacity, technology)

### 5.4.1 Lack of clarity on existing water-related institutions

The fragmented plethora of institutions in the GWGA have made it a challenge for anyone to obtain a clear and comprehensive picture of the roles, responsibilities and capabilities of different actors. As Germany put it, there is "no clear understanding of the existing mandates and subsequent activities of the multitude of UN organizations dealing with water" (Statement Germany). As a result, it has become difficult to reach a common understanding of the current landscape. Moreover, some Member States argue, such fragmentation can lead to overlaps and duplication of efforts in both the UN system and in Member States. Ten Member States, as well as the EU, have argued that there is a need for better understanding the system of GWGA institutions, their mandates and activities.

This is supported by both proponents and opponents of an intergovernmental body on water (IBW). On the one hand, calling for more research and information can be applied as a tactic to stall intergovernmental deliberations. The UK and Japan for instance, both highly sceptical towards the IBW proposal, were some of the first to raise this issue and stated that moving forward with solutions should be contingent on creating a better understanding of the system. Nonetheless, avid supporters of an IBW such as Germany, Hungary and Peru affirmed the need for a better understanding of the current landscape as well. Various Member States (e.g. Peru, Egypt, Thailand) suggested a mapping exercise to clarify the work of existing water-related mechanisms, understand challenges and identify solutions.

### 5.4.2 Current UN system not up to the task

Several UN Member States openly questioned whether the current UN system is capable of delivering on SDG6 and the other water-related goals and targets, pointing at a mismatch between ambition and ability which is attributed to fragmentation. Estonia, for instance, referred to the lack of a dedicated forum for regular dialogue, "where water is at the centre of attention and the main focus of discussion, not relegated to a subtopic" (Statement Estonia). In a similar fashion, Kenya argued that the lack of a dedicated UN organization which prioritizes water results in the current lack of leadership. A wide variety of Member States pointed at the importance of the coordination efforts by UN-Water, but also deemed it insufficient for the ambitious 2030 Agenda and suggest strengthening the coordinating mechanism.

### 5.4.3 Need for better integration in other SDGs

A large majority of Member States stressed the need for better integration of water in the other sustainable development sectors. This is not to be confused with integration or centralization of the GWGA. Rather, these countries argued for a better prioritization of water in the agendas and approaches of other SDGs. This builds on the recognition that water challenges cannot be addressed by the water sector alone. At the same time, some Member States stated that, as a result of fragmentation and lack of leadership, the topic of water is treated as a "marginal issue" (Statement Thailand) or "subtopic" (*inter alia* Statement Switzerland, Turkey, Estonia) in these other sustainable development sectors.

### 5.4.4 Limited support to Member States

A variety of Member States argued that the primary responsibility for achieving SDG6 is carried by countries, and consequently many Member States highlighted their individual efforts in addressing water challenges. However, as often happens when Member States are asked to undertake extra work, many

recognized that a great number of Member States do not have sufficient financial, institutional and or technical capacity to tackle SDG6. Increased capacity building, transfer of knowledge and technology, and sharing of best practices and lessons learned is required, especially for LDCs, LLDCs and SIDS.

### 5.4.5 Overall perspective

The perspectives that flow from the statements delivered by Member States show a close resemblance to the views on fragmentation in the GWGA as found in academic literature and other publications. The majority of Member States considers fragmentation in the GWGA to be problematic. Some argue that fragmentation is an inherent attribute of this institutional complex (cf. Zelli & Van Asselt 2013) and that it reflects the diversity and complex nature of the water realm. A small number of Member States poses that fragmentation in the GWGA is not that much of issue, especially compared to other SDG issue areas. This latter position appears to go hand in hand with a strong opposition towards new institutional development in the GWGA. This finding is in line with hypothesis i, which stipulated that the merits and demerits of a fragmented governance architecture play an important role in proposals and strategies for future institutional development in environmental policy, in this case for water (cf. Biermann et al. 2009; Zelli & Van Asselt 2013). Member States emphasizing the demerits of fragmentation argue in favour of a central body on water, whereas those emphasizing the merits do not.

Applying the typology of fragmentation from the conceptual framework of this thesis, it can be discerned that among Member States the predominant perspective on fragmentation in the GWGA is somewhere between cooperative and conflictive, without a clear inclination towards on or the other. The main arguments relate to the criteria of institutional centralization and coordination, which are found to be lacking and insufficient, thus matching the aspect of 'limited connectedness and unrelated decision-making procedures' as described by Biermann et al. (2009). However, in their statements Member States did not mention other aspects of conflictive fragmentation, such as conflicting sets of principles or norms, or coalitions of actors that are indifferent to, or seek to benefit from, such conflicts.

## 5.5 Managing fragmentation

Before taking place, the UNGA Water Dialogues were presented as the start of a new chapter, with the potential to become a new movement for catalysing the implementation of SDG6 (Hungary 2017). The process itself, which only consisted of two meetings, had little capacity for managing fragmentation, but instead provided a look into the options and limitations for managing fragmentation in the GWGA and the UN system in particular. These options and limitations emerge from analysing the Dialogue process and the statements delivered by Member States and other stakeholders. Similar to the equivalent section of the previous chapter on the HLPW, this section looks at the institutional setting, reactive management and proactive management of fragmentation.

### 5.5.1 Institutional setting

As was discussed in the section on the Dialogue process, while the Dialogues were envisioned as informal and interactive, they actually resulted in a fairly formal debate where speakers took the floor for a given amount of time and in a certain order based on a speakers' list. At no point during the Dialogues was there a deliberate occasion for unmoderated debate where representatives could mingle and speak freely. This restricted the free sharing of ideas and responding to the few questions posed by Member

States in response to earlier statements. Moreover, the Dialogues were held at the UN Trusteeship Council Chamber at UN headquarters in New York. This venue provides room to all UNGA member states as well as other participants, and arranges them according to alphabetical order. The natural downside of such a setting is that a debate quickly becomes impersonal and predetermined seating arrangements hampers communication within and between potential coalitions.

The mandate given to the Dialogues by the PGA, based on the Water Action Decade resolution, can also be considered a limitation. Even if the debate turned out to be formal, the informal setup meant that the Dialogues had no means of decision-making and that the foreseen co-moderators' summary would carry relatively little authority. Moreover, the Dialogues were restricted to two days, without specifying an avenue for follow-up. The second Dialogue enabled an exchange of views on possible next steps, which were incorporated in the Dialogues' summary, and sent to the PGA for further steps (Statement Tajikistan). However, this took place over two months after the conclusion of the Dialogues. At that point in time, the PGA was already nearing the end of his term, making any follow-up from UNGA leadership dependent on the next President. No follow-up has resulted at the time of this writing.

In terms of participation, the Dialogues did facilitate the involvement of other stakeholders. Most of the major transnational institutions active in the GWGA were represented during the Dialogues. None the less, the vast majority of speakers represented individual Member States (56 of 73). As examination shows that no less than 120 different Member States were represented at some moment during the Dialogues, this raises the question why over half of those did not take the floor. According to the co-moderators, all who wished to intervene were given the opportunity to do so (Summary 2). Two factors may have played a role. On the one hand, to at least some degree there is a lack of clarity among Member States on the current GWGA, which may have prevented them from taking position. Another explanation may be the politicized nature of the debate, resulting in a wait-and-see attitude of Member States with a less outspoken position on this topic.

Co-moderation by Tajikistan and Hungary has played a significant role in development of the Dialogues and their institutional setting. Both countries are members of the UN Group of Friends of Water, and both countries were members of the HLPW. Tajikistan was further invested in SDG6 through its initiative of the Water Action Decade, and Hungary had been the initiator of the proposal for a UN IBW. While this proposal was not mentioned in the concept note, the notion behind it took up a prominent role in the Dialogues. Over half of the participating Member States implicitly or explicitly touched on the idea of creating a new institution for intergovernmental interaction on water. It can be argued that co-moderating the Dialogues allowed Hungary to steer the process in a direction that would benefit their proposal, for instance through preparatory meetings and writing the summary. At the same time, co-moderators are generally expected to display at least some degree of impartiality. Both Tajikistan and Hungary did not have their alternate representatives speak on their behalf from the floor, and their only statements were rather nondescript. As such, it can be argued that Hungary became 'kaltgestellt', or excluded from the debate, because of its role as co-moderator.

### 5.5.2 Reactive management

Over the course of the Dialogues there were a number of proposals and elements of debate that could be linked to reactive fragmentation management, as they coincided with some of the conflictive consequences that result from fragmentation. There are two that stand out; the call for a Global Water Fund and requests for financial support; and the widely shared support for the Water Action Decade as a "broad and flexible framework" for *inter alia* capacity development (Summary full 2017 p5).

#### *World Water Fund and financial support*

A third of Member States (19 out of 56) reported either a lack of financial resources for SDG6 in their own country, or argued for the mobilization of additional funding for others. However, very few also elaborated on options regarding how to achieve this. Some Member States reverted to traditional arguments, suggesting that "developed countries should provide the developing countries with technical support and financial assistance" (Statement China). Others referred to the Addis Ababa Action Agenda on Financing for Development (Statement Morocco) or suggested enhancing the role of private sector investment and innovative financing options (Statement Ethiopia, Kazakhstan, The Netherlands).

The two most clearly articulated proposals in this regard came from Kazakhstan and Cabo Verde. The first suggested the creation of an innovative, inclusive and sustainable financing mechanism, building on successful experiences from the Central Asian region. The second suggested the creation of a World Water Fund, intended to provide technical assistance, capacity building and finance. Similarly, a variety of older press statements reported that Mexico, Senegal and Bangladesh also expressed a strong interest in creating such a "blue fund" for SDG6 (Conagua 2015, Le360 2016, BDnews 2017). However, Mexico did not express its support for this proposal during the Dialogues and the absence of Senegal and Bangladesh leaves the question open whether they still seek such a fund. In any case, the proposal received very little attention or backing from other participants of the Dialogues, and has not led to a subsequent process.

#### *Water Action Decade and capacity development*

Throughout the Dialogues, a lot of attention went to the need for more capacity building, both at regional and national levels. Nearly half of all Member States (27 out of 65) referred to this need; significantly more than the number calling for financial support. The summary states that "countries bear the primary responsibility, but support is needed" (Summary full 2017 p5). Similar to the issue of financial support, there were many interventions stating the need for capacity development, but again few Member States provided ideas on its realization. One approach was suggested by the Tajik co-moderator, who argued that the Water Action Decade was "designed to … set up a broad and flexible framework for capacity building on the basis of the accumulated experience in this field" (Statement Tajikistan).

In terms of ambition, the Water Action Decade may be described as a typical multilateral broad-but-shallow agreement (Biermann et al. 2009): broad support (176 sponsors out of 193 Member States), but very little substance as part of the resolution. In the words of one HLPW representative, "we just had a decade of action on water (referring to 2005-2015). Who cares?" (respondent 1). On the other hand, the broad and flexible nature of this framework may prove to deliver some of the merits of fragmentation that had been identified by Keohane and Victor (2011), namely flexibility across issues and adaptability

over time. So far, 41 countries are registered on its website (wateractiondecade.org) as active participants to the Decade, which was launched on World Water Day (March 22nd) 2018. The Decade will undergo a comprehensive midterm review in 2023, at which point a better assessment can be made of the framework's flexibility, adaptability and effectiveness.

### 5.5.3 Proactive management

The Dialogues have also produced proposals and elements of debate relating to proactive fragmentation management, which are directly or indirectly related to the conflictive attributes of GWGA fragmentation. These attributes, part of the four criteria that determine the overall degree of fragmentation, have been identified in the third chapter. In this regard, the debate of the Dialogues centred on two areas of strong contestation: institutional centralization through a dedicated IBW, and institutional coordination through strengthening of the UN-Water coordinating mechanism.

Attributes of GWGA fragmentation pertaining to the other two criteria of the conceptual framework (norm conflicts and actor constellation) are touched upon, but have not been the main focus in these debates. They are by no means of lesser importance than the criteria of institutional centralization and coordination. Moreover, analysis points out that development in the first two criteria may very well represent deterioration of the latter criteria.

#### *Strengthening UN-Water (coordination)*

The UN-Water coordinating mechanism was praised by various Member States for its coordinating efforts, but many also pointed out that current coordination is not sufficient for the 2030 Agenda ambitions. Nearly two thirds of those that referred to UN-Water suggested the coordinating mechanism should be strengthened. Very few, however, elaborated on how this should be done.

Of the sixteen Member States that referred to UN-Water, those who were the most strongly opposed to the IBW proposal (Brazil, Argentina, US, Mexico and Japan) were also some of the strongest advocates for strengthening UN-Water. It is worth noting that of the same sixteen Member States, three Member States who were strongly in favour of the IBW proposal (The Netherlands, Switzerland and Peru) did not suggest to strengthen UN-Water. One of the core criticisms was that UN-Water offers no platform for interaction with Member States. But as multiple panellists pointed out, government interaction is not part of the UN-Water mandate (Statement Bai-Mass Taal). Japan recognized the ambiguity and suggested to provide UN-Water with a new mandate. The US provided the most detailed suggestions, proposing the consideration of establishing a Member State advisory committee.

In terms of the fragmentation typology, this element of the Dialogues mostly relates to the second criterion of institutional coordination. Strengthening UN-Water – whether it would be institutionally, financially or otherwise – could potentially bring the degree of institutional coordination from the current cooperative-conflictive into synergistic spheres.

#### *Intergovernmental Body on Water (centralization)*

Throughout the Dialogues, many Member States raised doubts whether the current GWGA, and the UN system in particular, is up to the task of delivering on SDG6 and the other water-related goals and targets. The majority of statements recognized the need for better prioritization of water in the 2030 Agenda, and several interventions focused on the lack of leadership and the absence of a dedicated

platform for intergovernmental deliberations on water. As one delegate put it "We currently lack a legitimate and comprehensive space within the UN which would allow for universal participation of Member States, to mobilize political leadership in a sustained and long-term manner, leading to better prioritization of water and sanitation issues" (Statement Switzerland). Similar to what has been found in chapter 3 of this thesis, Member States acknowledged the importance of multi-stakeholder platforms such as the WWF, but also recognized that they do not resolve the lack of a dedicated IBW (Statement Brazil). Whether and how to resolve this issue became the most contested topic of the Dialogues.

*History*

Part of this discussion can be traced back to the proposal for a UN IBW (IBW) championed by Hungary and supported by Finland, France, Germany, The Netherlands and Switzerland. It built *inter alia* on the recommendation of UNSGAB in 2015, calling for the establishment of a UN intergovernmental committee on water (UNSGAB 2015). Such a body would provide follow-up and review on SDG6, as well as political guidance. The proposal also suggests strengthening UN-Water, which is foreseen as the IBW's secretariat. The actual proposal was not often explicitly mentioned during the Dialogues, but Member States spoke more generally about the establishment of an IBW (Hungary IBW prop 2016).

*Proponents*

During the Dialogues, 9 (out of 56) Member States clearly supported establishment of a UN IBW. This includes the initial proposal supporters, and four other Member States. However, it excludes Hungary who remained neutral during the Dialogues as co-moderator, but who was actually one of the proposal's initiators. The main arguments the proponents put forward were related to GWGA fragmentation and the insufficient prioritization of water in the 2030 Agenda and UN bodies, and lack of political space for intergovernmental deliberations. Some of the initial supporters took the time to elaborate on what such a body could entail, but were restricted by the three-minute speaking time. The majority of proponents called explicitly for continuation of the Dialogues, and several called for a renewed mandate to the PGA to further explore the proposed options and formalize the process.

*Opponents*

On the other end of the spectrum, however, a great deal of Member States expressed their scepticism, concern, or outright opposition to the establishment of such a body. No less than thirteen speakers argued openly against the proposal, and another five voiced their scepticism or reservations. The two main arguments brought up in opposition to the establishment of an IBW centre around funding and fragmentation. One major concern is that a new bureaucracy would lead to unnecessary costs and result in further competition over already scarce resources. The other argument shows an interesting divergence regarding perspectives on fragmentation. Where proponents of the proposal argued that a new intergovernmental body can aid in bridging the current GWGA fragmentation, opponents claimed the opposite. The latter argued that the proposal would only bring more confusion (Statement Japan). Moreover, they indicated it would not resolve the GWGA fragmentation, but rather increase fragmentation of the 2030 Agenda as a whole – which is meant to be integrated and indivisible. Many warned against creating another 'silo' for water and further isolating it from the 2030 Agenda. In addition to these arguments, the four Latin-American Member States among them expressed concern over sovereignty and human rights.

*Countries with a neutral stance*

Those countries who either strongly supported or opposed the proposal cover only half of the Member States who contributed to the Dialogues (28 out of 56). The other half of participating Member States encompasses ten speakers who did not touch upon the issue at all, but also includes eighteen who were openly optimistic about the prospect of establishing an IBW. All eighteen expressed an interest in further discussing the prospect and exploring further options.

Three of the major transnational institutions on water – GWP, WWC, SWA – participated on the first day of the Dialogues. Its representatives appeared to carefully circumvent the matter of a new IBW in the UN. Such a body would very likely have implications for these three organizations and might create further competition for resources, which could be a reason for concern for them. At the same time, openly deriding the establishment of such a body could undermine their standing with some of the UN Member States. Avoiding any specific comments on the matter would seem logical.

### 5.5.4 Lines of division

Overall, there is significant contestation regarding the idea of creating an IBW. There are Member States very eager to push this proposal and initiate a formal process of consideration in the UN. Conversely, there are Member States who vehemently oppose the idea and announce they "will continue to work with likeminded Member States to oppose the creation of such a body" (Statement US). And in the middle there is a massive body of Member States who remain undecided, but generally optimistic towards further dialogue and consideration.

Interestingly, Member States with the most land mass appear the most opposed to a new IBW. The top-10 Member States ranked by land mass comprises seven outspoken opponents of the proposal and merely includes two countries who are open to entertaining the proposal (China and Kazakhstan). This in turn leads to a division in terms of regional powers. What countries are considered a regional power is a matter of debate. In this case no specific definition is applied, but Member State attributes that contribute to its classification as regional power include: economic power, military strength, land mass, and renewable water resources. Analysis along these lines reveals that regional powers are major opponents of the proposal to establish an IBW. This theory applies to North America (opposition: US), Latin America (Argentina, Brazil, Mexico), transcontinental regional powers (Russia, Turkey), Oceania (Australia) and largely to Asia (Japan, India). There are two exceptions. In Europe regional powers are mainly supportive (France, Germany), which is explained by their involvement in the actual proposal (and, perhaps, the fact that the EU is generally in favour of multilateral approaches). The most notable exception is China, who is one of the few regional powers who is not firmly opposed towards the proposal, and is even open to continuing the dialogue. A major question is the position of African Member States, of whom only a few actively participated in the Dialogue. These findings are considered to corroborate hypothesis ix, which poses that "powerful states will seek to advance fragmentation in order to maintain control".

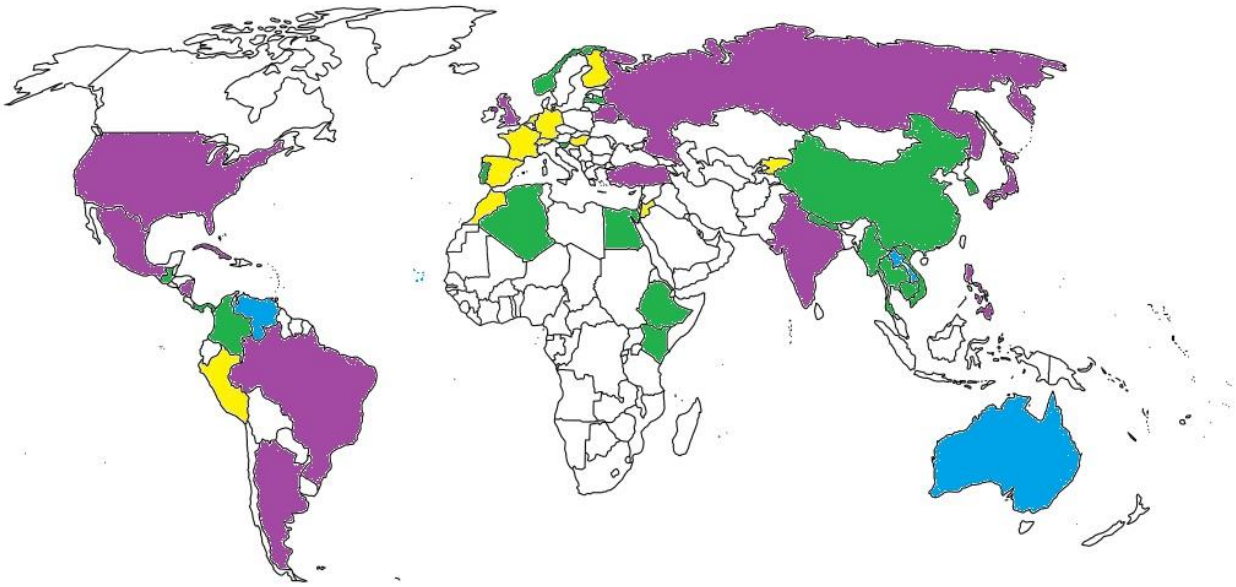

**Figure 4.** Visualization of Member State attitudes towards the proposal for an intergovernmental body on water. Supportive: yellow. Receptive: green. Sceptical: blue. Opposed: purple. Unknown/neutral: blank.

Visualizing the positions of Member States (supportive, open, sceptical, opposed) further indicates corresponding attitudes of a positive nature among certain regional clusters.

- In Europe there appears to be general agreement on support for the proposal, with some countries undecided but receptive, and only the UK in opposition.
- Among the Member States of mainland East and Southeast Asia there appears to be a consensus on the further consideration of the proposal (China, Myanmar, Thailand, Cambodia, Vietnam). Laos presented a somewhat sceptical statement, but also acknowledged consideration.
- While rather few African Member States expressed their opinion regarding the matter, among those that did, there appears to be an openness to discussing the issue further, with no apparent opposition present.

Another striking observation is that there is not a single non-continental Member State that openly supports or even expresses receptiveness to the proposal for an IBW. Island Member States which participated in the Dialogues have either expressed scepticism (Australia, Cabo Verde), opposition (Cuba, Japan, Philippines, UK), or no position at all (Maldives, Jamaica). The reason behind this remains unclear, but may be attributed to a general lack of (international) transboundary water courses, a lack of advantages for developed countries, and more pressing concerns for (small-island) developing countries such as water-related disasters.

### 5.5.5 Overall limitations of the Dialogues

*The integration paradox*

An overarching limitation of the Dialogues that became clear through the debate on establishing an IBW, was the ambiguity around the use of the concept integration. The goal of the Dialogues was "to discuss *improving the integration and coordination* of the work of the UN on the water-related goals and targets under sustainable development pillars, with particular emphasis on the 2030 Agenda for Sustainable Development, *while preserving its integrated and indivisible nature*" (UNGA 2017a).

The ambiguity results from the perceived contradiction between further integrating the UN work on water, while at the same time preserving the integrated and indivisible nature of the 2030 Agenda must be preserved. Proposals for improving integration in the GWGA have mostly focused on creating new institutions dedicated to water, which according to opponents is contradictory to the notion of an indivisible 2030 Agenda. This results in a paradox where Member States refer to integration in the way they see fit.

The question that results is whether the issue of integration is a zero-sum-game. In other words, does further integration of the GWGA necessarily mean disintegration of the 2030 Agenda? Or might there be a mutual gains possibility, in which improved GWGA integration actually supports the integrated 2030 Agenda? This appears to present a looming norm conflict that merits further research.

*Initiative funding*

Another limitation that played a significant role in these Dialogues is funding. The various initiatives that were proposed all faced questions how the required financial resources should be mobilized. Several Member States went on to suggest that any new initiative should built on existing resources.

Moreover, analysis shows that 10% of UN Member States cover more than 80% of Member State contributions for development-related operational activities in the UN system (not taking into account humanitarian assistance). The three largest contributors are the US, the UK and Japan. Together they cover 35% of these activities. They also happen to be some of the strongest opponents of the proposal for creating a new IBW. The five initial supporters of the proposal (Finland, Germany, France, Switzerland and the Netherlands, barring Hungary) are the only top-25 contributors explicitly supporting the proposal (ECOSOC 2016). Similar to the findings that show division between regional powers and non-regional power, this appears to corroborate hypothesis ix on powerful states seeking to advance fragmentation in order to maintain their control. Confirmation of this supposition, however, would require further examination.

## 5.6 Outcomes and Follow-up

### 5.6.1 Outcomes

The Dialogues were unique in bringing together UNGA Member States and major GWGA institutions for two days of meetings dedicated to SDG6, as neither the UNGA nor ECOSOC covers this Goal in a regular fashion (Statement Hungary). However, other than an official summary, it appears the Dialogue did not lead to any other significant results.

The summary states that Member States generally agreed on water as a global challenge and on the importance of SDG6 for the success of the 2030 Agenda. They also supported the Water Action Decade as a platform for SDG6. In addition, the Dialogues identified four issues: 1) the need for clarification of the roles, responsibilities and capabilities of institutions in the GWGA; 2) the need to better integrate and prioritize water in other sectors, especially agriculture; 3) the need for support and capacity development for Member States, in particular for LDCs, LLDCs and SIDS, to achieve the SDGs; and 4) the concern that the UN may not be up to the task of implementing SDG6 because of fragmentation, a lack of leadership and proper prioritization, and limitations to UN-Water.

Major contestations that emerged during the Dialogues were not extensively covered by the summary. Contestation mainly concerned the need for a dedicated intergovernmental body for water. Some argued that such a body could create centralization, provide leadership and ensure systematic integration in other issue areas. Others spoke out against new structures, as – paradoxically – a single body could undermine integration efforts of the 2030 Agenda and create silos. Furthermore, a global body could override existing structures with a utopian one-size-fits-all approach. Moreover, relying on existing structures could avoid significant increases in the bureaucratic and financial burden of the UN system.

Another point of debate was the strengthening of UN-Water. Interestingly, those who were most strongly opposed to the proposal for an intergovernmental body on water (*inter alia* Brazil, Argentina, US, Mexico and Japan) were also some of the strongest advocates for strengthening UN-Water. In contrast to many other proposals, there were ample suggestions how to achieve strengthening of UN-Water. Moreover, the US proposed the consideration of establishing a Member State advisory committee as an alternative to establishing a new intergovernmental body on water.

### 5.6.2 Follow-up

Over half of participating Member States suggested continuing the Dialogues, under the auspices of UNGA or ECOSOC (although the right forum in which to continue was debated). The summary also suggested eight ways to improve integration and coordination, based on Member State input. The first suggestion was to conduct a review of ongoing (water-related) activities of UN agencies and mechanisms, and identifying potential gaps, overlaps and areas for better cooperation. Second, participants suggested strengthening UN-Water and its mandate, increasing UN member agency contributions, to better interact with Member States (thus creating a global coordination approach which also included Member States). A third approach suggests exploring added value and drawbacks of platforms (Water decade etc.) to provide policy guidance, monitoring and follow-up. The fourth suggestion is related, and proposes catalysing the use of existing initiatives and frameworks. Fifth, Member States suggested greater integration of water into the broader HLPF framework. Member States also suggested using the National Voluntary Reviews within the HLPF to ensure countries address water challenges, and inviting UN regional economic commissions to host a discussion on water resources and share best practices. The final recommendation was to explore linkages with the ongoing reform of the UN Development system.

Despite the fact that the majority of Member States were open to continuing the Dialogues, and no statements were heard to contrary, no follow-up has occurred since the original Dialogues' conclusion on May 30$^{th}$ 2017. The call for continued dialogue was included in a UNEP resolution of December 2017 (UNEP 2017), but no concrete follow-up ensued.

## 5.7 Concluding remarks

The focus of the Dialogues was on integrating and coordinating the UN work on water, elements which are also part of the conceptual framework used in this study. The vast majority of Member States who addressed fragmentation explicitly during the Dialogues acknowledged the GWGA is fragmented and characterized this as problematic. Several Member States argued that the fragmentation reflects the diversity of the water issue, and that its conflictive elements could be resolved by improved coordination. A small number of Member States argued that, while fragmentation exists, it is not greater than in some of the other SDG issue areas.

A Member State's perspective on fragmentation generally correlated with its attitude towards new institutional development in the GWGA. This finding is in line with hypothesis i, stating that the merits and demerits of a fragmented governance architecture play an important role in proposals and strategies for future institutional development in environmental policy, in this case water (cf. Biermann et al. 2009 Zelli & Van Asselt 2013). The predominant perspective on GWGA fragmentation among Member States is found to be somewhere between cooperative and conflictive.

### 5.7.1 Options

The Dialogues were not expected to manage GWGA fragmentation itself, but rather to provide a platform to discuss options and limitations for fragmentation management. Reactive fragmentation management options included proposals for establishing a World Water Fund to fill the financing gap, and using the Water Action Decade for capacity building (a typical example of a broad-but-shallow multilateral agreement).

Proactive fragmentation management options that resulted from the Dialogues included establishment of UN intergovernmental body on water, and strengthening UN-Water. The former was geared towards increasing institutional centralization and resulted in major contestation, thus producing valuable insights regarding limitations. The latter was aimed at improving institutional coordination. Some Member States presented the strengthening of UN-Water as a viable alternative and potential way forward.

### 5.7.2 Limitations

The Dialogues also revealed significant limitations to multilateral fragmentation management. The institutional setting displays a strong stability of equilibrium, not least because of the penchant for consensus-based decision-making. This means that every Member State becomes a veto power, often resulting in agreement based on the lowest common denominator or no agreement at all. Moreover, the equilibrium appears to favour powerful Member States seeking to maintain their power by advancing fragmentation. The Dialogues showed that both regional powers and the largest UN donors are some of the strongest opponents of further institutional development.

Finally, there appears to be significant contestation around the concept of integration. Throughout the Dialogues, the phrase "integration of SDG6" has been applied to two very distinct contexts. On the one hand, it is used to promote centralization of the GWGA around a core institution. On the other hand, the phrase is used to refer to integration and better prioritization of water into other SDG issue areas. Contestation arises over the question whether the two are mutually exclusive, and therefore a zero-sum game, or whether the two interpretations are compatible through a mutual gains approach.

### 5.7.3 Outcomes and Follow-up

In retrospect, it can be concluded that the Dialogues did not live up to the expectation of "becoming a new movement for catalysing the implementation of Agenda 2030" (Hungary 2017). Instead, the process became bogged down in the negotiation story, without even getting to actual negotiations. The summary of the Dialogues distilled key messages but did not place much emphasis on the contestations that had dominated the debate. It did report on possible ways to improve integration and coordination according to Member States, and recognized that many participating Member States stressed the need for continuing the Dialogues. However, no follow-up has occurred.

From a critical perspective, without an avenue for follow-up the Dialogues might just as well have been an online consultation session. The only advantage of the physical meetings may have been that the desire for Member States to actually be heard led to a larger number of respondents than an online consultation. On a positive note, however, examination of the Dialogues has provided insights in Member States' perspectives on fragmentation as well as options and limitation of its management in a multilateral setting.

# 6. Discussion and Conclusion

This final chapter provides the discussion and conclusions of this thesis. It first discusses the use and added value of the conceptual framework used in this study, and contains some further theoretical insights. The subsequent conclusions section provides answers to the research questions, as well as suggestions for further research.

## 6.1 Discussion

The study of global governance architectures and their fragmentation is not a new phenomenon. The typology of fragmentation by Biermann et al. (2009) has been applied to a wide variety of global governance issue areas. However, the field of global water governance had not yet been subjected to such analysis. Using the concepts of both global governance architectures and global water governance, this study conceptualized the global water governance architecture (GWGA). The near absence of the notion in academic literature can be interpreted as a sign it has not been considered relevant. This study argues that the concept of GWGA is in fact very relevant, particularly in light of the SDGs, and because variations of the concept have increasingly been used in non-academic publications. Examples include the report of the UN Secretary-General's Advisory Board on Water and Sanitation (UNSGAB, 2015), the proposal for "a more effective global water architecture for the 2030 Agenda" by Hungary (2016 p1), and the call for a more robust global water architecture by the OECD Secretary-General (OECD 2017a). The GWGA is defined here as the overarching system of public and private institutions that are valid or active in global water governance, which comprises organizations, regimes, and other forms of principles, norms, regulations, and decision-making procedures. This definition may bring a common understanding of this concept among stakeholders of global water governance. Given the relative novelty and increasing use of the concept, further academic exploration of this topic is encouraged.

It is unclear whether, and if so, how the recent emergence of GWGA in non-academic publications is related to the global governance architecture theory and fragmentation typology of Biermann et al. (2009). Either way, the academic theory presents a decent fit with the institutional complex for water. However, the typology can offer a more accurate characterization of fragmentation in the GWGA by replacing the criterion of institutional integration by 'institutional centralization' and 'institutional coordination'. Adding this dimension is expected to allow for more contrast, especially when comparing fragmentation in different areas of environmental policy.

Application of the fragmentation typology to the GWGA has resulted in another suggestion for modifying the original framework and its three types of fragmentation: synergistic, cooperative and conflictive fragmentation. Biermann et al. very clearly state that in empirical research the "boundaries between these three types will not be clear-cut". That said, analysis of GWGA fragmentation merits the suggestion of a fourth type, in between cooperative and conflictive synergy. One argument is that the theoretical distance between cooperative and conflictive fragmentation is vast. The second more practical argument is that fragmentation in the GWGA demonstrates elements that cannot be classified as cooperative or conflictive. Instead, there is a high degree of ambiguity regarding the mandates and responsibilities of the vast array of actors, which results in a lack of understanding among stakeholders, most notably UN Member States. This was illustrated by the call for more clarity on water-related institutions that was raised during the UN General Assembly (UNGA) Water Dialogues. Consequently, this study raises the question whether a fourth type, for instance "ambiguous fragmentation", could provide an additional layer to the fragmentation typology.

## 6.2 Conclusions

This study has sought to provide a better understanding of the merits and demerits of fragmentation in the GWGA. It provides evidence regarding the type, degrees and consequences of fragmentation. Furthermore, it describes two initiatives which emerged in response to GWGA fragmentation and provide insight in the options and limitations of mini- and multilateral approaches to managing GWGA fragmentation.

### 6.2.1 Mapping the Global Water Governance Architecture

The mapping exercise of chapter 3 helped determine the degree of fragmentation in the GWGA and identify consequences for governance, thereby providing an answer to specific research question 1. The resulting overview of the GWGA clearly displays a patchwork of international institutions, varying in character, actor constellation, spatial scope and subject matter. Therefore, this institutional complex can rightfully be considered fragmented. Regarding degrees of fragmentation, the results of the mapping exercise show only limited *centralization* in the GWGA. There is no significant centralization around core institutions, but the GWGA is not fully decentralized either. SDG6 is considered a normative nodal point and there is some degree of centralization around 'custodians' of SDG6 target indicators. *Coordination* takes place among nearly all key actors in the GWGA, but system-wide coordination is perceived as weak and in urgent need of improvement. There is some non-conflictive *norm differentiation* over IWRM, adaptive water management and nexus approaches. Most concern goes out to the perceived 'value of water', which is seen as an unresolved problematic regime element. *Actor constellations* appear to be non-conflictive. There is a great deal of overlap in membership among UN institutions (which was expected), but also among transnational instructions (which also display variations) and high-level policy advice institutions (even with their limited membership).

The characteristics of the GWGA – minimally centralized, only slightly coordinated, containing institutions with some norm conflict and significant overlap in membership – result in *predominantly cooperative fragmentation with some conflictive elements, but showing potential for synergy*.

Five groups of consequences for governance were distilled. The increasing number of minilateral arrangements in the GWGA display a *higher speed* of establishment and decision-making than multilateral arrangements. These minilateral arrangements can be more *ambitious* than multilateral ones, but long-term success is dependent on acceptance and uptake of outcomes by the wider public. Fragmentation allows *participation* by an extremely wide range of actors, but the multitude of fora can also be a burden on actors with limited capacity and resources (hypothesis vi: remains unconfirmed). The lack of centralization results in the absence of a public arena for policy dialogue and dispute settlement. As a result, powerful states may seek to maintain this *equilibrium*, thereby advancing fragmentation in order to sustain their power. The degree of fragmentation leads to a lack of both political and financial *commitment*, which in turn leads to more fragmentation. Breaking the cycle arguably requires involvement of the highest political level.

### 6.2.2 The High Level Panel on Water

The High Level Panel on Water (HLPW) is an example of the abovementioned minilateral arrangements. Examination of the Panel in chapter 4 provided insights on its emerge, and it options and limitations for the management of fragmentation, thereby providing an answer to specific research question 2. Three factors played a key role in its emergence. First, the establishment of SDG6 resulted in concern over its implementation due to a lack of political leadership and insufficient financial flow into the water sector,

both consequences of fragmentation. Second, the final report of UNSGAB, another minilateral arrangement, called for *inter alia* the formation of for a heads of government panel on water. And finally, the initiative that set things in motion was the Mexican proposal for an intergovernmental panel on water, which was taken up by the World Bank and presented to the UN Secretary-General. In terms of gaining momentum, both Mexico and the World Bank are considered to have been a crucial factor.

One of the innovative features of the Panel was its exclusive heads of state and government membership. The GWGA already encompassed several high-level panels, but none at the highest political level. Despite its limited membership, the Panel is considered quite representative in relation to the full range of UN Member States. HLPW membership consisted of developed and developing countries, presented a decent geographical distribution, and included countries representing vulnerable groups (LLDCs, LDCs, SIDSs). The combination of leadership at the highest political level and its representativeness gave the Panel significant political influence, which is considered to have been its greatest strength in terms of managing fragmentation.

At the same time the Panel's diversity is considered one of its major limitations. The wide range of interests that the Panel members represented is displayed by the enormous amount of possible priority actions presented in its Action Plan. No less than 48 options were considered. While this represents the diversity of challenges in the water realm, it also made it difficult to steer the Panel towards a common goal. One example of this is when Panel discussed fragmentation in relation to a Hungarian proposal for the establishment of a UN Intergovernmental Platform for Water. Disagreement among members prevented the Panel from moving forward on this topic.

Overall, the Panel has certainly lifted water to a higher political level and provided an integrated overview of SDG6-related water issues with its 'Agenda for Water Action'. It did so in considerably short timeframe, which suggests that minilateral arrangements may reach negotiated outcomes faster than their multilateral counterparts (hypothesis ii: confirmation suggested). The Panel brought together a lot of work already underway and came up with relevant recommendations. Championing these efforts through the sheer political influence of the various heads of state and government is considered the HLPW's best option for fragmentation management.

The Panel also experimented with innovative approaches. However, the depth and ambition of the results do not seem to stand out from multilateral action (hypothesis iv, v: unconfirmed). This may be explained by the short duration of the Panel, expectations beforehand and the fact that the Panel was not able to resolve structural issues in the realm of global water governance (hypothesis iii: research required). The Panel did succeed in addressing the intricate topic of valuing water, an active norm conflict that is considered to contribute to fragmentation of the GWGA. The fact that this initiative was championed by The Netherlands, appears to corroborate that more influential countries (in terms of GDP and SDG6 expertise) have more bargaining power in minilateral arrangements (hypothesis vii: confirmation suggested). On the other hand, the HLPW relied on consensus-based decision-making and thereby granted veto power to all its members. The Panel has arguably paved the way for further action regarding valuing water. However, results from follow-up mechanisms such as the Valuing Water Leadership Coalition have yet to emerge.

### 6.2.3 UNGA Water Dialogues

The UNGA Water Dialogues, in contrast to the HLPW, are an example of a multilateral response to fragmentation. Chapter 5 examined the emerge of these Dialogues, as well as their options and limitations for the management of fragmentation, thereby providing an answer to specific research question 3. It was found that the Dialogues emerged as an element of the UNGA resolution on the Water Action Decade. These Dialogues focused on the integration and coordination of the work of the UN on water, which presented a clear parallel with elements of the conceptual framework used in this study. Inception of the Dialogues can partially be attributed to Hungary, who was appointed co-moderator of the dialogue, and who championed the heavily debated proposal for a UN intergovernmental body on water.

Analysis shows that the vast majority of Member States who addressed fragmentation explicitly during the Dialogues, acknowledged the GWGA is fragmented and characterized this as problematic. Several Member States argued that the fragmentation reflects the diversity of the water issue, and that its conflictive elements could be resolved by improved coordination. A small number of Member States argued that, while fragmentation exists, it is not greater in the GWGA than in some of the other SDG issue areas. It was found that Member State perspectives on fragmentation generally correlate with their attitude towards new institutional development in the GWGA. This finding is in line with the hypothesis that the merits and demerits of a fragmented governance architecture play an important role in proposals and strategies for future institutional development in the GWGA (hypothesis i: confirmed). Furthermore, these perspectives demonstrate a close resemblance to the views on GWGA fragmentation found in academic literature and other publications. Applying the typology of fragmentation from the conceptual framework leads to the conclusion that the predominant perspective on GWGA fragmentation among Member States is somewhere between cooperative and conflictive, without a clear predisposition towards either one.

The Dialogues process was not expected to manage GWGA fragmentation itself, but rather provided a platform to discuss options and limitations for fragmentation management. Some options that emerged are considered a reactive form of fragmentation management, responding to consequences of fragmentation. These include proposals for establishing a World Water Fund to fill the financing gap, and using the Water Action Decade as a broad and flexible framework for capacity building. Especially the latter is considered an example of a traditional broad-but-shallow multilateral agreement. Other options that resulted from the Dialogues relate to proactive fragmentation management, tackling the underlying attributes of an institutional complex that define its fragmentation. The option of establishing a UN intergovernmental body on water is linked to increasing institutional centralization. This proposal resulted in major contestation, which in turn produced valuable insights regarding limitations. The option of strengthening the UN-Water, aimed at improving institutional coordination, was presented by some as a viable alternative, and presents a potential way forward.

The Dialogues also revealed significant limitations to multilateral fragmentation management. The institutional setting displays a strong stability of equilibrium. One of the major factors in this stability is the penchant for consensus-based decision-making. This means that every Member State becomes a veto power, often resulting in agreement based on the lowest common denominator or no agreement at all. Moreover, the equilibrium appears to favour powerful Member States seeking to maintain their power by advancing fragmentation (hypothesis ix: confirmed). The Dialogues showed that both regional powers and the largest UN donors are some of the strongest opponents of further institutional

development. It was also found that less influential countries sought coalitions in this multilateral forum in order to protect their collective interest (hypothesis viii: limited confirmation), as was demonstrated by the statement of the Alliance of Small Island Developing States (AOSIS).

Finally, there appears to be significant contestation around the concept of integration. Throughout the Dialogues the phrase "integration of SDG6" has been applied to two very distinct contexts. On the one hand, it is used to promote centralization of the GWGA around a core institution. On the other hand, the phrase is to refer to integration and better prioritization of water into other SDG issue areas. Contestation arises over the question whether the two are mutually exclusive, and therefore a zero-sum game, or whether the two interpretations are compatible through a mutual gains approach.

In retrospect it can be concluded that the Dialogues did not live up to expectation as a potential catalyst for SDG6 implementation. Instead, the process became bogged down in negotiations. The co-moderators did produce a summary of the Dialogues that accurately described the process and distilled key messages. It recognized that many participating Member States stressed the need for continuing the Dialogues, but despite this positive attitude, no follow-up has occurred.

### 6.2.4 Merits and demerits of fragmentation

Overall, this thesis sought to provide an understanding of the merits and demerits of fragmentation in the GWGA, and how different responses seek to manage this fragmentation. It should be mentioned that this is a qualitative study, and that there were significant limitations to obtaining data, especially with regard to access to the high-level representatives of the HLPW. Recognizing these limitations, it can be concluded that merits and demerits of fragmentation do indeed play an important role in proposals and strategies for institutional development in the GWGA (hypothesis i: confirmed). Both the HLPW and the UNGA Water Dialogues emerged as a result of and in response to fragmentation of the GWGA.

Analysis of the HLPW as a minilateral response to fragmentation has not resulted in clear validation of the merits of fragmentation as presented by Biermann et al. (2009). The HLPW did manage to reach a negotiated outcome relatively fast (hypothesis ii: confirmation suggested), but it is difficult to compare this to multilateral processes such as the UNGA Water Dialogues. Whether the short-term success of the HLPW will increase overall governance performance in the long-term will be dependent on whether the Panel has been able to resolve structural problematic regime elements (hypothesis iii: research required). The HLPW Valuing Water Initiative may qualify, if it manages to solve the persistent norm conflict over the value of water. The HLPW did experiment with innovative approaches, but in terms of realized ambition, the Panel's results do not seem to stand out from multilateral action (hypothesis iv, v: unconfirmed). There is some evidence that more influential countries yielded more bargaining power in the Panel (hypothesis vii: confirmation suggested), but as the Panel operated on consensus-based decision-making, even less influential countries possesses veto power. Overall, the HLPW does not provide overwhelming evidence of the merit of minilateral responses to fragmentation. That said, this study does acknowledge the Panel's valuable contribution of filling the leadership gap and bringing water higher on the international political agenda.

The UNGA Water Dialogues have yielded few tangible outcomes, but examination of the process has provided valuable insights regarding Member States' perspectives on fragmentation, as well as a better understanding of the options and limitations of fragmentation management by multilateral arrangements. One interesting finding is that the perspective on fragmentation by Member States largely corresponds with perspectives found in academic literature and among international

organisations. Moreover, Member State perspectives were found to correspond with their attitude towards options for institutional development. In turn, this led to the observation that regional powers and the largest UN donors strongly oppose any proposal for centralization of the GWGA. This appears to corroborate the hypothesis that powerful states seek to advance fragmentation to maintain control (hypothesis ix: confirmed). Finally, the debate between proponents and opponents of institutional centralization revealed a looming norm conflict regarding "integration of SDG6".

## 6.3 Suggestions for further research

The findings and conclusions of this study have yielded various ideas for further research. The first suggestion would be to perform a deeper theoretical exploration of the GWGA concept. Building on the conceptual framework of this study, it could be interesting to consider the added value of the four-criteria fragmentation typology in other fields of sustainable development. This could eventually allow for comparative analysis between issue areas, providing higher contrast by distinguishing between centralization and coordination of institutional complexes. In this regard further conceptual research might also consider the introduction of a fourth type of fragmentation, somewhere between cooperative and conflictive fragmentation. Perhaps the notion of "ambiguous fragmentation" can serve as a useful middle ground.

The HLPW has provided an interesting perspective on the option and limitation for fragmentation management by minilateral arrangements. But given the fact is has only just concluded its work, many questions regarding its overall effect on governance performance remain unanswered. Especially the Valuing Water Initiative presents an interesting opportunity to take a deeper look into the ability of minilateral arrangements to tackle structural problematic regime elements, in this case the norm conflict over the value of water. Does the Valuing Water discourse developed by the HLPW present a viable way forward? Is there uptake of the five key principles among GWGA stakeholders?

The final area of further research that this study suggests, is an exploration of what is identified here as the integration paradox. The Water Dialogues revealed a high degree of ambiguity surrounding the use of phrase "integration of SDG6". This presents a looming norm conflict that merits further exploration. The main question in this regard would be whether the various uses are mutually exclusive, and therefore a zero-sum game, or compatible through a mutual gains approach.

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# Annex I. Overview of interview respondents

1. HLPW member representative 1
2. HLPW member representative 2
3. HLPW member representative 3
4. HLPW member representative 4
5. HLPW member representative 5
6. HLPW member representative 6
7. HLPW member representative 7
8. UN-Water member agency representative 1
9. UN-Water member agency representative 2
10. UN-Water member agency representative 3

# Annex II. Initial interview questionnaire

Time availability (expected): 10-15 minutes

Objective

1) Extract thesis data in line with research questions

2) Create potential for a follow-up interview

Questionnaire

*Introduction*

- Thesis on the governance innovation of high level panels in sustainable development
- Governance innovation can be external (the additionality to the governance system) as well as internal (the changes it envisions/introduces within the governance system)
- Special focus on the High Level Panel on Water

*HLPW external governance innovation / A new form of governance*

- Do you consider the HLPW a governance innovation?
- What specific elements of the HLPW qualify it as governance innovation?
- What have been the enabling conditions that have allowed the emergence of the HLPW?

*HLPW internal governance innovation / Reforming governance*

- Is there an urgent need for reform of the international institutional architecture of water?
- What is the most important driver for this (urgent) need?
- How do you envision the role of the HLPW in this reform?
- What do you consider the most important (design) aspect of this reform?

*HLPW influence*

- The HLPW action plan states "it requires political leadership to design and implement water governance systems" – how (where, on who) does the HLPW exert this political leadership?
- How should the HLPW mobilize support for a "whole of society approach" to water?
- What happens after the 2-year mandate?

*Recommendations for HLPW (likely to leave this section out for HLPW interviewees)*

- What do you consider a critical best practice of the HLPW?
- What do you consider a (potential) pitfall for the HLPW?
- (How) can this pitfall be avoided?

*Request follow-up interview and permission to contact interviewee's office*

# Annex III. Overview of hypotheses

**Responses**

i. Merits and demerits of fragmentation play an important role in proposals and strategies for future institutional development of the global water governance architecture (based on Biermann et al. 2009; Zelli & Van Asselt 2013)

**Speed**

ii. Small-n agreements, such as the High Level Panel on Water, may be able to reach a negotiated outcome faster than traditional multilateral arrangements (based on Biermann et al. 2009)

iii. Short-term success in small-n agreements does not improve overall performance of governance long-term if structural regime elements are not resolved (based on Biermann et al. 2009; Van Asselt 2007)

**Ambition**

iv. Smaller groups can produce more progressive and far-reaching agreements (based on Biermann et al. 2009)

v. Fragmentation enhances overall governance performance through regulatory diversity and innovation (based on Jänicke & Jacob 2006)

**Participation**

vi. Higher degrees of fragmentation reduce the entry costs for other (private) actors to engage in rule-making (based on Biermann et al. 2009)

**Equity**

vii. Small-n agreements will grant influential countries more bargaining power (based on Biermann et al. 2009)

viii. Small countries seek coalition in multilateral for a to protect their collective interest (based on Biermann et al. 2009)

ix. Powerful states will seek to advance fragmentation in order to maintain control (based on Karlsson-Vinkhuyzen & McGee 2013)

# Annex IV. HLPW Membership and meetings

**Initial HLPW Membership**

Panel Members

- H.E. Mrs. Ameenah Gurib-Fakim, President of Mauritius (Co-Chair)
- H.E. Mr. Enrique Peña Nieto, President of Mexico (Co-Chair)
- H.E. Mr. Malcolm Turnbull, Prime Minister of Australia
- H.E. Ms. Sheikh Hasina, Prime Minister of Bangladesh
- H.E. Mr. János Áder, President of Hungary
- H.E. Mr. Abdullah Ensour, Prime Minister of Jordan
- H.E. Mr. Mark Rutte, Prime Minister of The Netherlands
- H.E. Mr. Macky Sall, President of Senegal
- H. E. Mr. Jacob Zuma, President of South Africa
- H. E. Mr. Emomali Rahmon, President of Tajikistan

Special Advisors

- H.E. Dr. Han Seung-soo, Former Prime Minister of the Republic of Korea
- H.E. Manuel Pulgar-Vidal, Minister of State for the Environment of Peru

**Final HLPW Membership**

Panel Members

- H.E. Mrs. Ameenah Gurib-Fakim, President of Mauritius (Co-Chair)
- H.E. Mr. Enrique Peña Nieto, President of Mexico (Co-Chair)
- H.E. Mr. Malcolm Turnbull, Prime Minister of Australia
- H.E. Ms. Sheikh Hasina, Prime Minister of Bangladesh
- H.E. Mr. János Áder, President of Hungary
- H.E. Mr. Hani Al-Mulki, Prime Minister of Jordan
- H.E. Mr. Mark Rutte, Prime Minister of The Netherlands
- H.E. Mr. Pedro Pablo Kuczynski Godard, President of Peru
- H.E. Mr. Macky Sall, President of Senegal
- H. E. Mr. Jacob Zuma, President of South Africa
- H. E. Mr. Emomali Rahmon, President of Tajikistan

Special Advisors

- H.E. Dr. Han Seung-soo, Former Prime Minister of the Republic of Korea

**HLPW Sherpa meetings**

1. New York (preparatory meeting), 30 March 2016
2. Washington DC, April 13 2016
3. Rotterdam, May 22-23 2016
4. New York, July 7-8 2016
5. Dushanbe, August 8 2016
6. Stockholm, August 30-31 2016
7. New York, September 21-22 2016
8. Budapest, November 28-30 2016
9. Mexico City, March 7-8 2017
10. Mauritius, June 27 2017
11. Dhaka, July 27 2017
12. New York, September 21-22 2017
13. Amsterdam 2-3 November 2017
14. Cape Town, December 6-8 2017
15. Lima (final meeting), January 30 - February 1 2017