AALBORG UNIVERSITY COPENHAGEN

DEPARTMENT OF LEARNING AND PHILOSOPHY

MASTER OF SCIENCE IN TECHNO-ANTHROPOLOGY

PUBLIC PARTICIPATION IN GLOBAL ENVIRONMENTAL GOVERNANCE: A CASE STUDY ON THE INTEGRATION OF ONLINE PARTICIPATION IN WORLD WIDE VIEWS

BORGERINDDRAGELSE I GLOBAL MILJØSTYRING:

ET CASE STUDIE AF INTEGRATIONEN AF ONLINE INDDRAGELSE I WORLD WIDE VIEWS

MASTERS' THESIS | 30-ECTS

Student | Marco Alexandre Carreira da Silva – 20131315
Supervisor | Anders Koed Madsen
Number of pages | 60
Delivery date | June 9th 2015


common
face-to-face
method
perceived
Reference
access
Therefore
therefore
national
section
arguments
improvement
two
time
design
outcomes
social
international
actors
concept
solution
based
experts
DBT
implementation
potential
particular
information
supublic
weaknesses
interviews
mind
considered
influence
participationroach
question
interviewees
data
structure
sessions
issues
deliberative
done
integration
diverse
public
countries
case
environmental
interview
policy
research
purpose
participationort
well
basis
researcher
citizens
possible
framework
key
HMM PARTICIPATION
address
participatory
attention
al
answers
governance
chapter
areas
session
outputs
matters
partners
participation
participants
meetings
due
made
opinions
development
methods
meeting
global
level
et
results
see
among
GEG
solutions
However
analysis
opublic
WWviews
first
representativeness
concerning
Ibid
process
Also
methodological
democracy
second
e.g
form
adopted
following
much
apublic
online
initiative
questions
part
also
dedicated
place
means
across
found
processes
PUBLIC
associated
study
addressed
different
policymaking
identified
decision-making
considering
order
may
understanding
Internet
HMMs
realisation
interviewer
pointed
one
activities
source
Moreover
presented
knowledge
weakness
organiser
take
edition
discussion

Abstract

Public participation has been gaining weight in policymaking and, with the increasing pressure for effective global environmental governance, further attention has been dedicated to it. Such trend has been accompanied by a growing pervasiveness of the Internet and related technologies. Several are the studies dedicated to online public participation in national contexts, but few have been exploring the role of online solutions for public participation at a global scale. The following master's thesis is therefore dedicated to exploring the research question "*How may the integration of online solutions in participatory practices influence public participation in global environmental governance?*"

The research is centred in a case study – the initiative World Wide Views, a global initiative dedicated to public participation in international policymaking. For the characterisation of the initiative individual face-to-face interviews with experts who designed and manage World Wide Views were conducted. Also, individual online-based interviews with experts across the globe, who implemented the initiative at national level, contributed for broadening the description of the initiative. A multi-person interview with the initiative managers, structured as a future workshop, provided a space for the conceptualisation of online solutions intended to address weaknesses of the initiative. The extensive data collected was primarily subject to a pre-analysis using SWOT as an analytical framework. Then, the integration of a particular online solution in World Wide Views was analysed using a theoretical framework proposed by Gene Rowe and Lynn J. Frewer.

The analyses have demonstrated that weaknesses especially associated to a standard methodological framework of the initiative can be addressed with a certain online solution. However, it was also revealed that the integration of online solutions in global participatory processes ought to, in particular, account for resource accessibility because of the limited access to Internet infrastructure across the world, and, structured decision-making due to online facilitation barriers. Furthermore, this study contributed for pushing forward research in the field by raising the veil over the potential of combined integration of digital solutions, the possible transformation of participatory practices with the inclusion of online solutions and the expansion of the North-South divide in participation in international policymaking due to online participation hurdles.

Acknowledgements

To Anders Madsen, my thesis supervisor, thanks for the support provided throughout the last months. His commitment and dedication were always present. I particularly appreciated his openness to the nature of this thesis and critical academic questioning on it. It was a pleasure to conduct this research study with his guidance.

I am also grateful to the Danish Board of Technology Foundation for their willingness to cooperate with me for the purpose of this thesis. Without their collaboration, this thesis would not be possible. Special thanks to Bjørn Bedsted, who I could always count on to take this study forward. I also thank Lars Klüver and Marie Louise Jørgensen whose contributions for this thesis were immeasurable.

Many are the people who I would like to thank personally too, but those are physically distant. I refer to all the practitioners who kindly contributed for this thesis through their participation in online interviews. Thanks to Alison Atherton and Jade Herriman from the Institute for Sustainable Futures, University of Technology, Sydney, Australia; Ulrike Bechtold from Institute for Technology Assessment (ITA), Austria; Jenny Gruenberger from La Liga de Defensa del Medio Ambiente LIDEMA, Bolivia; Edna Einseidl, from University of Calgary, Canada; Martin Knapp from Institute for Technology Assessment and Systems Analysis (ITAS), Germany; Ruzka Radwamina from Dana Mitra Lingkungan (DML), Indonesia; Yasushi Ikebe from National Museum of Emerging Science and Innovation (Miraikan), Japan; Kobayashi Tadashi from Center for the Study of Communication-Design (CSCD), Japan; Roubina Ghattas from Applied Research Institute-Jerusalem (ARIJ), Palestinian Territories; Peninah Kyarimpa from Food Rights Alliance Uganda & Choice Africa (FRA), Uganda; and, Richard Worthington from The Loka Institute, USA. I hope the outcomes of this research study prove worth their extraordinary effort.

Copenhagen, June 2015

Marco Silva

Table of Contents

List of Figures and Tables

Figures

Tables

List of Acronyms

DBT – Danish Board of Technology

DD – Deliberative Democracy

EPTA – European Parliamentary Technology Assessment

GEG – Global Environmental Governance

HMM – Hybrid Micro Meetings

ICT – Information and Communication Technologies

ITU – International Telecommunications Union

MEA – Multilateral Environmental Agreement

NGO – Non-Governmental Organisation

PP – Public Participation

R&F – Rowe and Frewer

S&T – Science and Technology

UN – United Nations

UNEP – United Nations Environmental Programme

WWViews – World Wide Views

1 Introduction

Public participation (PP) has been gaining weight in policymaking processes due to the recognition of the importance of public opinion in decision-making. Likewise, the increasing need for effective global environmental governance (GEG) has been requiring further engagement with the public. Such trend has been accompanied by a growing pervasiveness of information and telecommunication technologies (ICT) in society, namely the Internet, which much influence governance. However, the role of online solutions for PP at a global scale in particular has been underexplored both by researchers and practitioners of participatory processes. This shortage of attention to the matter is disconcerting because potential solutions for issues and limitations associated to traditional participatory processes may be revealed in times when PP in GEG expands. Aware of that, this study explores how online solutions may influence global public participation. Before elaborating on the problem here pointed out and this study's response to that, an overview of the thematic background of this study is shared.

1.1 Background

Since the 1970s, public participation in science and technology (S&T) governance has evolved significantly (Wilsdon and Willis 2004). Due to the increasing understanding of public' influence in S&T governance (Jananoff 1997; Lengwiler 2008), PP shifted from a means to inform the public to an engagement form for integrating public views in policymaking (Wilsdon and Willis 2004). Such evolution has fallen short though. The ultimate influence of PP in S&T governance is weak (Ibid.). PP practice has been mainly characterised by events where ethical dilemmas and risk concerns are to be solved (Stirling 2008), instead of focusing on the priorities and ends of S&T (Kleinman 2000). Such trend can however be related to normative, instrumental or substantive motivations for the enactment of PP (Fiorino 1990; Stirling 2008). When the reasons for conducting PP are normative, the fundamental is to run the process itself as a democratic act (Ibid.). Differently, the instrumental motivations do not put much emphasis on the process. In this case the intentions are to enact PP for serving particular interests or decisions of certain actors (Ibid.). Similarly, substantive motivations stress the importance of the outcomes. However, here the intent is to directly improve policy-making by integrating public opinions regardless of whether they are aligned with those of particular actors. The materialisation of such motivations for PP is done through diverse PP processes. Popular ones are: public hearings (Kemp 1988); deliberative polling (Fishkin 1997; Besley 2010); citizens' juries (Crosby and Nethercut 2005; Crosby 2010); and consensus conferences (Joss and Durant 1995; Einsiedel 2010). Which process is enacted then depends on the goals set for the activity, as well as the resources available (Wilsdon and Willis 2004). Over the last couple of decades, research in this field has been dedicated to PP processes including deliberation. In line with the Habermasian theories (1981; 1991), deliberative processes have been advocated as means to foster deliberative democracy (Elster, J. 1998; Dryzek 2000) – a normative call. Thus, the design and evaluation of PP processes based on principles of deliberative communication (Webler 1995; Abelson et al. 2003; Riedy and Herriman 2011). Intrinsically related to S&T governance,

research in the field of PP in environmental governance has evolved similarly (Lengwiler 2008; Bäckstrand et al. 2010).

Of interest in this study is PP in global environmental governance. The establishment of the United Nations Environment Programme (UNEP) in 1972 represents the emergence of GEG (O'Neill 2009). A complex system of actors, instruments, mechanisms, rules, procedures and norms intended to combat environmental degradation worldwide (Ibid.). On the basis of political negotiations across countries, many multilateral environmental agreements (MEAs) were made in the following decades. Yet, the environment kept deteriorating (Najam et al. 2006). Among other reasons, the establishment of MEAs centred in diplomacy among nation-states and the influential roles of several other actors, make global decision-making evolve slowly and insufficiently (O'Neill 2009). Relatedly, the legitimacy and effectiveness of such state-centric regimes has been questioned and so it has given rise to non-state regimes of governance[1] (O'Neill 2009; Newig and Kvarda 2012). Regardless of the type of regime, scientific advice has been found critical in attempting to handle the uncertainty and dilemmas associated to environmental issues (Shackley and Wynne 1996; Wilsdon and Willis 2004; Jasanoff 2005). Most importantly here, in connection to the base of knowledge in decision-making, public participation in GEG has been found worth of value due to its contribution for more effective policy decisions (Fischer 2000; Beierle and Cayford 2002; Newig and Kvarda 2012). Moreover, further integration of PP in GEG also mitigates the lack of legitimacy the public associates to MEAs and actors involved in negotiations (Andresen and Hey 2005; Bäckstrand 2006; O'Neill 2009).

Matters of legitimacy have been associated to weak democratic enactment for few decades. Related to that, it was in the 1990s, when the first propositions for further attention to the potential of the Internet for enhancing democracy emerged (Johnson 1998; Tambini 1999). Two main arguments were associated to the importance of the Internet. One was providing access to information before inaccessible and another was facilitating public deliberation before infeasible at a large scale (Ibid.). However, concerns were also allied to such call. On top of those was the uneven access to the Internet across the public (Brants et al. 1996; Streck 1997; Johnson 1998; Klein 1999; Tambini 1999). In the following decade, the Internet significantly expanded throughout the world, and so did research attempting to verify the claimed potential. With particular focus on governmental initiatives (e.g. Weber et al. 2003; Ferber et al. 2005), it was soon realised that much of the potential was hindered by the still narrow access and use of the Internet by the public. Also, other issues were identified, namely the lack of quality of deliberations online and their actual integration in policymaking (Papacharissi 2002; Weber et al. 2003; Albrecht 2006). At the same time, some studies reported some positive results, such as high levels of participation and quality discussions (e.g. Albrecht 2006). Such contrast in studies' conclusions can be related to the different cultural practices of technologies (Suchman et al. 1999) and the traditions and context of political deliberations. Nevertheless, being most first studies focused on open online forums (e.g. Brants et

[1] NGOs and the corporate sector cooperate with the aim to address environmental issues independently of governmental authorities

[2] This source was chosen in particular due to its overarching coverage of GEG – a rather vast field of study.

[3] Public participation; transparency of decision-making processes; legitimacy of policies in the view of the public, and; accountability of policymaking actors to the public.

[4] For understanding the exploratory nature of the research question in this study, in view of Yin's explanations (2014,

al. 1996; Klein 1999; Janssen and Kies 2005; Albrecht 2006), it was later in time when energy was directed to participatory processes in the online realm (Werner et al. 2012; Bang the Table 2015). Outstanding example is the Hamlett's experiment (2002) in running two consensus conferences, one in a face-to-face format and another in an online setting. According to the evaluation of the author himself, the results from both means were similar and deliberation online was of quality. More recently, some research has been exploring social media as a means for PP envisioning better democracy (Williamson 2009; Andersson et al. 2012; Halpern and Gibbs 2013).

1.2 **Problem Statement**

Although much research has been conducted in order to explore online forums dedicated to PP and, more recently, attention has been dedicated to participatory processes in online settings – all in the context of national or local initiatives – research addressing online public participation in global contexts is scarce.

Reasons for that may be the juvenile nature of online PP and the recent realisation of the first public participation initiative of a global reach – the World Wide Views (elaborated on in the sub-chapter 3.1.1). Apart from possible justifications, the absence of research in this particular area of research is problematic because intrinsic features of the Internet may offer solutions to improve the quality of participatory processes, as well as further expand and transform their application globally. The deficiency of knowledge of how online solutions can possibly address PP issues and limitations ought to be attended. Also, considering the sought increase of legitimacy and effectiveness of policymaking in GEG, inclusively in the making and implementation of MEAs, understanding how online PP may support such process is significant. Ultimately, the public could increase its participation in global policymaking.

That said, the present research study attempts to address the void identified by opening up an exploration of the how online solutions may influence public participation in governance at the global level.

1.3 **Research Question**

In order to address the problem statement aforementioned, this study is focused on exploring how the Internet, in particular tailored online solutions, can potentially influence the enactment of participatory processes that are targeted to policymaking in international negotiation arenas.

Due to the extensiveness of GEG, this study is based on a case study. In relation to that, considering that one and only one initiative worldwide is addressing PP in GEG at a global scale so far, the present study is centred in the initiative World Wide Views coordinated by the Danish Board of Technology Foundation (Annex 1). Briefly, World Wide Views aims at providing decision-makers in international policy venues insights into public opinions across the globe. That is done through public consultations with a common methodological framework in diverse countries. In each consultation participants go through sessions where deliberating and voting activities form and gather public opinion. Further description is found in the sub-chapter 3.1.

As guiding lights throughout the following research study, in line with the arguments stated in the first two sub-chapters of this introduction, the research questions below were formulated.

- How may the integration of online solutions in participatory practices influence public participation in global environmental governance?
  - What weaknesses in WWViews can be addressed with online solutions?
  - What sort of online solutions can be integrated in WWViews to address its weaknesses?
  - What ought to be considered in the integration of online solutions in WWViews?

Worth noticing that, in an attempt to answer these questions, WWViews is in this study primarily viewed as a means to increase the quality of policymaking in GEG. Therefore, the study takes a pragmatic approach and it is oriented to participatory practice. Additionally, WWViews is seen as a contribution for the premises of democracy, and so democratic matters are discussed as well.

1.4 **Research Nature**

Before further expanding this report, some statements concerning the nature of the research study are made. The intention is to share: the philosophical grounds on which the study is built on; the academic school in which the study evolves; and how the research study is logically structured.

Theoretical perspective. In order to facilitate comprehension of how this study was first conceptualised and conducted, it is here found relevant to state the fundamental understanding of the world in which the study takes place. In a broad sense a phenomenological perspective may define the worldview adopted by the researcher – author of this report. Unlike realism, phenomenology interprets reality as formed by diverse subjective descriptions, being those descriptions dependent on the subjects that attribute meanings to phenomena (Schutz 1970). That very same understanding is embraced in the study. For instance, in the definition of the problem statement by considering diverse disciplinary views and in the selection of the different research methods (Justesen and Mik-Meyer 2012) in order to capture distinctive actors' meanings associated to the initiative studied. Another example is in the analysis of the initiative WWViews by taking into account diverse actors' interpretations of reality. Intrinsic to phenomenology, the ontology of reality is dependent on the epistemic understanding of the actors enacting it within the life-world context of their existence. Similar to social constructivism (Berger and Luckmann 1991), reality in this study is perceived as dependent on the actors enacting it. Unlike social constructivist-based studies though, this study does not attempt to describe how meanings are formed or phenomena come into being. Ultimately, the phenomenological perspective here serves to understand and analyse phenomena per se.

Techno-anthropological research. This study is a thesis for graduation in a Masters of Science in Techno-Anthropology. Therefore, the study has evolved as a techno-anthropological product in the sense that it takes place in the intersections between techno-scientific and social domains (Jensen 2013). In line with techno-anthropological stances, this study is centred in the interdisciplinary design and analyses of innovative responsible solutions (AAU 2012). Analyses in this study are therefore on the relationship between technological solutions and their potential socio-cultural,

organisational, institutional, as well as ethical implications. Relatedly, with focus on PP in environmental issues, this study directly responds to the call by Techno-Anthropology advocators to the need to explore and re-think public engagement with scientific matters, particularly with account to online technologies (Jensen 2013). Bearing that in mind, it becomes noticeable that this study is not oriented to studying existing technological solutions, but instead giving rise to new ones. Hence, the object analysed in this study emerges from the intervention of the researcher in the field and its analyses is normative.

Study's logical structure. In light of the aforementioned, this study sets out with empirical data collection in order to gain knowledge on the initiative studied. Also early in the study, potential online solutions to improve the initiative are conceived. Due to the high volume and diversity of data, a pre-analysis is conducted in order to break down and organise the data allowing the characterisation of the initiative in a clear and comprehensible way. The purpose of the pre-analysis is therefore to provide the grounds for analyses and discussions. With a solid understanding of the initiative, the study proceeds by identifying its key weaknesses and selecting a particular online solution to address those. Then, the possible implications of integrating such online solution in the initiative are analysed with the support of a theoretical framework. The framework sets normative practices of participatory processes. Therefore, the analysis is normative in the sense that it states what ought to be accounted in the integration of the online solution. Ultimately, the purpose of the analysis is to explore the implications of a new online solution to participatory practices considering what is pointed in this field as proper participatory processes. Concluded the analysis, the study evolves with a discussion on implications of higher level. That is, it is discussed how the further development of the online solution may have consequences beyond its immediate organisational practice.

Report Roadmap. The report proceeds with a literature review on the thematic areas addressed in the study. In the third chapter, methodology, the different methods adopted are introduced. On that basis, the chapter 4 is dedicated to pre-analysing the empirical data. In chapter 5, analysis, the outputs of the pre-analysis are used in order to explore an online solution for public participation. The chapter before last further discusses how online solutions can influence PP in GEG. The report finishes with a chapter dedicated to conclusions drawn in the research study.

2 Literature Review

Introduced this research study, this chapter presents a literature review offering a more thorough view of the current knowledge of the main thematic areas addressed here. The first sub-chapter here is dedicated to GEG, the second to PP in governance and the third to online solutions in PP. Although approached segmentally these main thematic areas overlap each other and it is in that intersection that this research study takes place (Figure 1). This literature review also aims at unveiling relevant questions not addressed in research conducted so far (Yin 2014). Thus, this review also highlights the void that this study attempts to address considering the body of literature produced as yet.

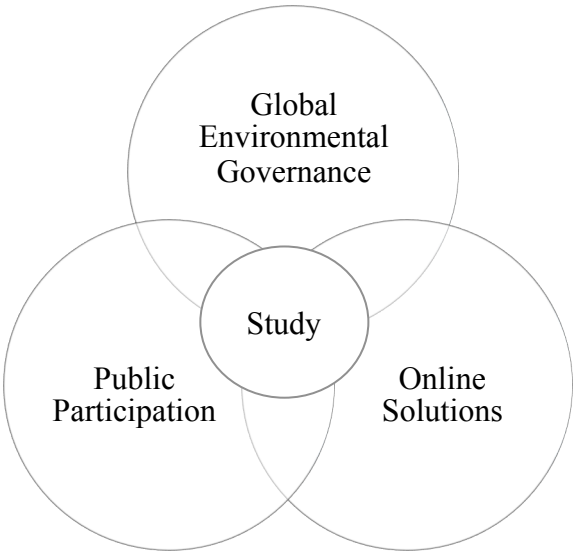


Figure 1 Thematic areas of the research study

2.1 Global Environmental Governance

The following sub-chapter presents an overview of the theme GEG. For that purpose the book 'The Environment and International Relations' by Kate O'Neill (2009)[2] is taken as a point of departure. The following sub-chapter addresses the different parts constituting GEG by answering pertinent questions concerning the field.

What is global environmental governance? There is no simple way to define GEG without obscuring the complexity of such term. Notwithstanding, O'Neill (2009) puts it as an amalgam of efforts by diverse actors across the world intended to address environmental issues that are faced by different countries. As it becomes noticeable, the number and diversity of actors engaged, the dimension and entangled environmental issues, as well as the numerous instruments, mechanisms, rules, procedures and norms created and adopted by actors to tackle environmental issues, give form to a complex and extensive area of practice and study.

[2] This source was chosen in particular due to its overarching coverage of GEG – a rather vast field of study.

It was back in time when trans-national environmental issues were first recognised. Along with that, in 1972, the United Nations (UN) organised the Conference on Humans and the Environment in Stockholm. In this conference 114 countries came together to discuss and decide on a model to deal with environmental degradation at an international level. Consequently, the UNEP was established with the purpose of facilitating MEAs internationally (Ibid.). It was therefore defined that protecting the environment would be attempted on the basis of political negotiations among UN parties and consequent implementation of decisions at national level. The strong reliance on international diplomacy resulted in a steep increase of MEAs in the following decades (Ibid.). However, environmental conservation did not follow such trend. Instead, environmental problems kept increasing in scale and scope (Najam et al. 2006).

What kind of environmental problems are faced? In line with O'Neill (2009), environmental issues can be categorised in: (a) global commons issues, those where the negative implications affect "commons", such as the atmosphere. "Commons" are owned by no sovereign state. However, states make use of them and, in the absence of proper management, the accumulated overuse may lead to the degradation of the global "commons". The emission of green house gases into the atmosphere, resulting in climate change, is an example; (b) transboundary issues, those associated to cross-country environmental problems. That is, when the problem extends beyond the boarders of a country into another. A typical example is the pollution of international rivers; (c) local-cumulative problems. When an environmental issue that occurs in a country contributes for the aggravation of environmental issues at a global scale cumulatively. Biodiversity loss in a state affects climate that has global effects, for instance. The categorisation of environmental problems is, however, not pre-defined and so it depends on states how an environmental problem is classified, and so how it is addressed. MEAs tend to be suitable to global common issues, while bilateral agreements may serve transboundary problems. Local-cumulative are usually addressed at national level.

What are the actors enacting global environmental governance? The number and diversity of actors engaged in GEG is immense. In general terms, six main sorts can be identified as: (i) nation states, (ii) international organisations, (iii) global environmental movements, (iv) corporate sector, (v) expert groups and (vi) the public (O'Neill 2009). The latter two studied in separate question further down. Nation states (i) are key actors in GEG due to their governments' unique decision-making authority. No other actor has the power to ratify and enforce MEAs legally in a country. Consequently, governments are potential targets of influence by other actors (e.g. environmental organisations) that attempt to direct MEAs towards their interests. States also exercise pressure on each other, being some more influential than others. The "divide" between North and South countries reflects such condition (Fisher and Green 2004; O'Neil 2009). International organisations (IGOs) (ii) are founded by states with the purpose of supporting the development and application of international policy (e.g. UNEP and World Trade Organisation). Some IGOs are meant to help states to address environmental problems by providing spaces for international negotiations (namely by setting policy agendas), ensuring the implementation of agreements and managing international financial loans and aid. Global environmental movements (iii) are composed of NGOs, grassroots groups and alike. This group is independent from states, but their actions actually tend to target states. These actors make use of protests (with emphasis on media coverage), lobbying and other

means to influence the development of environmental negotiations. Some NGOs are granted access to international negotiation venues, but they have no formal decision-making authority. Importantly is the role of some NGOs and alike in the implementation of MEAs by running and monitoring activities nationally. The corporate sector (iv) is also an actor of major importance due to the strong relation between companies' activities and the environment. However, companies tend to offer resistance to engaging in direct policy matters, and so associations and lobbying groups are meant to represent their interests.

What approaches define global environmental governance? As it might be suspected by now, the creation of issue-specific MEAs by states is the most common approach adopted to govern the environment globally. MEAs are legally binding agreements that states reach among them and then each attempts to implement at national level in order to tackle global environmental issues. The process of reaching agreements is pursued through negotiations among states once they have different opinions about how to address environmental issues. Throughout the process of negotiation, new rules, norms, procedures and organisations are created and sustained to support the convergence of states' stances. Such collection, including other actors involved, is called a "regime". The concept of regimes is extended in time so that it includes the continuous processes addressing a certain environmental issue post reached agreements. The climate regime is centred in the activities surrounding the UN Framework Convention on Climate Change established in 1992, for instance. Relatedly, a MEA is usually accomplished in two phases: first, the establishment of a convention to set out the kind of the issue in hand, as well as guidelines for negotiations, and; second, the definition a protocol that stipulates objectives in a legally binding manner. Once a state signs a protocol, the next step is to ratify it. That is, to integrate it into its national law. Although MEAs are widely adopted in GEG, the effectiveness of such approach is questioned, particularly, with regard to compliance and problem-solving capacity of associated regimes. Gauging the effectiveness of treaty-centred regimes is difficult and designing effective regimes is neither a simply endeavour (O'Neill 2009). Associated to that, the dissatisfaction of some non-state actors with the perceived effectiveness of a state-centric approach focused on MEAs has led to the emergence of non-state regimes.

Non-state regimes tend to emerge when treaty regimes evolve too slowly or end up not fulfilling their purpose. Facing such situations, NGOs and companies stand up and give rise to regimes aimed at addressing environmental issues independently of governmental authorities. Non-state regimes are characterised by their reliance on the market power – the key is to provide further information to the consumers in order to allow them to guide the demand of environmentally sustainable products and services (market-driven). Examples are the certification (schemes) of tea as products not harming rainforests. Non-state regimes are voluntary and so their success depends on the companies subscribing to and complying with the schemes. For that end, NGOs attempt to pressure and supervise the corporate sector. In the view of companies, such schemes can be perceived attractive due to branding enhancement, minimisation of risks associated changing governmental regulation, maximising profits by adhering to common standards in their sector, as well as the possibility of having business-friendly schemes turning into international regulation. In the perspective of states and IGOs, such initiatives are worth supporting, particularly when they address environmental

issues associated to transnational corporate activities difficult to control (limited capacity of state and IGOs) or unappealing for the intervention of states (conflicting with free-market).

What is the role of science in global environmental governance? Due to the complexity, uncertainty, dilemmas and controversies associated to environmental issues, policy-makers seek scientific advice and rely on scientific evidence and expertise to make decisions (Shackley and Wynne 1996; Wilsdon and Willis 2004; Jasanoff 2005). Relatedly, expert groups, formed by scientists and others whose expertise is relevant for the matter, provide scientific insights to policymaking. This group is usually officially represented in the form of panels (e.g. IPCC) and play a significant role in defining environmental issues, and so shaping policy solutions (Lindskog and Sundqvist 2002). Expert groups are also represented in the form of epistemic communities (Haas 2001). These are transnational networks of scientists that attempt to influence the course of international policy negotiations on the basis of their claimed authoritative knowledge. Members of epistemic communities tend to share consensus.

Environmental scientific advice is subject to criticism, particularly due to, among other reasons, potential political influence in science practice – related to the concept of co-production by Jasanoff (2004). Additionally, narrowing advice to experts has triggered contestations. Some argue that scientific advice is too focused on natural sciences, and so insufficient considering the potential contributions of social sciences and humanities (O'Neill 2009). Furthermore, it is argued that local specialised knowledge (from indigenous, for instance) is absent of experts' portfolio (Ibid.).

Although much is here referred to the relation between science and treaty regimes, the relevance of scientific insights is not to be underestimated in the formation and evolvement of non-state regimes.

What is then the role of the public in global environmental governance? The general public tend to be found in a place distant from where global policymaking takes place. As aforementioned, governance of the global environment is mainly pursued through state agreements facilitated by IGOs. Such MEAs are reached through negotiations where the general public is absent. Consequently, both MEAs and those involved in their elaboration (states, IGOs and, sometimes, NGOs) tend to lack legitimacy in the view of the public (Andresen and Hey 2005; O'Neill 2009). That is, the public does not recognise their interests being defended in negotiations and agreements – lack of accountability – and, these are seen as opaque, lacking transparency. Aware of such conditions, IGOs have been opening up to the engagement of the public through dedicated channels of representative participation (Bäckstrand 2006).

In the previous question, the relation between science and GEG raised the veil covering local knowledge for policymaking. This contribution from the public is perceived as a means not only to increase legitimacy of MEAs but also their effectiveness. With a broader knowledge base, policy-makers are empowered to make more effective decisions (Fischer 2000). Relatedly, considering that much of the solutions for environmental problems depend on individuals' attitude (acceptance or rejection) and changes of public behaviours (Stern 1999, John et al. 2009; Verplanken 2011), the

public is a key actor in the ultimate implementation of much environmental policy (McLaughlin 1987; Beierle and Cayford 2002; Newig and Fritsch 2009; Newig and Kvarda 2012).

2.2 Public Participation in Governance

In line with the question addressed right above, the following sub-chapter is dedicated to exploring further the relation between the public and governance. Bearing in mind the close relation between environmental issues and science (sub-chapter above), the following departures from PP in the governance of S&T. First, an overview of the evolution of PP is introduced, so that what it came to being is understood. Then, the reasons and motivations why PP is enacted are shared. Third, the different processes of PP are introduced in order to elucidate how it is enacted. Last, a summary of the recent attention dedicated to the relation between PP and deliberative democracy is shared.

Evolving public participation. The first bridges between the general public and science first emerged in the 1970s as a means to increase public trust in science. The goal was to inform the public, and so it was assumed that people were ignorant and science universal and comprehensible (Wilsdon and Willis 2004). Soon, particularly along the Bovine Spongiform Encephalopathy (BSE) crisis, such approach proved itself insufficient. It then became noticeable that public awareness of scientific matters was actually generating an increasing absence of public confidence in science-based policy (Jananoff 1997; Lengwiler 2008). Throughout the 1990s and 2000s, an approach where dialogue and engagement takes place therefore emerged (Wilsdon and Willis 2004). Likewise, the practice of PP intensified its expansion into scientific areas such as nanotechnology and climate change (Lengwiler 2008). First public engagement activities were characterised by shortcomings such as focus on narrow expert knowledge, ignoring pluralistic views of the public. Also, discussions were mostly focused on risks of new science and technology, ignoring the issues of ownership, management and desired-ends (Ibid.). Furthermore, there was no follow-up on the engagement activities, no link back to research option and policymaking (Wilsdon and Willis 2004). This is particularly important considering that participants tend to value that their contribution is being taken into consideration, influencing policy discussions and consequent policies (e.g. Rowe et al. 2004). More recently, although PP has evolved, questions tend to be focused on ethical dilemmas and risk concerns. Little attention is dedicated to the core values, visions and diverse interests that guide scientific endeavours. Moreover, policy and regulatory debates are too few dedicated to the priorities and ends of S&T. Instead the discussions are focused on the implications of the scientific and technological development assuming that its social and economic benefits are universal (Kleinman 2000). Eventually, PP tends to be addressed as a means to close down dilemmas, concerns and disagreements (Stirling 2008). Consequently, in opposition, enabling PP in early phases of scientific and technological developments (moving engagement upstream) is advocated by some (e.g. Guston and Sarewitz 2002). In the same line, Sirling (2008) and others call for PP as a means to open up debates, bring up unexplored questions and interrogate suppositions. Notwithstanding, as identified by Lengwiler (2008), the levels of PP differ among scientific cultures. For instance, medical sciences tend to favour earlier PP than natural sciences.

Motivations for public participation. PP in policymaking tends to be materialised in response to political calls for that effect. Different motivations and intentions therefore define the enactment of PP processes. As introduced by Fiorino (1990) and developed by Stirling (2008), the different reasons for PP can be distinctly categorised as normative, instrumental and substantive. A normative motivation is associated to the willingness of sponsors to do the right thing, regardless of the ends of the process. Thus, PP activities, which emerge on such basis, tend to have attention directed to their processes. Being mostly associated to normative democratic perspectives, like deliberative democracy (elaborated below), normative motivations emphasise the importance of conducting participatory processes and their proper realisation is worth by itself. Consequently, sponsors tend to disregard the outputs of such participatory processes. After all, realising them is the ultimate intention (Ibid.). Contrastingly, instrumental motivations focus less on the process and more on the outcomes. The intentions here are to enact PP for supporting particular interests of certain actors. Normative values are not in the radar. A common interest fed by instrumental participation is the increase of public trust on particular actors, or scientific or technological solutions promoted by them (Ibid.). Although further attention is directed to the outcomes, these are not necessarily integrated in decision-making. The outcomes are worth of as much attention as they contribute for the interests at stake. Contrastingly, substantive motivations are directly associated to improving policy-making. Similarly to instrumental motivations, attention is devoted to the outcomes and not so much to the process of participation. However, the outcomes are not instrumentally manipulated. Instead, the outcomes are taken in as inputs that shape the development of policymaking. Here public opinions are considered of importance considering their unique moral, social and cultural perspectives. The public is then perceived as an active subject in the process of policymaking, rather than an object. Substantive motivations are easily identified if sponsors announce beforehand how the outcomes are to be used (Wilsdon and Willis 2004). Notwithstanding, the challenge lays on making PP integral part of democratic political decision-making. Linking participatory processes to the political system so that there is real change in how governance is enacted seems to be to ever-lasting bottleneck (Ibid.). Noteworthy, these three different motivational categories are not self-exclusive. That is, more than one motivation may justify (or serve as lens of analysis for) a particular PP activity and a certain policy culture may well be characterised by diverse motivational categories in different periods of time (Stirling 2008).

Processes of public participation. Introduced what PP is and why it is enacted, attention here is dedicated to how it is enacted. Different participatory processes characterise how PP takes places. While it is not the intent here to present all the diverse methods, the following are some of the most known or practiced: public hearings (Kemp 1988); referenda (Zimmermann 2001); focus groups (Yun 2008); deliberative polling (Fishkin 1997; Besley 2010); citizens' juries (Crosby and Nethercut 2005; Crosby 2010); consensus conferences (Joss and Durant 1995; Einsiedel 2010); citizen summit (Lukensmeyer and Brigham 2002) and deliberative mapping (Wilsdon and Willis 2004). Although there is a vast offer of processes, there is, in fact, no optimal one that is ought to be enacted. Ultimately, the aim of the PP activity determines what methods to be used (Ibid.). Other than the objectives of the activity, the methodological approach adopted is also likely to define the selection of certain methods over others. Whether the issues addressed are to be defined by experts

or laypeople; whether the participants ought to be representative of the general public or not; whether deliberation among participants is sought or not; whether consensus among participants or final decisions are sought or not; they all are different approaches that define the process picked or designed (Ibid.). Moreover, the time and financial resources available also influence the choice of methods.

Deliberative democracy engulfing public participation. In spite of the evolving nature of PP and its large variety of processes, its influence in governance falls short in the view of some (e.g. Wilsdon and Willis 2004). The enactment of participatory processes, some centred in deliberation among participants (deliberative processes), have predominantly not been part of decision-making structures. Much of such condition concerns the practice of democracy, concretely representative democracy. So, what other democratic system could favour the purpose of public participation? In line with the arguments of Wilsdon and Willis (2004), Public opinions about scientific and technological matters are based on perceived potentials, risks and uncertainties, as well as how these are handled. Bearing in mind that public perceptions are formed through their encounter and engagement with an issue (e.g. Nisbet 2009), it then becomes central for the shaping of public opinions to enable deliberation. Thus, if public opinions ought to shape governance, deliberation ought then to be central in democracy. Following this rationale, deliberative democracy (Miller 1992; Elster, J. 1998; Dryzek 2000; Fishkin 2009) is a possible answer to the question. Accordingly, in line with the notions of 'public sphere' explored by Habermas (1991) and 'communicative action' put forward by himself (1981), deliberative processes have been advocated as means to foster deliberative democracy, and so their design and evaluation based on principles of deliberative communication (Webler 1995; Webler and Tuler 2000; Petts 2001; Abelson et al. 2003; Edwards et al. 2008; Riedy and Herriman 2011). Unlike idealised at birth, such conceptual normative vision (deliberative democracy), has been to a certain extent misinterpreted and narrowed to deliberative processes (democratic deliberations), and such is matter of concern for some (Chambers 2009; Lafont 2015). Nonetheless, such call for deliberative democracy is subject to critics. For instance, Przeworski (1991) raises questions regarding the practicability of deliberative democracy in the current large-scale, complex democratic system. Others emphasise that minorities' point of view tend to be suppressed or even ignored opening space for pre-existing majority stands (Schakade 2000). More conceptually centred, Mouffe (2000) counter-argues on the sought consensus proclaimed in deliberative democracy.

As possibly noticed, some of the literature referred to regards PP in environmental governance. That stresses that the development of PP in environmental governance goes hand in hand with PP in S&T. If looking exclusively at PP for the environment (e.g. Beierle and Cayford 2002), it is realisable that its emergence was in the 1970s, the motivations and processes' features mirror those discussed in S&T governance and deliberative democracy has gained space in its enactment as well (Smith 2003; Bäckstrand et al. 2010).

2.3 **Online Solutions in Public Participation**

Early visions of an Internet-empowered democracy. Soon after the initial expansion of the Internet in the 1990s, some envisioned a healthier democracy with higher levels of PP in political issues, on the basis of the interconnectedness of a global digital network (e.g. Johnson 1998; Tambini 1999). Associated to new and broader forms of access to information, as well as novel means of communication, the Internet was perceived as a powerful tool for further assisting PP in decision-making. Also, the Internet's potential to support education of policy-makers and the public was anticipated to support informed PP. With particular attention to the decreasing prices of computer technologies and increasing growth of the Internet, online solutions seemed the "uniquely qualified" way forward (Johnson 1998). All in all, the Internet was primordially advocated for two reasons: one, as an enhancer of governments' role – providing access to information – and, two, as a tool for enacting democratic principles[3] – facilitating public deliberation. Nonetheless, such advocating arguments were accompanied by precaution and concerns, particularly considering the American context where many of the first steps were taken. The unequal access to the Internet was a worrying matter (Brants et al. 1996; Streck 1997; Johnson 1998; Tambini 1999). Although Internet access was increasing rapidly, it was still very limited or totally inaccessible to a significant share of the public. Relatedly, many citizens' ability to use the Internet was reduced. Internet illiteracy was an issue. Moreover, Internet users tended to be socially well off relatively to others. They had higher levels of income and were better educated (Streck 1997; Klein 1999). Therefore, relying exclusively on the Internet for enhancing democracy was insufficient. Another matter of concern was privacy protection (Johnson 1998). Information exchanged between governments and citizens on the Internet ought to respect individual privacy rights. Plus, if private information was somehow intercepted or directed to wrong parties, integrity and privacy was compromised. Also related to technical matters, technological factors were identified as a possible limitation (Ibid.). The Internet speed and user-friendly design of effective online solutions were foreseen as bottlenecks to the prosperity of the Internet as a democratic tool. Moreover, the costs of computer technologies and online solutions were seen as limitations (Johnson 1998; Klein 1999). Contrastingly to the aforementioned concerns, the envisioned increasing PP was itself also a matter of precaution (Johnson 1998). Some argued that over-participation by the public was a potential threat to policymaking processes, inclusively representative democracy as a whole. Policy-makers would direct their attention to too diverse interest groups, becoming difficult to set and effective follow a policy agenda. Counterarguments postulated better accountability and policy quality.

The continuing quest for answers. Over the 2000s, access to the Internet kept increasing and larger proportions of the public in the Western world became 'connected'. Along that, further research was conducted exploring the promised potential of the Internet. Much research was centred in evaluating pioneering national governmental initiatives (e.g. Brants et al. 1996; Weber et al. 2003; Ferber et al. 2005; Albrecht 2006). It was then possible to realise that, although online political discussion increased, such was not in line with an optimal expansion of democratic practices. As feared by early advocators, the narrow access to and use of the Internet by a small share of the

[3] Public participation; transparency of decision-making processes; legitimacy of policies in the view of the public, and; accountability of policymaking actors to the public.

public proved to be a major constraint in the development of the democratic ideal (Papacharissi 2002; Weber et al. 2003). Furthermore, online discussions tended to be generated by few and dominated by elites (Papacharissi 2002; Weber et al. 2003; Albrecht 2006). Also, communication issues were identified, such as miscommunication among users and emotional rather than logical arguments tended to give rise to conflicts. Additionally, the impact of online discussion on policymaking was questioned. Although spaces were provided for PP, whether the content of discussions was taken into consideration in decision-making was uncertain (Papacharissi 2002). Nevertheless, some research findings pointed at positive outcomes of online discussions. Albercht's analyses (2006), for instance, support that online deliberations can be associated to high levels of participation and quality discussions. Moreover, he also came to conclude that no conflicts arose and arguments were rather rational. The contradictory results from research studies strengthen the argument that online deliberations' outcomes are dependent on several factors (Albrecht 2006), namely the cultural practices of technologies supporting online solutions (Suchman et al. 1999) and the traditions and context of political deliberations. After all, online deliberations are constructed and so their results depend on what shapes them (Coleman and Moss 2012). Important to notice that such PP activities were centred in open online spaces provided by the Internet. Mostly, those spaces took the form of online forums (Brants et al. 1996; Klein 1999; Janssen and Kies 2005; Albrecht 2006) where users debated political issues or, more concretely, provided their inputs or feedback on policy proposals (Johnson 1998). Related to that and the emphasis on deliberative democracy (see above), some research studies narrowed focus on the quality of online deliberations. While Edwards (2002) presented arguments for the increasing importance of the role of deliberation moderations in the online setting, Graham and Witschge (2003) dedicated their effort to providing a framework for evaluating the online forums in view of deliberative democracy principles. In line with that trend, studies on the online versus face-to-face deliberations were conducted (Hamlett 2002; Min 2007; Baek et al. 2011).

Harnessing online public participation. More recently, some attention has been dedicated to PP taking place in closed online spaces (Rucker and Whalen 2012), in particular, to online participatory processes, as introduced in the previous section (e.g. Werner et al. 2012; Bang the Table 2015). Worth mentioning that here the public is represented in the form of participants, not users. In online participatory processes participants are invited and engaged. An example of such is the early pioneering experiment of Hamlett (2002) in conducting two consensus conferences, one offline and another online. The results showed that both settings might deliver similar outputs (public opinions). Moreover, levels of participants' commitment were undistinguishable; no disrespectful arguments arose in the online setting; consensus was attainable as sough, and, apparently, all participants learnt with the deliberative process. It is however important to weigh the strength of these findings (Coleman and Moss 2012). The evaluation of the processes was done by Hamlett, a co-organiser himself, and no evaluation framework was adopted allowing comparison. Also in recent years, as a result of the proliferation of social media platforms, some have been calling for further attention to their potential to support the ideal visions of an Internet-empowered democracy (Williamson 2009; Andersson et al. 2012; Halpern and Gibbs 2013). Unlike in early

days, online PP tends now to be perceived as necessarily controlled and potentially transnational (e.g. Andersson et al. 2012; PEP-NET 2015).

3 Methodology

Introduced the thematic of this research study in the previous chapters, the present one is dedicated to introducing the different methods that were used in this study. In the first sub-chapter of this chapter the research method case study is presented. In the second sub-chapter three data collection methods, all of them interviews, are described.

3.1 Case Study

The present research study is methodologically centred in a case study. Hence, the following sub-chapter firstly shares how a case study came to be identified as proper for this study. Then, the design of the case study adopted is described followed by a description of the unit case.

Case study identification. Case study is a research method that allows understanding complex social phenomena in depth and within their contexts (Yin 2014). The acquisition of knowledge about a social phenomenon is done by focusing on a case and keeping the holistic realistic context in which the case takes place. There are three types of case studies: explanatory, descriptive and exploratory; and these are defined following the purpose of the case study. Identifying whether a case study as research method is adequate for the study in hand depends on (a) the research questions addressed; (b) the researcher's control over behavioural events, and; (c) the focus on contemporary events. With regard to the research questions addressed (a), in this study the main research question posed is "How may the integration of online solutions in participatory practices influence public participation in global environmental governance?" and so, following Yin's rationale[4] (2014), this research question can be classified as exploratory. That is, answering this question implies exploring unknown possibilities. This condition by itself opens the possibility of adopting a case study. However, other factors shall be considered. The researcher's control over behaviours (b) associated to the research topic addressed also determines whether a case study is adequate. In case the researcher cannot manipulate the behaviours for the purpose of the research study, then a case study is preferable (over an experiment). Last but not least, the extent to which the research study addresses contemporary matters (c) influences the choice of the research method. When the matters are rather contemporary and few documentation addresses the matter, the researcher may find case studies a more proper research method. In this particular research study, the behaviours, in the form of participatory practices, are not under the control of the researcher (large dimension of practices contrasting dimension of this study) and the matter address, PP in GEG, is rather novel. Therefore, doing an exploratory case study is here found appropriate.

[4] For understanding the exploratory nature of the research question in this study, in view of Yin's explanations (2014, p.10), a equivalent "what" question could be: What influence can the integration of online solutions have in public participation in global environmental governance?

Case study design. Similarly to other research methods, the adoption of case studies demands a research design. Here, the five components suggested by Robert Yin (2014) are considered as inspiration to design the case study further introduced.

Case study question and propositions. The first and second components regard the research question addressed with the case study and associated propositions. Considering that the research question of this study is introduced in sub-chapter 1.3 and examined in relation to the case study right above, attention is now dedicated to the propositions. Propositions are focal points that help the researcher to direct attention within the scope of its research. Bearing in mind the exploratory nature of this study, no propositions were identified a priori. Instead, the researcher used research sub-questions to direct its research (sub-chapter 1.3). Actually, by attempting to get answers to the first research sub-question (What weaknesses in WWViews can be addressed with online solutions?) in the first part of the analysis (sub-chapter 5.1 Key Weaknesses), the researcher defines propositions for further analysing the integration of online solutions in PP in GEG.

Case study unit. An explanatory case study is here adopted by addressing a case of participatory practices in PP in GEG. The case ("a contemporary phenomenon", borrowed from Yin [2014, p.16]) is the initiative WWViews. The case study unit is therefore the WWViews (elaborated on below). This initiative was chosen because it is the only initiative that addresses PP in GEG at a global scale. No other initiative of the same kind if found in the world. The boundaries of this case are defined by the two realised editions of the initiative WWViews: Global Warming and Biodiversity (described in Annex 2 and Annex 3, respectively). Hence the third edition, Climate Change, which was being prepared as of the concretisation of this study, is not considered as part of the case. Although an initiative may be considered slightly abstract as a case study, grasping its concreteness is attainable by bearing in mind its WWViews meetings (several at national level per edition) as tangible manifestations of it. The term initiative is used as to encapsulate the WWViews meetings that took place and related activities and actors.

Linking data to research question. Attempting to avoid duplication of text, concerning linking data to research question, full descriptions on data pre-analysis and analysis are found in chapters 4 and 5, respectively. Additionally, it may here be stated that, foreseeing the adoption of SWOT-analysis as a framework for pre-analysis, the researcher designed the data collection methods bearing that in mind. Relatedly, it is worth mentioning that in this case study the sources of evidence for providing answers to the research question were solely interviews. No observations were conducted although that technique was considered but not found feasible.

Interpreting findings. The researcher conducted a preliminary research on the literature on WWViews in order to identify studies addressing the integration of online solutions in the initiative (sub-chapter 2.3). With exception to the chapter "Crossing Boundaries with Deliberation: But Where Are We Going?" by Edward Andersson and Thea Shahrokh, in the book "Citizen Participation in Global Environmental Governance" (Rask et al. 2012), no other exemplars were found. Therefore, the findings are to be confronted with theories and arguments from the broader discipline of participatory methods.

All in all, by studying the case WWViews the researcher proposes to expand the understanding of participatory practices with consideration to the integration of online solutions in such practices. The ultimately goal is to shed light on the possible integration of online solutions in WWViews, a contemporary phenomenon, in the context of PP in GEG.

3.1.1 World Wide Views

Now, the introduction of the case study proceeds by describing the case unit WWViews. This description is centred on information from the DBT, the managing institution of the initiative.

Initiative concept. WWViews is an initiative that aims at providing decision-makers in international policy venues (e.g. COPs within the UNFCCC) insights into public opinions across the globe. Therefore, WWViews attempts to complement the sources where from policymakers at global venues are informed[5]. The initiative is a result of the combination of two conditions verified on its conceptualisation. On the one hand, transnational governance issues tend to be handled at higher instances of policymaking. Therefore, the distance between the public and policymakers widens – propensity towards bigger lack of policy legitimacy. On the other hand, although in some countries practices of public involvement are found, no global approach actually took place ever before. Consequently, the initiative attempts to tap on the democratic gap between the public and policymakers.

Prior to WWViews, there were few cross-national initiatives, namely Meeting of Minds (2006), European Citizens Panels (2006-2007), Tomorrow's Europe (2007), European Citizen's Consultation I (2007) and II (2009). In all these Europe-centred initiatives, with exception for Tomorrow's Europe, participants met national and regional peers before deliberating face-to-face in a multilingual environment with international peers (Andersson et al. 2012). The WWViews initiative has resulted in the realisation of two editions so far. The issues addressed so far varied but were both related to GEG. The first one concerned Global Warming and took place in 2009 (see Annex 2 for particularities). The second one addressed Biodiversity and was hold in 2012 (see Annex 3 for further details).

Initiative actors. The initiative is coordinated by the DBT. As such, DBT has been heading the development of the initiative's concept and method (more below). The initiative is further composed of a network of institutions across the globe, called WWViews Alliance (established and coordinated by the DBT). The nature of institutions ranges from parliamentary technology assessment (TA) institutions, through think tanks, universities, to governmental institutions. These institutions support the initiative in different ways, some through fundraising, others through promotional campaigns, for instance. The common denominator of the network members is their ambitions to integrate PP in the governance at a global level. Members of the Alliance that implement the initiative at national level are also called National Partners, or just partners. Those are selected by the DBT based on criteria meant to ensure their political neutrality (so, they all are

[5] Scientific, technical and economic panels, as well as views of organised groups (e.g. mining industry and environmentalists) are other sources of information.

non-governmental) and to capitalise on their possible PP experience. Upon selection and at the beginning of each initiative edition, partners participate in a three-day training seminar to align understanding and actions across the different countries concerning the initiative's concept and method. Further individual training sessions may also take place through online meetings.

Initiative financing. The DBT covers expenses related to the initiative infrastructure, administration, project management and implementation at international level. Partners are to cover their own expenses regarding the planning, preparation and implementation of the WWViews meetings at national level. However, a work group on funding is to be established so that common funds are raised to support particular WWViews-related activities, such as meetings held in low-income countries; global training courses; promotional events, and; actions to widen the scope of the meetings. The concretisation of a WWViews meeting is estimated to cost between 30.000 Euro and 100.000 Euro. This great discrepancy is verified due to the geographical characteristics (e.g. size of the country) and economic conditions (e.g. general price level) where the meeting takes place.

Method design. WWViews attempts to provide a method that is affordable and feasible for partners implementing it across the globe. Running the initiative method at national level is meant to be as much independent from financial and capacity levels of partners as possible. Furthermore, the method was designed bearing in mind the need to address prominent policy issues and provide concrete, clear and comparable results, which can easily be passed to policymakers. Relatedly, initiative method's outputs are to be of use for both national and international levels of policymaking. Uniquely, the Internet was found a means to collect and report the method results spread across the world. The expansion of the initiative to more countries was therefore possible due to the digital means of communication offered by the Internet.

WWViews is based on methods from participatory TA (Bedsted et al. 2012), some of which were applied in transnational consultation in Europe. The main participatory methods which WWViews is inspired in were: citizen hearings; voting conference; interview meeting; consensus conference (pioneered by the DBT); deliberative polling (by James Fishkin [1997]), and; citizen summit (from the initiative 'America Speaks' [Lukensmeyer and Brigham 2002]). From those, WWViews mirrors best deliberative polls (Albeson et al. 2003). Ultimately, as described below, participants deliberate in order to come up with individual opinions (shaped by groups discussions).

Method framework. WWViews method is defined by public consultations in different countries that take place in the very same and only day (hereon called WWViews meetings or just meetings where the textual context allows). One or several WWViews meetings may take place in a country depending on its dimension and the organisational capacity of the partner. Each meeting comprises approximately 100 citizens. The format and content of the meetings is common and so all the participants, regardless of their country or regional location are exposed to the same information.

Prior to the WWViews meeting day (2 to 3 weeks in advance), participants receive an informational booklet from the partner. Informational materials (booklet and videos) are meant to present the many possible views on the issue addressed. In the first edition, a journalist was commissioned to

write the booklet in order to avoid bias. In the second edition, a research and science communication company provided support in the delivery of the booklet. A scientific advisory board with selected experts reviewed such materials. Some partners also provided feedback in an attempt to produce unbiased materials. Moreover, informational materials are subject to approval by a citizen focus group from different countries before being finalised. The information materials in English language are initially distributed by the DBT to partners who translate the materials. It is expected that participants are not provided with any other informational materials than the ones by the DBT.

A WWViews meeting is composed of 4-5 sequential topic-centred sessions. Each session focuses on a key topic of the addressed issue and it lasts between 30 and 90m. The key topics are selected a priori by consulting policymakers and stakeholders dealing with the issue. This work is done by the DBT. At the beginning of each session all the approximately 100 participants watch an introductory video (summary of the informational booklet, also made available in the day). Then, participants, split into table groups of 5-8 beforehand, deliberate about the topic with the support of a moderator. After this deliberative moment, participants are presented with the set of predefined closed questions on the key topic addressed. These closed questions are also elaborated by the DBT on the basis of the expert consultation done previous to the meeting. The questions are also subject to feedback by a citizen focus group. Subsequently, all participants vote individually and anonymously on the questions asked using the predefined answers. Once the voting is done, all the answers are collected and automatically made available in the WWViews website (web-based platform developed for the purpose) where further comparative inter-country analysis can be done.

Ultimately, the results are compiled (outputs) and presented to policymakers both of national bodies where the WWViews meetings took place and at international level, such as the COPs.

Outputs' nature. Unlike surveys, a method for collecting people's opinions on a matter based on their immediate reaction ('reflex') to a set of questions, WWViews method focuses on pondered ('reflected') answers. Firstly, by introducing the participants to the issue and key topics through informational materials and then by allowing them to discuss among themselves before choosing answers individually. That way, it has been attempted to give participants the opportunity to provide more solid answer choices to the set of questions asked.

Method flexibility. Some partners may be willing to start the WWViews meeting one day before to the pre-set in order to make participants familiar with the informational booklets and so better prepare them for the topic-centred sessions. Others may prefer to extend the event to the next day so that national-oriented public consultations take place.

In the first edition, 'Global Warming', participants had the chance to formulate recommendations (qualitative fifth session) to COP15 policymakers concerning their matters of concerns. In the second edition, 'Biodiversity', a recommendation session was not officially integrated, leaving to partners themselves the possibility to run a fifth session dedicated to national policymaking bodies.

Participant representation. The range of participants is to reflect the demographical diversity (age, gender, occupation, education, etc.) of the geographical area where the WWViews meeting takes place. It is argued that the sample of approximately 100 participants is large and diverse enough to serve as an accurate representation of the people's opinions at regional or national levels. Experts in climate change, scientists or stakeholders related to the issue are not to take part in the meetings as participants. Guidelines were developed by the DBT so that all partners do the selection of participants (purposeful sampling) in order to seek reliability in the view of policymakers and comparability of the outputs. Such guidelines are also used as training object in the preparation seminar that takes place before the concretisation of the WWViews meeting.

Online public consultation. As described above, WWViews is centred in face-to-face meetings and no online features, other than the collection and availability of national results over the Internet, shape it anyhow in a direct manner. Considering the purpose of this study, the reasons why that condition is verified as put by the DBT are presented below. The DBT also states its interest in expanding the representativeness of the initiative with the support of the Internet.

> "[a] The WWViews should build upon deliberation, and that is best done face-to-face. [b] There is still a social distortion in the access to the Internet, which we could not accept in the project. [c] Internet consultations will to a very high degree be written consultations, which will also introduce a social distortion. [d] The projects around the world should be comparable with regard to their results, and we could not trust on-line consultations to work anywhere on the globe. [e] The WWViews project should attract attention by being an event, and on-line meetings are much less visible than face-to-face meetings." (World Wide Views).

A final note for this sub-chapter; as it will be later notice, the description of WWViews above is rather normative. Some of its stated features are actually worth further study and development to meet their idealised purposes and functions.

3.2 **Methods Applied**

Introduced the case study, the following sub-chapter is dedicated to present the data collection methods. Roughly following a chronological order these were, face-to-face interviews, online interviews and a multi-person interview. First and foremost, interview-based methods were primarily chosen because the availability of literature on the initiative is limited. Document analysis would be insufficient. Other particular reasons for the adoption of specific interview models are shared below. Due to the multiple adoption of qualitative research interviews in this study, before presenting in detail each one of the different interview methods applied, the reader is now invited to the Annex 4 where it is highlighted the main questions borne in mind in the realisation of qualitative research interviews. Following that, the three methods are here presented by stating their purpose, approach, preparation and conduction, as well as related transcription matters. While Figure 2 displays the combination of methods here adopted, a summary table of these is found in Annex 5.

Figure 2 Data collection methods in the study

3.2.1 Face-to-face Interviews

Purpose. The first session of interviews was primarily dedicated to further learning about the initiative. What, how and why activities related to the initiative took place, from the moment of their conception to the point in time when they were assessed. The overall purpose of first session was then to better understand the initiative in the view of its developers – its founders and managers. On the basis of that purpose, face-to-face interviews were found the most suitable interview form to fulfil it.

Approach. In particular, individual face-to-face interview was chosen due to its capacity to generate knowledge in the perspective of the interviewee (Beitin 2012). Therefore, the questions addressed by the interviewer were focused on the individual experiences of the interviewees. This particular interview configuration was also chosen because it was intended that interviewees' perspectives were shared in a interview environment where interviewees felt comfortable and safe to put forward their thoughts even if in conflict with of other interviewees (colleagues).

With regard to interviewer models, the one generally adopted was of a pollster. That is, the interviewer mostly assumed a more passive role in order to capture the opinions of the interviewee as raw as possible (neither influenced nor challenged), as argued by Kvale and Brinkmann (2014, p. 109). On the other hand, the interviewee model that might best define the interviewees is the one of informant. According to this model, the interviewee has critical "knowledge about a setting or a specific social practice" and so they are considered experts in that area (Kvale and Brinkmann

2014, p. 113). Relatedly, all the interviewees in this interview first session can be considered 'elites' once they all are experts in their community of practice. Such condition may challenge the assumed interview power asymmetry where the interviewer is who leads the conversation. In line with Kvale and Brinkmann (2014, p. 171), in order to avoid to compromise this asymmetry the interviewer shall "be knowledgeable about the topic of concern and master the technical language, as well as be familiar with the social situation and biography of the interviewee" (Ibid.). Furthermore, elites are so used to give interviews that they may end up having "talking tracks" (borrowed from Kvale and Brinkmann [2014]) to promote their points of view. It is the role of the interviewer to go beyond that standard answering scheme to get insights. Challenging the elites statements may lead to new insights once they usually have their ideas and status quite consolidated (Ibid.). Such elite-related situations were verified in one of the face-to-face interviews conducted. See Annex 7 where immediate reflections about the interviews' dynamics are shared.

In some interview projects the interviewer attempts to obtain answers from different interviewees to the same question (get different perspectives on the matter). In such cases, it is pointless to stick to strict questions to the different interviewees because people interpret the very same question differently. The best way to approach this issue is by shaping the question to the different interviewees according to their vocabulary, comprehension of and relation to the research topic (Kvale and Brinkmann 2014, p. 160). Bearing that in mind, although the interview guide was common to all the interviewees in this first session (elaborated on right below), the formulation of some questions varied slightly depending on the interviewee.

Preparation and Conduction. The face-to-face interviews, as a methodological tool of this study, can be slip into three parts: (i) selection of interviewees, (ii) design of interviews, (iii) running interviews. Below each one of these parts are addressed.

The first step in the preparation of these interviews was the selection of interviewees (i). Bearing in mind the purpose of this first interview session (see above) the interviewer was confronted with the task of identifying who were the experts from the DBT who had experienced WWViews the most. That task was accomplished with the support of a contact point in the DBT. Initially, four experts were identified as individuals who had been tightly engaged with the development and implementation of WWViews activities. However, three of them whose agendas could accommodate the face-to-face interview took part. The interviewees were therefore, by order of interview realisation, Bjørn Bedsted (Head of DBT International), Lars Klüver (DBT Director) and Marie Louise Jørgensen (DBT Project Manager).

Another relevant aspect in the preparation of this method was the design of interviews (ii). Once again the purpose identified for the face-to-face interviews defined the concretisation of this task. Hence, the structure and flow of the interviews were defined on the basis that the interviewer sought an understanding of the initiative across the whole spectrum of this development. In that line of thought, the interviews were structured roughly following a traditional project cycle (notice main titles in the 'thematic guideline' section in the interview guide in the Annex 6). That structure not only allowed the interviewer to better localise the experiences and associated meanings shared by

the interviewees, but also to present a sequence of questions that followed the most likely chronological order of the initiative activities. It was meant that the structure of the interview provided a flow that would be perceived as natural for the interviewees when recalling past events. Nevertheless, these face-to-face interviews were idealised as semi-structured (Kvale and Brinkmann 2014). Therefore, whenever the dynamics of the interview suggested other flow than the one defined, the interviewer was sensitive to them. With particular regard to the guiding questions, these were also formulated bearing in mind that initiative activities had taken place far back in the past. Considering the philosophical approach guiding the interviews in this study (Annex 4), the questions were focused on the phenomena (activities) experienced by the interviewees. These approaches in the structuring and formulation of questions also characterised the questions in the online interviews (presented in the sub-chapter below).

Running the interviews (iii) was consequently the part of this method when the preparation work turned into practice. The face-to-face meetings took place in the DBT office located in Copenhagen, Denmark. The particular setting of the interview, as well as contextual dynamics are further described in the Annex 7. Importantly, each interviewee was interviewed only once. Consequently, probing questions were addressed along the conduction of the interviews and no follow-up interviews were possible due to time constraints.

Transcriptions. Transcribing interviews usually results in the lost of information in two phases. Firstly, when the interview is audio recorded leaving the live physical presence behind, not allowing the interpretation of body language. Secondly, when the audio recording is translated into writing by ignoring the tone of voice and the intonations (Kvale and Brinkmann 2014, p. 204). In order to avoid this, the interviews were video recorded. Transcriptions are particularly useful when the researcher intends to identify patterns or contradictions in the answers given by the interviewee. However, analysis of interviews may well be conducted without transcribing them (Kvale and Brinkmann 2014, p. 206). In this study the interviews were meant to acquire further understanding of the activities throughout the WWViews initiative. Therefore, the purpose was not to spot congruence or discrepancies in interviewees' answers (no linguistic or conversational cross-comparisons either) but use the different perspectival experiences in a complementary mode. Although transcribing became a standard practice in qualitative research, once the video recordings are made available (Annex 8), the need to transcribe them was not identified. Instead, the resources and effort that would be dedicated to transcribing (1 hour of interview may take 5 hours to transcribe and there were more than 5 hours of interview in this study) were channelled to more thorough understanding of the process of interview pre-analysis and analysis, as well as the frameworks adopted for those ends. This way, the researcher was able to directly draw his interpretations from the audio-visual-recorded interviews.

> Working directly with the sound will save time and money for transcribing entire interviews, overstep many of the problems of transcription discussed earlier, and secure the researcher a close contact with the original oral discourse (Kvale and Brinkmann 2014, p. 226).

3.2.2 Online Interviews

Purpose. The purpose of these interviews was to acquire insights on WWViews from the position of the WWViews alliance partners. These interviews were meant to complement the data collected in the face-to-face interviews with the designers and managers of WWViews. Consequently, it was possible to multiply the perceptual perspectives on the initiative WWViews as a phenomenon. By acquiring diverse perspectives (similarities and differences), the researcher also attempted to enrich the quality of data collected from parts involved in the implementation of the initiative. These interviews were therefore targeted to partners of the WWViews once experts from the organising institution, the DBT, had been interviewed individually (previous sub-chapter).

Approach. The collection of data from partners of the initiative WWViews was done by conducting asynchronous online interviews (James and Busher 2012). This method was primarily chosen because: (1) all the partners targeted are geographically dispersed and so it would be too costly, in fact, infeasible considering the financial resources available for this study, to run face-to-face interviews; (2) a large amount of interviewees ended up being selected making too time-consuming the conduction of synchronous online interviews once that would imply that interviews would be conducted one at a time; (3) the different time-zones where the interviewer and the interviewees are placed would challenge the realisation of interviews in a common point in time.

This approach has not considered lack of Internet access or skills a threat once such conditions had to be met by partners when taking part of the initiative. Without Internet access and related skills partners could have never implemented the initiative in their countries (sub-chapter 3.1.1).

Preparation and Conduction. The online interviews, as a methodological tool of this research study, can be slip into four parts: (i) selection of interviewees, (ii) design of interviews, (iii) addressing questions, (iv) pre-analysing answers and probing. Below each one of these parts are addressed.

In the selection of the partners (i) to participate in the online interviews, it was attempted that partners from all the different major regions worldwide were represented. The interviewee sample size was not predetermined and it was not intended to follow a theoretical saturation approach or similar either (Beitin 2012). The sample size was actually defined on the basis of the geographical distribution of the interviewees. Preferably, one interviewee from each major region in the world was to take part. Therefore, the researcher attempted to ensure qualitative representativeness of the interviewed partners (purposeful sampling) by selecting them from diverse geographical regions across the world. All in all, the selection of partners was based on a pragmatic approach intended to find a balance between wide diversity of partners interviewed and availability of resources for the concretisation of the task.

In order to increase the chances of high-value contribution the researcher did a long list of potential online interview participants based on the participation of partners in both editions of the initiative. It was expected that a partner taking part in both editions could have more experiences to share in the interview. The long list was presented to a project manager of WWViews who shared back which partners were most responsive. A short list of potential online interview participants (Annex

9) was then elaborated. All the partners from the short list – fifteen across the world – were invited to participate in the online interview session. In an invitation email partners were informed about this research study (researcher identity and research project goal), the purpose of the online interview and their potential collaboration. The informed consent from interviewee was therefore sought through this initial round of emails.

Alongside the selection of interviewees the design of the interviews (ii) took place. In the beginning of this phase it was realised that online text-based interviews was considered better suitable in this study than virtual call-based interviews (Given 2008, p. 924), because of the number of partners approached. Running virtual interviews with all the fifteen partners would turn out too time-consuming. Furthermore, online interviews were preferred to online questionnaires (Given 2008, p. 291) because the latter, as a quantitative method, presents a rigid question structure and it is meant to provide automatic primary analysis. Once the analysis of partners' answers was done applying a SWOT-analysis framework (introduced further on in the next chapter), the use of questionnaires was not suitable.

Bearing in mind time limitations, the realisation of the online interviews was compacted into two phases (third and fourth parts listed above). In the first phase all partners were questioned the very same questions. In the second phase some of the partners were asked specific probing questions (elaborated on below). By limiting the online interview to these two phases the researcher potentially deprived partners from further contributing with their distinctive experiences to the study. The intention of the two-phase online interview was nevertheless to capture as much as possible from the partners considering the time available for the realisation of this research study. In relation to that, the online interviews were meant to be of a semi-structure type. After all, the first-phase questions allowed the interviewees to determine the interviews' second phase and so define, to a certain extent, the flow of the online interview.

In the third part of this method the partners were then presented with interviewing questions (iii). Similarly to the face-to-face interviews guide structure (see above), the interviewer addressed open-ended questions in some particular areas within the initiative WWViews (Annex 11 Online interview guide). Some questions were also drawn from the preliminary findings of the face-to-face interviews. By additionally asking specific interview questions, the interviewer attempted to get insights based on the unique partners' role in the realisation of initiative. In order to facilitate the management of data the partners were emailed a link through which they could find an online interview form (Annex 12). The interviewees were asked to acknowledge the reception of interview form link so that the interviewer was sure that the request email was not got lost in participants' email traffic (James and Busher 2012). Each partner was provided with one different interview form. Moreover, by addressing each interviewee individually, the interviewer had the chance to somehow personalise the interaction and so avoid the absence of emotional and personal approach important when interacting online (James and Busher 2012). The key advantage of this individual approach is elaborated below.

Faced with the lack of responsiveness from some interviewees in this phase, the interviewer emailed partners periodically attempting to remind them of the online interview. For a couple of critical cases, when there was no reaction to emails, the interviewer emailed self-recorded short videos with personalised messages of request. With exception to one partner, all others reacted to such means of communication.

Pre-analysing answers and probing (iv), as the fourth part, aimed at following up on interviewees' answers (Annex 13). This part was meant to address exclusively three possible conditions: (i) clear out answers that not allowed the interviewer to figure out what interviewees meant (Kvale and Brinkmann 2014, p. 157); (ii) reformulate questions which were clearly misinterpreted by the interviewees, and; (iii) explore potentially relevant points in answers if underdeveloped by interviewees. Therefore, the probing questions were addressed differently to each interviewee by editing their unique online interview form. The probed interviewees were asked through email to access their interview form and provide answers to the new questions in order to conclude the email interview. The interviewees were asked to acknowledge the reception of probing request as well.

The closing of this interview session was represented by the acknowledgement of interviewees' answers and appreciation of the time dedicated to participating in the research study. Eventually, eleven partners concluded the online interview, being them, in alphabetic order of their country origin: Institute for Sustainable Futures, University of Technology, Sydney (Australia), Institute for Technology Assessment – ITA, (Austria), La Liga de Defensa del Medio Ambiente – LIDEMA (Bolivia), University of Calgary (Canada), Institute for Technology Assessment and Systems Analysis – ITAS (Germany), Dana Mitra Lingkungan – DML (Indonesia), National Museum of Emerging Science and Innovation – Miraikan (Japan), Center for the Study of Communication-Design – CSCD (Japan), Applied Research Institute-Jerusalem – ARIJ (Palestinian Territories), Food Rights Alliance Uganda & Choice Africa – FRA (Uganda) and The Loka Institute (USA).

Transcriptions. Unlike the face-to-face interviews, online interviews' questions and answers were solely based on written text. Therefore, there was no need to transcribe the content of the interviews. The interview forms stored online are themselves transcripts of the interviews (James and Busher 2012) that can be accessed any time any where through the Internet. Importantly though, live physical presence and associated body language of the interviewees, as well as their expressional tones and intonations (Kvale and Brinkmann 2014, p. 204) are intrinsically absent with the adoption of this specific online method. This condition stresses therefore the relevance of the probing phase (explained right above) to grasp interviewees' meanings.

3.2.3 Multi-person Interview

Purpose. The purpose of applying a third method was to get a better understanding on experts' views concerning online solutions for PP. Hence, the objective was to capture experts' ideas and opinions on integration of online solutions in PP in environmental governance in the context of the initiative WWViews. For the purpose of the research questions addressed of this study (sub-chapter 1.3), this method complemented the empirical data collected through previous interviews referred in the two sessions above.

Approach. This last interviewing session took the form of a multi-person interview. The interview was mainly characterised by: the process of interviewing more than one interviewee simultaneously; embedding a focus group approach, and; a thematic structure based on future workshops.

A focus group is itself a multiple-person interview composition where the interactive dynamics among the interviewees are expected to contribute with data to research goals (Morgan 2012). It was bearing that in mind that the focus group approach was adopted. This approach was also preferred because focus groups allow getting insights from multiple viewpoints of different interviewees (Beitin 2012). The interview matter might be better understood if different perspectives are confronted, discussed and new meanings are constructed through negotiation among the interviewees. Worth stressing that the interest here was on the multiple perceptions of reality and not in a single truth, and so no single interviewee's idea or opinion was taken as more realistic than others (Ibid.).

Preparation and Conduction. The multi-person interview, as a methodological tool of this study, can be slip into three parts: (i) selection of interviewees, (ii) design of the interview, (iii) running the interview. Below each one of these parts are addressed.

Similarly to the two interview methods presented above, the first step here was also the selection of interviewees (i). The key criterion for the group composition was that all the interviewees shared an interest in the WWViews initiative but had different experiences and views. To a certain extent, the group composition was meant to be homogenous considering the common expertise of interviewees though (Morgan 2012). In fact, some WWViews-related experiences were shared among the interviewees. However, the interviewees assumed different professional roles, and so their views were expected to be diverse (more sharing and comparing [Morgan 2012, p. 10]). All in all, it was anticipated that the interview discussion would be fluent, constructive and multi-sighted. Three DBT experts were identified as potential interviewees and two ended up taking part (Bjørn Bedsted [Head of DBT International] and Lars Klüver [DBT Director]). Both interviewees were engaged in the design of WWViews, but only one was actively involved in the implementation of its two first editions.

Selecting DBT experts for the purpose of this multi-person interview – understanding experts' views concerning online solutions for PP – was potentially associated to some cons. DBT experts could have particular prejudices and resistance to the adoption of such kind of activities, for

instance. Also, considering DBT experts' background, they could as well not be knowledgeable enough to equate the potential of online solutions for PP. eParticipation experts could well share bold opinions and views on online solutions for PP. Notwithstanding, on the pros side, DBT experts were selected because they were considered knowledgeable in what concerns WWViews' evolvement and few literature addresses online solutions for PP in its context. More, arranging a multi-person interview with the DBT experts was found more efficient than doing it with experts who the researcher had not established contact with before. Furthermore, the inclusion of the DBT experts in the development of online solution ideas potentially fostered their interest in and understanding of online solutions for PP.

Alongside the selection of the interviewees, the researcher proceeded with the design of the interview (ii). Bearing in mind the purpose of the multi-person interview (see above), as well as the novelty of online solutions for PP in WWViews, the interview structure was based on future workshops. The structure of future workshops (elaborated on below) was considered proper for exploring the integration of online solutions in the initiative WWViews. The three sequential blocks of the interview were then defined based on the three core phases of future workshops: (1) critique – identifying WWViews' aspects to improve; (2) fantasy – idealising online solutions for improving WWViews, and; (3) implementation – identifying barriers and levers for the adoption of online solutions in WWViews. Further on concerning this structure, its first block, critique, was meant to include questions and discussions that would allow the interviewees to bring up aspects of WWViews that if improved could boost the initiative's outcomes and potentially expand its objectives. Contrastingly, the second block, fantasy, was meant to be deprived of critical reflections and, instead, characterised by an idealist thinking. That way interviewees could share and discuss their views of perfect online solutions for PP that could enhance WWViews. Then, in the third and last block, it was intended that the interviewees shared and discussed critically their distinct and similar opinions on the diverse barriers and levers for the integration of online solutions for PP in WWViews. With regard to the guiding questions to support the flow of the interview based on the future workshop structure, please see Annex 15 Multi-person Interview Guide for further insights. Notice that the multi-person interview did not take the full form of a future workshop. There were no sufficient resources to perform such activity that could deliver more insightful outcomes. For a brief introduction to the background of future workshops see Annex 14.

The third part of this method was running the interview (iii) itself. Considering the relevance of the interview and the particular structure adopted in it, the researcher firstly presented to the interviewees the nature of the multi-person interview defined by the future workshop structure (defined the situation [Morgen 2012, p. 18]. Also in the introduction, the researcher stressed the importance of the distinct perspectives on the topics by the interviewees and encouraged them to speak out in case their opinions, perceptions and ideas were different. By adopting the role of a facilitator (in line with focus groups), the interviewer attempted to support discussions by clarifying and emphasizing the different perspectives shared by the interviewees. By asking questions, the interviewer attempted to guide the interview and so to call on the interviewees' attention to themes that addressed in the interview block in hand. The conduction of this interview form was done in a slight directive manner so that the interactions among participants could deliver on the objective

aforementioned. That means, that the interviewer attempted to have the interviewees discussing the interview block's themes as predefined. However, it was not the intention to strictly define the extent and depth to which the discussions in each block were achieved. It was dependent on the developing discussion dynamics whether a certain block topic was thoroughly discussed or not.

In order to consolidate the meanings constructed throughout the session, the interviewer attempted to direct the interviewees to a process of "organising and conceptualising" (Morgan 2102, p. 26). That is, the interviewer asked few questions that triggered the capacity of categorisation and conceptualisation of the interviewees, so that conclusions could be drawn.

Transcriptions. On the basis of the successful adoption of video recording in the face-to-face interview, the researcher adopted the same technique here. Therefore, the statements concerning transcriptions of face-to-face interviews (see above) are also applied to the multi-person interview.

Interview reporting. Due to limited space, a narrative reporting of the interview (how the specific ideas emerged and discussions evolved) is not presented. Considering the future-workshop structure, such exercise would require specifying interviewees' arguments for each of the critics, solutions and barriers, as well as their relations. Instead, a diagram was conceived attempting to illustrate the relations among outcomes of this interview. See Annex 17.

3.2.4 Quality and Ethical Considerations

Due to limited space, discussions on the quality and ethical implications of interviews in this study are found in the Annex 22 and Annex 23, respectively. Thoughts on self-reflexivity may also be considered of relevance with regard to these matters. Those are found in the Annex 24.

4 Pre-analysis

Introduced the different interview methods adopted in this research study, the interview analysis is now presented. It is important to notice, that interview analysis here mean to break down the interviews' empirical data into parts and process each part (Kvale and Brinkmann 2014, p. 219) so that these can be more easily consulted and adopted in further thematic analysis and discussions in this research study (chapters 5 and 6, respectively). The objective of this analysis is to provide grounds for understanding what, how and why activities composing the initiative WWViews took place in the perspective of its actors. Only by adopting a specific context, the further thematic analysis can be conducted assertively. To refresh the logical contribution of this chapter to the study revisit the section 'Study's logical structure' in the sub-chapter 1.4. That said, this chapter is divided into two parts: one for introducing the analytical framework adopted and another for presenting the outcomes of the pre-analysis.

Due to limited space, aspects considered in the analysis of the empirical data, as well as the very detailed process taken to analyse the interviews are shared in the Annex 18. Nevertheless, before presenting the outcomes of the interview analysis conducted, below follows an introduction to SWOT-analysis due to its relevance for the categorisation process in the interview analyses and its further support for thematic analysis and discussions in the next chapters.

4.1 SWOT-analysis Framework

Selection of analytical framework. Bearing in mind the objective of this pre-analysis (see above), the framework selected for disentangling the data and presenting it in a graspable manner had to account for the various contributions that characterise the initiative studied. In order words, the framework had to facilitate a thorough understanding of the initiative in its context. For that reason SWOT as an analytical framework oriented to studying contextual objects was adopted. Other motivations were that the framework has been widely adopted in organisational studies, as well as adopted in social sciences for the conduction of analytical studies (Annex 19). There are many examples of its proper applicability. Moreover, the familiarity of the framework to the researcher also favoured its adoption.

Concept. SWOT-analysis is a solution (in the absence of a common definition) that has mostly been used by organisations in strategic planning (Johnson et al. 1989). Such solution is adopted by organisations with the intent to get thorough knowledge of the environment in which strategic decisions are to be made concerning the organisation's activities. SWOT stands for 'strengths', 'weaknesses', 'opportunities' and 'threats'. These four categories facilitate characterising the internal and external environment of a certain organisation, as well as cross-category analysis. Hence, SWOT may well be perceived as an analytical framework that supports strategic decision-making.

Usability. In the perspective of this study, SWOT-analysis is used with the intent to structure knowledge concerning the initiative WWViews. Instead of focusing on an organisation's environment, here the focus is on the initiative's environment. More concretely, through the

adoption of the categories of SWOT-analysis, this study makes use of it as a framework first and foremost to organise entries (parts of empirical data), as well as to make some use of its structure and basic theoretical background (elaborated on Annex 19) as a contribution to analysis and discuss (chapters 5 and 6). Regarding the adoption of SWOT-analysis categories (Figure 3), entries with regard to internal environment of the initiative WWViews are associated to the categories strengths or weaknesses. That is, entries whose background meaning units (Annex 18) define the initiative's internal characteristics are associated to the categories strengths or weaknesses. Relatedly, strengths and weaknesses are under control of the initiative organisers and implementers. Strengths are positive levers to the implementation and development of the initiative, while weaknesses are negative barriers. On the other hand, entries with regard to external characteristics of the initiative WWViews are associated to the categories opportunities and threats. In other words, entries whose background meaning units define the initiative' external characteristics are associated to the categories opportunities and threats. Respectively, opportunities and threats are not under control of the initiative organisers and implementers. Opportunities offer positive possibilities in the implementation and development of the initiative, while threats offer negative limitations.

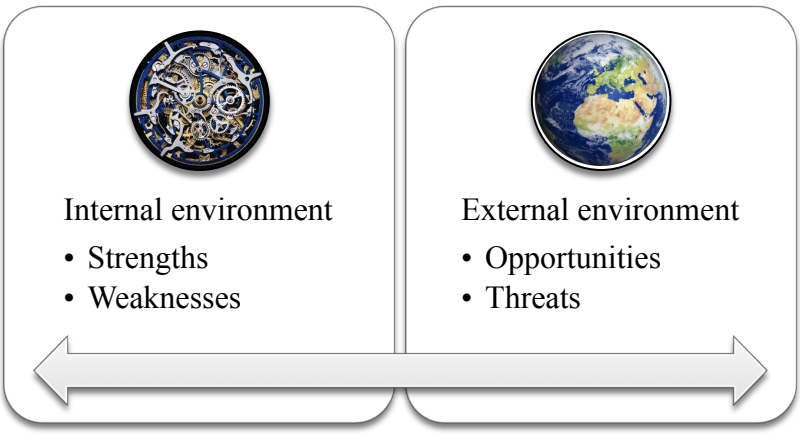


Figure 3 SWOT-analysis framework categories

Applicability. Following recommendations from organisational studies (Annex 19), prior to the integration of SWOT-analysis in this study the researcher (i) studied literature on SWOT-analysis giving particular attention to critics to such solution. Moreover, the researcher attempted to: (ii) expand the sources of information for the characterisation of the initiative's environment by interviewing different experts; (iii) dedicate extensive time for the proper analysis and judgement of the different entries and respective meaning units; (iv) adopt different perspectives in the analysis of entries when running thematic analysis and discussion in this study; (v) avoid to group up meaning units into entries which were not exactly common in order to not oversimplify interviewees' statements concerning the initiative, and; (vi) include, where possible, the latest developments in the initiative. On the basis of these points aforementioned, the researcher also relied on his own organisational training and experiences in the conduction of SWOT-analysis.

Validity. With regard to dynamic environments (Annex 19), the researcher was confronted with the fact that literature addressing the second-edition of the initiative had not been published as of the

realisation of the study. Moreover, the third edition of the initiative was being planned by then as well. Access to the most up to date information was therefore attempted through the interviewing of experts managing and implementing the initiative in its last editions. Relatedly, the entries, which SWOT-analysis' categories were associated to, were not drawn on anticipated visions of what, how and why the initiative will be in the future. This condition reflects the objectives of the interviews, which were to provide grounds for identifying current weaknesses in the initiative and possible online solutions to address those.

Traceability. Concerning communication of SWOT-analysis (Annex 19), the researcher opted for using meaning units also for the purpose of tracing the origin of SWOT list entries (empirical data outcomes). The presentation of the meaning units that support the researcher's interpretations expressed in the entries, not only allow the reader to directly access the source of the information presented, but also provide the researcher an opportunity to identify who and what interviewees exactly stated regarding that entry. Such has proven of much value when conducting analyses and discussions concerning the data outcomes of interviews.

4.2 Interview Data Outcomes

Introduced SWOT-analysis background and its adoption in this study, attention is now turned into the data outcomes of the interviews conducted. As referred above, the subsequent presentation of data outcomes is done with support of a SWOT-analysis framework. Therefore, the outcomes are organised by internal strengths and weaknesses, and external opportunities and threats. Due to the limited space, outcomes regarding weaknesses and opportunities are stated here, while strengths and threats are found in Annex 20. This decision is made on the basis that the analysis following this chapter centre its attention in both weaknesses of the initiative and online solutions found in opportunities. The other two, strengths and threats, are also taken into account in the analysis and discussion, but as background knowledge for argumentation, not as central object of analysis or discussion. That said, the interview data outcomes here presented are in the form of a résumé divided into themes. Those were identified by the researcher on the basis of the relations among the different entries. The full list of entries is presented exclusively in the Annex 21. Each entry in that annex is tagged with its theme here described.

4.2.1 Weaknesses

Organisational and learning contexts. DBT lack of know-how on campaigning was argued as a limiting condition for the realisation of promotional activities, inclusively capturing international media attention. Also concerning capacity, some partners' low TA experience was found a weakness.

Initiative preparation and evaluation. Regarding the initiative preparation, the little time between that phase and realisation was pointed out by several as a weakness that challenges the concretisation of the preparation activities adequately. Moreover, the development of web tools is found resource consuming, particularly considering that the initiative web tools were all developed by the DBT. In an evaluative perspective, the total dependency on organisations joining the

initiative for its realisation associated to a decreasing number of organisations participating in the first two editions was noticed as a weakness.

Initiative promotion. Associated to the lack of know-how on campaigning aforementioned, the lack of long-term marketing strategy was stated as an important weakness of the initiative. Such weakness is of relevance because potential sponsors and partners tend to not be aware of the initiative when approached.

Initiative funding. The DBT lacks a sponsorship strategy aimed at properly identifying incentives to attract sponsors, as well as benefits that funding partnerships may bring to potential partners. This is of concern considering the high financial dependency of the initiative. Furthermore, fundraising in the first two editions was centralised in the DBT. This situation not only possibly led to fewer funds raised but also to slower fundraising process and higher dependency on the success of DBT.

Methodological approach. A common methodological framework to adopted across different social cultures, deliberative habits, as well as political realities, was pointed out by several partners as a hampering aspect of the initiative that may negatively influence the natural flow of the initiative meetings. Moreover, the exclusiveness of issues of global nature addressed in the initiative was perceived by some partners as a weakness. Relatedly, the time-framed methodological framework was associated to difficulties to accommodate local desires, such as running a fifth session dedicated to recommendations in the second initiative edition.

Methodology. No external evaluations consensually estimate how much participants relied and so used the information materials in their decision-making. Consequently, the influence of the informational materials in deliberations and voting is to a large extent unknown. Subject to more attention was the inefficiency in the bottom-up process adopted in the first edition (public recommendations in a fifth session). Making a meaningful translation of the many national recommendations was found cumbersome by the DBT experts. Hence, they perceived the final global recommendation as too abstract, making sense only to a narrow extent. Intrinsically related is the exclusion of bottom-up principles of PP in the second edition (no public recommendations). Some partners pointed this move as a major weakness of the initiative because it erases the only space dedicated to capturing qualitatively participants' opinions about matters of their own concern (bottom-up policy advice).

Methodological representativeness. Two aspects were identified as weaknesses associated to representativeness of participants in WWViews meetings: the small number of WWViews meetings per country and the non-uniform recruitment. Respectively, a bigger number of WWViews meetings per country would ensure more public participating, and a uniform recruitment would facilitate how sampling is performed, for instance.

Initiative political influence. The realisation of WWViews meetings soon before negotiation events does not provide much room for the realisation of public or policy debates in between. Furthermore, the lack of an official participation of DBT in COP negotiations was identified as a weakness because WWViews outputs did not get into discussions in formal negotiation circles. The influence

of WWViews is solely based on indirect channels, such as COP parallel events, media coverage and lobbying.

Initiative public awareness. Country-based outreaching activities post WWViews meetings, meant to disseminate and raise awareness about the results, have not been widely adopted.

4.2.2 Opportunities

Organisational and learning contexts. Both EPTA network (European parliamentary technology assessment institutions that form a network of expertise) and the WWViews alliance offer the capacity to address challenges that inhibit the development of the initiative. In order to capitalise on such pool of organisational resources, an online discussion forum for WWViews partners was identified by a partner as an opportunity to facilitate communication and so foster problem-solving discussions.

Initiative promotion. The increasing number of users of social media makes these means attractive to promote the initiative, particularly when running participant recruitment campaigns. More, social media may promote online initiative activities, as well as disseminate the results of meetings.

Initiative funding. In order to support the diversification of funding sources, online debates for stakeholders could take place to increase the awareness of potential funding partners about the initiative's relevance. Also concerning funding, crowdfunding websites were identified as a means to expand the funding sources tapped so far.

Methodological representativeness. Related to a weakness aforementioned, a computerised recruitment module could automatically define the recruitment sample so that partners could easily find who is to be recruited for WWViews meetings and so seek proper representativeness. Also concerning recruitment, this activity can capitalise on promotional opportunities associated to organisational and social networks, advertising in traditional media, public transportation and on the Internet. Nevertheless, outsourcing participant recruitment was pointed as an opportunity to spare resources and increase the quality of the representativeness. With regard to the actual participation, representation of participants could be better understood if they could anonymous and digitally introduce their demographic characteristics and voting answers.

Initiative outreach (political influence & public awareness). Both online debates for key decision-makers and other stakeholders, and, expert webinars could take place before negotiation events. These activities could be made accessible to the general public as well, and serve as communication channels between the WWViews meeting and the negotiation event. Furthermore, COP-related events preceding the COP could be capitalised on by presenting and discussing the meeting's results in them. Of a higher-level nature, collaboration opportunities with UN institutions could be fostered in order to facilitate the integration of public opinions in international negotiations through UN chairs.

Online participatory methods. On the perceived basis that too few experimental studies on online participation methods have been conducted and the Internet usage across the social spectrum in westerns countries have been increasing; several related opportunities were identified by the DBT. Bearing in mind some of the weaknesses aforementioned, an intelligent computer system to automatically collect public issues was pointed out as a solution that could map out what issues are most relevant and what questions are to be addressed in public consultations. With regard to the expansion of the initiative's reach, hybrid micro meetings were envisioned as a potential solution to increase participation representativeness. This solution is based on the idea of a small number of participants coming together, face-to-face, to take part in a WWViews micro meeting being supported by a computer program and a facilitator online. Also regarding the initiative's expansion, online debates for WWViews participants were identified as an opportunity for increasing participants' understanding of the meeting's results. This solution could therefore capitalise on face-to-face deliberation experiences of participants. Concerning non-participants, a potential solution could be having, upon the WWViews meetings, groups of non-participants (e.g families, students) coming together online to run (short) debates where the topics addressed in the meetings would be discussed. The intent of this solution would be to raise awareness of the public. Distinctively, another solution, being perceived as independent from WWViews method, was discussed between the DBT experts. That was the conduction of international online deliberation meetings where citizens across the world discuss global common environmental issues. In this format public deliberations could be enriched by the diversity of experiences shared in single online tables once participants would represent different countries/regions. Furthermore, moderated social-media debates were also referred to but associated to low potential.

Online promotional solutions. For the purpose of enhancing the promotion of the initiative (classified as weak above), an online demonstration application was found an opportunity. This solution could consist of a program that allows users to experience the process of WWViews in order to make them acquainted with the initiative and its method. Moreover, the initiative promotion could also grasp online advertising.

5 Analysis

In the previous chapter a pre-analysis of the empirical data collected through the different interviews (sub-chapter 3.2) was presented with the support of SWOT-analysis as a framework. As a result, several internal strengths and weaknesses, as well as numerous external opportunities and threats associated to the initiative WWViews were identified. The present chapter follows such outputs up by pursuing answers to the research questions posed in this study (sub-chapter 1.3). More concretely, this chapter is divided into two major sub-chapters. In the first one (5.1) key weaknesses in WWViews are identified. Bearing those in mind, the second sub-chapter (5.2) explores an online solution that can potentially address them. To refresh the logical contribution of this chapter to the study revisit the section 'Study's logical structure' in the sub-chapter 1.4.

5.1 Key Weaknesses

The following sub-chapter is dedicated to identifying key weaknesses in WWViews based on the empirical data collected. Thus, this sub-chapter is highly relevant for attempting to answer the first research sub-question. Importantly, what is here recognized as key weaknesses is solely based on the DBT's and partners' experiences concerning the initiative. In other words, the key weaknesses are identified considering what WWViews alliance partners pointed as relevant.

The identification of key weaknesses is done following two principles. One is that weaknesses referred to by many alliance partners potentially represent higher relevance for the initiative as a whole (developed under). Another is that weaknesses associated to divergences between the organiser and partners are considered key weaknesses because they possibly undermine the evolvement of the initiative (elaborated below).

Weaknesses mostly referred. These weaknesses are found important because they potentially reflect a general perception of the partners. If numerous partners point a factor as a weakness of the initiative, then such factor is likely to represent a weakness that hampers the development of the initiative as a whole. Even if such factor does not inhibit the evolvement of the initiative in conceptual terms, the fact that it is perceived as a weakness by partners is worth considering. After all, the initiative is intrinsically dependent on its partners for its materialisation and what is real depends on their perceptions (revisit arguments on phenomenology in the sub-chapter 1.4).

That said, by revisiting each of the entries listed in section 'Internal Weaknesses' in the Annex 21 (Full list of interviews' outcomes), four weaknesses are identified as mostly referred by partners. These key weaknesses are: (**i**) little time between preparation and realisation; (**ii**) common methodological framework; (**iii**) time-framed methodological framework, and; (**iv**) exclusive issues of global nature.

Regarding the first (i), partners pointed out that too little time between preparation and realisation of the WWViews meetings was a concern when pondering taking part of the initiative. Partners feared that the timeline to organise the WWViews meeting was too short. Moreover, partners shared that the little time available challenged partners' human resources management, some, in

particular, for the translation of informational materials. All in all, partners perceived the short period for organisation as a weakness that could hamper the proper concretisation of preparatory activities. As initiative manager, the DBT referred to such weakness as a consequence of late confirmation of main funding from key sponsors. No partner shared to not have prepared properly for the WWViews meetings as a consequence of the little time available. However, they did stress it as a weakness.

Concerning the second weakness (ii), a common methodological framework adopted by countries or regions with different social cultures, levels of education, deliberative customs, as well as political environments was pointed as a condition that limited the successful concretisation of WWViews meetings nationally. In some countries, participant representation was influenced by the fact that women were to participate only in the condition that their husbands or brothers accompanied them, for instance. In other countries, deliberative customs were perceived as clashing with time-limited deliberation followed by voting on closed questions. This because in those countries deliberations are perceived as valuable means to reach consensus. Moreover, some countries reported that a common methodological framework did not match with predominant organisational cultures that seek to adapt methods to the regional and local contexts. In sum, some partners perceived the methodological framework too strict forcing, in some cases, minor adjustments to accommodate national and regional conditions. Partners tended to not share they have not respected the methodological framework. However, they did reference to the matter as an internal barrier.

With respect to the third (iii), the time-framed methodological framework is in close relation to the key weakness just described. Considering that the WWViews meetings are time-framed and last for most part of a day, some partners did not find possible to accommodate national desires. Perhaps, the most critical was the impossibility of running a fifth session dedicated to public recommendations in the second edition (as it will become clearer further down in this sub-chapter), due to the impracticability of integrating it in an already daylong WWViews meeting. Although some partners were willing to add a recommendation session to the agenda, they found no chance to materialise it due to time constraints. Also, several partners pointed the prescribed time frame as unsuitable with the need for breaks for snacks and pray considering the socio contexts in which the WWViews meetings run. Unlike the two previous weaknesses, partners explicitly stated that this weakness shaped their WWViews meetings.

Closing key weaknesses identified on the basis of their recurrence is the exclusiveness of issues of global nature addressed in WWViews meetings (iv). Some countries find relevant to take the opportunity to deliberate national, regional and/or local environmental issues due to their importance to national policy and national governmental stance in international environmental negotiations. Some point the lack of country-specific deliberations and questions as a weakness of the initiative that compromises participants' engagement and initiative's influence in policymaking, be it at international or national level. While few countries overcame this weakness by managing to run a fifth session dedicated to country-specific biodiversity issues in the second edition, some others did not even take part in the edition.

Weaknesses associated to divergences. These are weaknesses that are perceived by partners as internal barriers, but initiative organiser perceives them differently. In some cases the organiser does not identify the weakness but instead present a juxtaposing strength (different meanings forming reality). These weaknesses are of particular relevance because if they are associated to divergences among partners (initiative organiser and national partners) they may weaken the alliance. This is a pragmatic argument. Some partners have argued not take part in the second edition because their positions were not met by the specifications of the initiative method. Although it might be considered premature to draw on such situations, it is here found wise to adopt a precautionary approach towards the improvement of the initiative. Therefore, weaknesses associated to divergences among partners ought to be addressed early.

That said, by revisiting each of the entries listed in section 'Internal Weaknesses' in the Annex 21 (Full description of interviews' outcomes), five weaknesses are identified as associated to divergences. These key weaknesses are: (**i**) common methodological framework; (**ii**) exclusiveness of informational booklets; (**iii**) time-framed methodological framework; (**iv**) exclusive issues of global nature; (**v**) exclusion of bottom-up principles of PP and unavailability of qualitative data in the web tool. The first, third and fourth weaknesses here identified are common to the last three weaknesses mostly referred just presented above. Therefore, those three are here briefly introduced and contrasted with the diverging view of the organiser. The remaining two weaknesses (second and fifth) are here more descriptively presented and confronted with the diverging perspectives of the organiser, as well.

Regarding the first (i), a common methodological framework adopted by countries or regions with different contexts was perceived by several partners as a limiting condition for the successful concretisation of WWViews meetings (find a thorough description above). However, in the view of the organiser, by having a defined methodological framework that all partners are to adopt, the initiative assures the standardisation and quality of its processes and results. That way, the results were comparable across countries independently of their national contexts and, most importantly, possible of being presented to decision-makers as a congruent whole of international character.

Related to the first, the second weakness (ii) concerns the exclusiveness of informational booklets. A partner expressed interest in encouraging participants to seek knowledge in sources of information other than the provided informational booklet. Although a justification was not provided, the intention by itself diverges from the organiser's intention to standardise the participatory process by having participants worldwide accessing exclusively the same sources of information, among other factors. The standardisation of the processes is perceived by the partners as the means to attain reliable and valid results and so acceptable by policy-makers.

With respect to the third (iii), considering that the WWViews meetings are time-framed and last for most part of a day, some partners did not find possible to accommodate national desires (find a more thorough description above). Such condition was, however, not identified as limitative by the initiative organiser. Contrastingly, the organiser pointed as strength that partners could possibly complement the WWViews meetings by conducting pre-meetings, as well as post-meetings to

integrate national needs and desires. While some countries found impractical to run a fifth session dedicated to public recommendations in the second edition due to the daylong time-framed WWViews meeting, the initiative organiser found post-meetings a solution for that purpose. Similarly, the initiative openness to post-meetings is perceived by the organiser as an opportunity to address sessions focused on national, regional and/or local environmental issues – this, concerning the fourth weakness (iv) (find a more thorough description above). Notably, no partner referred to post-meetings, be it following WWViews meeting in the same day or in the next, as a possibility to run recommendation sessions focused on international or national matters. Worth referring as well that the majority of the interviewed partners did not run a fifth session and the few minority that did are partners with experience in participatory processes.

Closing key weaknesses identified on the basis of associated divergences is the exclusion of bottom-up principles of PP from WWViews meetings (v). The second edition of the initiative did not officially integrate (global level) a fifth session dedicated to capturing participants' opinions qualitatively (descriptive own matters of concern). This measure was considered negatively surprising by some partners due to the importance associated to such session – the only one offering a space for bottom-up policy advice. Moreover, the exclusion of the only qualitative-oriented session resulted in restricting the information made available in the web tool to purely quantitative. Only representing the voting choices made by participants, and so failing to portray qualitatively what participants' opinions were and how they were formed. Some partners argued that qualitative data could offer other perspectives to explain country differences. In a diverging perspective the initiative organiser found that, in the first edition, compiling the several recommendations produced in the different sites across the world, making a meaningful translation of them, turned out a too difficult task. Consequently, DBT experts perceived the final global recommendation as making sense only to a narrow extent. Moreover, in the view of the organiser, recommendation-based sessions require time for deliberation, reflection and sharing among participants. Such condition is a constraint when trying to fit this kind of sessions in a daylong meeting dedicated to voting-based sessions. Nevertheless, as aforementioned, the exclusion of the recommendation session at global level, as an input to COP negotiations, was not intended (by the organiser) to exclude the possibility of running recommendation sessions at national level, as an input to national governments.

Spotted areas of improvement. From now on, key weaknesses are addressed as areas of improvement considering the space they represent for enhancing the initiative. As it is noticeable, many of the key weaknesses identified in the two groups above are very inter-related. In some cases the links among them are so tight that addressing them separately only makes sense for the sake for detailed analyses. Therefore, here on the following areas of improvement (also displayed in Figure 4) are addressed when general arguments are made in relation to them and their particular key weaknesses unveiled when detailed analytical arguments are required. Bearing in mind the relations among key weaknesses the first area of improvement is (I) 'sufficient organising period' that incorporates the key weakness 'little time between preparation and realisation'. The second area of improvement is (II) 'flexible framework' (sensible to national contexts) and it packages the key weaknesses 'common methodological framework', 'exclusiveness of informational booklets', 'time-framed methodological framework' and 'exclusive issues of global nature'. Last but not least,

the third area of improvement is (III) ‘qualitative recommendation session’ (integrated bottom-up approach) that encapsulates the key weaknesses ‘exclusion of bottom-up principles of PP and unavailability of qualitative data in the web tool’.

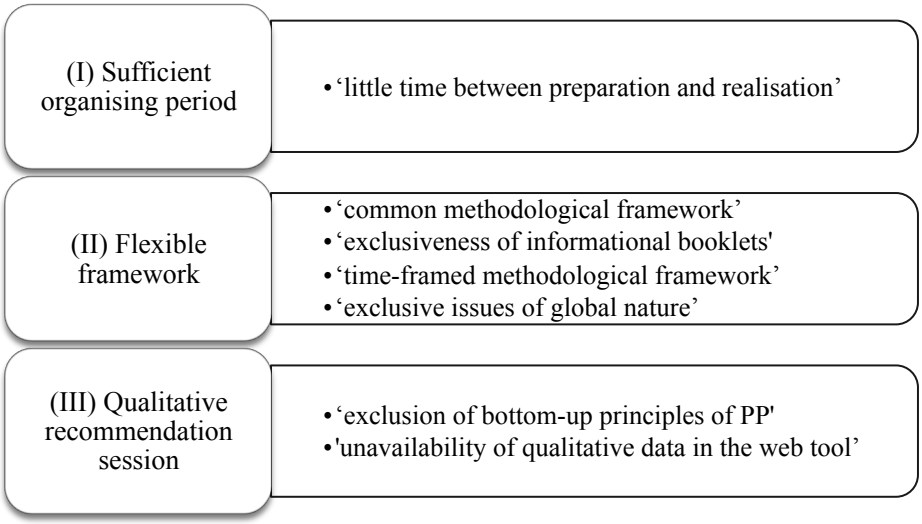


Figure 4 Spotted areas of improvement

5.2 **Hybrid Micro Meetings**

Bearing in mind the areas of improvement identified in the previous sub-chapter, the following is dedicated to exploring an online solution that may address those areas. That exploration is done by firstly presenting an online solution as put forward by the DBT experts in the multi-person interview (sub-chapter 3.2.3). Then, analysis of the possible integration and development of the online solution is done by examining its conceptual features in light of a theoretical framework. Hence, this sub-chapter highly contributes for attempting to answer the second and third research sub-questions (sub-chapter 1.3).

Before elaborating on online solutions it is important to notice that, all those considered here emerged in the multi-person interview (sub-chapter 3.2.3). Revisit the section ‘Preparation and Conduction’ in the sub-chapter 3.2.3 to refresh the process through which online solutions concepts came up. Furthermore, when collecting empirical data in the interview, the researcher did not intend to narrow the kinds of the online solutions considered to possibly improve the initiative. Therefore, the definition of online solutions presented to the interviewees was broad. Online solutions were to be considered all kind of solutions that had a component associated to the Internet (first premise). Online solutions could be fully or partly online-based. Additionally, online solutions were to be considered all kinds of solutions (meeting the first premise) addressing any initiative weakness identified by the interviewees themselves (second premise). As a result, a wide range of online-based solutions targeted to diverse issues was suggested. The list of all online solutions in found in the Annex 25.

For the purpose of selecting a particular online solution for further analysis in this study (addressed right below), the following criterion was defined: the online solution with higher potential to address the areas of improvement identified above would be selected. In line with that, all online

solutions (list in Annex 25) were pondered and their conceptual characteristics confronted with the three areas of improvement. The table below illustrates that exercise.

Table 1 Online solutions confronted with areas of improvement

	(I) Sufficient Organising Period	(II) Flexible Framework	(III) Qualitative Recommendation Session
Hybrid micro meetings	✗	✓	✓
Intelligent system to collect public issues	✓	✗	✗
Social media promotion	✓	✗	✗
Online crowdfunding websites	✓	✗	✗
Computerised recruitment module	✓	✗	✗
Online debates for participants	✗	✗	✓
Online discussion forum for partners	✓	✗	✗
Online debates for stakeholders	✗	✗	✗
Representation processed digitally	✗	✗	✗
Expert webinars before negotiations	✗	✗	✗
Online debates for non-participants	✗	✗	✗
Online demonstration solution	✓	✗	✗
Online advertising for online activities	✓	✗	✗

It was therefore concluded that none of the online solutions potentially relates to the areas of improvement as hybrid micro meetings (HMM) do. Some of the online solutions relate to one area of improvement, but not beyond. Hence, the online solution HMM was selected. Worth noticing that the HMM concept was conceived by the interviewees at the multi-person interview in order to address the problem of representativeness in the initiative (lack of multi-site meetings in each country [see diagram in Annex 17]). Due to time constraints, the interviewees were not presented with the areas of improvement here identified. Had that happened, other online solutions would have been envisaged targeted at the areas of improvement. Nevertheless, as verified in the next session, HMM is here also analysed in terms of its potential response to the issue of representativeness. That said, now, the concept of hybrid micro meetings is presented.

Online solution conceptual features. The purpose of HMM is exactly the same of WWViews meetings – to collect public opinions on matters discussed in international policy venues and

transmit such insights to policymakers. Actually, HMM are meant to be a complement to WWViews meetings (elaborated on below). Therefore, the flow and the key topics of a HMM agenda is to be the same of the complemented WWViews meeting (sub-chapter 3.1.1).

HMM is a concept defined by having a group of citizens taking part in a micro WWViews meeting separately from the main WWViews meeting. A HMM can therefore take place in a location other than of the WWViews meeting (Figure 5). The group of citizens taking part in a HMM is to correspond to the equivalent number of participants composing a table group in a WWViews meeting – between 5 and 8 (sub-chapter 3.1.1). No other than the citizens compose a HMM in the site. That is, neither the presence of organisers nor facilitators are necessary for the materialisation of a HMM in a particular location. The conduction of a HMM is to be done with the support of a computer program and the moderation of face-to-face deliberations in each topic-centred session is to be done with the support of a facilitator online. These two conditions are particular to HMM. Relatedly, a HMM is thought of better being unsynchronised with the complemented WWViews meeting due to the fact that online participation is likely to be more tiresome.

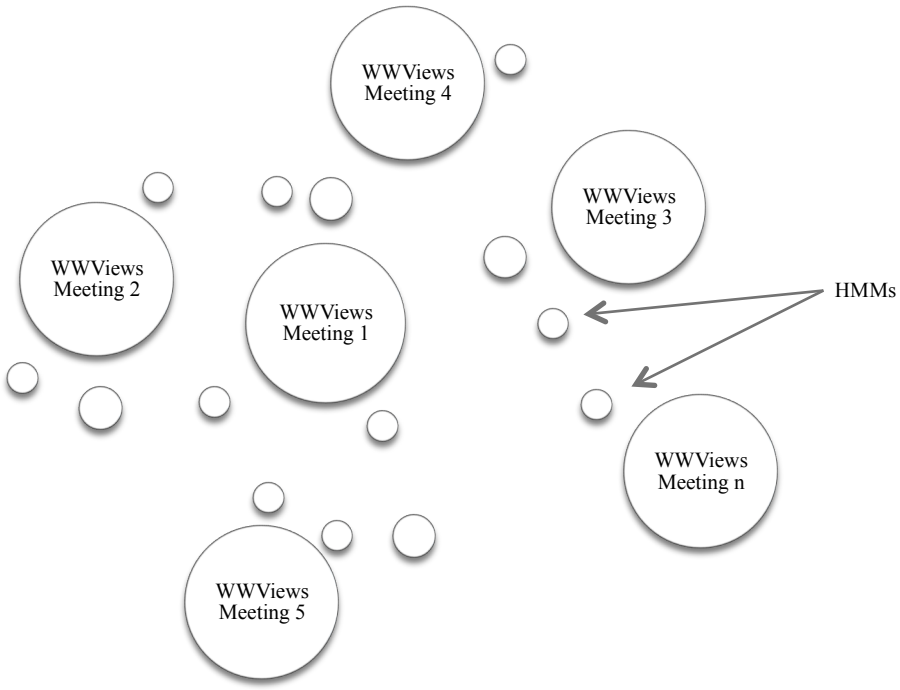


Figure 5 Spatial visualisation of HMM and WWViews meetings

The concept of HMM is based on a brainstorm and short discussion between the two interviewees of the multi-person interview. Therefore, this online solution, similarly to all the others put forward in the interview, was not subject to thorough reflections in order to specify and assess its detailed features. The points made here regard conceptual features. However, based on those, a hypothetical scenario of a HMM is shared in the Annex 26 for the purpose of aiding to understand the concept.

In sum, a group of citizens come together face-to-face to share their opinions on policy matters by (a) being guided with support of a dedicated computer program; (b) being moderated by an facilitator online when deliberating, and; (c) submitting their voting answers digitally.

5.2.1 Integration and Development

Introduced the concept of Hybrid Micro Meetings, the following sub-chapter is dedicated to analysing the online solution concept in relation to the initiative. That analysis has two main goals. One is to further understand to which extent HMM may influence the initiative WWViews through its integration, inclusively to address the areas of improvement above identified. Another is to shed light on design factors ought to be considered in its possible further development. Intended to contribute to both goals, the benefits and drawbacks associated to the concept (influencing and resulting from its integration) are pointed out. Moreover, such exercise is conducted bearing in mind the initiative features and context (sub-chapter 3.1.1 and 4.2, respectively). In concrete, the outcomes of the interviews (sub-chapter 4.2) come here into play for the characterisations of the initiative. Thus, each criterion of the theoretical framework (introduced below) is studied considering HMM as an integral part of the initiative and not as an independent element.

Theoretical Framework

Choosing a framework. The process of selecting a theoretical framework for the analysis of the proposed online solution, hybrid micro meetings, vis-à-vis the initiative WWViews, was centred in the question: what framework offers a structure and rationale suitable for attaining the goals of the analyses conducted in this study? Being the analyses' goals: (i) further understanding to which extent the online solution may influence the initiative through its integration (address areas of improvement [sub-chapter 5.1]), and (ii) shedding light on design factors to be considered in its possible further development. On these grounds, the process evolved with the identification of frameworks addressing the design and evaluation of participatory processes. Two major categories were therefore identified: those addressing traditional participatory processes and those narrowly focused on deliberative processes. Upon the confrontation of the appropriateness of these two kinds of frameworks, bearing in mind the characteristics of the initiative and the online solution, as well as the goals of the analyses, it was realised that the adoption of a framework dedicated to evaluating participatory processes in general was preferred.

The specific pros and cons of adopting frameworks addressing traditional participatory processes or deliberative processes, bearing in mind the analyses' purpose of this study, are specified in a table below in order to facilitate comprehension. Notice that the selection was not based on a quantitative evaluation of the pros and cons, but on the basis of a qualitative approach of each pro and con for both kinds of frameworks.

Table 2 Participatory frameworks versus deliberative frameworks

Participatory Process Frameworks		**Deliberative Process Frameworks**	
Pros	Cons	Pros	Cons
- General evaluation of the features of participatory processes. Not narrowly focused on deliberative specifics (as e.g. Webler 1995). - Also encompass deliberative processes. There are examples of their application to evaluate deliberative processes (e.g. Rowe and Frewer 2004). - Flexibility allows emphasis on particular features and integration of deliberative criteria if desired. - Adopted in several instances. Their consistency has been reviewed and there are several examples supporting its application. - R&F framework has been validated in an evaluation study of a deliberative conference (Rowe and Frewer 2004).	- Do not (intrinsically) account for the quality of the deliberations that possibly take place in them. - Do not account for participant learning outcomes of participatory processes.	- Detailed analysis of deliberation exercises taking place in the participatory processes. - Based on normative deliberative democracy principles (Abelson et al 2003) – positive focusing on such ideology. - Evaluation of WWViews Australia was conducted on the basis of principles of deliberative democracy (Riedy and Herriman 2011). - Deliberative processes have gained space in PP practices in the last decade (Abelson et al. 2003). - Literature addressing deliberative processes and deliberative democracy has blossomed in the last years (Abelson et al 2003).	- Focus on deliberative norms (e.g. participant learning, and trust among participants [Edwards et al. 2008]) that are to be evaluated on the basis of empirical data. - Deliberative democracy requires further empirical research to evaluate its practice (Ryfe 2005). - WWViews was not designed with the intent to fulfil normative criteria associated to deliberative processes (Riedy and Herriman 2011). - WWViews adopts deliberation as a means to foster participants weighing of own opinions, but not to reach consensus.

Eventually, the framework by Rowe and Frewer (2000), hereon R&F, was chosen because it normatively addresses both the relevance of the public acceptance of the participatory process and the efficacy of the process itself. As Rowe and Frewer (2000) argued, these two key elements were, previous to their proposal, addressed separately or, if combined (the case of Webler's framework [Webler 1995; Renn, Webler, and Wiedemann 1995]), targeted at deliberative processes. Considering that WWViews is here perceived as a participatory process with some deliberative characteristics, but not a deliberative process per se[6], the overarching adaptability of the Rowe and Frewer framework was also found attractive.

Describing the R&F framework. A brief introduction is here done for the purpose of understanding the criteria addressed below. A full description of the framework is found in the article 'Public Participation Methods: A Framework for Evaluation' by Rowe and Frewer (2000). R&F framework is dedicated to the evaluation and design of participatory processes in an organisational perspective. The framework adopts a normative stance in the sense that it sets the factors that are ought to be considered when designing or evaluating an effective participatory process[7]. Supporting that is that the R&F analytical framework was built on the basis of literature inputs from academics and practitioners, not findings from empirical studies. The framework is intended to be suitable to the different types of participatory processes, from public opinion surveys to consensus conferences.

Rowe and Frewer put forward two elements that define the effectiveness of a participatory process. Those are the potential acceptance of the process by the public and the efficacy of the process itself. The absence of one of the elements compromises the effectiveness of the whole process. If a process is effective but the public perceived it as unfair or undemocratic, it is likely that the outputs suffer of public legitimacy and so the public does not respond to the policy decisions made. On the contrary, if the outputs of a process are positively acknowledged by the public, but the process lacks consistency and so the outputs and policy decisions are of poor quality, then their successful implementation is likely to fail. Hence, the R&F framework is based on two criterion categories: the acceptance criteria and the process criteria. Within the acceptance criteria, it is found: (a) representativeness; (b) independence; (c) early involvement; (d) influence, and (e) transparency. Within the process criteria, it is found: (f) resource accessibility; (g) task definition; (h) structured decision-making, and; (i) cost-effectiveness. To ease the correlation between the definition of each criterion and associated analysis, each criterion is introduced (as defined by R&F [2000]) throughout the analysis. Also, considering the relative importance of each criterion, some result in more extensive analysis than others. That said, the analyses follow.

[6] For instance, deliberations among participants take place but no consensus is sought. In the end, each participant makes decisions individually.

[7] Rowe and Frewer's motivations for the practice of PP are of a substantive nature (see section 2.2). Their research is not catalysed by ideological principles of (deliberative) democracy, but instead they focus on the organisation of participatory processes for the sake of bettering policymaking.

5.2.1.1 Acceptance Criteria

a) Representativeness

Definition. Participants taking part of the process should represent the broader public. Concretely, they ought to be a sample that represents the population affected by the issues addressed in the participatory process. Attention should be paid to underrepresentation of underprivileged and minorities, as well as overrepresentation of elites (Rowe and Frewer 2000).

Benefits. Because only the physical presence of the participants would be required for the realisation of HMM, this solution has the potential to address the problematic lack of participation due to mobility barriers, being them permanent or temporary ones. Unlike in WWViews meeting, participants would not need to commute long distances to take part. Actually, the geographical proximity of potential HMM participants could foster promotion of the initiative through organisational and social networks. HMM features could also be beneficial when there is a great demographical distribution of potential participants, and so accommodating all the different sub-groups within a WWViews meeting is impractical (Rowe et al. 2004). The more HMMs would be realised, the bigger the sample and the bigger the room for representation of sub-groups. Relatedly, HMM could better safeguard viewpoints promoted by few participants (Rahl 1996). Simply put, a bigger sample (enabled by HMM) would allow for the composition of particular HMMs to be defined in way that would prevent minority views to stand alone risking of being diminuendoed. Furthermore, considering the expanding access to and usability of the Internet worldwide (Selwyn 2006; ITU 2014), the solution could tap on this opportunity to include more participants. From this optimistic perspective, in line with the motivations presented by the interviewees at the multi-person interview, HMM could therefore positively influence the initiative by enlarging the sample of participants per country, by increasing representativeness.

Drawbacks. However, there are several potential downsides. Considering the reported low availability of potential participants and disinterest of social groups in the extremes ends of social spectrum (Irvin and Stansbury 2004), the representativeness of HMM participants could suffer from the same issue of other participatory processes, and so representativeness of the initiative be compromised. A tendency towards under-representation of the lowest educated could be seen in many countries, for instance. Additionally, considering the HMM features, the participation of computer-illiterate citizens is not accommodated in it. Citizens who are non-users of computer (Selwyn 2006; Brandtzæga et al. 2011) or lacking Internet skills (Deursen and van Dijk 2010) could become disenfranchised – unless those are aided by other HMM participants, inclusively when voting. The vote secrecy and integrity would then be threatened. Though, it is worth distinguish such condition from electoral voting and put such disadvantage vis-à-vis the non-participation at all of illiterate citizens who can not participate in WWViews meetings. Relatedly, the lack of access to computer facilities with proper Internet access could hamper PP in certain parts of the world (Chinn and Fairlie 2007; World Bank 2015). This drawback is further developed in the criterion ‘resource accessibility’. However, it is here pointed out due its impact on representativeness of the participants. Furthermore, concerning the promotion of HMM, the level of know-how on

campaigning by the initiative organiser and its partners could impede attracting potential participants, and so reduce the representativeness associated to the participatory process as a whole.

b) Independence

Definition. The organisation and conduction of the participatory process is to be independent and unbiased. All organisers, facilitators and participants ought to be independent from the sponsoring body. Independence of the parties is to be not only exercised but also perceived by the public (Rowe and Frewer 2000).

Benefits & Drawbacks. Unlike the previous criterion, the independency associated to the organisation and conduction of the initiative would likely not be altered with the integration of HMMs. The organisation and facilitation of HMMs may themselves follow the guidelines already adopted for the materialisation of WWViews meetings. The selection of partners based on their neutrality, the development of informational materials and questions with inputs and feedbacks from diverse sources, as well as reports by the DBT, could be extended to the HMMs. It is not the aim here to evaluate the independence of the WWViews meetings, so attention is paid to particular aspects that can shape the independence of HMMs and so influence the initiative's independence.

Considering that the HMMs could happen post WWViews meeting, it might be worth reflecting on the possibility of HMM participants being influenced by results published online. As far as experienced in previous editions (Annex 21), participants do not take a strategic participation in the sense that they attempt to influence the outputs of the WWViews meeting they take part considering the results of WWViews meetings elsewhere. Likewise, it could be expected that HMM participants would not define their stand based on results from previous WWViews meetings. On the other hand, an aspect that could shape the independence of HMMs negatively is the low specific functional-area capacity of some partner organisations. The lack of skilled facilitators, for instance, could lead to the conduction of HMMs in a biased fashion (Rower and Frewer 2000) and so compromise the independence of the initiative as a whole.

c) Early involvement

Definition. The public is to take part in the decision-making process associated to the issue addressed as soon as potentially contributive; bearing in mind that PP becomes particularly valuable when value judgments emerge (Rowe and Frewer 2000).

Benefits & Drawbacks. Similarly to the criterion right above, the integration of HMMs would not likely change the timing of involvement of the public in international environmental policymaking. It is neither the objective here to evaluate this criterion in view of the initiative, but instead to address aspects that can support or hamper the contribution of HMMs to early involvement of the public in decision-making if induced by the initiative at first.

As possibly noticeable in its description (sub-chapter 5.2), HMMs could be replicated quickly as long as its foundations are established. That is, once the program, partners, facilitators, venues were

set, HMMs could be relatively rapidly materialised by developing informational materials and recruiting participants. The latter could represent a major drawback though (addressed in the first criterion of this analysis – see above). Therefore, depending on the aspects just mentioned, the prompt deployment of HMMs could or not be triggered as soon as there would be an opportunity to conduct a participatory process.

d) Influence

Definition. The outputs of the participatory process should affect the decision-making course and its outcomes. The mere legitimation of decisions based on PP outputs tends to lead to public distrust and scepticism towards sponsors and policymaking actors (Rowe and Frewer 2000).

Benefits. Political influence of WWViews is an issue of concern, both for the initiative organiser and the partners (see, for instance, Herriman et al. 2012; Delborne et al. 2013), particularly because participants who take part in WWViews meetings are keen on influencing international negotiations. HMMs by themselves would neither provide further channels of influence, nor establish accountability mechanisms that could foster public perception of their influence in decision-making. However, the integration of HMMs in the initiative could possibly increase representativeness of the public (see first criterion above) that would support higher recognition of its value by policymaking actors. Consequently, further acceptance of the outputs by policymakers could support sought influence. Furthermore, it here argued that, bearing in mind the online-related features of HMM, the concept could be a catalyser for engaging with UN institutions that, suffering from lack of public legitimacy (Andresen and Hey 2005; Najam et al. 2006), are opening up to PP practices and using the Internet to accomplish such ends (see, for instance, the initiative 'The World We Want' [UN 2015]). Also, with regard to the online-related features of HMM, its outputs could feed social media platforms automatically. The promotion of the results within networks populated by policy-makers and influential policy actors, such as international NGOs, would then boost influence (see, for instance, Pearce et al. 2014).

Drawbacks. On the other hand, some strategic actions adopted in the WWViews meetings aimed at seeking influence would not be suitable to HMMs. Some policymakers attended WWViews meetings and that was perceived as a means to nurture influence. Such condition would unlikely be verified in HMMs though, considering the reduced number of participants in each meeting.

e) Transparency

Definition. What takes place in participatory process, as well as the reasons behind such activities should be transparent to the public. Both decisions made regarding the design of the process and decisions made throughout the process should be open to public scrutiny (Rowe and Frewer 2000).

Benefits & Drawbacks. Other than the measures already adopted for the WWViews meetings, it could benefit the initiative to ensure the transparency of the process of selection of partners running HMMs. Similarly, making information available concerning the profile of the HMM facilitators could contribute for transparency and perceived independence (see second criterion above) of the

process. Furthermore, although the participation of citizens in HMM would not require their identification prior or upon voting by the end of each topic-centred session, it is important to bear in mind that privacy issues could arise if done otherwise. Possibly some participants would wish their votes to be private and so related information (allowing the correlation between the computer user and the participant) would be kept inaccessible to the public. Consequently, the transparency of the whole initiative would be influenced.

5.2.1.2 Process Criteria

f) Resource accessibility

Definition. Participants should have access to adequate resources both in their preparation and actual participation in the participatory process. Resources include: time, information, materials and human resources. They all ought to be made accessible to participants on the basis of the issue addressed and process adopted (Rowe and Frewer 2000).

Benefits. Concerning time, although topic-centred sessions of HMM would be of the same length as of WWViews meetings, the intervals between blocks of sessions (see description of HMM above) would offer the opportunity to participants to digest and consolidate issues addressed[8]. Regarding information and materials, a positive contribution of HMM argued here is that, due to the online-related nature of HMM, informational booklets could also be made available online for participants through a website allowing to trace the usage of the materials by the participants (for some insights into website tracking see Atterer et al. 2006). Such feature could support the enhancement of future initiative's informational materials. Further arguments of this genre are shared in the first sub-chapter of the discussion below.

Drawbacks. Nevertheless, HMM is possibly compromised by accessibility to material resources, namely computer facilities with Internet access. Essentially, the realisation of HMM is only possible with the availability of sites where participants can make use of computers with capacity to run Internet-based programs rapid and smoothly. Such requisite is met in some countries, but not in others (Chinn and Fairlie 2007; World Bank 2015). Preferably, video conferencing rooms would be appropriate for conducting HMMs. These factors represent not only a drawback associated to this criterion but also to 'representativeness' (elaborated on above). Relatedly, the realisation of HMM depends on online facilitation and submission of the results on the Internet. Thus, the solution not only requires access to capable computers but also reliable access to the Internet. Once again, proper access to the Internet in several countries is the world is restricted (see, for instance, Les Cottrell 2013). The quality of Internet connectivity is particularly important, because the communication between the participants and the facilitator relies on the Internet as a channel. A connection between the two parts associated to interruptions or low quality audio could hamper the role of the facilitator and so compromise the participants' decision-making. Still concerning facilitation, the online context defining such activity demands particular skills of the facilitator (Edwards 2002; Williams et al. 2006). For instance, while in face-to-face facilitation both facilitator

[8] A drawback might be associated to intervals between blocks of sessions: to favour different results from WWViews meetings and so compromise the standard nature of the initiative's results.

and participants are physically present, and so they can make use of body language to better understand each other, such is not the case in an online audio-based facilitation (Holt et al. 1998). Ultimately, the accessibility of most resources here referred tends to depend on the availability of financial resources. This matter is addressed in the 'cost-effectiveness' criterion below. Failing to account for the drawbacks aforementioned could result in the concretisation of HMM only in certain countries and so negatively influence the public acceptance of the initiative as a whole. This matter is further developed in the third sub-chapter of the discussion below.

g) Task definition

Definition. The nature and scope of the participatory process should be clear to all participants from the very beginning. What the process is addressing, how the process will progress and what outputs are sought should be explicit from the outset. Otherwise, disputes due to misunderstandings may arise and influence the effectiveness of the process (Rowe and Frewer 2000).

Benefits. Due to the relation between benefits in this criterion and two of the three areas of improvement identified previously (sub-chapter 5.1), the area of improvement 'flexible framework' is addressed first, followed by the 'qualitative recommendation session'. Focusing on former, a benefit of the HMM concept is the flexibility this online solution could provide in terms of timing for the progress of the participatory process (addressed above as a resource for participants' decision-making). Bearing in mind that the sequence of sessions in HMM could be taken in separate periods of time (see Annex 26 for a hypothetical scenario), the solution could also offer the opportunity to participants to have breaks as necessary (e.g. religious activities or family duties). Additionally, HMM could also provide the opportunity to extend the number of sessions (beyond the four commonly addressed) in order to integrate sessions dedicated to issues of national, regional and/or local nature. This opportunity could expand the nature of the participatory process by diversifying the outputs sought. The combination of the flexibility to deliver sessions with the possibility to add sessions could therefore contribute for a more flexible framework. With regard to 'qualitative recommendation session', analogously to the last arguments, the solution could offer the possibility to add sessions that could address public recommendations (bottom-up approach focused on qualitatively outputs). That is, on top of the four common topic-centred sessions, a fifth session could be conducted where participants' own policy recommendations were collected. Such collection would be done digitally, and so computer programs could be used to synthetise information and display insights (elaborated on in the first sub-chapter of the discussion). Moreover, HMM recommendations could be made available online through the website of the initiative automatically, contributing in that way for transparency of the initiative as a whole. All in all, the possibilities aforementioned could make the methodological framework more sensitivity to partner's needs and desires.

Drawbacks. Although task definition could be enhanced in some aspects with the integration of HMM, the core of the process would be unchanged – as conceived by the interviewees at the multi-person interview. The process would be characterised by a top-down approach (Joss 1999). The themes and the questions and answers would be defined by the DBT in collaboration with

institutions working on the topic addressed, so participants would not determine what issues were addressed in the HMM. Likewise, group deliberation followed by individual voting would characterise the HMM across countries. Therefore, a common methodological framework would still possibly conflict with different social cultures, levels of education, deliberative customs, organisational cultures, as well as political realities.

h) Structured decision-making

Definition. The decisions made by participants throughout the participatory process should be supported by mechanisms for that purpose. Such mechanisms ought to structure and display the decision-making process, in order to organise the process and facilitate the examination of reasons behind decisions made, respectively (Rowe and Frewer 2000).

Benefits. Supporting participants' decision-making processes in HMM would be that the methodological framework of WWViews meetings (sub-chapter 3.1.1) forms the basis of the methodological framework of HMM (sub-chapter 5.2). Bearing in mind that the WWViews framework was built up with reference to tested participatory methods, HMM would benefit from that background. For the purpose of reporting the decision-making process, it is here argued that, considering the required use of computers in HMM, upon consent by participants, deliberating and voting procedures could be digitally recorded[9]. Allowing that way to examining the reasons behind voting decisions. Making such records public could also increase transparency of the process (see above) and so of the initiative as a whole.

Drawbacks. On the downside of HMM, a structured decision-making could be compromised by the online facilitation. Facilitation itself is of major importance when deliberation takes place within groups (Edwards 2002; Williams et al. 2006). The facilitator ought to, among other duties, avoid the dominance of the discussion by particular individuals or submissive behaviour by specific participants (Rower 1998; Williams et al. 2006), and so keep the group discussion flowing in favour of the whole group. In the case of online facilitation the physical absence of the facilitator could influence the participants' perception of the facilitators' role and power (Williams et al. 2006). Participants could feel more tempted to question the authority of the online facilitator once social differences are weakened in online communications (Ibid.). Relatedly, the sense of absence of a facilitator could present a disadvantage when the deliberation environment is turning out unfriendly or too unbalanced, giving incentives for some participants to drop out (Rowe and Frewer 2000). Other analytical arguments concerning facilitation were presented in the criteria independence and resources accessibility (see above). Here attention was dedicated to how online facilitation could turn out to be disadvantageous for decision-making in HMM and so degrade the outputs of the initiative. It is not the intent here do make a comparative analysis between face-to-face and online deliberation (see Gastil 2000; Min 2007 and Baek et al. 2011 for that purpose, for instance). After all, HMM would not be based on online deliberation among participants but on online facilitation.

[9] Possibly in an anonymised fashion to meet participants' will.

i) Cost-effectiveness

Definition. Participatory processes should be cost-effective in a way that the process is perceived as effective and the outcomes as worth in face of the associated costs. Both time and money costs ought to be taken into account (Rowe and Frewer 2000).

Benefits. For a cost-effective development and integration of HMM, the initiative organiser could capitalise on the EPTA network by seeking partnerships to co-develop the online solution; reducing that way the time and financial costs associated to such endeavour. Furthermore, as mentioned in the criterion 'early involvement', HMMs could be replicated quickly as long as its foundations are established. Therefore, a rapid start of a new initiative edition could be supported by the prompt deployment of HMMs. Also regarding initial organisation, once HMM concept offers the chance to run meetings across the country independently of partner organisers' presence, the DBT could focus on selecting one national partner per country. The process of engaging partners could therefore target a wider diversity of countries within the same time period at the beginning of a new WWViews edition. Concerning national preparations, considering that HMM would not require centralised meetings; participants would not have to commute great distances to take part. Consequently, partners' costs associated to incentives and reimbursement concerning participant transportation could decrease. Notice that in previous editions of WWViews, some partners recruited participants from entire geographical areas, whereas others did it from a smaller area in order to cut expenses. In the realisation of the participatory process itself, HMM would not require vote counting once that would be done automatically with the submission of the votes by participants digitally. This condition could make voting faster, free of counting mistakes and allow further analyses of the voting process.

Drawbacks. There two major cost-effective drawbacks associated to HMM. One has to do with money and another with time. The former is a drawback that hinders the integration of HMM in the first place (not in focus of this analysis), while the latter is a drawback that results from the integration of HMM.

Regarding financial matters, the development and integration of HMM in WWViews is threatened by the fact that developing online solutions tend to be resource consuming. Bearing in mind the recurrent emphasis on funding dependency and limited financial means to materialise WWViews meetings (both by the initiative organiser and partners), developing further participatory processes require additional attention to fund raising and sponsorship. Worth mentioning that funds for providing accessibility to the necessary resources for WWViews meetings were short in previous editions (Annex 21).

As possibly noticed, the area of improvement 'sufficient organising period' was not addressed in any of the criteria so far. It happens that the integration of HMMs in the initiative is likely to increase the workload of the initiative organiser and partners, and so it turns out to not counterbalance the little time between preparation and realisation, but instead possibly exacerbate such key weakness. Notice that HMMs are participatory processes that would happen close to

WWViews meetings, so it is likely that their organisation would happen in parallel to the preparation of WWViews meetings. In relative terms, the organisation of HMMs alone could be translated into high time cost-effectiveness, once their single organisation would not require much work and potentially deliver fruitful outputs. However, the workload associated to them accumulated to the workload of WWViews meetings could end up being excessive, particularly for partners. Therefore, the initiative would possibly be influenced negatively in this sense.

5.3 **Key Findings**

The key findings in this chapter are here presented as answers to the research sub-questions.

(i) What weaknesses in WWViews can be addressed with online solutions? Key weaknesses identified based on their recurrence and propensity for divergence between partners and organisers were: little time between preparation and realisation; common methodological framework; time-framed methodological framework; exclusive issues of global nature; common methodological framework; exclusiveness of informational booklets, and; exclusion of bottom-up principles of PP and unavailability of qualitative data in the web tool. Upon that, it was verified that an online solution such as the HMM can address all these weaknesses favourably but the little time between preparation and realisation.

(ii) What sort of online solutions can be integrated in WWViews to address its weaknesses? In the view of the initiative organiser, weaknesses identified by them could be addressed with the following conceptual online solutions: hybrid micro meetings; intelligent system to collect public issues; social media promotion; online crowdfunding websites; computerised recruitment module; online debates for participants; online discussion forum for partners; online debates for stakeholders; representation processed digitally; expert webinars before negotiations; online debates for non-participants; online demonstration solution, and; online advertising for online activities. In this study only the hybrid micro meeting concept was analysed due to its unique potential to address not only weaknesses pointed out by the initiative organiser but also the key weaknesses aforementioned.

(iii) What ought to be considered in the integration of online solutions in WWViews? With the adoption of a normative theoretical framework, several criteria were pointed as of relevance when designing an online solution. The most critical ones for the further development of the HMM concept were: representativeness due to the possibility to increase the number of participants; resource accessibility because of the limited access to Internet infrastructure across the world; task definition once it allows expanding the methodological framework easily; structured decision-making due to online facilitation barriers and cost-effectiveness bearing in mind potential financial savings.

6 Discussion

Subsequent to the analysis presented above, several arguments are worth developing in order to further explore how online solutions can influence PP in GEG. To refresh the logical contribution of this chapter to the study revisit the section 'Study's logical structure' in the sub-chapter 1.4. The discussion below has its epicentre in the concept of HMM (sub-chapter 5.2), but the discussion rationale is positioned in a higher level. In other words, the discussion is around the possible integration of HMM, but arguments also address matters beyond its immediate organisational practice. Thus, the discussion here is decentred from the framework adopted in analysis. Ultimately, arguments here are researcher's own attempts to shed light on the unexplored dimensions of online participatory practice by taking HMM as a torch. In line with that, this chapter is composed of three main sub-chapters. The first is dedicated to exploring the potential emerging from the adoption of diverse digital solutions combined. The second divides its attention between reflections on the further development of HMM as an integral part of WWViews or an independent initiative in itself. The last, attempts to underline critical considerations about the possible implementation of HMM for public participation in global governance. Justifying arguments for addressing these three particular issues are presented in the beginning of each sub-chapter.

6.1 Synergies of digital solutions

ICT have been playing a preponderant influence on how governance is enacted. From how grassroots groups cooperate internationally to how climate change estimations are conducted. Actually, the concept of WWViews (sub-chapter 3.1.1) is much possible due to ICT. HMM, as an online solution, is centred in the capabilities and limitations of ICT. However, other digital solutions could be considered in combination with HMM or by themselves in order to possibly enhance the initiative WWViews. Here few of those are introduced by directly referring to their potential solving character[10]. Essentially, these online solutions are discussed here because they potentially support the improvement of the initiative. Improving aspects are here derived on the basis of the face-to-face and online interviews, not directly argued by the initiative organiser or partners.

In relation to the process criterion resource accessibility (sub-chapter 5.2.1.2), booklet informational materials are meant to ensure that all participants attending a WWViews meeting have an understanding of the issues addressed. However, some participants may well read the materials and research further, while others may even not read them at all. Such condition may result in unequal levels of knowledge. Being considered inevitable in participatory processes and part of deliberative dynamics, such disproportionality may however lead to domination of deliberations by participants with high levels of knowledge (take the role of experts). It is here argued that avoiding such situations could be attempted by using digital booklets with gamification embedded (game mechanics and dynamics [Deterding et al. 2011; Domínguez et al. 2012]). This way, participants could learn about the content in the informational booklets in a more effective manner. This digital

[10] Not intending to argue for ICT as ultimate solutions. The call is for exploring this means as contributions for solutions.

solution could motivate and support participants to acquire knowledge of the issues addressed; boost participants' excitement about the deliberations and voting sessions, and; even gauge the level of participants' knowledge prior to the meetings.

Another matter. Collection and storage of potentially relevant deliberative data generated in the WWViews meetings, for possible future analyses, was not performed in its first two editions. In the first edition, only the most-voted recommendations from each meeting site were reported to the DBT (sub-chapter 3.1.1). The many recommendations from each table were not collected. Moreover, in both editions, only deliberations at certain tables were recorded. It is here argued that such kinds of data could provide insights not only about how deliberations are performed and evaluate their quality (very much attractive for deliberative democracy advocators), but also about what opinions actually emerge in deliberations but are not translated into the outputs of the participatory process. The latter is particularly relevant when public opinions are ultimately exteriorised in the form of votes. Although the collection and storage of data may be found a simple task, making sense of it does require further expertise and the adoption of digital solutions. Among those are: automated audio transcription, translation and transfer (Saindon et al. 2004); automated discourse analysis (Lüngen et al. 2008); big data (Boyd and Crawford 2012); and word clouding (Wu et al. 2011). If used in combination these digital solutions could provide invaluable insights into public opinions, and to a certain extent contribute for increasing transparency of the process. Ultimately, such synergetic solution (combining diverse online solutions to capitalise on their complementary features) could contribute for the generation of qualitative outputs, much appreciated by some national political cultures worldwide, without demanding much in the organising period prior to the meetings – pointed by partners as already overloaded.

6.2 **Integration or disintegration**

The concept of HMM emerged within a future-workshop framework focused on the initiative WWViews (sub-chapter 3.2.3). Thus, HMM was thought of as a complementary element intended to address some weaknesses of the WWViews method. That said, further developing HMM is likely to contribute for its integration in the initiative. However, how ought such integration to occur? Could HMM be implemented aside of WWViews? If so, what would be the implications of that? These two possible developments are now addressed.

Taking further the concept of HMM envisioning its integration in the initiative WWViews, better take into consideration not only the weaknesses it attempts to address and the particular characteristics of the solution, but also the context in which the initiative WWViews takes place. HMM, besides an online solution, a complementary element, ought to be addressed as a democratic contribution within the realm of public participation, a means for supporting the improvement of democracy, inclusively the quality of policy decisions made in international arenas. Such approach may therefore harvest desired attention from sponsors and partners for its development and implementation. If address merely as an online solution, HMM may well be underestimated and disregarded by relevant actors in the global governance community.

Distinctively, HMM could be further developed foreseeing its implementation separate from the initiative WWViews. In such case, HMM would not be materialised as an integral part of WWViews, not as a complementary element addressing weaknesses of WWViews, but as an initiative in its own. This development path would likely give result to an end solution slightly different from the one developed bearing in mind its integration in the initiative WWViews. It is not the intent here to explore such differences, but instead what the implications of an HMM initiative could be for democracy in general and GEG in particular. Having a HMM initiative would mean that the outputs of such meetings would not be added on to the outputs from WWViews meetings taking place elsewhere. Instead, the agglomerate of HMM outputs by itself would form the output of the initiative edition[11]. Moreover, considering that HMMs across the world could result from citizens' pro-active attitude, instead of from partners' promotional efforts, the initiative could become citizen-enabled[12]. Thus, the initiative could mostly depend on the citizens' will to set up a HMM in their locality. The sense of ownership of the meetings could shift from partners to citizens. To a certain extent, such phenomenon could increase the acceptability of the participatory process by the public once its organisation would possibly be perceived more independent (sub-chapter 5.2.1.1). Adopting a more bottom-up approach to the structure and content of the meeting would also be in line with that, but that is another matter here not taken further. Worth considering though is that such transition could support the emergence of a global social movement (Tarrow 2011) – as first though of by one of the interviewees in the multi-person interviews – where the public would take in their hands the materialisation of participatory processes, namely HMMs. The disintegration of public participation as a democratic practice as it is known today would then take place. Not associated to a negative change, but to a positive distribution of the motive forces proclaiming public participation in democracy. By pushing such vision a little bit further, it is possible to picture a phase in which the movement would strive for and demand the concretisation of participatory activities in early phases of policymaking processes (sub-chapter 5.2.1.1). That is, citizens would attempt to run HMMs as soon as it would be possible to contribute with public opinion to decision-making. A rather normative and utopian vision, indeed. Notwithstanding, as referred by several (e.g. Lenaghan 1999), the public participation tends to increase the sense of community and political engagement of participants. Therefore, it could be expected that such a global movement would also increase the sense of global community that is found of importance to address global environmental issues, such as climate change.

6.3 **Backfiring effects**

The idea of HMM came up in the multi-person interview as a possible solution to address the issue of public representativeness in WWViews meetings. In short, some citizens cannot take part in the meetings because commuting is not possible due to geographical or socio-political barriers or because transportation is too costly. Realising micro meetings for such citizens was therefore considered a potential solution. However, as it was pointed out in the analysis above, the realisation of HMMs depend on access to the Internet and participants' computer skills. Bearing that in mind,

[11] For the effect, it is here assumed that a HMM initiative would be edition-based, just as WWViews is, and so each edition would be dedicated to a major decision-making event in GEG.
[12] Assuming though that WWViews partners would also run the HMM initiative (see section 5.2 to refresh their role).

the further possible development and implementation of the HMM concept entails critical democratic considerations that are ought to be accounted to. Here few of them are discussed.

The materialisation of the HMM concept, as an integral part of the WWViews initiative or as an independent initiative (as briefly explored in the previous sub-chapter), in a global scale, would imply that its implementation would not be homogenous across the world. Considering the problematic access to computer facilities and reliable Internet in some countries – in fact, a large proportion of world's countries – HMM would not be feasible everywhere. Notice that proper Internet access for the submission of results in WWViews meetings was already pointed as a matter of concern by some partners (Annex 21). An uneven implementation of HMM worldwide would then be translated into differentiated public participation. In simple words, citizens with access and ability to use the Internet would supposedly make their opinions heard, while citizens deprived from technological infrastructure and skills would continue not potentially influencing decision-making. In O'Neill's description of GEG (2009), the North-South divide is introduced as a phenomenon where countries from the Southern hemisphere struggle to gain influence in the decision-making negotiations taking place in global arenas of environmental governance. Among other aspects, being countries in the Northern hemisphere holders of much economic and financial capacity, these tend to monopolise decision-making processes in GEG, and so undermine the legitimacy of policy, as well as its effective implementation in Southern countries, for instance. Indeed, democratic principles of equality are absent. That said, it is here found likely that an uneven implementation of HMM would extrapolate such North-South divide to the PP realm. Not only states but also Southern public would struggle to influence decision-making. Relatedly, Fisher and Green's call for attention to the disenfranchisement of civil society and developing countries[13] in global governance (2004) sheds light on the barriers hampering participation of these two in negotiations. In a nutshell, with regard to developing countries, lack of resources and human capacity, as well as information availability are pointed as the main obstacles to further influence decision-making. Concerning civil society, the lack of perceived legitimacy (in view of IGOs and states) and professionalization of its actors are the two major hindrances identified. Making a parallel, once again, an unbalanced application of HMM globally would further stress the disenfranchisement of developing countries. Not only mechanisms for nation-state participation would be insufficient, but also those for global online public participation would be unsatisfactory. All in all, attempting to implement an online solution such as the HMM ought to be accompanied by considerations of its implications for a accentuated disenfranchisement of some countries, as well as, relatedly, a wider gap between the North and South in participation in GEG[14].

It could also be argued that the development of new solutions should not be constrained by limiting factors of their system. In that perspective, HMM and other online solutions would then be implemented somehow ignoring the immediate unsuitability of such innovations in a vast number

[13] The term is used exclusively in this section on the basis of Fisher and Green's reference (2004).
[14] Mitigating such backfiring effects could be attempted by, for instance, cooperating with NGOs that strive for the democratisation of GEG by increasing PP and representing social interests of the general public in negotiation arenas (O'Neill 2009). This cooperation is distinguished from those of the WWViews alliance due to its continuous dedicated effort (not solely around initiative editions) to exchange knowledge and experiences, as well as find novel solutions.

of countries in the planet. In another perspective, perhaps more idealistic, online participatory processes such as HMM could function as a supporting element for the expansion of ICTs in some countries throughout the world. If highly associated as a response to the officially requested participation in global decision-making (e.g. Fisher and Green 2004; Bäckstrand 2006), such innovations could be used as arguments for further technical infrastructural development.

Summing up, leaving aside the analyses in the previous chapter, the further possible development and implementation of the HMM concept calls for critical reflections by its developers and practitioners. Whether the outcomes of HMM are considerably contributive for democracy or the backfiring effects of such online solution are unbearable, is much worth of thought.

6.4 **Key arguments**

A summary of the key arguments in this chapter is here presented attempting to complement answers to the third research sub-question in particular: *(iii) What ought to be considered in the integration of online solutions in WWViews?* Three major arguments were predominant in this discussion and those are found of relevance when dealing with the integration of online solutions in participatory practices. One was that participatory processes could gain from a combined integration of digital solutions. Another was that participatory practice could transform itself as a result of the adoption of online solutions once that move could empower citizens. A third was that the nature of online solutions raises barriers to participation in Southern countries and that could aggravate the already recognised North-South divide in participation in international environmental policymaking.

Other aspects that might influence the integration of online solutions in the initiative WWViews are found in the Annex 27.

7 Conclusion

Study's endeavour. The study here presented was set out to explore the influence of online solutions in PP in GEG. By adopting a case study, the study focused on the initiative WWViews and the potential integration of an online solution to address some of its weaknesses. The study sought to identify and study online solutions with the potential to improve the quality of participatory processes and to extend their application beyond national contexts. Also, the research study discussed the possible implications of online-based participatory initiatives for PP in GEG in particular and democracy at global level in general. Such matters were addressed due to the scarce attention dedicated to them by research studies so far. The acquisition of knowledge of these subjects is of importance considering the increasing contribution and relevance of public participation to policymaking, particularly in GEG. Moreover, expanding the understanding of the role of ICT in PP beyond national contexts is relevant for further development of participatory processes suitable to global contexts. Aware of that, the present study was conducted seeking answers to the main research question: *How may the integration of online solutions in participatory practices influence public participation in global environmental governance?* Contributions for answering this question are presented below. Also, theoretical contributions of this study are shared.

Findings' synthesis. In the chapter 5, analysis, the main empirical findings providing answers to the three research sub-questions were summarised in its last sub-chapter. Likewise, the chapter 6, discussion, provides a summary of the key arguments attempting to complement answers to the third research sub-question in particular. Thus, this section is dedicated to synthesising the findings of the study with particular focus on the main research question.

With the realisation of this study it was stressed that global participatory initiatives face distinctive issues directly related to their international nature. One issue was the diverging meanings associated to participatory processes by the diverse organisations implementing the initiative. Another issue was adopting an undifferentiated methodological framework across different social and cultural environments. Related to that, it was realised that tailored online solutions might provide a means to accommodate differences of PP practices across countries. The flexibility associated to online solutions could allow different countries to run specific participatory activities (e.g. qualitative public recommendations). Consequently, the expansion of PP practices through online solutions could favour the emergence of social movements that would strive for PP in GEG.

Another major influence online solutions may have in PP in GEG is to increase levels of representativeness in participatory activities due to their reach beyond geographical obstacles. Such condition could therefore favour the quality of PP outputs and so better respond to the call for higher levels of PP for increased legitimacy and effectiveness of policy in GEG. Also, converging diverse online solutions could boost the outputs of PP and their understanding. However, this study recognises that online solutions, being intrinsically dependent on the Internet, may find socio-technical barriers for their integration in global participatory processes. That is because of the need for Internet access and skilled citizens worldwide, as well as the existence of online facilitation obstacles. Relatedly, expanding the adoption of online solutions could influence PP in GEG in a

rather biased way. Considering the current unbalance in state influence in international environmental negotiations, in concrete between Northern and Southern countries in the world, relying on online solutions for increasing PP in GEG could result in higher levels of participation of the public in the North than in the South. Hence, a divide of participation between the two poles could increase.

Theoretical implications. In line with early literature addressing the potential of the Internet (Johnson 1998; Tambini 1999) and as reported in previous studies on online participatory processes in national contexts (e.g. Brants et al. 1996; Klein 1999; Janssen and Kies 2005), this study stressed that the Internet infrastructure and usability represent a concern to PP also in global contexts. With regard to the theoretical framework by Rowe and Frewer (2000), it was possible to verify that the argued general adaptability of this framework (Ibid.) may well suit the design of global participatory processes. Furthermore, this study opens the concept of North-South divide (Fisher and Green 2004; O'Neil 2009) to the inclusion of public participation, particularly in the view of its expansion through online solutions.

Due to limited space, practice implications of this study are addressed in the Annex 28. Recommendations for future research are found in the Annex 29.

Public participation in global environmental governance has been increasing, and so has the pervasiveness of the Internet. However, little is known about how online solutions can influence global participatory practices. This study contributed for this body of knowledge and it shed light into an obscure but yet promising area of research: global online public participation.

8 Bibliography

- AAU. 2012. *Curriculum for the Master's Programme in Techno-Anthropology*. [Online] Denmark: Aalborg University. Available at: http://goo.gl/Ajstvl [Accessed: 5 June 2015].
- Abelson, J., Forest, P., G., Eyles, J., Smith, P., Martin, E. and Gauvin, F., P. 2003. Deliberations about deliberative methods: issues in the design and evaluation of public participation processes. *Social Science & Medicine* 57, pp. 239–251.
- Agger, A., Jelsøe, E., Jæger, B., and Phillips, L. 2012. The Creation of a Global Voice for Citizens: The Case of Denmark. In: Rask, M., Worthington, R. and Lammi, M. eds. *Citizen Participation in Global Environmental Governance*. New York: Earthscan, pp. 45-69.
- Albrecht, S. 2006. Whose voice is heard in online deliberation?: A study of participation and representation in political debates on the internet. *Communication & Society* 9(1), pp. 62-82.
- Andersson, E., Shahrokh, T. 2012. Crossing Boundaries with Deliberation: But Where Are We Going? In: Rask, M., Worthington, R. and Lammi, M. eds. *Citizen Participation in Global Environmental Governance*. New York: Earthscan, pp. 70-85.
- Andresen, S. and Hey, E. 2005. The Effectiveness and Legitimacy of International Environmental Institutions. *International Environmental Agreements* 5, pp. 211–226.
- Atterer, R., Wnuk, M. and Schmidt, A. 2006. Knowing the User's Every Move – User Activity Tracking for Website Usability Evaluation and Implicit Interaction. *Proceedings of the 15th international conference on World Wide Web*, pp.203-212.
- Bäckstrand, K. 2006. Democratizing Global Environmental Governance? Stakeholder Democracy after the World Summit on Sustainable Development. *European Journal of International Relations* 12(4), pp. 467-498.
- Bäckstrand, K., Khan, J., Kronsell, A. and Lövbrand, E. 2010. *Environmental Politics and Deliberative Democracy*. United Kingdom: Edward Elgar Publishing Limited.
- Baek, Y. M., Wojcieszak, M. and Carpini, M. X. D. 2011. Online versus face-to-face deliberation: Who? Why? What? With what effects? *New Media & Society* 14(3), pp. 363-383.
- Bang the Table. 2015. *Online Citizens Jury: Energy Generation in NSW*. [Online] Australia: BangtheTable. Available at: http://goo.gl/L3GhEu [Accessed: 28 May 2015].
- Bedsted, B. Gram, S. and Klüver, L. 2012. The Story of WWViews. In: Rask, M., Worthington, R. and Lammi, M. eds. *Citizen Participation in Global Environmental Governance*. Oxon: Earthscan, pp. 30-44.
- Beierle, T., C., Cayford, J. 2002. *Democracy in Practice: Public Participation in Environmental Decisions*. Washington, DC: Resources for the Future.
- Beitin, B. K. 2012. Interview and Sampling: How Many and Whom. In: Gubrium, J. F. et al. ed. *The SAGE Handbook of Interview Research: The Complexity of the Craft*. Thousand Oaks, CA: SAGE Publications, Inc., pp. 243-255.
- Berger, P. and Luckmann, T. 1991. *The Social Construction of Reality*. [Online] Available at: http://perflensburg.se/Berger%20social-construction-of-reality.pdf [Accessed: 4 June 2015].
- Berte, E. and Panagopoulos, T. 2014. Enhancing city resilience to climate change by means of ecosystem services improvement: a SWOT analysis for the city of Faro, Portugal. *International Journal of Urban Sustainable Development* 6(2), pp. 241–253.
- Besley, J., C. 2010. Deliberative Polling. In: Priest, S., H. *Encyclopedia of Science and Technology Communication*. Thousand Oaks, CA: SAGE Publications, Inc..

- Boyd, D. and Crawford, K. 2012. Critical Questions for Big Data: Provocations for a cultural, technological, and scholarly phenomenon. *Information, Communication & Society* 15(5), pp. 662-679.
- Brandtzæg, P., B., Heim,' J. and Karahasanović, A. 2011. Understanding the new digital divide—A typology of Internet users in Europe. *Human-Computer Studies* 69, pp. 123–138.
- Brants, K., Huizenga, M., and Van Meerten, R. 1996. The new canals of Amsterdam: An exercise in local electronic democracy. *Media, Culture & Society* 18, pp. 233-247.
- Brinkmann, S. and Kvale, S. 2014. *InterViews: Learning the Craft of Qualitative Research Interviewing*. 3rd ed. Thousand Oaks, CA: SAGE Publications, Inc..
- CBD Secretariat. *Aichi Biodiversity Targets* [Online]. Kenya: UNEP. Available at: https://www.cbd.int/sp/targets/ [Accessed: 8 May 2015].
- Chambers, S. 2009. Rhetoric and Public Sphere: Has Deliberative Democracy Abandoned Mass Democracy? *Political Theory* 37(3), pp. 323-350.
- Chinn, M. and Fairlie, R. W. 2007. The determinants of the global digital divide: a cross-country analysis of computer and Internet penetration. *Oxford Economic Papers* 59, pp. 16-44.
- Coleman, S. and Moss, G. 2012. Under Construction: The Field of Online Deliberation Research. *Journal of Information Technology & Politics* 9(1), pp. 1-15.
- Crosby, N. 2010. Citizens Jury. In: Priest, S., H. *Encyclopedia of Science and Technology Communication*. Thousand Oaks, CA: SAGE Publications, Inc..
- Crosby, N. and Nethercut, D. 2005. Citizens juries: Creating a trustworthy voice of the people. In Gastil, J. and Levine, P. eds. *The deliberative democracy handbook: Strategies for effective civic engagement in the 21st century*. San Francisco: Jossey-Bass, pp. 111–119.
- DBT Foundation. 2015. *About DBT Foundation*. [Online] Available at: http://www.tekno.dk/about-dbt-foundation/?lang=en [Accessed: 2 June 2015]
- DBT. 2015. *World Wide Views Official Website*. [Online]. Copenhagen: Danish Board of Technology Foundation. Available at: http://wwviews.org [Accessed: 23 May 2015].
- Delborne, J., Schneider, R., Bal, S., and Cozzens, R. 2013. Policy pathways, policy networks, and citizen deliberation: Disseminating the results of World Wide Views on Global Warming in the USA. *Science and public policy* 40(3), pp. 378-392.
- Deterding, S., Khaled, R., Nacke, L., E. and Dixon, D. 2011. *Gamification: Toward a Definition.* [Online] Canada: CHI 2011. Available at: http://goo.gl/Ikgxbp [Accessed: 28 May 2015].
- Deursen, A. and van Dijk, J. 2010. Internet Skills and the Digital Divide. *New Media & Society*, 13(6), pp. 893-911.
- Domínguez, A., Saenz-de-Navarrete, J., de-Marcos, L., Fernández-Sanz, L., Pagés, C. and Martínez-Herráiz, J. 2012. Gamifying learning experiences: Practical implications and outcomes. *Computers & Education* 63, pp. 380-392.
- Dryzek, J. S. 2000. *Deliberative Democracy and Beyond: Liberals, Critics, Contestations*. New York: Oxford University Press.
- Edwards, A., R. 2002. The Moderator as an Emerging Democratic Intermediary: The Role of the Moderator in Internet Discussions about Public Issues. *Information Polity* 7(1), pp. 3–20.
- Edwards, P. B., Hindmarsh, R., Mercer, H., Bond, M. and Rowland, A. 2008. A Three-Stage Evaluation of a Deliberative Event on Climate Change and Transforming Energy. *Journal of Public Deliberation* 4(1).

- Einsiedel, E., F. 2010. Consensus Conference. In: Priest, S., H. *Encyclopedia of Science and Technology Communication*. Thousand Oaks, CA: SAGE Publications, Inc..
- Ellingson, L. 2012. Interview as embodied communication. . In: Gubrium, J., F., J., A., Holstein, Marvasti, A., B. and. McKinney, K., D. eds. *The SAGE handbook of interview research: The complexity of the craft*. Thousand Oaks, CA: SAGE Publications, Inc., pp. 525-540.
- Elster, J. 1998. *Deliberative Democracy*. UK: Cambridge University Press.
- EPTA. 2012. *Denmark – The Danish Board of Technology.* [Online] Available at: http://www.oeaw.ac.at/ita/fileadmin/epta/popupwindow/popup02/popup02_denmark.html [Accessed: 2 June 2015].
- Ferber, P., Foltz, F. and Pugliese, R. 2005. The Internet and Public Participation: State Legislature Web Sites and the Many Definitions of Interactivity. *Bulletin of Science, Technology & Society* 25(1), pp. 85-93.
- Fertel, C., Bahn, O., Vaillancourt, K., Waaub, J-P. 2013. Canadian energy and climate policies: A SWOT analysis in search of federal/provincial coherence. *Energy Policy* 63, pp. 1139–1150.
- Fiorino, D., J. 1990. Citizen participation and environmental risk: a survey of institutional mechanisms. *Science, Technology, and Human Values* 15(2), pp. 226–243.
- Fischer, F. 2000. *Citizens, experts, and the environment, the politics of local knowledge*. Durham: DUKE University Press.
- Fisher, D. R. and Green, J. F. 2004. Understanding Disenfranchisement: Civil Society and Developing Countries' Influence and Participation in Global Governance for Sustainable Development. *Global Environmental Politics* 4(3), pp. 65-84.
- Fishkin, J. S. 2009. *When the People Speak: Deliberative Democracy & Public Consultation*. New York: Oxford University Press.
- Fishkin, J., S. 1997. *The voice of the people: Public opinion and democracy*. New Haven, CT: Yale University Press.
- Gastil, J. 2000. Is Face-to-Face Citizen Deliberation a Luxury or a Necessity? *Public Communication* 17, pp. 357-361.
- Given, L. M. 2008. *The SAGE Encyclopedia of Qualitative Research Methods*. Volumes 1 & 2. Thousand Oaks, CA: SAGE Publications, Inc.
- Graham, T. and Witsche, T. 2003. In search of online deliberation: Towards a new method for examining the quality of online discussions. *Communications* 28, pp. 173-204.
- Guston, D. and Sarewitz, D. 2002. Real-time Technology Assessment. *Technology in Society* 24, pp. 93-109.
- Haas, P. 2001. Policy Knowledge: Epistemic Communities. In: Brooks, A. and VanDeveer, S. eds. *International Encyclopedia of the Social & Behavioural Sciences*. Amsterdam: Elsevier, pp. 11578-11586.
- Habermas, J. 1981. *The Theory of Communicative Action. Volume 1. Reason and the Rationalization of Society*. London: Heinemann Educational Books Ltd.
- Habermas, J. 1991. The Public Sphere. In: Mukerji, C. and Schudson, M. eds. *Rethinking Popular Culture: Contemporary Perspectives in Cultural Studies*. Berkeley, CA: University of California Press, pp. 398–404.

- Halpern, D. and Gibbs, J. 2013. Social media as a catalyst for online deliberation? Exploring the affordances of Facebook and YouTube for political expression. *Computers in Human Behavior* 29, pp. 1159–1168.
- Hamlett, P., W. 2002, *Adapting the Internet to Citizen Deliberations: Lessons Learned*. [Online] IEEE. Available at: http://goo.gl/UBiino [Accessed: 8 June 2015].
- Herriman, J., White, S. and Atherton, A. 2012. Political Influence in the Context of Australian WWViews. In: Rask, M., Worthington, R. and Lammi, M. eds. *Citizen Participation in Global Environmental Governance*. Oxon: Earthscan, pp. 221-240.
- Holt, M., Kleiber, P., Swenson, J., Rees, E. and Milton, J. 1998, Facilitating group learning on the Internet, *New Directions for Adult and Continuing Education* 78, pp. 43-53.
- Horst, M. and Irwin, A. 2009. Nations at Ease with Radical Knowledge. *Social Studies of Science*, 40, pp. 105-126.
- Irvin, R. and Stansbury, J. 2004. Citizen Participation in Decision Making: Is It Worth the Effort? *Public Administration Review* 64(1) pp. 55-65.
- ITU. 2014. *ICT Facts and Figures* [Online] Available at: http://www.itu.int/en/ITU-D/Statistics/Pages/facts/default.aspx [Accessed: 22 May 2015].
- James, N. and Busher, H. 2012. Internet Interviewing. In: Gubrium, J. F. et al. ed. *The SAGE Handbook of Interview Research: The Complexity of the Craft*. Thousand Oaks, CA: SAGE Publications, Inc., pp. 177-193.
- Janssen, D. and Kies, R. 2005. Online Forums and Deliberative Democracy. *Acta Politica* 40, pp. 317-335.
- Jasanoff, S. 1997. Civilization and madness: The great BSE scare of 1996. *Public Understanding of Science* 6 (3), pp. 221-232.
- Jasanoff, S. 2004. *States of knowledge: the co-production of science and social order*. London, United Kingdom: Routledge.
- Jasanoff, S. 2005. Judgment Under Siege: The Three-Body Problem of Expert Legitimacy. In: Maasen, S. and Weingart, P. eds. *Democratization of Expertise? Exploring Novel Forms of Scientific Advice in Political Decision-Making*. The Netherlands: Springer.
- Jensen, T., E. 2013. *Techno Anthropology – a new move in Science and Technology Studies*. [Online] Denmark: DASTS. Available at: http://goo.gl/eF5EGz [Accessed: 5 June 2015].
- John, P., Smith, G. and Stoker, G. 2000. Nudge Nudge, Think Think: Two Strategies for Changing Civic Behaviour. *The Political Quarterly* 80(3), pp. 361-370.
- Johnson, G., Scholes, K. and Sexty, R.W. 1989. *Exploring Strategic Management*. Canada: Prentice Hall.
- Johnson, S., M. 1998. The Internet Changes Everything: Revolutionizing Public Participation and Access to Government Information through the Internet. *American Bar Association* 50(2), pp. 277-337.
- Jørgensen, M., S. 2012. *A pioneer in trouble: Danish Board of Technology are facing problems*. [Online] EASST. Available at: http://goo.gl/tILuIj [Accessed: 2 June 2015].
- Joss, S. 1999. Public participation in science and technology policy- and decision- making — ephemeral phenomenon or lasting change? *Science and Public Policy*, 26(5), pp. 290–293.
- Joss, S. and Durant, J. 1995. *Public Participation in Science: The Role of Consensus Conferences in Europe.* London: NMSI Trading Ltd.

- Joss, S. and Durant, J. 1995. *Public participation in science: The role of consensus conferences in Europe*. London: Science Museum.
- Justesen, L. and Mik-Meyer, N. 2012. *Qualitative Research Methods in Organisation Studies.* Denmark: Hans Reitzels Forlag.
- Kemp, R. 1988. *Planning, Public Hearing, and the Politics of Discourse*. In: Forester, J. ed. Critical Theory and Public Life. Massachussetts: MIT Press.
- Kensing, F. and Madsen K. 1991. Generating Visions: Future Workshops and Metaphorical Design. In: Greenbaum, J. and Kyng, M. eds. *Design at work: cooperative design of computer systems*. Hillsdale, NJ: L. Erlbaum Associates Inc, pp. 155-168.
- Klein, H. 1999. Tocqueville in cyberspace: Using the Internet for citizen associations. *The Information Society* 15, pp. 213-220.
- Kleinman, D. L. 2000. *Science, Technology and Democracy*. New York: SUNY Press.
- Koch, J., A., 2000. *SWOT Does Not Need To Be Recalled: It Needs To Be Enhanced – Part 1: Description of the Problem.* [Online] Available at: http://goo.gl/q0fOHd [Accessed: 18 December 2014].
- Koch, J., A., 2001. *SWOT Does Not Need To Be Recalled: It Needs To Be Enhanced – Part 2: Fundamental of enhancement.* [Online] Available at: http://goo.gl/a7UnRx [Accessed: 18 December 2014].
- Lafont, C. 2015. Deliberation, Participation, and Democratic Legitimacy: Should Deliberative Mini-publics Shape Public Policy? *The Journal of Political Philosophy* 23(1), pp. 40-63.
- Lengwiler, M. 2008. Participatory Approaches in Science and Technology: Historical Origins and Current Practices in Critical Perspective. *Science, Technology, & Human Values* 33(2), pp. 186-200.
- Les Cottrell, R. 2013. *How Bad Is Africa's Internet?* [Online] New York: IEEE. Available at: http://spectrum.ieee.org/telecom/internet/how-bad-is-africas-internet [Accessed: 23 May 2015].
- Lindskog, R. and Sundqvist. 2002. The Role of Science in Environmental Regimes: The Case of LRTAP. *European Journal of International Relation* 8(177), pp. 77-101.
- Lukensmeyer, C., J. and Brigham, S. 2002. Taking Democracy to Scale: Creating a Town Hall Meeting for the Twenty-First Century. *National Civic Review* 91(4), pp. 351-366.
- Lüngen, H., Mehler, A. and Storrer, A. eds. 2008. Lexical-Semantic Resources in Automated Discourse Analysis. *Journal for Language Technology and Computational Linguistics* 23(2).
- McLaughlin, M. W. 1987. Learning from Experience: Lessons from Policy Implementation. *Educational Evaluation and Policy Analysis* 9(2), pp. 171-178.
- Miller, D. 1992. Deliberative Democracy and Social Choice. *Political Studies*, pp. 54-67.
- Min, S. 2007. Online vs. Face-to-Face Deliberation: Effects on Civic Engagement. *Journal of Computer-Mediated Communication* 12, pp. 1369-1387.
- Morgan, D. L. 2012. Focus Groups and Social Interaction. In: Gubrium, J., F., J., A., Holstein, Marvasti, A., B. and. McKinney, K., D. eds. *The SAGE handbook of interview research: The complexity of the craft*. Thousand Oaks, CA: SAGE Publications, Inc., pp. 161.177.
- Mouffe, C. 2000. *The democratic paradox*. New York: Verso.
- Najam, A., Papa, M. and Taiyab, 2006. *Global Environmental Governance: A Reform Agenda*. [Online] Available at: https://www.iisd.org/pdf/2006/geg.pdf [Accessed: 22 May 2015].

- Newig, J. and Fritsch, O. 2009. Environmental governance: participatory, multi-level – and effective? *Environmental Policy and Governance* 19(3), pp. 197-214.
- Newig, J. and Kvarda, E. 2012. Participation in environmental governance: legitimate and effective? In: Hogl, K., Kvarda, E., Nordbeck, R. and Pregernig, M. eds. *Environmental Governance: The Challenge of Legitimacy and Effectiveness*. Cheltenham: Edward Elgar, pp. 29-45.
- Nielsen, M., V. 2015. *The Danish Board of Technology Foundation (DBT).* [Online] Available at: http://goo.gl/f6vQyJ [Accessed: 2 June 2015].
- Nisbet, M. C. 2009. *Communicating Climate Change: Why Frames Matter for Public Engagement.* [Online] Taylor & Francis. Available at: http://goo.gl/PamGPG [Accessed: 26 May 2015].
- O'Neill, K. 2009. *The Environment and International Relations*. New York: Cambridge University Press.
- Pearce, W., Holmberg, K., Hellsten, I. and Nerlich, B. 2014. Climate Change on Twitter: Topics, Communities and Conversations about the 2013 IPCC Working Group 1 Report. *PLoS ONE* 9(4).
- PEP-NET. 2015. *PEP-NET Official Website*. [Online] Available at: http://pep-net.eu [Accessed: 28 May 2015].
- Petts, J. 2001. Evaluating the Effectiveness of Deliberative Processes: Waste Management Case- studies. *Journal of Environmental Planning and Management* 44(2), pp. 207-226.
- Przeworski, A. 1991. *Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America*. New York: Cambridge University Press.
- Rahl, G. M. 1996. Risk reduction through public-participation in environmental decisions. *Naval Engineers Journal* 108 (4), pp. 53-57.
- Rask, M., Worthington, R. and Lammi, M. 2012. *Citizen Participation in Global Environmental Governance*. Oxon: Earthscan.
- Renn, O., Webler, T. and Wiedemann, P. 1995. *Fairness and competence in citizen participation: Evaluating models for environmental discourse*. Dordrecht, the Netherlands: Kluwer Academic.
- Riedy, C. and Herriman, J. 2011. Deliberative Mini-publics and the Global Deliberative, System: Insights from an Evaluation of World Wide Views on, Global Warming in Australia. *PORTAL: Journal Of Multidisciplinary International Studies* 8(3), pp. 1-29.
- Rowe, G., Marsh, R. and Frewer, L. 2004. Evaluation of a Deliberative Conference. *Science, Technology, & Human Values* 29(1), pp. 88-121.
- Rucker, D., G. and Whalen, P., F. 2012. *Online Public Participation Platforms and Applications*. [Online] Boilind Springs, Pennsylvania: NCDD. Available at: http://goo.gl/Oky6Wp [Accessed: 28 May 2015].
- Ryfe, D., M. 2005. Does Deliberative Democracy Work. *Annual Review of Political Science* (8), pp. 49-71.
- Saindon, R., J., Estrin, L., H., Brand, D., A. and Brand S. 2004. *Systems and methods for automated audio transcription, translation, and transfer with text display software for manipulating the text.* [Online] Available at: https://goo.gl/JtZIeU [Accessed: 29 May 2015].
- Schakade, D., Sunstein, R. and Kahneman, D. 2000. Deliberating about dollars: The severity shift. *Columbia Law Review* 1000(4), pp. 1139-1175.

- Schutz, A. 1970. *On Phenomenology and Social Relations*. Chicago: University of Chicago Press.
- Selwyn, N. 2006. Digital division or digital decision? A study of non-users and low-users of computers. *Poetics* 34, pp. 273–292.
- Shackley, S. and Wynne, B. 1996. Representing Uncertainty in Global Climate Change Science and Policy: Boundary-Ordering Devices and Authority. *Science, Technology, & Human Values* 21(3), pp. 275-302.
- Smith, G. 2003. *Deliberative Democracy and the Environment*. London: Routledge.
- Stern, P., C. 1999. Information, Incentives and Proenvironmental Consumer Behavior. *Journal of Consumer Policy* 22, pp. 461-478.
- Stirling, A. 2008. "Opening up" and "Closing down": Power, Participation, and Pluralism in the Social Appraisal of Technology. *Science, Technology, & Human Values*, 33(2), pp. 262-294.
- Streck, J., M. 1997. *Pulling the Plug on Electronic Town Meetings: Participatory Democracy and the Reality of the Usenet* [Online] New Political Science. Available at: http://www.brooklynsoc.org/courses/92.4/streck.html [Accessed: 27 May 2015].
- Suchman, L., Blomberg, J., Orr, J., E. and Trigg, R. 1999. Reconstructing technologies as social practice. *American Behavioral Scientist* 43, pp. 392–408.
- Tambini, D. 1999. New media and democracy: The civic networking movement. *New Media and Society* 10, pp. 305-329.
- Tarrow, S., G. 2011. *Power in Movement*, Cambridge: Cambridge University Press.
- UN. 2015. *The World We Want*. [Online] Available at: https://www.worldwewant2015.org [Accessed: 20 May 2015].
- Verplanken, B., 2011. Old Habits and New Routes to Sustainable Behaviour. In: Whitmarsh, L., O'Neill, S. and Lorenzoni, I. eds. *Engaging the Public with Climate Change*. Oxon: Earthscan.
- Weber, L., M., Loumakis, A. and Bergman, J. 2003. Who Participates and Why?: An Analysis of Citizens on the Internet and the Mass Public. *Social Science Computer Review* 21(1), pp. 25-42.
- Webler, T. 1995. "Right" discourse in citizen participation: An evaluative yardstick. In: Renn, O., Webler, T. and Wiedemann P. eds. *Fairness and competence in citizen participation: Evaluating models for environmental discourse*. The Netherlands: Kluwer Academic, pp. 35-86.
- Webler, T. 2000. Fairness and Competence in Citizen Participation: Theoretical Reflections from a Case Study. *Administraion & Society* 32(5), pp. 566-595.
- Werner, R., N., Anja, J., Stefanie, R. and Alexander, N. 2012. Online consensus conferences for clinical guidelines development – a survey among participants from the International Guidelines for the Treatment of Actinic Keratosis. *Journal of Evaluation in Clinical Practice* 20, pp. 853-856.
- Westhues, A., Lafrance, J. and Schmidt, G. 2010. A SWOT analysis of social work education in Canada. *Social Work Education: The International Journal* 20(1), pp. 35-56.
- William, A. 2009. Revitalising Politics from the Group Up: The Role of Digital Media in Promoting Citizen-led Democratic Renewal. *Representation* 45(3), pp. 301-311.
- Williams, S., W., Watkins, K., Daley, B., Courtenay, N., Davis, M. and Dymock, D. 2006. Facilitating cross-cultural online discussion groups: Implications for practice. *Distance Education* 22(1), pp. 151-167.

- Wilsdon, J. and Willis, R. 2004. *See-Through Science. Why Public Engagement Needs to Move Upstream*. London: Demos.
- World Bank. 2015. *World Development Indicators: The information society* [Online] Available at: http://wdi.worldbank.org/table/5.12# [Accessed: 22 May 2015].
- Wu, Y., Provan, T., Wei, F., Liu, S. and Ma, K. 2011. Semantic-Preserving Word Clouds by Seam Carving. *Computer Graphics Forum* 30(3), pp. 741–750.
- Yuan, H. 2012. A SWOT analysis of successful construction waste management. *Journal of Cleaner Production* 39, pp. 1-8.
- Yun, H. J. 2008. Focus Groups. In: Kaid, L., L. and Holtz-Bacha, C. eds. *Encyclopedia of Political Communication*. Thousand Oaks, CA: SAGE Publications, Inc..
- Zimmermann, J., F. 2001. *The referendum: the people decide public policy*. Westport, Conn.: Praeger.

9 Annexes

Annex 1 Danish Board of Technology Foundation

The following text introduces the Danish Board of Technology Foundation in brief following a thorough description of it by Lars Klüver (its director) in a book edited by Joss and Durant (1995), as well as sources of the information (e.g. Agger 2012; EPTA 2012, Nielsen 2015).

The Board of Technology was first set up by the Danish parliament (in Danish: *Folketinget*) in 1986. As a temporary statutory body, it was then replaced by the Danish Board of Technology (DBT) in 1995. As an independent office associated to the Danish Ministry of Science, Innovation and Higher Education, the DBT's mandate was two fold: to provide counselling to the parliament on technology assessment in order to support policymaking, and to encourage public debate on technology with the intention to nurture Danish democracy. The activities of the DBT were funded by the Danish government yearly.

Although the DBT made use of diverse methodological solutions throughout its activities, consensus conferences pioneered by DBT itself became international known. That was because of its distinct characteristics and applicability in different national contexts.

Later in 2012 the DBT was abolished following a political decision intended to redirect the funds allocated to the DBT to other areas of research (Jørgensen 2012). Consequently, the DBT Foundation was founded. Building on its background, the DBT Foundation kept its role of providing advice to the parliament and supporting public debate about techno-scientific developments. On top of that, the DBT Foundation expanded its activities by also addressing other than parliamentary decision-makers and applying technology assessment methodologies to other issues where technology issues are less prevalent. The areas of operation of the DBT now range from IT, energy, through environmental issues and biotechnology to health and transportation. Currently, the DBT Foundation is funded for projects it implements by a variety of national and international sponsors. The DBT Foundation is formed by a board of seven members, a council and a secretariat of 25 employees (DBT Foundation 2105).

The most recent international projects by the DBT Foundation are the World Wide Views on Global Warming realised in 2009 preceding the COP15 in Copenhagen and the World Wide Views on Biodiversity that took place in 2012. Both described in the sub-chapter 3.1.1.

Annex 2 WWViews on Global Warming 2009

WWViews on Global Warming (WWViews GW) was the first edition of the initiative and it took place in 26 September 2009. WWViews GW aimed at influencing the COP15 hosted by the Danish Minister of Climate in Copenhagen in December of the same year. 170 countries were present at COP15 through around 8000 delegates, such as governmental officials and representatives from NGOs, business and industry.

WWViews GW motivations. On top of the general motivations for conceptualising the WWViews initiative, some particular aspects supported the emergence of its first edition. As argue by the DBT in the initiative's website (World Wide Views), policies to coupe with global warming are to influence the public in a wide rage of forms. From chance in consumption habits, through alteration of transportation means to livelihoods conditions, citizens are to be confronted with new policies that impact their lives. Moreover, changes in weather patterns are to strongly influence people's daily lives. Therefore, in order to have the public embracing such transitions, it is important that they are part of the decision-making process leading to new policies.

WWViews GW numbers. Approximately 4000 citizens in 38 countries from 6 continents shared their opinions on key topics concerning global warming discussed among policymakers at COP15. 50 partners took part arranging 44 WWViews meetings in total. Around 12 of those countries, had never run participatory activities concerning climate policy.

WWViews GW informational materials. The informational booklet was composed of 40 pages based on the IPCC's fourth assessment report and what was to be discussed at the COP15. 5-12 minute videos were also part of the informational materials.

WWViews GW topic-centred sessions. Throughout the WWViews GW meeting day, participants addressed key topics concerning Global Warming. Such key topics were clustered into four sessions: "[a] climate change and its consequences; [b] Long-term climate goal and urgency; [c] dealing with greenhouse gas emissions; [d] the economy of technology and adaptation" (World Wide Views). Participants voted in 2-4 closed questions at the end of each topic-centred session. After the four sessions, citizen groups discussed recommendations of their own concern that they considered to be relevant to pass on to COP15 delegates. Each participant group discussed and came up with one recommendation that was then put together with the recommendations from other groups. Eventually, all citizens voted in the recommendation they found most relevant in their WWViews GW meeting and so a recommendation ranking was originated and reported to the initiative's website.

WWViews GW outputs. The results of the GW were compiled into a policy report with nine policy recommendations. A short video featuring Lars Klüver, summarized the policy recommendations and highlighted the reliability of the results accomplished through the WWViews meetings.

The outputs of the GW were handed in directly to COP15 delegates and those were also publicised in Copenhagen through visual advertisements. Relatedly, an international media strategy was set to

attempt that key media in country partners promoted the results. International newspapers, television and the Internet were the three attempted means of communication to spread the news about the GW's results and so raise awareness of the many stakeholders and public about the issue addressed. Regarding the latter, an online quiz was created so that online users could use it to figure out what country their opinions are mostly similar to. The quiz followed the same flow of the WWView meeting, with exception to the deliberation between watching the video and voting. Furthermore, the GW website was intended to function as a portal where further information resources about scientific findings, political discourses and PP in governance could be found. That way other actors could use the GW website as a means of accessing relevant information for their activities, not necessarily related to the WWViews GW meeting.

Annex 3 WWViews on Biodiversity 2012

WWViews on Biodiversity (WWViews BD) was the second edition of the initiative and it took place in 15 September 2012. The outputs of the WWViews BD aimed at the COP11 of the UN Convention on Biological Diversity, in Hyderabad, India, in October of the same year. Following up on the COP10 in Japan where Aichi Biodiversity Targets were set (within the Strategic Plan for Biodiversity 2011-2020), in 2010, the WWViews BD was intended to be targeted to all citizens in general and young citizens in particular.

WWViews BD motivations On top of the general motivations for conceptualising the WWViews initiative, some particular aspects supported the emergence of its second edition. Of great motivational importance was the potential contribution of WWViews to the first strategic goal of the Aichi Biodiversity Targets (CBD Secretariat) and the United Nations Decade on Biodiversity 2011-20. They both strive for raising peoples' awareness on biodiversity.

WWViews BD partners. For this edition, a Steering Group was formed with the intention to facilitate its delivery. The UN Secretariat of the Convention on Biological Diversity, the Danish Ministry of the Environment and the Danish Board of Technology formed this group. The group strategically discussed on matters such as the national partners, the informational materials, the questions to be asked, the dissemination of results and their integration in governance structures. Mostly, online meetings in a monthly basis enabled the group. It was in this edition that UNESCO joined the WWViews Alliance with the objective of supporting the initiative. Such international partners are expected to help to find more national partners and/or financial support. With regard to the latter, the VILLUM Foundation and the Danish Ministry of the Environment mostly sponsored WWViews BD. Additionally; the Japan Biodiversity Found sponsored the participation of national partners across developing countries.

WWViews BD numbers. Approximately 3000 citizens from 25 countries through 34 WWViews meetings participated in the WWViews BD.

WWViews GW informational materials. The informational booklet was composed of 20 pages based on what was to be discussed at the COP11. 4-10 minute videos were also part of the informational materials.

WWViews BD promotion. In March 2012 the Danish Ministry for the Environment held an opening event to officially launch the initiative edition. It was intended to attract the attention of the international media (dedicated press release) to expose WWViews BD. Partner were present in line with their participation in the training seminar. Consequently, the DBT produced six press releases documents to promote the edition between the March 2012 and October of the same year. Moreover, Facebook, Twitter, YouTube and Flickr accounts were created and used for the purpose of sharing promotional resources such as news, videos and pictures, on the Internet. While the press releases were taken as primary means of dissemination of information, social media was used as a secondary means. Another communicational mechanism used in this edition was newsletters. In total 7 different newsletters were released with roughly a month interval between them. These

newsletters informed their readers about the project's scope, goals, partners, preparation developments, implementation, results and their impact, throughout the period between June and October 2012. Several videos have been produced by the DBT and published through the newsletters.

WWViews BD topic-centred sessions. The opening of the WWViews meeting in each of the partner countries was done with the screening of a welcoming video featuring Dr. Braulio Ferreira de Sousa Dias, Executive Secretary to the Convention on Biological Diversity. Similarly to WWViews GW, the WWViews meeting proceeded with four thematic sessions, but no fifth session recommendation was officially included. In this edition it was up to the partners to run such session for national purposes. Thirteen questions were addressed in four thematic sessions: "[a] introduction to biodiversity; [b] biodiversity on land; [c] biodiversity in the sea, and; [d] burden and benefit sharing" (World Wide Views). The four sessions were followed by a feedback session were the participants were asked to vote on five questions concerning the WWViews meeting as a PP activity.

WWViews BD outputs. A final report on the basis of the WWViews meetings' results was written and handed in to the Executive Secretary of the UN Secretariat for Biodiversity in October 2012. Moreover, a short documentary video was created and both screened at the COP11 and made available in the website of the project in order to easily provide an insight into the methodological process applied and the results achieved. Two side-events at COP11 addressed WWViews BD and its results. Organisations and some citizens who participated in the WWViews meetings themselves also took part. It was also DBT's intention to raise further funds for the development of web-based awareness raising activities and of a school kit with a mix of role-play and education in biodiversity. Nevertheless, in the final decision text resulting from the COP11 states that PP activities, such as the WWViews BD, are encouraged in all member countries of the convention of biological diversity.

> 24. Encourages Parties, relevant organizations and stakeholders to support and contribute to communication initiatives, such as the World Wide Views on Biodiversity, which combine the implementation of Strategic Goals A and E regarding mainstreaming of biodiversity, participatory planning, knowledge management and capacity-building (CBD Secretariat).

Annex 4 Qualitative research interviews

Why and what for qualitative research interviews? Considering the research questions posed (sub-chapter 1.3) and the adoption of a case study (sub-chapter 3.1), the researcher was confronted with the need to get insights into what, how and why activities composing the initiative WWViews took place, from the moment its idea was generated until the point in time when the latest edition was assessed. Studying the initiative WWViews encompassed an understanding of how the initiative evolved from conception to assessment. Actually, scrutinising the initiative was a crucial element in this research because of its contribution for identifying areas of improvement and possible respective online solutions for participatory processes. In order to accomplish so, given that much of how and why particular activities happened is not documented so far, interviewing the experts involved in the initiative was then found the best means. Experts themselves were the people who experienced the activities (phenomena) in first hand and are able, to a certain extent, to recall past events. That said, qualitative research interviews were then an obvious choice considering their intrinsic openness to exploring interviewers' experiences and points of view.

What is about qualitative research interviews? Generally speaking, interviews are situated events where knowledge production takes place. These events happen in a context, which is composed of the interviewer, the interviewee, their bodies and the role of nonhumans (Kvale and Brinkmann 2014, pp. 104). It is through the relational dynamics among these four elements that knowledge is produced. In qualitative research interviews, such dynamics foster insights on the interviewee's views of the world, particularly of a phenomenon. In other words, qualitative research interviews allow understanding the interviewee's lived world by getting explicit phenomenological descriptions. Nonetheless, such phenomenological descriptions depend on the interviewee's capacity to remember own lived experiences. This condition may become crucial for the quality of the knowledge produced in an interview when the phenomena addressed have taken place far back in time. It is therefore the role of the interviewer to sensitively facilitate the recalling of past events by the interviewee. That can be attained by asking specific questions that help the interviewee to recall the particular context in which a certain phenomenon took place back in time.

What is the role of the interviewer? In the perspective of the interviewer in this study, also the author of this text, qualitative research interview is a craft (Kvale and Brinkmann 2014), in the sense that human skills are crucial for the concretisation of the interview. The researcher must be skilled, sensitive and knowledgeable to perform interviews by using interpretation and situated personal judgement. Research interview is not defined by rules and standards to be mechanically followed (Kvale and Brinkmann 2014, pp. 70), and so the researcher's role is not of a manual's follower but of a situation-sensitive driver who conducts the interview in collaboration with the interviewee. It is therefore paramount for the interviewer to be aware of the meaning associated to statements shared throughout the interview. Meaning may sometimes be implicit or "between the lines" and require the interviewer to question the interviewee whether an implicit message interpreted by the interviewer is correct and exact. Such condition can then support the interviewers' interview guidance, as well as interview analysis later on.

What preparation does the interviewer need? The interviewer must, one; be knowledgeable about the interview matter, two; to know what the methodologies available are, and, three; be aware of the conceptual issues that may arise in the production of knowledge (Kvale and Brinkmann 2014, pp. 19). These three conditions were central in the general preparation of the interviewer to the interviews further on described. In the first place, the interviewer studied literature on interviews in order to build up on his experience as research interviewer. Here the books The SAGE Handbook of Interview Research: The Complexity of the Craft (Gubrium et al. 2012) and InterViews (Brinkmann and Kvale 2014) played an important role in the acquisition of further understanding of the methodological characteristics of research interviews, as well as the conceptual implications of their adoption in research studies. Further on, in order to get acquainted with the topic of research interviews, the interviewer studied information available on the initiative's websites. That also helped the interviewer to develop an interview guide. Moreover, studying informational material produced by the initiative's experts themselves allowed the interviewer to guide the interview in line with the interviewees' professional language. Further familiarity with initiative's experts could have been boosted by "hanging out" (borrowing the term from Kvale and Brinkmann 2014, pp. 134) in the interviewees' environment. Although such situation was not attainable, particularly in initiative's partners' offices across the world, the mere prior presence at the office of the DBT for arrangement meetings did offer a glimpse of daily working routines and organisational power structures that ended up being reflected in the interviewees' performance throughout the interviews (see interviewer's immediate reflections about the face-to-face interviews in the Annex 7). A more thorough preparation of the interviewer could have been done by also studying scientific literature, particularly the book Citizen Participation in Global Environmental Governance (Rask et al. 2012), regarding the initiative World Wide Views. Due to limited access to the book and time constraints, the study of literature preceded the analysis of the interview instead.

How many interviewees shall the interviewer target? In this study having a relatively small amount of interviewees allowed: one, the researcher to dedicate more attention to designing, conducting and analysing the interviews; two, more efficient allocation of time and other resources, especially in the case of a research study embedded in a one-semester master's thesis as this one, and; three, to a certain extent, the inclusion of more interviewees would not render much further insights. In particular, the non-inclusion of all the initiative's partners was justified by the sufficient data collected from an attempted representative part of them (further elaborated on in sub-chapter 3.2.2). After all, the accounts of the partners interviewed about the initiative (witnessed by and shared with the other partners) reflect a wider range of understandings and practices. Ultimately, a small number of interviewees does not mean a lower quality scientific work (Kvale and Brinkmann 2014, pp. 140).

What are the implications of cross-cultural interviewing? Cross-cultural interviewing takes place when the interviewer does not share the same culture with the interviewee. Such condition may arise challenges in the interpretation of the findings due to different cultural factors, such as habits, narrative styles and linguistic and non-linguistic expressions, such as hand movement (Kvale and Brinkmann 2014, pp. 168). As a foreign researcher in Denmark cross-cultural issues may arise although the interviewer studied and worked in Danish environments for longer than a year as of

the writing of this text. Such experiences did facilitate the familiarisation of the interviewer with the Danish culture. As a result, the interviewer attempted to tailor the design (how to formulate the questions [direct or indirect], etc.), conduction (e.g. how much flexibility to discussion) and analysis (study indirect answers, detect subtle hints, etc.) of the interviews with Danish experts. As example, based on the interviewer' socio-professional experiences, a confrontational interview form (Kvale and Brinkmann 2014, pp. 184) is not thought of yielding much once Danish culture is shaped by strong elements of consensus (Horst and Irwin 2009) and conflict avoidance. Also related to distinct cultural origins, both the interviewer and most of the interviewees in this study are not native English speakers. Whether the qualitative research interviews would deliver different results if the interviews were conducted in the mother tongue of the interviewees is hard to guess due to the fact that the same interview never happens twice. Each interview is unique due to its dependence on the context. Nevertheless, all interviewees have expressed good English fluency.

What matters concern the interviewees? Interviewees are individuals who act upon and make meaning of events. Therefore, they are a key component in the production of knowledge when an interview takes place. Although interviewees are subject to discourses, power relations, and ideologies, and so some of their views may not fully be of their own making (Kvale and Brinkmann 2014, pp. 3), they certainly are catalysts in the knowledge production process intrinsic to a qualitative research interview. Furthermore, interviewees may share ambiguous and contradicting statements. In such situations the interviewer shall try to identify whether contradictions are a cause of interview miscommunication or they actually represent phenomenological contradictions as experienced by the subject. Ultimately, the realisation of interviews itself may also allow interviewees to realise certain thoughts and so produce new knowledge through reflections. By describing a certain phenomenon interviewees may come to see elements that generate new relations, and consequently new meanings. As a result, knowledge produced in interviews may not result from pre-existing phenomenological meanings of the interviewees, but new meanings developed through the conduction of the interview itself.

How structured were the interviews? The interviews were semi-structured considering that they had a predefined theme and their guides were characterised by some open-ended questions for guidance (Kvale and Brinkmann 2014, pp. 32). Guiding questions were complemented by new and probing open-ended questions throughout the interviews on the basis of the statements shared by the interviewees and dynamic flows of the interviews. Semi-structured interviews were adopted in order to facilitate the smooth development of the interview in view of the purposes predefined for them (shared above). This structural approach was mostly adopted in the three different interview methods with slight exception (less structured) for the multi-person interview due to the distinct methodological approach (further explained in sub-chapter 3.2.3). Fully structured interviews were not considered applicable because these tend to hamper the smooth evolution of qualitative interview by rejecting, one, the personal competences, skills and judgmental capacity of the interviewer to guide the interview and, two, the unique contextual interview dynamics (Kvale and Brinkmann 2014, pp. 74). On the other end of the spectrum, fully non-structured interviews, also called explorative interviews (Kvale and Brinkmann 2014, pp. 132), were found not suitable due to

the intention to address identified areas of interest related to the initiative (e.g. use of web tools) in the limited time available for interviews.

Were the interviews guided by any philosophical approach? The interviews conducted in this research study may be considered in line with a phenomenological philosophy in the sense that (interview structure, questions formulation and) insights got from interviewees were based on *experiences* (and related meanings) that the interviewees went through in the initiative WWViews. Nevertheless, interviewees' *opinions* and *interpretations* were sometimes questioned to further understand certain events. Therefore, a hermeneutical philosophical approach was also taken to a certain extent. Hermeneutics also helped the researcher to better interpret the interview results by taking into consideration the history and tradition in which the knowledge was produced in interaction with the interviewee (Kvale and Brinkmann 2014, pp. 60). Contrarily, a discursive approach was not adopted, once the objectives of the interviews were not related to studying the interviews as accounts themselves subject to discourse and communication analysis. There was no interest in studying how what took place in the interviews came to be unless of relevance for validating the reports resulting from a phenomenological research interview.

What are the implications of adopting a phenomenological approach? Briefly, this approach implies that several interviewees ought to be interview if a certain phenomenon is to be understood in its plenitude. After all, the different meanings associated by the diverse interviewees will enable the understanding of the phenomenon. A relatively limited number of interviewees may lead to a restricted or biased understanding. Moreover, the interviewer ought to be able to empathise with the interviewees' situations so that the interview turns out fluid and outcomes understood by the interviewer as viewed by the interviewees. This condition, may contrast the usually demanded researcher neutrality. Notice though that empathy and the absence of preconceived explanations is not a trade-off. In this approach the interviewee ought to be empathetic but not bring into play pre-established ideas that will affect the understanding of the phenomena studied.

Annex 5 Summary of interview methods

Method	Purpose	Approach	Composition	Conduction	Transcripts
Face-to-face interviews	Better understanding on what, how and why activities related to WWViews took place.	Individual face-to-face interviews addressing experiences of WWViews organisers.	Interviewees: Bjørn Bedsted (Head of DBT International), Lars Klüver (DBT Director) and Marie Louise Jørgensen (DBT Project Manager). Interview design: semi-structure based on traditional project cycle and questions focused on phenomena experienced by the interviewees.	Taken place at the DBT office. Each interviewee was interviewed once.	Not applicable. Analysis based on audio-visual-recorded interviews.
Online interviews	Better understanding on what, how and why activities related to WWViews took place.	Asynchronous online interviews addressing experiences of WWViews partners across the world.	Interviewees: Institute for Sustainable Futures (Australia), ITA (Austria), LIDEMA (Bolivia), University of Calgary (Canada), ITAS (Germany), DML (Indonesia), Miraikan (Japan), CSCD (Japan), ARIJ (Palestinian Territories), FRA (Uganda) and The Loka Institute (USA). Interview design: semi-structure based on project cycle and two phases of questions (common and specific). Questions focused on phenomena experienced by the interviewees.	Individual online interview forms. Each interviewee was interviewed once in two phases (general and probing questions).	Intrinsically associated to the online method adopted. Analysis based on audio-visual-recorded interviews.
Multi-person interview	Better understanding on experts' views concerning online solutions for PP.	Focus group approach structured on the basis of future workshops.	Interviewees: Bjørn Bedsted (Head of DBT International), Lars Klüver (DBT Director). Interview design: Three sequential blocks based on core phases of future workshops: (critique) identifying WWViews' aspects to improve; (fantasy) idealising online solutions for improving WWViews, and; (implementation) identifying barriers and levers for the adoption of online solutions in WWViews.	Taken place at the DBT office. Interviewer adopting the role of facilitator.	Not applicable. Analysis based on audio-visual-recorded interviews.

Annex 6 Face-to-face interview guide

Interviewer's general reminders I

- Questions shall be simple, short and with no academic jargon;
- A good interview contributes both for the research topic and the interview dynamism;
- 1st task – "What" and "How" questions to describe (reports);
- 2nd task – "Why" to get depth (accounts) by the end;
- Ask descriptions, you get facts. Ask opinions, you get emotions;
- Clarify ambiguous descriptions to ease interview analysis;
- Repeating significant words can motivate the interviewer to say more;
- Be aware of "red lights" in the answers to follow up and probe;
- Interview themes based on the project management flow (chronological), and;
- Interview analysis use SWOT analysis as a analytical framework.

Interview's focus areas

- What, how and why decisions were made considering the external and internal influences on those decisions;
- Citizen-interaction elements where online solutions could have possibly been used (not necessarily as a replacement but as a support) or they were in fact used.

Interview's briefing

- Share the interview's purpose in the context of the project;
- Present the structure of the interview and its goals;
- Make reference to the ethical implications of interviewing:
    - Right to withdraw at any time;
    - Interviewee can be anonymous;
    - Consent to make public the transcriptions and analysis, and;
    - Validate of analysis and interpretations of the interviews.
- Mention the usefulness of video recording and ask for permission, and;
- Allow the interviewee to ask questions before the start of the interview.

Thematic guideline

Below is a potential structure. However, pragmatic approach allows interviewee's answers to set the flow's dynamism.

- **Initiative Conceptualisation** [*this title is an example of a category*]
    - Generating the idea – (IC1 [*this acronym is an example of a code*])
        - Do you remember the first time you thought of something like the WWViews?

        - Do you remember the first discussions you had about it?
            - Discussed qualities, challenges, doubts
            - Discussed with internal and external experts
        - Were you inspired by any particular literature? Theories?
            - "deliberation, and that is best done face-to-face"
    - Conceptualising the idea – (IC2 [*this acronym is another example of a code*])
        - Could you describe in as much details as possible how the ideas were then converted into an initiative?
            - How doubts were handled
- **Initiative Planning** [*this title is another example of a category*]
    - Designing the method – (IP1)
        - The method was also shaped by inputs from workshops with some country partners.
            - How did it go?
            - What inputs did you get?
        - Could you tell me about how the idea of asking for citizens' recommendations came up?
    - Selecting the partner – (IP2)
        - Besides funding, were there other barriers to have more partners joining the projects?
    - Creating the informational materials – (IP3)
        - When creating the materials, were there discussions about the effectiveness of their format?
    - Formulating the questions – (IP4)
        - What was the focus groups' feedback to preliminary questions?
    - Training seminar – (IP5)
        - What were the main concerns of project managers?
    - Selecting the citizens – (IP6)
        - There were issues about citizens' representation. What happened?
            - E.g. illiteracy and access to the venue
            - Developed and developing countries
            - "social distortion in the access to the Internet"
            - "Internet consultations [are] written"
    - The web tool – (IP7)
        - Do you remember the first discussions with partners about it?
        - What were the matters of concern regarding it?
- **Initiative Implementation**
    - Cross-country interactions – (II1)
        - Could you tell me more about the videoconferences that some countries held?
    - Deliberations – (II2)
        - How did the interaction between the citizens and the experts take place?

- Voting – (II3)
    - How exactly was the process for citizens in different countries?
- Citizens' reactions – (II4)
    - What are the intentions behind recording videos of citizens' opinions about the meetings?

- **Initiative Assessment**
    - Informational materials – (IA1)
        - What was the acceptance and usage of the booklet made available to citizens?
        - What was the acceptance and usage of the video screened to citizens?
    - Responsiveness and accountability – (IA2)
        - How did the outcome influence the political decisions?
        - How did citizens react to the impact of the outcome in political decisions?
    - Media exposition – (IA3)
        - How much attention did the meetings attracted? Measurable?
            - "WWViews should attract attention by being an event"
            - Traditional media, websites' visits (e.g. access to BD newsletters) and social media (e.g. access to BD final documentary)
    - The web tool – (IA4)
        - How did it succeed?
            - "not trust on-line consultations to work anywhere"
        - What else could the web tool perform?
    - Internet-based participation – (IA5)
        - How are you "examining new ways of involving more participants in WWViews through the Internet"? (FAQ in BD)
        - What would be the "web-based awareness raising activities" that the DBT planned to raise further funds for in BD (FAQ)?
        - What about the "school kit with a mix of role-play and education in biodiversity" (FAQ)?
        - What are the constraints to have experts analyzing data right away and sharing their insights immediately?
        - What was the intention behind the GW quiz available online?

<u>Interview's debriefing</u>

- Present the main points got (as an interviewer) from the interview
    - Allow the interviewee to further comment on the points made
- Ask the interviewee whether there something else to talk about
    - Q: Is there something you'd like to also mention before we end this interview? Please, take 2m for reflection.
- Ask the interviewee how he or she experienced the interview
    - Q: How do you feel about the interview we've just had?

Annex 7 Face-to-face interview immediate reflections

Bjørn Bedsted (FI1-IPIC)

Concerning interview context: The interview took place in the general meeting room at the DBT office. The room is a very wide-open space where table islands are scattered. The interview happened in one of the table islands located in one corner of the room. At a certain point in the interview, someone external to the DBT nocked the door and interrupted the interviewing process for a period of around 3 minutes. That unexpected event broke the fluency of the interview in that particular moment but it did not influence the further development of it.

Concerning interview guidance: Some questions were preceded by introductory descriptions, which could have been shorter. That might have happened because: (1) the interviewer was concerned about being sure the interviewee was following his line of thinking; (2) the subconscious pressure felt by the interviewer to prove that he had properly prepared himself for the interview; (3) how transparent the interviewer's intentions were; (4) how much at ease both interviewer and interviewee felt (Kvale and Brinkmann 2014, p. 154), and; (5) the communication and inter-personal skills of the interviewer being enacted due to his appetence for talking further on matters of his strong interest.

Concerning interviewee responsiveness: Few questions were not answered or just partly answered due to lack of memory of the situations addressed by questions. Some questions, particularly the ones related to the generation of the project idea, as well as its conceptualisation, regarded moments that took place back between 2007 and 2009. Therefore, the interviewee found a hard time to remember the details of some events and so to share specific processes or outcomes that were important in the definition of the initial idea and its transformation into a initiative. Nevertheless, the interviewee presented himself quite reflective giving himself time to think of the question asked before attempting to provide an answer. In several questions, the interviewee mentioned that his coming answers could not be the most accurate due to lack of memory of the past events. In such situations, the interviewer asked the interviewee to focus on few of the elements the interviewee could remember. Furthermore, in some questions, namely concerning policy-making responsiveness and accountability, the interviewee transparently shared that there was no information that could allow him to provide answers to the questions asked. That is, the initiative method did not allow measuring the influence of deliberations on policy-making processes.

Lars Klüver (FI2-IPIC)

Concerning interview context: The interview took place at the office of Lars, although it was the intention of the interviewer to make it in the general meeting room of the DBT office – the same location where the meeting with Bjorn had taken place in the day before. It was Lars' preference to make the interview at his office. That change in the location seemed to not make a significant difference in the development of the interview dynamics. It did bring to the interviewer a stronger sense of personal privacy and relevance of the interview though. The room was restricted to other

employees, as well as externals and it was a personalised space by Lars himself. Such conditions made the interviewer feel he was in a safer space (from interruptions) to conduct his interview.

Concerning interview guidance: Similarly to the interview with Bjørn, some questions asked by the interviewer were more extensive than they were initially planed. The introductions of the questions presented themselves again too long. Adding to the five points made in the reflections shared about Bjørn's interview, a sixth reason for doing so was the need to create spaces in the interview where the interviewer could reset the pace and direction of the interview. That happened due to the very fluent communication and long answers provided by Lars.

Concerning interviewee responsiveness: The interviewee answered all questions, many of them by sharing his impressions based on personal experiences and feelings about the phenomenon that was addressed. A strong support on professional experiences and personal feelings was used when addressing questions concerning the face-to-face versus online deliberation processes. The interviewee did not share specific details of phenomena addressed but picked on exemplary aspects to share his main point concerning a particular phenomenon. Moreover, the interviewee was very quick in staring answering the questions asked. Such fast-paced answering made harder for the interviewer to follow the interviewee's discourse. Hence, reflecting on the contribution of the answer to the research, as well as its integration in the flow of the interview was challenging. The few times when Lars did not automatically started sharing his thoughts were when there were no evidences of the phenomena asked about. Such approach sometimes led the interviewee to slightly diverge from the core question.

Concerning an unexpected event: Unfortunately, part of the answer to the first question: "Do you remember the first time you thought of something like the WWViews?" and the full answer to the second question in the interview: "Do you remember the first discussions you had about it?" were not video recorded because the laptop ran out of battery. Therefore, the video recording was interrupted until Lars made notice of the technical event. The main points from the unrecorded interview period are stated below based on what the interviewer can remember right after the conclusion of the interview.

(a) The first time Lars thought of something similar to WWViews was back in 2000 when DBT run some projects with the EU in order to collect opinions of citizens across few European countries. Around three cross-national projects were conducted back then with the participation of less than a dozen countries each. The themes of those projects varied from ICT to CVT and privacy. The methods applied varied from project to project and the deliberation events did not happen in the same day as in the case of the WWViews initiative.

(b) The first time Lars presented the idea to the project managers in the DBT there were "3 minutes of silence". His impression is that his colleagues were aware of the dimension of the idea at stake and that such encompassed challenges. Soon, Bjørn and Søren started working further on the conceptualisation of the method and further meetings took place.

Marie Louise Jørgensen (FI3-IPIC)

Concerning interview context: The interview took place on Friday afternoon and lasted for two hours, excluding a ten-minute break. The interview setting was different from the previous ones in the sense that the two parts, interviewer and interviewee, sat down face to face using two armchairs in a corner of the very same general meeting room where the interview with Bjørn took place. Those physical conditions provided a less formal atmosphere and a feeling of broader transparency once both parts were confronting each other without tables or other materials in between.

Concerning interview guidance: The flow of the interview was slightly slower than the previous two ones. The time of its realisation and the accumulated fatigue from the whole passing week could have been reasons for that. The researcher himself found challenging to keep the level of energy throughout the interview even noticing that the second part's dialogue (after the break) was slightly less fluent. That was evident in the roughness in the formulation probe questions by the interviewer and the slow responsiveness from the interviewee.

Concerning interviewee responsiveness: The interviewer significantly felt more comfortable providing answers to questions that addressed the second edition once she was not part of the idea generation of the WWViews. Such condition represented an unexpected situation for the interviewer who had not been informed of such situation. The questions previously thought to be proper to start the interview off had to be discarded and new ones improvised. Similarly to the interview with Bjørn the questions formulated were slightly longer than desired. The reasons are mostly the very same ones as presented for Bjørn. Also similar to Bjørn's interview, Marie faced the challenge of remembering details of the events that took place back in 2011 (planning and preparation of the Biodiversity edition). In her case, the fact that she was at the time of the interview also running a EuropeWViews project made it difficult for her to differentiate between decisions made and processes run in the two different projects. Generally, the interviewer was prompt in replying the questions asked. Whenever the interviewer faced the need to reflect, she did not hesitate to share the vagueness of her memories and state clearly that she could not remember details but the key points of the event addressed.

Annex 8 Face-to-face interview recordings and units

The video recordings were converted into audio recordings and made available online. The video recordings are not stored online. If those are desired, the author shall be approached. Access to the links shared below requires permission, so whoever interested shall contact the author for that effect. The uses of the audio recordings below are for exclusive assessment of this research study. Other intended ends shall be communicated to the author for further agreement with the consent of the interviewees.

Face-to-face Interview 1

The recordings of the interview with Bjørn Bedsted (FI1) can be found here.
Below follows the allocation of units to the outcomes of the interview.

Interview's part 1
FI1-IC1 – Initiative Conceptualisation – Generating the idea [00:01:00]
FI1-IC2 – Initiative Conceptualisation – Conceptualising the idea [00:15:25]
FI1-IP1 – Initiative Planning – Designing the method [00:20:00]
FI1-IP2 – Initiative Planning – Selecting the partners [00:33:55]
FI1-IP3 – Initiative Planning – Creating the informational materials [00:36:30]
FI1-IP5 – Initiative Planning – Training seminar [00:41:45]
FI1-IP7 – Initiative Planning – The web tool [00:45:00]

Interview's part 2
FI1-II1 – Initiative Implementation – Cross-country interactions [00:00:50]
FI1-II4 – Initiative Implementation – Citizens' reactions [00:04:20]
FI1-II2 – Initiative Implementation – Deliberations [00:09:05]
FI1-IA1 – Initiative Assessment – Informational materials [00:11:25]
FI1-IP4 – Initiative Planning – Formulating the questions [00:14:25]
FI1-IA2 – Initiative Assessment – Responsiveness and accountability [00:19:30]
FI1-IA3 – Initiative Assessment – Media exposition [00:27:00]
FI1-IA4 – Initiative Assessment – The web tool [00:33:25]
FI1-IA5 – Initiative Assessment – Internet-based participation [00:38:20]

Face-to-face Interview 2

The recordings of the interview with Lars Klüver (FI2) can be found here.
Below follows the allocation of units to the outcomes of the interview.

Interview's part 1
FI2-IC1 – Initiative Conceptualisation – Generating the idea [00:00:10]
Please see notes of FI2-IPIC [Interrupted period]

Interview's part 2
FI2-IC1 – Initiative Conceptualisation – Generating the idea [00:00:01]
FI2-IP1 – Initiative Planning – Designing the method [00:06: 55]
FI2-IP5 – Initiative Planning – Training seminar [00:10:40]
FI2-IA5 – Initiative Assessment – Internet-based participation [00:19:50]
FI2-IP7 – Initiative Planning – The web tool [00:36:20]

Interview's part 3
FI2-II1 – Initiative Implementation – Cross-country interactions [00:01:55]
FI2-II4 – Initiative Implementation – Citizens' reactions [00:03:50]
FI2-IA3 – Initiative Assessment – Media exposition [00:06:15]
FI2-IA1 – Initiative Assessment – Informational materials [00:13:05]
FI2-IA2 – Initiative Assessment – Responsiveness and accountability [00:20:00]
FI2-IA4 – Initiative Assessment – The web tool [00:30:30]
FI2-IA5 – Initiative Assessment – Internet-based participation [00:39:00]

Face-to-face Interview 3

The recordings of the interview with Marie Louise Jørgensen (FI3) can be found here.
Below follows the allocation of units to the outcomes of the interview.

Interview's part 1
FI3-IC1 – Initiative Conceptualisation – Generating the idea [00:01:30]
FI3-IC2 – Initiative Conceptualisation – Conceptualising the idea [00:08:35]
FI3-IA2 – Initiative Assessment – Responsiveness and accountability [00:13:35]
FI3-IC2 – Initiative Conceptualisation – Conceptualising the idea [00:16:50]
FI3-IP1 – Initiative Planning – Designing the method [00:19:55]
FI3-IP5 – Initiative Planning – Training seminar [00:28:25]
FI3-IP6 – Initiative Planning – Selecting citizens [00:36:30]
FI3-IP2 – Initiative Planning – Selecting the partners [00:44:10]
FI3-IP7 – Initiative Planning – The web tool [00:49:40]

Interview's part 2
FI3-II3 – Initiative Implementation – Voting [00:00:40]
FI3-II1 – Initiative Implementation – Cross-country interactions [00:02:30]
FI3-II3 – Initiative Implementation – Voting [00:10:20]
FI3-II4 – Initiative Implementation – Citizens' reactions [00:13:50]
FI3-IA2 – Initiative Assessment – Responsiveness and accountability [00:15:00]
FI3-IA1 – Initiative Assessment – Informational materials [00:23:20]
FI3-IA3 – Initiative Assessment – Media exposition [00:25:15]
FI3-IA4 – Initiative Assessment – The web tool [00:30:05]
FI3-IA5 – Initiative Assessment – Internet-based participation [00:35:10]
FI3-IC1 – Initiative Conceptualisation – Generating the idea [00:44:40]
FI3-IP2 – Initiative Planning – Selecting the partners [00:46:45]
FI3-IC2 – Initiative Conceptualisation – Conceptualising the idea [00:50:35]

Annex 9 Online interview participants

Country	Area	Institute	Editions
Canada	North America	University of Calgary	GW BD
USA	North America	The Loka Institute	GW BD
Bolivia	South America	La Liga de Defensa del Medio Ambiente LIDEMA	GW
Bolivia	South America	Protección del Medio Ambiente Tarija – PROMETA	BD
Saint Lucia	South America	St. Lucia National Trust	GW BD
Germany	Europe	Institut für Technikfolgenabschätzung und Systemanalyse (ITAS)	GW BD
Austria	Europe	Institute for Technology Assessment (ITA)	GW
Uganda	Africa	FRA - Food Rights Alliance Uganda & Choice Africa	GW BD
Camerron	Africa	ADEID – Action pour un Développement Équitable, Intégré et Durable	BD
Palestinian Territories	Western Asia	Applied Research Institute-Jerusalem (ARIJ)	BD
The Maldives	Western Asia	Strength Of Society (S.O.S)	BD
Indonesia	Eastern Asia	Dana Mitra Lingkungan – DML	BD
Japan	Eastern Asia	CSCD - Center for the Study of Communication-Design	GW
Japan	Eastern Asia	National Museum of Emerging Science and Innovation (Miraikan)	BD
Australia	Oceania	Institute for Sustainable Futures, University of Technology, Sydney.	GW

Annex 10 Online interview invitation email

Content and intention of the email:

- Partners informed about the research study (researcher identity and research project goal);
- The purpose of the online interview and partners' potential collaboration is shared;
- Invite partners to take part of the research project by becoming research interviewees.

Email sent:

Dear X,

This email follows a suggestion from Bjørn Bedsted from the Danish Board of Technology, Denmark.

I am Marco Silva, a master's student in Techno-Anthropology at the Aalborg University Copenhagen, Denmark. I am conducting a research study in collaboration with the Danish Board of Technology.

The research explores the integration online solutions to support public participation in global environmental governance. For this reason, I study the initiative WWViews (both editions – Global Warming and Biodiversity).

Considering the involvement of the institute your represent in the initiative, I would like to invite you to contribute for the study by sharing your experiences regarding WWViews. Your contribution is crucial due to the international nature of study.

It is my intention to hand out a questionnaire in late January 2015, which I would very much appreciate to get back from you. The questionnaire will be made available online. It will be short and flexible - respondents may complete it based on their availability. Could I then count on your interest and collaboration?

Thank you very much for your attention.

Academic regards,

Marco Silva

Annex 11 Online interview guide

Interviewer's general notes

- Questions shall be simple, short and with no academic jargon
- A good interview contributes both for the research topic and the interview dynamism
- 1st task – "What" and "How" questions to describe (reports)
- 2nd task – "Why" to get depth (accounts) by the end
- Ask descriptions, get facts. Ask opinions, get emotions.
- Interview themes based on the project management flow (chronological)
- Interview analysis use SWOT analysis as a analytical framework

Interview's focus areas

- What particular aspects of the initiative predominantly influenced partners' performance in their country
- How specific aspects of the initiative predominantly influenced partners' performance considering the external and internal partners' environments
- What the adoption of online solutions in the initiative meant
- How is perceived the possible further adoption of online solutions to boost PP

Interview Form

- **Initiative Consideration** [*this title is an example of a category*]
  - Considering WWViews - (IC1 [*this acronym is an example of a code*])
    - What were the key encouragements and concerns when you first discussed about possibly taking part of WWViews?
  - Recommendation session - (IC2 [*this acronym is another example of a code*]))
    - What were the reasons for adopting or not a recommendation session to collect citizens' opinions at the Biodiversity edition?
- **Initiative Preparation** [*this title is another example of a category*]
  - Recruiting citizens - (IP1)
    - What were the critical challenges faced when recruiting citizens to participate in the deliberative meetings?
  - The web tool - (IP2)
    - In case there were discussions about the use of a web tool to report the results, what were the key encouragements and concerns?
  - Preparation challenges - (IP3)
    - Besides the topics addressed in previous questions, what other key challenges were faced when preparing for the deliberative meetings?
- **Initiative Implementation**
  - Cross-country interactions – (II1)
    - In case there were videoconferences between your country and another one, what influence did they have in the development of the deliberative meetings?
  - Policy activities – (II2)
    - In case your institution ran national/regional initiatives to reach politicians in order to make results of the deliberative meetings known by them, what were those?
- **Initiative Assessment**
  - Web tool – (IA1)
    - How much did the use of the web tool influenced the realisation of the deliberative meetings from the moment you started preparation until the moment you reported the results?
  - Improved web tool – (IA2)

        - What else could the web tool perform in order to better support the accomplishment of the goals set by your institution for the WWViews?
    - Online solutions - (IA3)
        - In case your institution is considering new ways of engaging citizens in deliberative consultations through online solutions, what are the key encouragements and concerns discussed around that?
    - Further comments – (IA4)
        - In case there is something you find important to mention that it was not covered so far, what is it?

Annex 12 Online interview questions email

Content and intention of the email:

- Partners further introduced to the online interview format and nature;
- Questions made available to partners for their submission;
- Ethical considerations explicitly presented.

Email sent:

Dear X,

Thank you for your interest in collaborating.

In this email I share with you an online interview form with the purpose of getting insights into your experiences as partner of the WWViews Alliance.

Instructions:

There are ten questions addressed to you. The questions are slip into four parts (2+3+2+3 questions) so that you may submit each part according to your availability. All the questions are open-ended, with no predefined answers, and a maximum of approx. 150 words is allowed per answer.

I kindly request you to write all your answers in English and submit all the four parts until the 8th of February.

Part 1 – Considerations & Design
Part 2 – Preparation
Part 3 – Implementation
Part 4 – Reflections

In case I realise, when analysing your answers, that some deserve to be elaborated on, I would like to follow up on them once, and only once, by asking you very few extra questions afterwards.

Ethical considerations:

Your identity will be kept anonymous. You may validate the analyses I'll do of your answers. If that is your will please let me know.

All data generated, stored and shared through the links above is subject to the privacy policy of Google. Your answers will only be made accessible to myself, as researcher, and the evaluators of the master's thesis in which this research project is integrated. My analyses of your answers will be made public through academic literature and alike.

It is your right to withdraw your collaboration whenever you wish. By submitting your answers, you consent the above. Please, don't hesitate to write me back in case. I very much appreciate your attention.

Annex 13 Online interview answers and units

Australia

OI1-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI1-IC2 – Initiative Consideration – Recommendation session – Column C in here.
OI1-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI1-IP2 – Initiative Preparation – The web tool – Column C in here.
OI1-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI1-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI1-II2– Initiative Implementation – Policy activities – Column C in here.
OI1-II2a – Initiative Implementation – Policy activities – Column B in here.
OI1-II2b – Initiative Implementation – Policy activities – Column C in here.
OI1-IA1 – Initiative Assessment – Web tool – Column B in here.
OI1-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI1-IA2a – Initiative Assessment – Improved web tool – Column B in here.
OI1-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI1-IA3a – Initiative Assessment – Online solutions – Column C in here.
OI1-IA4 – Initiative Assessment – Further comments – Column E in here.

Austria

OI2-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI2-IC2 – Initiative Consideration – Recommendation session – Column C in here.
OI2-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI2-IP2 – Initiative Preparation – The web tool – Column C in here.
OI2-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI2-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI2-II2– Initiative Implementation – Policy activities – Column C in here.
OI2-IA1 – Initiative Assessment – Web tool – Column B in here.
OI2-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI2-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI2-IA4 – Initiative Assessment – Further comments – Column E in here.

Bolivia

OI3-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI3-IC2 – Initiative Consideration – Recommendation session – Column C in here.
OI3-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI3-IP1a – Initiative Preparation – Recruiting citizens – Column B in here.
OI3-IP2 – Initiative Preparation – The web tool – Column C in here.
OI3-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI3-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI3-II2– Initiative Implementation – Policy activities – Column C in here.
OI3-IA1 – Initiative Assessment – Web tool – Column B in here.

OI3-IA1a – Initiative Assessment – Web tool – Column B in here.
OI3-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI3-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI3-IA3a – Initiative Assessment – Online solutions – Column C in here.
OI3-IA4 – Initiative Assessment – Further comments – Column E in here.

Canada

OI4-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI4-IC2 – Initiative Consideration – Recommendation session – Column C in here.
OI4-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI4-IP2 – Initiative Preparation – The web tool – Column C in here.
OI4-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI4-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI4-II2– Initiative Implementation – Policy activities – Column C in here.
OI4-IA1 – Initiative Assessment – Web tool – Column B in here.
OI4-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI4-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI4-IA4 – Initiative Assessment – Further comments – Column E in here.

Germany

OI5-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI5-IC2 – Initiative Consideration – Recommendation session – Column C in here.
OI5-IC2a – Initiative Consideration – Recommendation session – Column B in here.
OI5-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI5-IP1a – Initiative Preparation – Recruiting citizens – Column B in here.
OI5-IP2 – Initiative Preparation – The web tool – Column C in here.
OI5-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI5-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI5-II2– Initiative Implementation – Policy activities – Column C in here.
OI5-IA1 – Initiative Assessment – Web tool – Column B in here.
OI5-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI5-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI5-IA4 – Initiative Assessment – Further comments – Column E in here.

Indonesia

OI6-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI6-IC2 – Initiative Consideration – Recommendation session – Column C in here.
OI6-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI6-IP2 – Initiative Preparation – The web tool – Column C in here.
OI6-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI6-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI6-II2– Initiative Implementation – Policy activities – Column C in here.

OI6-IA1 – Initiative Assessment – Web tool – Column B in here.
OI6-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI6-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI6-IA4 – Initiative Assessment – Further comments – Column E in here.

Japan CSCD

OI7-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI7-IC1a – Initiative Consideration – Considering WWViews – Column B in here.
OI7-IC2 – Initiative Consideration – Recommendation session – Column C in here.
OI7-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI7-IP2 – Initiative Preparation – The web tool – Column C in here.
OI7-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI7-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI7-II2– Initiative Implementation – Policy activities – Column C in here.
OI7-II2a– Initiative Implementation – Policy activities – Column B in here.
OI7-II2b– Initiative Implementation – Policy activities – Column C in here.
OI7-IA1 – Initiative Assessment – Web tool – Column B in here.
OI7-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI7-IA2a – Initiative Assessment – Improved web tool – Column B in here.
OI7-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI7-IA4 – Initiative Assessment – Further comments – Column E in here.

Japan Miraikan

OI8-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI8-IC2 – Initiative Consideration – Recommendation session – Column C in here.
OI8-IC2a – Initiative Consideration – Recommendation session – Column B in here.
OI8-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI8-IP2 – Initiative Preparation – The web tool – Column C in here.
OI8-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI8-IP3a – Initiative Preparation – Preparation challenges – Column B in here.
OI8-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI8-II2– Initiative Implementation – Policy activities – Column C in here.
OI8-II2a– Initiative Implementation – Policy activities – Column B in here.
OI8-IA1 – Initiative Assessment – Web tool – Column B in here.
OI8-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI8-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI8-IA3a – Initiative Assessment – Online solutions – Column B in here.
OI8-IA4 – Initiative Assessment – Further comments – Column E in here.

Palestinian Territories

OI9-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI9-IC2 – Initiative Consideration – Recommendation session – Column C in here.

OI9-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI9-IP2 – Initiative Preparation – The web tool – Column C in here.
OI9-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI9-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI9-II2– Initiative Implementation – Policy activities – Column C in here.
OI9-IA1 – Initiative Assessment – Web tool – Column B in here.
OI9-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI9-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI9-IA4 – Initiative Assessment – Further comments – Column E in here.

Uganda

OI10-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI10-IC2 – Initiative Consideration – Recommendation session – Column C in here.
OI10-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI10-IP2 – Initiative Preparation – The web tool – Column C in here.
OI10-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI10-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI10-II2– Initiative Implementation – Policy activities – Column C in here.
OI10-IA1 – Initiative Assessment – Web tool – Column B in here.
OI10-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI10-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI10-IA4 – Initiative Assessment – Further comments – Column E in here.

USA

OI11-IC1 – Initiative Consideration – Considering WWViews – Column B in here.
OI11-IC2 – Initiative Consideration – Recommendation session – Column C in here.
OI11-IP1 – Initiative Preparation – Recruiting citizens – Column B in here.
OI11-IP2 – Initiative Preparation – The web tool – Column C in here.
OI11-IP3 – Initiative Preparation – Preparation challenges – Column D in here.
OI11-II1 – Initiative Implementation – Cross-country interactions – Column B in here.
OI11-II1a – Initiative Implementation – Cross-country interactions – Column B in here.
OI11-II2– Initiative Implementation – Policy activities – Column C in here.
OI11-IA1 – Initiative Assessment – Web tool – Column B in here.
OI11-IA2 – Initiative Assessment – Improved web tool – Column C in here.
OI11-IA3 – Initiative Assessment – Online solutions – Column D in here.
OI11-IA3a – Initiative Assessment – Online solutions – Column B in here.
OI11-IA4 – Initiative Assessment – Further comments – Column E in here.

Annex 14 Future workshops background

Future workshops, as their own denomination suggests, are facilitated sessions which main focus is on a distant time in the future. These workshops are a type of design games, which is characterised by its potential to generate and discuss alternative futuristic ideas that may be applied with the intention to tackle present issues (Kensing and Madsen, 1991).

The method is of preference of some design researchers due to its informal approach that supports the engagement of participants and consequent richer outcomes (Ibid.). Future workshops are characterised by taking place in spaces familiar to participants where no more than twenty of them come together with one or two facilitators. Traditionally, papers and other physical props are used to support discussions and record them throughout the workshops (Ibid.). That way, all participants can follow what is happening and follow-up discussions and actions can take place smoothly.

Originally, according to Robert Jungk and Norbert Müllert (1987), future workshops are divided into three inter-related phases - critique, fantasy and implementation. In the critique phase, the participants are invited to freely share their negative opinions and perceptions about a certain phenomenon, which is to be overcome. Critics are neither to be justified by their proponents, nor be subject to questioning by other participants or facilitators. Contrastingly, the phase that follows, fantasy, is dedicated to the generation of optimistic, to certain extend, even utopian visions of a future where the phenomenon addressed is transformed into an ideal picture. All ideas shared are to be positive and disregard the conditional elements of the present. It is common practice to include creative exercises in this phase in order to trigger the imagination of the participants. To close, the implementation phase brings those visionary ideas into the practical realm so that it is identified which ones may be applied considering the resources available and possible systemic changes by then.

A future workshop is preceded by a preparation period and succeeded by a follow-up.

Annex 15 Multi-person interview guide

Interviewer's general notes

- Questions shall be simple and short
- Questions are to contribute for the substantive content and the dynamic flow of the interview
- Ask descriptions, you get facts. Ask opinions, you get emotions.
- Clarify ambiguous descriptions to ease interview analysis
- Interview analysis use SWOT analysis as a conceptual framework

Multi-person Interview's objective

- Producing knowledge on what and how barriers and levers related to online solutions for PP practices influence their potential integration in the initiative WWViews.

Multi-person Interview's focus areas

- WWViews' aspects to improve
- Ideal online solutions for PP practices
- Barriers associated to online solutions for PP practices
- Levers associated to online solutions for PP practices

Interview's Introduction via email

- Introduce the interview's objective in the context of the project
    - F2F Interviews – Further insights into the initiative
    - Online Interviews – Multiply perspectives on the initiative
    - MP Interview – Explore integration of online practices
- Introduce the defined structure of the interview guided by questions
- Present the relevance of discussions between interviewees
- Make reference to the ethical implications of interviewing
    - Right to withdraw at any time
    - Interviewee can be anonymous
    - Consent to make public the transcriptions and analysis
    - Validate of analysis and interpretations of the interviews
- Mention the usefulness of video recording and ask for permission

Interview's Introduction on site

- Refresh the interview's objective
- Clarify the concepts of 'WWViews initiative'-'WWViews method'
- Refresh the defined interview's structure
- Stress the relevance of discussions
- Allow the interviewees to ask questions
- State when video recording starts

Defined structure

- **Critique: Identifying WWViews' aspects to improve** [*this title is an example of a category*]
    - What WWViews' aspects could be improved to enhance and expand the initiative's outcomes?
    - Interviewees write on paper strips the aspects they think shall be improved;
    - Could you please briefly explain each one of the aspects you wrote down? If possible, compare it to the others referred.
    - Would you like to make a comment regarding other aspects brought?
- **Fantasy: Idealising online solutions for improving WWViews** [*this title is another example of a category*]

- Bearing in mind these aspects, how would you describe ideal online solutions/practices that could improve the initiative's outcomes? Please, disregard constraints of online solutions/practices. And, try to relate the solution to one or several aspects identified previously.
- Interviewees write on paper strips the solutions/practices they think shall be improved;
- Could you please briefly explain each one of the solutions/practices you wrote down?
- Question interviewees whether aspects they did not refer could somehow be improved by ideal online solutions/practices.

- **Implementation: Identifying barriers and levers for the adoption of online solutions**
  - What barriers and levers are currently associated to the ideal online solutions/practices just brought up?
  - Interviewees write on paper strips the barriers and levers they think are related to the solutions/practices identified previously;
  - Could you please briefly explain each one of the barriers and levers you wrote down?

Interview's debriefing:

- Present the main points got (as an interviewer) from the interview
  - Allow the interviewee to further comment on the points made
- Ask the interviewee whether there something else to talk about
  - Q: Is there something you'd like to also mention before we end this interview?

Interviewer's general notes

If the interviewee does not allow the video recording, then the interviewer shall take few minutes right after the interview to write down the key points. That shall happen while the first impressions based on situated interaction (perception of facial expression, empathy, etc.) are still fresh.

Annex 16 Multi-person interview units

In order to facilitate identifying the relation of some meaning units across multi-person interview phases, common numbers were used in different meaning units. For instance, the meaning unit MI-FT3 (Online Demo) in the fantasy phase uses '3' because it is associated to the meaning unit MI-CT3 (Pre-Project Marketing) in the critique phase. Such associations are based on the interviewees' explanations and discussions.

MI-CT1 – Critique Phase – Time [00:06:25]
MI-CT2 – Critique Phase – Funding [00:07:20]
MI-CT3 – Critique Phase – Pre-Project Marketing [00:08:20]
MI-CT4 – Critique Phase – Sponsor Strategy [00:09:05]
MI-CT5 – Critique Phase – Visibility at Ramp-up [00:11:30]
MI-CT6 – Critique Phase – High-level Debates [00:12:30]
MI-CT7 – Critique Phase – Outreaching Activities [00:13:40]
MI-CT9 – Critique Phase – Involvement of Politicians [00:15:13]
MI-CT10 – Critique Phase – Integration with COP [00:16:54]
MI-CT11 – Critique Phase – More countries [00:19:25]
MI-CT12 – Critique Phase – Multi-site [00:19:30]
MI-CT13 – Critique Phase – Respondents [00:20:40]
MI-CT14 – Critique Phase – Uniform Recruitment [00:20:50]
MI-CT15 – Critique Phase – Press Contact [00:21:40]
MI-CT16 – Critique Phase – Recommendation session [00: 22:45]
MI-CT17 – Critique Phase – Translation [00: 26:25]

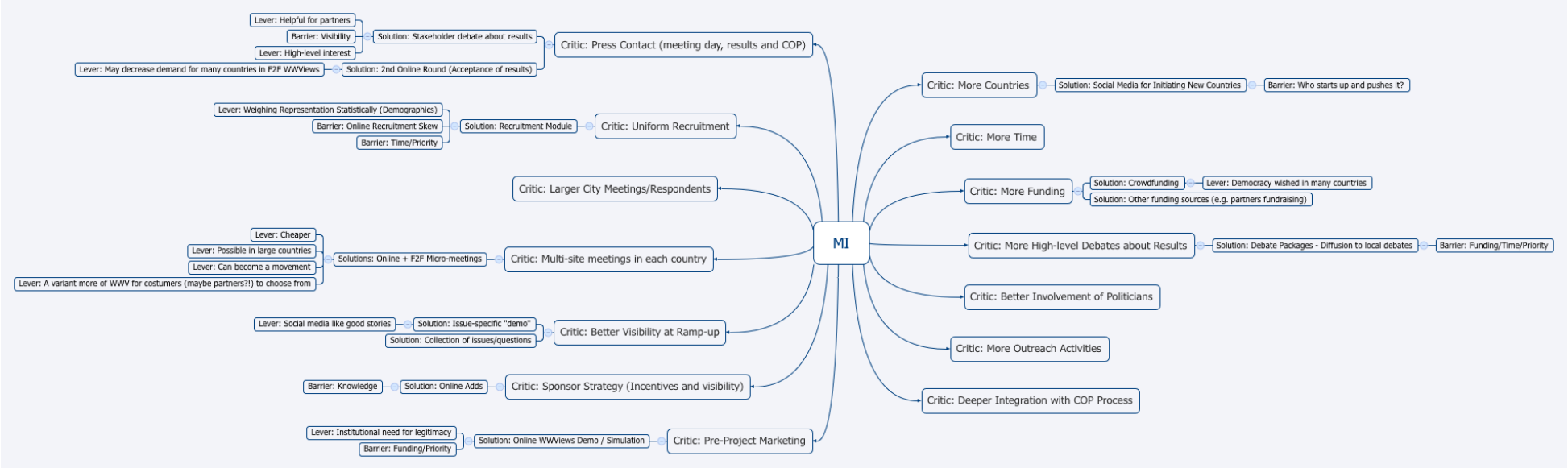
MI-FTA – Fantasy Phase – Collection of Issues [00:29:40]
MI-FT3 – Fantasy Phase – Online Demo [00:30:25]
MI-FT2 – Fantasy Phase – Crowdfunding [00:32:00]
MI-FT7a – Fantasy Phase – Debate Actors [00:34:00]
MI-FT12 – Fantasy Phase – Online Micro Meetings [00:35:00]
MI-FT14 – Fantasy Phase – Recruitment Module [00:37:40]
MI-FT7b – Fantasy Phase – Online 2nd round [00:39:15]
MI-FT6 – Fantasy Phase – Stakeholder Debates [00:42:20]
MI-FT4 – Fantasy Phase – Online Ads [00:43:00]
MI-FTB – Fantasy Phase – Method Integrity [00:44:40]
MI-FTC – Fantasy Phase – Weighing Representation [00:46:11]
MI-FTD – Fantasy Phase – Online Deliberation Quality [00:49:35]
MI-FTE – Fantasy Phase – Social media-based debates [00:51:50]
MI-FTF – Fantasy Phase – Social media-based promotion [00:57:46]

MI-IP12a – Implementation Phase – Cheaper Online (micro) Deliberation [01:12:55]
MI-IP2a – Implementation Phase – Funding [01:14:40]

MI-IP6a – Implementation Phase – Other Funding Sources [01:20:35]
MI-IP4 – Implementation Phase – Campaigning know-how [01:20:54]
MI-IP3 – Implementation Phase – IGO's Legitimacy [01:21:30]
MI-IP3 – Implementation Phase – Need for Legitimacy [01:21:30]
MI-IP2b – Implementation Phase – Funding [01:22:00]
MI-IPA – Implementation Phase – Alliance capitalisation [01:22:00]
MI-IP6b – Implementation Phase – Visibility of Stakeholder Partners [01:24:35]
MI-IP2c – Implementation Phase – Wished Democracy [written comment]
MI-IP7a – Implementation Phase – Help Partners [written comment]
MI-IPF – Implementation Phase – Starting and Pushing Social Media [written comment]
MI-IPG – Implementation Phase – Social Media Good Stories [written comment]

MI-EXT – International Online Deliberation Meetings [01:26:15]

Annex 17 Multi-person interview outcomes



Annex 18 Aspects and process of interviews' analyses

What aspects to consider when analysing interviews? The context, not timely limited to when an interview takes place, is crucial for better understanding what the outcomes of such interview actually are. The context shape what happens in an interview and the interview itself determines the context. Therefore, it's important to describe the particulars that make the interview happen in a certain way. Once temporal and spatial boarders of a context cannot be easily defined and connections of a context are rather unlimited, the more descriptive a context is presented, the more its understanding increases (Kvale and Brinkmann 2014, p. 105). For that purpose descriptions of the contexts in which the interviews took place are found in the Annex 7. Another aspect born in mind in the interview analyses was the nonverbal communication, particularly of the interviewees. As interview research shows (Ellingson 2012) much of meaning is mediated by bodily signs and gestures, not necessarily verbal communication. Hence, with the support of interview video recordings, the interviewer attempted to get further insights when analysing the interviews (Kvale and Brinkmann 2014, p. 116) by taking into consideration the nonverbal communication used by interviewees.

Which approach and modes are here adopted to interview analyses? Key approach to qualitative interview analyses can be divided into 'analyses focusing on meaning', 'analyses focusing on language', and 'general analyses' (Kvale and Brinkmann 2014, p. 223). Here the analyses are focused on meaning due the overall purpose of the interviews – what, how and why activities composing the initiative WWViews took place, and, experts' views concerning online solutions for PP. Analysing the meaning given by interviewees to initiative-related experiences they lived allowed the researcher to get an understanding of what, as well as how and why they took place. Similarly, by focusing on the substantive content rather than on the process of multi-person interviews (Morgan 2010 and Beitin 2012), the researcher was able to collect shared meanings of experts regarding online solutions for PP. Furthermore, there are three common modes of interview analysis: *inductive*, *deductive* and *abductive* (Kvale and Brinkmann 2014, p. 224). The *inductive* approach leads to general conclusions based on the several instances verified throughout the interview. The *deductive* process seeks to identify testable hypotheses. Only conclusions that are falsifiable can then be valid. If one instance is contradictory to all the other, then the conclusion is to be false. The a*bductive* form is more aligned with pragmatism in the sense that reasoning attempts to relate the new/uncertain instances with known instances until those new instances are better understood. In this study a combination of *induction* and *abduction* has been used considering the purpose of the interviews. Pairing both modes was found particularly useful due to the diversity of views collected in the interviews. Notice that diverse experts involved in WWViews were interviewed. Therefore, it was productive to *induct* because of instances found in different views and it was useful to *abduct* when new views were shared.

How was the process of analysing the interviews' data? In line with Kvale and Brinkmann (2014) the analysis of an interview can be made by taking five steps: (1) going through the whole interview to get an overview; (2) determining units in the answers (coding); (3) allocating categories to the units (categorising); (4) interrogating whether units relate to the purpose of the study, and; (5)

putting together non-redundant categories into a explanatory statement. In the present interview analyses the first four steps were taken, leaving the fifth step for thematic analysis and discussions in this research study (chapters 5 and 6). Interestingly, the second, third and fourth steps were mostly taken simultaneously. Before justifying such approach and developing on how the process of analysing the interviews' data took place, the concepts of coding and categorisation are now introduced in the light of Kvale and Brinkmann (2004).

Coding is the process of associating codes, one or more keywords, to segments of the interview analysed, so that it becomes easier to identify that particular segment later on. Categorisation is the process of associating general categories to segments in a more conceptual fashion. The use of categories facilitates meaning condensation in the sense that it is possible to see what categories are more often or less often addressed by the interviewees (Kvale and Brinkmann 2014, pp. 232). Categorisation can be done inductively or deductively. That is, in the former, the researcher defines categories based on the data analysed, so there is no list of categories prior to the data analysis. In the latter, by adopting pre-existing categories based on previous studies, literature, etc., the researcher allocates categories to the data analysed. In this approach, there is the risk that pre-existing categories do not suit any of the data analysed. Sometimes researchers use both approaches to maximise previous knowledge and new insights. Coding and categorisation therefore depend on how the researcher interprets the interviewees' statements. Different meaning interpretation may come up when different interpreters analyse a certain interviewee's statement. In fact, multiple interpretations may also occur when a researcher adopts different perspectives – perspectival subjectivity. Multiple interpretations may offer different perspectives and so a broader understanding of the phenomenon studied (Kvale and Brinkmann 2014, p. 237, 239, 241 and 245). Moreover, as mentioned above in the sub-chapter 3.2, the analysis is to explore, to a certain extent, latent meanings in the sense that it attempts to extract points made not explicitly. This is particularly relevant in Danish contexts when issues addressed may be perceived by the interviewees as sensitive to others' values, opinions, beliefs and alike. When confronting such situations, there is the potential to avoid conflict by not being explicit, for instance.

That said, back to the steps taken in this interview analyses, it was found more efficient to conduct coding and categorisation simultaneously. In the case of face-to-face and online interviews, the codes and categories were pre-defined (further developed right below). Therefore, the exercise was focused on interpreting the interviewees' statements and associate codes and categories to them. As a result, there was no need to take step four: interrogating whether units relate to the purpose of the study. In the case of the multi-person interviews the codes were not pre-established and the categories were (elaborated on right below too). Consequently, the coding and categorisation exercise demanded not only interpretation of the interviewees' statements but also the definition of new codes based on researcher's interpretations of statements and the allocation of such codes to pre-established categories. In this case, the step four: interrogating whether units relate to the purpose of the study; was taken to ensure that the data outcomes of interviews presented (sub-chapter 4.2) were serving the research questions posed in this study (sub-chapter 1.3).

In this study, for the purpose of coding and categorisation, pre-established codes (not applied to the multi-person interview) and categories were adopted. Both the codes and categories were defined on the basis of pre-interview studies conducted by the researcher and they can be found in the interview guides (for face-to-face in the Annex 6 and for online interviews in the Annex 11). In concrete, categories were inspired in general phases of project management, while codes in pre-interview readings about the initiative. The coding and categorisation of a particular interview segment results in what is here called a 'meaning unit'. A meaning unit is therefore always associated to a code and a category. Furthermore, with regard to the face-to-face interviews, a particular meaning unit is delimited by a certain topic (and code and category associated) addressed by the interviewee for a period of time. See Annex 8 where all the meaning units are presented and access to each meaning unit's question and answer is provided. A particular meaning unit can therefore be associated to more than one time slot in a face-to-face interview. Concerning the online interviews, each question addressed to the interviewee (and respective code and category) is associated to a meaning unit. See Annex 13 where all meaning units are listed. Similar to meaning units used in the face-to-face interviews, online interviews' meaning units were defined on the basis of the interview question codes and categories introduced in the online interview guide (Annex 11). Concerning both face-to-face and online interviews' analyses, the delimitation of the meaning units took a rough approach. Other potential codes (not identified in the interview guides) that were put forward by the interviewee were integrated in the existing ones. Differently, the analysis of multi-person interviews' data originated meaning units based on new codes defined by statements made by the interviewees. New codes in this interview were mostly determined by the verbal explanations and discussions that took place throughout the interview (sensitively to its dynamics [Morgan 2012]), but written comments are also considered (read about the interview method above). Categories were pre-established on the basis of the three phases of the interview. Hence, new codes associated to pre-existing categories resulted in more and new meaning units. These and access to the interview recording is also found in the Annex 16.

How was the amalgam of meaning units sorted out? Bearing in mind that the interviews purpose was to figure out what, how and why activities composing the initiative WWViews took place with the intention to identify weaknesses in the initiative, as well as what potential online solutions could be integrated to address those, the categorisation based on phases of project management were insufficient to further make sense of the outcomes of the interviews. Therefore, a second-level categorisation took place by adopting SWOT-analysis (introduced above) as a framework. In this last phase of the interview analysis the researcher interpretatively described each meaning unit and allocated each one to a category of SWOT-analysis: strength, weakness, opportunity or threat. That exercise resulted in what is hereon called SWOT entries or simply entries. Importantly, all the entries no matter their provenience (e.g. face-to-face interview) are associated to the SWOT-analysis categories on the basis of the arguments of the interviewees. In other words, the interview outcomes are to be read as researcher's interpretations of exclusive views of the interviewees. When describing the meaning units from different interviews the researcher was also confronted with the unexpected fact that many meaning units' meanings were common among them. That is, meaning units from face-to-face interviews were common to meaning units from online interviews, for

instance. This condition resulted in having entries supported by several meaning units from different interviews. The Annex 21 demonstrates that by stating which meaning units are source of meaning to each entry.

Annex 19 Aspects of SWOT-analysis

SWOT-analysis usability. Organisation may through the use of SWOT-analysis anticipate changing trends in the environment, become more aware of its internal capabilities and formulate strategies that lead to the achievement of its vision. In theory, SWOT-analysis allows identifying what strengths are to be maximised and capitalised on, what weaknesses are to be mitigated and transformed into strengths, what opportunities are to be grasped and maximised, and what threads are to be avoided or minimised. As it is shown further down, this theoretical potential of SWOT-analysis is not always translated into practice though. Nevertheless, in order to run proper SWOT-analysis several conditions ought to be found (Koch 2000): (i) eliminating misconceptions concerning the analytical framework itself; (ii) improving access to relevant reliable sources of information; (iii) using good analytical skills, critical thinking and judgement to classify entries; (iv) reflecting on the each SWOT list entry in different perspectives; (v) avoiding oversimplification of SWOT list entries' descriptions that may lead to hidden SWOT list entries, and; (vi) defining the strategic planning horizon (anticipation length) of SWOT lists application. If such conditions are met then the output of SWOT-analysis are reliable. In organisational practices, gathering such conditions is not always attainable and so the outputs of SWOT-analysis tend to be characterised by information gaps. The main subsequent reasons for that concern: (1) unavailability of information; (2) inaccessibility to information; (3) low commitment to analyses; (4) inadequate analytical framework, and; (5) failure to identify key entries. The aforementioned reasons for informational gaps in SWOT-analysis are also supported by the lack of training of the ones carrying such exercise.

Not of less relevance, very dynamic environments tend to make the collection of information for SWOT-analysis more difficult. Relatedly, once SWOT-analysis entries are dependent on the internal and external environment, which themselves are dynamic, SWOT lists are condemned to be of value for a certain period of time. Therefore, to revalidate a particular SWOT list, the entries are to be updated bearing in mind the factors that have triggered the need to renew the entries considered. The bigger the change in the environment, the more challenging the update process becomes once more than few entries may be subject to change. Informational gaps are of extreme importance because they may lead to wrong conclusions. For that reason it is worth verifying the quality of the SWOT lists throughout the realisation of the analysis, as well as when conducting the strategic decision-making processes. The SWOT lists shall be questioned so that their quality is assured and no strategic decisions are made based on false inputs. All in all, failing to produce a SWOT-analysis adequately results in an invalid and unreliable analysis.

SWOT-analysis applicability particularities. SWOT-analysis is, in the organisational realm, to support a strategy that is to be implemented in a certain period of time in the future. Therefore, the SWOT lists out ought to account for the period in time when the strategy will be adopted. Defining a strategy based on a SWOT-analysis reflecting past or present environments may result in failure because the strategy is deployed in a different situation than the one that it was defined for. Nevertheless, in order to anticipate the SWOT in the future, current SWOT lists are to be drawn up and revised. Furthermore, it is important to notice that SWOT-analysis is a solution, not a one-take

remedy for organisational strategic decision-making – it does not provide strategic solutions by its own. Hence, SWOT-analysis is to be complemented by other solutions when strategic decisions are sought.

SWOT-analysis critics. SWOT-analysis may result in unsuccessful decision-making. In some cases, SWOT-analysis may even not result in affecting the subsequent process of organisational strategic planning (Hill and Westbrook). Adam Koch (2000) argues that such failures are based on lack of poor quality of input and insufficient skills of those who adopt the solution. However, Koch further argues that SWOT-analysis, if used properly, considering its proprieties, can deliver successful outcomes. A common misuse of the solution is mostly witnessed by the observation of unstructured, superficial, biased and non-reflected categorial content. That happens when the adequate resources for such a task are not allocated, and so the execution of the exercise is done inaccurately. Moreover, it is also the case that those who conduct the SWOT-analysis fail to present an analysis representing realistically the organisation's strategic situation but regard them as valid (Koch 2000).

Furthermore, communication of SWOT-analysis plays a very important role in its reliability. If SWOT-analysis proponents do not present the sources and forms through which it was conducted, there is the susceptibility of others questioning the validity of the findings presented. Therefore, clear referencing and transparency in the analysis execution are crucial for a reliable SWOT list.

SWOT-analysis evolution. SWOT-analysis as a solution has been subject to enhancement prepositions. Koch (2001) succinctly presents the three most influential proposals put forward by Weihrich (1982), Dealtry (1992) and Wheelen and Hunger (1998). Overall, the enhancements were centred in the need to cross-analyse entries from different SWOT categories throughout different periods of time. That is, SWOT-analysis should explore the different relationships among the many SWOT list entries in different points in time.

SWOT-analysis across academic disciplines. In the recent years, SWOT-analysis has also been used for other purposes than organisational strategic planning. The following examples are not meant to cover the whole diversity of studies using SWOT-analysis but it is hoped to serve as an illustration of the multiplicity of applications that the solution has outside the organisational realm. Back in 2010, Westhues et al. (2010) developed a comprehensive analysis of social work education and profession in Canada with the support of SWOT-analysis. By using the categories of SWOT-analysis, the authors organised data that provided them a thorough description of the current situation of social work education and profession. The authors conclude by stating the current state of the profession by exploring the relations among elements in the different categories. On the almost opposite side of the planet, Yuan (2012) ran a study on construction waste management in China with the support of SWOT-analysis. In order to understand the status quo of the management practices in Shenzhen, the author used SWOT-analysis to strategically analyse construction waste management. The author ends by presenting recommendations for improving practices on the basis of SWOT-analysis theory (see above). More recently, concerning environmental governance, Fertel et al. (2013) adopted SWOT-analysis to study the coherence between provincial and federal levels

of Canadian energy and climate policies. In this case the authors used SWOT-analysis to map put the strengths, weaknesses, opportunities and threats in energy security and efficiency, as well as innovation and technology policies. Based on that mapping, Fertel et al. pointed out the main issues and concluded with possible solutions concerning coherence of such policies. Also regarding environmental governance, Berte and Panagopoulos (2014) used SWOT-analysis to describe the urban green infrastructure of a Portuguese city and identify potential measures for improving its ecosystem services for the purpose of climate change mitigation and adaptability. After spotting the weaknesses of the urban green infrastructure the authors were then able to suggest solutions.

Annex 20 Interview data outcomes

Internal Strengths

Organisational and learning contexts The informal approach within DBT was pointed out as strength because it facilitates communication among colleagues when new ideas come up. Relatedly, professional scepticism of DBT experts was found an internal quality because it supports thorough examination of new ideas. Also concerning the development of new ideas, DBT's decisions not being fully drawn on academic theory was mentioned as a plus because previous experiences made DBT experts realise that a linear application of theories in practice not always work out. Furthermore, DBT is perceived with the capacity to manage global initiatives based on its experienced staff and interactions between them and academics. Last, with regard to the DBT organisational context, the support of Danish governmental institutions in the promotion of the initiative was mentioned an internal strength.

Initiative preparation and evaluation With regard to the preparation of WWViews meeting questions, structured feedback from citizens was found a good solution for ensuring the integration of public opinions in improved versions of the WWViews meeting questions. Also concerning the initiative preparation, sensitivity to partners' selection based on their financial capacity and their organisational nature were two aspects valued as positive in the initiative. Moreover, despite partners' different capacities, a training seminar was run dedicated to all partners to ensure the equal implementation of the initiative at national levels. Another identified strength was partners' evaluations conducted in the end of the WWViews editions to improve the initiative.

Initiative promotion The increased use of social media for promotion of the initiative was found a positive trend although much has not been explored. Subject to much more attention were the official launching events in the start of each initiative edition due to the attendance of important stakeholders and captured media attention.

Methodological approach A pragmatic methodological approach was referred to as strength of the initiative because it ensures that the initiative method is applicable, scalable, resource efficient, especially financially, and considered valid by its main stakeholders. Relatedly, by applying a standardised methodological framework, in the view of the organisers, the DBT, the quality of the initiative processes and results is therefore attainable. Furthermore, although the methodological framework is to be common across national contexts, sensitivity to partner's national needs (e.g. introduction of informational materials) and desires (e.g. collection of public recommendations) was attempted by opening up for the realisation of pre and post-meetings. Also, sensitivity to bottom-up principles of PP was identified as an important positive quality in the first edition where collection of public recommendations was officially integrated in the methodological framework. Last concerning the methodological approach, the preservation of the integrity of the WWViews method is vehemently stressed by the DBT experts as strength in the initiative.

Methodology Concerning the initiative method itself, its design based on previously adopted TA methods, namely in transnational European initiatives, supported its solid foundations and scalable

proprieties. Another strength stated was the use of video informational materials throughout the meetings to attempt to ensure that all participants had a common starting point for deliberations and voting. Relatedly, deliberation group facilitators were found preponderant in the conduction of deliberations according to deliberation principles. Especially, if considered the importance of deliberations for levelling up participants' understandings of the matters addressed. Immediateness of results through the web tool supported by its usability and well functioning was another strength stated multiple times by the DBT and partners.

Initiative political influence Governmental representatives participation in WWViews meetings was perceived as an influence channel through which meetings' results reach national political realms. In the same line, post-meeting briefings with decision-makers provided a space to present and discuss WWViews meeting's results. Other means, found as strengths, were mailing meeting's results out to national and local decision-makers and the coverage of WWViews meetings by national media. Distinctively, parallel events to COPs were found a key internal strength of the initiative in its attempt to take WWViews meetings' results into the international political realm.

Initiative public awareness Public events post WWViews meetings were stated as positive elements that favour the dissemination of meetings' results and contribute to raise public awareness of the matters addressed in international negotiations.

External Threats

Organisational and learning contexts Some organisations have low specific functional-area capacity (staff's competences and skills, as well as structural procedures) that are beneficial when organising national public consultations in an international context. Marketing, fundraising, external relations, translating and facilitating to name but a few, are areas in fault.

Initiative promotion Media resistance to new approaches was witnessed and found a threat to the initiative evolvement because media's working methodologies and habits tend to present resistance to new approaches that could facilitate the dissemination and access to initiative-related information. Nevertheless, further use of traditional media for promotion is to be carefully handled due to media biased coverage. The framing adopted by the media to make news attractive may miscommunicate the initiative messages.

Initiative funding As a non-governmental institution and managing institution of WWViews, the DBT is confronted with the need to raise major funds for the realisation of initiative editions. That situation represents a threat once fundraising depends on the availability of funds of other organisations. Corporate organisations are therefore appealing sources of sponsorship. However, the desired independence of certain corporate organisations from particular political negotiations may hamper possible funding partnerships. These conditions are relevant considering that some potential partners did not apply for the WWViews alliance due to their lack of funds. Actually, many organisations that became part of the alliance perceive their dependency on fundraising as a principal concern. Failing to secure funds from the outset unable the organisation to perform

properly because resources have also to be directed to raising further funds. In some cases, little funding meant narrower geographical representation of participants, for instance.

Methodological representativeness A threat to participation representativeness is the great demographical distribution of the public. In some countries the population is so demographically vast that it becomes a challenge to recruit people from all the different societal segments. Furthermore, the general low availability of potential participants to take part in public consultations and the particular disinterest of social groups in the extreme ends of the social spectrum aggravates the challenge of recruiting a sociologically representative group of participants. In addition to these threats, geographical mobility barriers (such as in island-based countries) and extraordinary mobility barriers for potential participants (e.g. civil conflicts or natural hazards) hamper the achievement of desired representativeness. In the case of online solutions, representativeness is challenged by low quality or no Internet connectivity, among other points stated below.

Initiative outreach (political influence & public awareness) The two first WWViews editions addressed socio-technological matters of great complexity which policies are associated to very high stakes for many different stakeholders. As a result, negotiations and management of such issues are challenging per se and so the integration of public opinions in the process is demanding.

Online participatory methods On the basis that studies addressing online deliberative PP methods lack empiricism, the following were identified as threating elements to the development and adoption of online participatory methods. In the case of open online public consultations where everyone is free to access and participate, ensuring representativeness of participants is not attainable. Therefore, such methodological approach is perceived as not suitable for policy advice. When reflecting on the quality of online deliberation due to the need to ensure its legitimacy, unanswered questions arise concerning whether participants have access and make use of common informational materials, whether the discussion is conducted in a deliberative manner and so on. Similarly, the adoption of social media is associated to low-quality debates because they tend to become conflicting rather than constructive if not well moderated, argue the DBT experts. On top of that, different outcomes from face-to-face and online deliberations are not easily communicable to policy makers and are potentially subject to misinterpretations. In addition to the threats just mentioned, the low audio quality of Internet-based applications and their 2D visuals are also perceived as technical threats to the adoption of online participatory methods.

Annex 21 Full list of interviews' outcomes

The full description of the interviews' outcomes in this annex is done with support of a SWOT-analysis framework (sub-chapter 4.1). Therefore, content below is organised by internal strengths, internal weaknesses, external opportunities and external threats. For the purpose of helping navigation in the report text, each entry below is tagged (primarily preceded by an hashtag [#]) with a theme which the entry is associated to in the sub-chapter 4.2. In relation to the section 'Spotted areas of improvement' (in sub-chapter 5.1), the labels *#Divergence_FW* and *#Divergence_5S* are associated to entries concerning divergences between national partners and the initiative organiser. Furthermore, in relation to sub-chapter 5.2, entries associated to online solutions are labelled *#Online_Solution*.

The provenience of the entries below can be traced following their associated meaning unit(s). To help the reader finding the source of a certain unit, it might be useful to keep in mind that units starting with: "FI_" regard face-to-face interviews (units description in the Annex 8); "OI_" concern online interviews (units listing in the Annex 13), and; "MI_" are related to the multi-person interview (units presented in the Annex 16). Understanding a particular units coding can be accomplished following the process illustrated in this example: if the unit is labelled (FI3-IA5), then the reader is confronted with information from the face-to-face interview number 3 (FI3) where the interviewee was addressing the category 'Initiative Assessment' (IA), sub-category 'Internet-based participation' (5).

The ultimate goal of the use of meaning units is to facilitate identifying the origin of the entries below in the interviews' records and so to allow further analysis and discussions about the entries considering who have stated the points made in each entry.

Internal Strengths

(#Organisational_Learning_Contexts) Informal approach within DBT (FI1-IC1) (FI3-IC2) – the initiative idea was presented in a talk that did not impose the scheduling and preparation of a formal strategic planning meeting or similar. When someone has an idea, a talk takes place among several experts so that the idea is debated.

(#Organisational_Learning_Contexts) Professional scepticism of experts at DBT (FI1-IC1) (FI2-IPIC) – the initiative idea was primarily debated among three experts who adopted different analytical perspectives and so identify potential weaknesses. Although the foundations of the initiative were rapidly found solid, the identification and assemblage of its parts was of much scepticism. That supported the shaping of the initiative idea in a thorough manner avoiding, therefore, unexpected effects in its implementation.

(#Organisational_Learning_Contexts) DBT's capacity to manage a global initiative (FI1-IA5) – previous experience in European-wide initiatives support the realisation of a global initiative once DBT's experts managerial and other skills and competencies are enhanced. More, the project-oriented mind-set of DBT's staff strengthens the organisation's internal capacity.

(#Organisational_Learning_Contexts) Interactions between DBT experts and academics (FI1-IC1) (FI3-IA5) – DBT experts participate in projects where academics are involved and attend conferences where academics are present. Therefore, there are interactions between the two communities that allow the transmission of knowledge.

(#Organisational_Learning_Contexts) Professional decisions not drawn on academic theory (FI1-IC1) (FI2-IC1) (FI3-IA5) – arguments or methods are not justified on the basis of academic arguments. Arguments may be influenced by theoretical inputs, but the ultimate decision is to be based on practical grounds. "Because, it doesn't work. We see to many examples of that." (Bjorn [00:14:15])

(#Organisational_Learning_Contexts) Danish governmental institutions are informed and supportive of the initiative (FI3-IP2)– despite hosting official launching initiative events and other contributions, the Danish ministry for environment expanded its support by informing other nations about the initiative when DBT was searching for partners and funding.

(#Initiative_Preparation_Evaluation) Structured feedback for questions from citizens (FI1-IP4) – the focus groups are run with a set of feedback points that are to be addressed so that specific inputs are captured for the improvement of the questions.

(#Initiative_Preparation_Evaluation) Partners' selection considering their financial capacity (FI3-IP2) – although most partners do not ensure their financial sustainability when the training seminar places place, these are accepted by the DBT to join the alliance as long as they can cover their expenses to attend the training seminar. This approach gives partners the possibility to raise funds between the training seminar and the realisation of the initiative meeting.

(#Initiative_Preparation_Evaluation) Partner's selection considering their organisational nature (FI3-IP2) – partners whose organisational nature or experience do not match the primary criteria defined by the DBT can still join the alliance if they team up with other organisations that balance the organisational characteristics of the primary candidate partner.

(#Initiative_Preparation_Evaluation) Training seminar with all the partners (FI3-IP5) – prior to the realisation of the initiative meeting partners come together (mandatory attendance) for 2-3 days to get to know each others, boost their understanding about the negotiations targeted, clear out the adopted organisational setup and receive training on how to plan (e.g. defining strategy for participants' recruitment) and implement (e.g. facilitating round tables) the initiative in their home country. Such event, ensure a common ground in the implementation of the initiative and so its expected quality outcomes.

(#Initiative_Preparation_Evaluation) Partners' evaluation after initiative meetings (FI3-IC2) – the DBT, as initiative manager, conducts an evaluation where partners are asked to share their experiences and opinions concerning the implementation of the initiative. Such inputs are then taken into consideration for the improvement of the initiative's future meetings.

(#Initiative_Promotion) Using social media for promotion (FI1-IA5) – social media channels were used in the second edition of WWViews and are being considered for the next edition in 2015. Few discussions are taking place with the French partner with regard the use of social media to promote the WWViews 2015.

(#Initiative_Promotion) Official launching event (FI3-IP5) – an official launching event takes place in the first day of the training seminar in order to raise awareness of policy makers and other stakeholders about the coming initiative edition. Such event accounts with the participation of key policy makers and distinct policy institutions host it so that it also attracts media attention.

(#Initiative_Promotion) Participant testimony videos (FI1-II4) (FI2-II4) (FI3-II4) – the recording of videos where participants share their impressions of the initiative event provided a space where citizens' voice was present when introducing the documentary to its target audience (funding partners, policy-makers, TA institutions, etc.). These videos served as both communication and assessment materials.

(#Methodological_Approach) Pragmatic approach (FI2-IC1) – the centralised creation of informational materials, the centralised development of manual for recruiting citizens and the limited number of participants in each meeting, are examples of measures adopted so that the initiative method is applicable, scalable, resource efficient, especially financially speaking, and considered valid by its main stakeholders, namely policy makers.

(#Methodological_Approach #Divergence_FW) Defined methodological framework (FI1-IC1) – by having a defined methodological framework that all partners are to adopt, the initiative assures the standardisation and quality of its processes and results. That way, the results were comparable and possible of being presented to decision-makers as a congruent whole.

(#Methodological_Approach #Divergence_FW) Sensitivity to partner's needs and desires (FI1-IP1) (FI2-IP1) – the initiative allows partners to complement initiative purpose by conducting pre-meetings (e.g. introducing illiterates to informational materials through story-telling), as well as post-meetings (e.g. collecting national recommendations).

(#Methodological_Approach #Divergence_5S) First edition sensitivity to bottom-up principles of PP (recommendations) (FI1-IP1) (IO1-IC2) (OI1-IA4) (OI4-IC2) (OI5-IC2a) (OI10-IC2) – the fifth session in the first edition was the result of the felt need to provide to participants the opportunity to present their own recommendation free of thematic guidance (as in the first four sessions). Recommendation sessions are found by citizens and partners more deliberative than voting and amenable to participants' particular interests, some not addressed by framed voting sessions.

(#Methodological_Approach) Preserved integrity of the method (MI-FTB) – the method as applied in the two first editions of WWViews has been keeping its integrity and so it has not changed its core structure, approach and nature of outcomes. This condition is perceived by the DBT as one to be conserved. New methodological solutions are to be considered as a new method by themselves.

(#Methodology) Tested methods (FI1-IC1) (FI2-IPIC) (FI2-IP5) – the initiative method was based on methods previously adopted in Technology Assessment, namely transnational methods adopted in project in Europe in 2000. Such methods had proven to be possible of being used in different countries ('travel well'). Therefore, those methods were object of improvement and critics from academics. Consequently, the foundations were solid and proprieties scalable.

(#Methodology) Video informational materials (FI1-IP3) – this materials attempt to ensure that all the participants attending an initiative event have a common starting point for the deliberation regardless of whether they read the booklet and whether they researched further about the issues discussed.

(#Methodology) Deliberation group facilitator (FI1-II2) – the presence of a facilitator attempt to ensure that the deliberation in groups is performed according to deliberation principles (e.g. everyone's voice is heard) and that whenever expertise questions are raised the focus is redirected to the information made available in the informational booklet.

(#Methodology) Deliberations level up people's understanding (FI2-IA1) – deliberation among the different people who take part in an initiative meeting allow them to get a better understanding of the issue at stake regardless of their demographic characteristics, background and prior preparation (e.g. reading the informational booklet). Constructive discussions allow people to share their thoughts, listen to others, reflect and assimilate new knowledge and so improve their understanding.

(#Methodology) Videoconference sessions in meetings (FI1-II1) (FI2-II1) (FI3-II1) (OI1-II1) (OI4-II1) (OI6-II1) (OI8-II1) – the realisation of short videoconference sessions between different countries give participants the sense of belonging to a global event (a social connection). That is relevant because people feel that their individual effort is contributing for something of a bigger scale that is built by the sum of individual contributions globally. People become more aware of what they are doing and so more motivated. Such perceptions are also applied to organisers and stakeholders who are presented when videoconference sessions take place.

(#Methodology) Immediateness of results through the web tool (FI2-IP7) – the fact that the results from countries across the globe can be immediately accessed to and analysed give experts and others the feeling of the global dimension and synchronisation that the initiative has. Such situation was meant (not worked out) to capture media attention, boosts motivation and commitment of organisers and participants.

(#Methodology) Web tool well functioning and usability (FI1-IA4) (FI2-IP7) (FI2-IA4) (FI3-IA4) (FI3-IP7) (OI1-IP2) (OI1-IA1) (OI2-IP2) (OI2-IA1) (OI4-IP2) (OI5-IP2) (OI6-IP2) (OI6-IA1) (OI7-IA3) (OI9-IA1) (OI9-IA2) (OI10-IA2) (OI11-IA1) (OI11-IA2) – the tool performs as expected, without failures or delays. Internally the web tool successfully supported exchange of information between the DBT and partners. Moreover, it is found useful not only for DBT experts and partners to immediately analyse the results and later write the initiative policy reports that are handed in to policy makers and other stakeholders, but also for external actors (e.g. researchers and teachers) to analyse the results.

(#Initiative_Political_Influence) Governmental representatives attending WWViews meetings (OI6-II2) (OI7-II2) – the presence of national governmental representatives in WWViews meetings is perceived as a means to link the WWViews meetings with the political negotiation arena. Governmental representatives participation in the WWViews meetings serves to widen the channel of influence of the meetings' outcomes on the political stands of national governments.

(#Initiative_Political_Influence) Post-meeting briefing with decision-makers (OI1-II2) (OI1-II2a) (OI6-II2) (OI9-II2) (OI11-II2) – some countries organise meetings where the results of the WWViews meeting are presented and discussed with national and local decision-makers. In these meetings partners make use of written reports and videos to transmit the concept and outcomes of the initiative. Levels of interest and engagement of policy-makers was mostly estimated by organisers considering policy-makers' openness to meet and their reactions during meetings.

(#Initiative_Political_Influence) Mailing results out to national and local decision-makers (IO1-II2) – some countries send summary reports of the WWViews meeting to policy-makers in order to inform them about the concept and outcome of the initiative, particularly in their country.

(#Initiative_Political_Influence) National media appearances (FI1-IA3) (FI3-IA3) (IO1-II2) (OI5-II2) (OI11-IP3) – In several partner countries national media covered the initiative events and so news was released in different means. This becomes another way to pass the message through to policy makers.

(#Initiative_Political_Influence) Parallel events to COPs (FI1-IA2) (FI3-IA2) (FI3-IA3) – DBT organises diverse parallel events to the COPs (nationally and internationally) where the results of the initiative meetings are shared and discussed with some policy makers. That is found the most effective way to pass the message through (estimating the influence of initiative meetings' outcomes in negotiations at COP is not conducted though).

(#Initiative_Public_Awareness) Public events post WWViews meeting (OI5-II2) – some countries organise public events dedicated to the dissemination of the outcomes of the WWViews meeting with the purpose of raising public awareness.

(#Initiative_Public_Awareness) Linkage between web tool and public exhibition (FI1-IA5) – in the first edition, there was an exhibition in the town hall square of Copenhagen where the public could answer digitally the very same questionnaire answered by the initiative meeting's participants and compare their results to results from other countries.

Internal Weaknesses

(#Organisational_Learning_Contexts) DBT lacking know-how on campaigning (MI-IP4) – staff of the DBT lacks knowledge of campaigning and related functional areas, such as marketing and advertising. This condition limits their activities preceding and succeeding the WWViews meetings and consequently affects their external positioning, funding sponsorship and outreach.

(#Organisational_Learning_Contexts) Addressing international media (FI1-IA3) (FI2-IA3) (MI-CT15) – No international media (e.g. metro, CNN or BBC) covered or exhibit news about the initiative events. The reasons why that happen, beyond 'no interest' from media, are unknown. The potential in media/press services is recognised but how to 'breakthrough' is to be figured out.

(#Organisational_Learning_Contexts) Partners' low participatory experience (FI1-IP5) (OI9-IP3) – some lack experience with participatory practices. Consequently, the DBT, as initiative manager, faces the challenge to build capacity of partners by directing part of its resources to it.

(#Organisational_Learning_Contexts) Partners' call for broader method's scope (FI1-IP5) (FI2-IP5) – western countries argued for added complexity to the method so that further outcomes could be capture. Making the methods more complex requires more management, funding, capacity and distributed attention, as well as raises risk levels and uncertainties.

(#Initiative_Preparation_Evaluation) Little time between preparation and realisation (OI1-IC1) (OI6-AI1) (OI7-IP3) (OI10-IP1) (MI-CT1) – too little time between the start of the preparation and the realisation of the WWViews meeting threatens the development of the initiative by its partners. This little title is a result of late confirmation of major funding to the DBT, which can then announce a new WWViews edition.

(#Initiative_Preparation_Evaluation) Developing web tools is resource consuming (FI3-IA4) – it takes long time and energy to reach the point when web tools meet the specifications desired by the initiative's project managers. Moreover, practicalities such as adapting the tools to different languages and alphabets are rather time consuming. The DBT staff has developed all the web tools.

(#Initiative_Preparation_Evaluation) Redeveloping the web tool for each initiative meeting (FI3-IP7) – the web tool developed for the first edition was not used in the second edition. In fact, a whole new tool was developed in order to accommodate the improvements desired. Further on, a new tool was also developed for a European WViews. The latter with the intent to be adaptable to changes in future editions.

(#Initiative_Preparation_Evaluation) Handling and displaying of results in the web tool (FI1-IA4) – the way the results of comparisons are made available to the user does not allow exporting them so that they can be easily used outside the web tool. Printing the results of a comparison is also not possible through the web tool itself. Moreover, the presentation of the results is not graphically attractive.

(#Initiative_Preparation_Evaluation) Dependency on organisations joining (FI1-IC1) – the implementation of the initiative depend on whether other organisations join the alliance. The initiative can only take place if organisations accept to take part of the initiative as partners.

(#Initiative_Preparation_Evaluation) Number of countries participating (MI-CT12) – the total number of countries participating in both editions is relatively low when compared with the total number of countries in the world, or simply, to the democratically governed countries across the globe. Moreover, the number of countries participating has dropped from the first to the second edition. This represents a challenge for the organisers considering that the worldwide nature of the initiative, as well as its legitimacy in the view of policy makers, is intrinsically related to the diversity and number of countries participating.

(#Initiative_Promotion) Lack of long-term marketing strategy (MI-CT3) (MI-CT4) – the concept of WWViews is not promoted throughout time, there are no on-going marketing activities running and so potential sponsors and partners do not know about it when they are approached. This situation makes it harder to engage potential sponsors and partners when a new WWViews edition is announced and planned by the DBT. Ideally, the DBT would be approached to run WWViews public consultations instead.

(#Initiative_Promotion) Dependency of initiative editions' promotion on media (MI-CT4) – the launch of a new edition of the initiative is not preceded by a promotional campaign (at the ramp-up) to raise awareness of potential sponsors and partners. Apparently, the media is not interested in covering such news. The dependence and reliance on the traditional media for promotional campaigns have proved unfruitful.

(#Initiative_Funding) Lack of sponsorship strategy (MI-CT4) – as of the assessment of the first two editions, neither the incentives to attract sponsors are identified nor what sponsors may gain from such partnerships is figured out. Therefore, how to persuade potential sponsors is unknown and hampers the establishment of financial partnerships.

(#Initiative_Funding) Financial dependency (FI1-IC2) (MU-CT2) – Implementation of the initiative method is dependent on the availability of money. The activities associated to the initiative can only be realised if money is available. Moreover, parallel activities that boost the initiative goals could not be implemented due to the lack of money. Were the initiative activities possible for being realised on a volunteering basis, with no costs associated, there would be no such internal weakness.

(#Initiative_Funding) Fundraising centralised in the DBT (MI-CT2) (MI-IP2b) (MI-IPA) – only the DBT ran fundraising activities in the first two editions of WWViews. This situation not only possibly leads to fewer funds raised but also to slower fundraising process and higher dependency on the success of DBT activities.

(#Methodological_Approach #Divergence_FW) Common methodological framework (FI2-IP1) (FI3-IP5) (OI1-IC1) (OI1-IA4) (OI9-IP1) (OI10-IP3) – a common methodological framework

adopted by countries or regions with different social cultures (e.g. gender differentiation), levels of education (e.g. illiterateness), deliberative customs (e.g. lack of debate culture, acceptability of closed questions), organisational cultures, as well as political realities may hamper the natural flow of the initiative meetings.

(#Methodological_Approach #Divergence_FW) Exclusive issues of global nature (OI1-IA4) (OI4-IC1) (OI11-IC2) – some countries find relevant to take the opportunity to deliberate national, regional and/or local environmental issues due to their importance to national policy and national governmental stance in international environmental negotiations. However, the environmental issues integrated in the initiative are exclusively of global nature.

(#Methodological_Approach #Divergence_FW) Time-framed methodological framework (OI1-IC1) (OI5-IC2) (OI6-IC2) (OI9-IC2) (OI9-IP3) – considering that the WWViews meetings are time-framed and day-long lasting, some partners did not find the conditions to accommodate local desires, such as running a fifth session dedicated to recommendations in the second edition, or simply make breaks for snacks and pray.

(#Methodology) Informational materials usability (FI1-IA1) (FI2-IA1) (FI3-IA1) – in the second edition, participants answered an assessment questionnaire where they shared their perception of the informational materials' quality (informative and neutral). However, no external evaluations consensually estimate how much participants relied and so used the information materials in their opinion making. Different studies point at different levels of relevance. It is, so far, not possible to know exactly whether participants' opinions changed as a result of the information shared in the materials. Consequently, the impact of the informational materials in deliberations and voting is, to a large extent, unknown.

(#Methodology #Divergence_FW) Exclusiveness of informational booklets (OI4-IP3) – a partner have expressed interest in encouraging participants to seek knowledge in sources of information other than the provided informational booklet.

(#Methodology) Resource-consuming translations (OI3-IP3) (OI7-IP2) (OI7-IP3) (OI7-AI4) (MI-CT17) – the translation of informational materials is a time-consuming process that requires the allocation of many human and financial resources. Although English is an international language widely spoken across the world, informational materials are to be presented in the official language where the meeting takes place. After all, WWViews meetings are held in the mother tongue of the participants. Importantly, translated materials have to be carefully worked on as to guarantee that information is not loss or mistranslated in the process.

(#Methodology) Time-consuming vote counting (FI3-IP7) (FI3-II3) (OI9-IP2) – in both editions votes in the four voting sessions were counted manually by two or three people in order to ensure their accuracy. Such process is time-consuming (half an hour or longer for each session) as susceptible of human-based mistakes that delay the whole event. In the last edition of the European WViews, the voting was automated so it is fast, free of counting mistakes and allows further analyses of participants voting once each vote can be associated to a participant.

(#Methodology #Divergence_5S) Inefficiency of bottom-up processes (recommendations) in first edition (FI1-IP1) (FI3-IP1) (OI5-IC2) (MI-CT16) – in the first edition, compiling the several recommendations produced in the different sites across the world turned out a too difficult task. Making a meaningful translation of the recommendations was too hard. Therefore, DBT experts perceived the final global recommendation as making sense only to a narrow extent. Moreover, recommendation-based sessions require time for deliberation, reflection and sharing among participants. Such condition is a constraint when trying to fit this kind of sessions in a daylong meeting dedicated to voting-based sessions. Nevertheless, the exclusion of the recommendation session at global level, as an input to COP negotiations, was not intended to exclude the possibility of running recommendation sessions at national level, as an input to national governments.

(#Methodology #Divergence_5S) Exclusion of bottom-up principles of PP (recommendations) (OI5-IC2) (OI5-IC2a) (OI8-IC2) (OI8-IC2a) (OI8-IA3) – the second edition of the WWViews did not officially integrate, at global level, a fifth session dedicated to capturing participants' opinions qualitatively (descriptive own concerns). This measure was considered surprising by some partners due to the importance associated to such session – the only one offering a space for bottom-up policy advice.

(#Methodology #Divergence_5S) Unavailability of qualitative data in the web tool (OI4-IP2) (OI5-IA2) – The information made available in the web tool is purely quantitative, representing the voting choices made by the participants, and so it fails to portray qualitatively what participants' opinions were and how they were formed. Qualitative data could offer other perspectives to explain country differences.

(#Methodological_Representativeness) Number of WWViews meetings per country (MI-CT12) (MI-CT13) – some countries with a relatively big number of inhabitants run one or few WWViews meetings. Although considered sociologically representative, a bigger number of WWViews meetings would ensure more citizens participating (respondents) and so it could strengthen representativeness.

(#Methodological_Representativeness) Non-uniform recruitment (MI-CT14) (MI-IP12a) – Although a recruitment strategy (also specifying the demographic criteria) is defined and shared between DBT and partners in order to ensure the sociological representativeness of the participants, there is a lack of a uniform recruitment (how sampling is performed, for instance). This situation raises discussions about representativeness of participants and comparability of participation across countries.

(#Initiative_Political_Influence) WWViews meetings soon before negotiation events (FI2-IA4) (MI-CT6) – initiative meetings happen shortly before the negotiation events. Such condition does not provide much room for the realisation of further public or high-level policy debates between the initiative meetings and the negotiation events.

(#Initiative_Political_Influence) Official participation in COP negotiations (OI7-IC1a) (MI-CT10) – DBT organised diverse parallel events to the COPs where the results of the initiative meetings

were shared and discussed with some policy makers. However, WWViews outputs did not get into discussions in formal negotiation circles. Consequently, the influence of WWViews is solely based on indirect channels, such as COP parallel events, media coverage and possible lobbying. This is perceived as a weakness by the interviewees because WWViews main purpose is to influence negotiations with public's opinions.

(#Initiative_Public_Awareness) Outreaching activities post WWViews meetings (MI-CT7) – activities meant to disseminate and raise awareness about the outcomes of the WWViews meetings have not been widely adopted. Some countries run outreaching activities for educational purposes, for instance. However, no such activities have been developed as standards internationally.

(#Initiative_Public_Awareness) Online expert discussions on results (FI1-IA5) (FI2-IA5) – experts discussed among them the results of the initiative meeting in 2009 in a web-based platform. The intention was to link up such discussions with mass media, but it turned out not attainable. The expert opinions were reflexive and sometimes incongruent. Their opinions lacked overview of the results and comparable perspectives. The process was not attempted again as of the realisation of this study.

External Opportunities

(#Organisational_Learning_Contexts) EPTA network (FI1-IC1) (FI2-IP1) (OI5-IC1) – European parliamentary technology assessment institutions that form a network of expertise, supported the development of the initiative idea through an initial workshop. In general, experts in this network share and discuss practices and so new knowledge can be produced from it and synergies emerge for the realisation of initiatives.

(#Organisational_Learning_Contexts) Capitalise on organisational capacity (MI-IPA) – some partners of the WWViews alliance have the capacity to address some of the issues the initiative faces. If such issues are presented by the DBT as a list of priorities to the alliance, some partners could develop solutions and share them with the rest of the whole alliance. Means of raising funds is an example of an issue that could be presented to the alliance.

(#Organisational_Learning_Contexts) Academic literature addressing the initiative (FI3-IC2) – a book, entitled 'Citizen Participation in Global Environmental Governance' (Rask et al. 2012), addressing the first edition of WWViews has been published as of the realisation of this study. The book not only provides insights into the design, planning and implementation of the first edition, but also serves as an assessment record (taken into consideration by the DBT when working on the second initiative meeting) where several academic studies focused on the WWViews meetings enactment and outcomes are presented. Moreover, several academic articles with similar purposes of the studies in the book have been published.

(#Organisational_Learning_Contexts) Showcasing deliberation-based methods nationally (IO1-IC1) – Although some countries have experience in PP, deliberation-based methods have not been

subject to much attention and practice. In such cases, the initiative may provide the means to demonstrate deliberation-based methods in a national context.

(#Organisational_Learning_Contexts #Suggested_Solution) Online discussion forum for partners (OI6-IA2) – the WWViews web tool used in the two first editions provided a channel of communication between the DBT and partners, particularly for the transference of files between them. However, communication among partners was not very supported. An online discussion forum for partners could aid partners' work development by having them sharing knowledge, ideas or suggestions, especially when facing barriers.

(#Initiative_Promotion #Online_Solution) Social media promotion (OI9-IA3) (MI-FTF) (MI-IPF) – the increasing number of users of social media makes these platforms an attractive means to promote the initiative, particularly when running recruitment campaigns to attract potential participants. Social media platforms may well be used to promote online initiative activities (online debates, crowdsourcing, etc.) and disseminate the outcomes of WWViews meetings among the general public in order to raise awareness about the issue addressed. Such solutions require resources to start it up and, most importantly, to keep it up.

(#Initiative_Funding #Initiative_Outreach #Online_Solution) Online debates for stakeholders (MI-FT6) (MI-IP6a) (MI-IP6b) – key decision-makers and other important stakeholders could take part on online debates where the results of the WWViews meetings are discussed. This solution could support the diversification of funding sources due to the increase in awareness of potential funding partners about the initiative's relevance. Making such kind of debates stand out among the many COP-related activities and events represents a challenge though.

(#Initiative_Funding #Online_Solution) Online crowdfunding websites (MI-FT2) (MI-IP2b) (MI-IP2c) – more funding can be attained by partnering with crowdfunding companies and/or running funding campaigns in their websites so that individuals can fund initiative editions. This is seen as an opportunity due to the wish for democracy in many countries.

(#Methodological_Approach) Non-strategic participation by participants (FI2-IP7) – participants in participatory events tend to not adopt a strategic approach in their participation. That means, participants do not analyse the voting results from elsewhere with the intent to support or stand against them through their own contribution to the participatory process. Such condition therefore allows the immediate availability of results in WWViews without compromising the quality of the participants' opinions shared.

(#Methodological_Representativeness #Online_Solution) Computerised recruitment module (MI-FT14) – automating the recruitment sample so that partners could easily find who is to be recruited for the WWViews meeting in order to seek proper representativeness. Such module would allow partners to know what people and how many are to be recruited (output) on the basis of the DBT-defined demographic criteria and their national demographic statistics (inputs).

(#Methodological_Representativeness) Organisational and social networks help recruitment of participants (FI3-IP6) (OI3-IP1a) (OI11-IP1) – in some countries organisations (such as museums and adult schools), support the recruitment of participants by advertising the initiative meetings to people frequenting the organisation. Furthermore, social networks are used in some countries to disseminate the recruitment campaign and reach under-represented groups, such as low educated people (e.g. maids being invited to participate by their employers).

(#Methodological_Representativeness) Advertisements help recruitment of participants (FI3-IP6) (OI5-IP1) (OI5-IP1a) (OI11-IP1) – in few countries newspaper and magazines ads supports the dissemination of the recruitment campaign reaching a wide audience. Internet and public transportation advertising were also adopted in some countries. In the case of online advertising, citizens were offered the immediate opportunity to register themselves, in the official website of the national initiative, as potential participants in the WWViews meetings.

(#Methodological_Representativeness) Outsourcing recruitment of participants (OI1-IP1) (OI7-IP1) – some partners may find outsourcing recruitment of participants a more efficient way to seek representativeness. The costs may well be higher and take longer if participants are directly invited by the outsourcing company. However, outsourcing such service lightens the burden associated to recruitment – a major challenge in the preparation of the initiative meetings.

(#Methodological_Representativeness #Online_Solution) Representation of participants processed digitally (MI-FTC) – WWViews participants could anonymously use a program to introduce their demographic characteristics and their voting answers so that it becomes possible to weighing representation of results. That is, to mathematical extrapolate the results of the WWViews meeting to the national level. Such exercise also allows better understanding of the results by having insights into how certain demographic segments answer certain questions.

(#Initiative_Outreach #Online_Solution) Expert webinars before negotiation events (FI2-IA5) - between WWViews meetings and negotiation events there is the possibility to run webinars where experts discuss the public opinions. Such webinars could be made accessible to the general public and policy makers as well, and so serve as communication channels between the initiative meeting and the negotiation event.

(#Initiative_Outreach) COP-related events preceding the COP (MI-CT6) – there are several COP-related events, mostly organised by NGOs and governmental organisations, where policy discussions take place and the outcomes of an initiative edition could be presented and discussed. The introduction of WWViews in such events would support the dissemination and further integration of the outcomes into policy debates. Such approach is attainable when there is enough time between the WWViews deliberation day and the COP.

(#Initiative_Outreach) Collaboration with UN institutions (MI-CT9) – International negotiations are chaired by UN representatives to whom the outcomes of deliberations can be introduced and discussed with, and so facilitate the integration of public opinion in negotiations among government representatives.

(#Initiative_Outreach #Divergence_FW #Divergence_5S) Democratic gap - policymaking taking place at higher levels (FI1-IA5) (FI2-IC1) (OI1-IA4) (MI-IP3) – policy decision-making has been moving to higher instances and so the distance between international policy negotiations and the public tend to widen. Such trend calls for actions that attempt to bridge the increasing 'democratic gap' so that public opinions are considered when negotiations that influence their lives take place at international negotiation arenas.

(#Initiative_Outreach #Divergence_5S) International Governmental Organisations lacking legitimacy (MI-IP3) – some IGOs, such as UN, lack legitimacy in the view of the public. Therefore, activities in the context of WWViews could support mitigating such condition that is not desired by the institutions themselves.

(#Initiative_Outreach) Openness of UN institutions (MI-CT10) – UN has been promoting the integration of stakeholders in international environmental negotiations. That has been especially noticeable in the Sustainable Development Council with the implementation of multi-stakeholders forums and, more recently, in the UNFCCC in a less formal way. Such trend can be capitalised by the initiative organisers so to increase the potential influence of public consultation in the negotiations.

(#Initiative_Outreach) Participation in inter-COP events (MI-CT10) – several events organised by the UN take place between COPs in order to facilitate and foster the development of negotiations. Such events offer opportunities to promote the initiative among attendees and identify possible future options to present the outcomes of the initiative.

(#Initiative_Outreach) Collaborating with Danish embassies (OI2-II2) – bearing in mind that the initiative's organisational managing body is located in Denmark, partners may capitalise on the potential engagement of Danish embassies in their country. Collaboration with embassies of Denmark may foster diplomatic relations between the partner organisation and national decision-makers, among others.

(#Online_Participatory_Methods) Too few experimental studies on online PP methods (FI2-IA5) – in contrast to the pervasiveness of the Internet, there are too few experiments, and consequently studies, where Internet-based solutions are used in participatory processes. Therefore, there is much room for experiments in this area.

(#Online_Participatory_Methods) Internet usage across the social spectrum (FI2-IA5) – the Internet has become widely used by different demographic groups in western society. Many of its applications are used in people's daily life and so the Internet literacy is rather high particularly in developed countries. Such condition increases the pool from which potential participants can be recruited for online deliberation initiatives.

(#Online_Participatory_Methods #Online_Solution) Intelligent computer system to collect public issues (MI-FTA) – a computer system that collects information automatically from the web could

help mapping what issues are most relevant and what questions are to be addressed in public consultations.

(#Online_Participatory_Methods #Divergence_FW #Divergence_5S #Online_Solution) Hybrid micro meetings (MI-FT12) (MI-IP12a) (MI-IP2a) (MI-IP12b)– small number of participants come together, face-to-face, to take part in a WWViews micro meeting being supported by a web-based computer program and guided by a facilitator online. The agenda flow and main features of the WWViews micro meeting would be the same as in centralised WWViews meetings. The main difference would be in the automated guidance, online facilitation and insertion of results by participants themselves. These micro meetings are to be unsynchronised with centralised WWViews meetings taking place elsewhere due to the fact that online participation is likely to be more tiresome. This solution is of particular relevance in countries where mobility of citizens is a barrier to their participation in centralised WWViews meetings. By adopting such solution, (a) the costs of financial incentives and reimbursements associated to participant transportation could decrease, and (b) the time dedicated to establishing partnerships could shorten due to the need to have only one partner per country for the purpose of translating informational materials, training moderators, etc.

(#Online_Participatory_Methods) Generate a global WWViews movement (MI-IM12b) (MI-FTD) – global alliance of WWViews micro meeting moderators/hosts, who whenever there is an initiative edition, runs a hybrid micro meeting. WWViews micro meeting moderators/hosts are associated to WWViews partners that support (provides training, informational materials, etc.) their activities. This alliance could expand on the basis of a campaigns run by partners and be self financially sustained by donations from participants themselves.

(#Online_Participatory_Methods #Online_Solution) Online debates for participants (FI2-IA4) (MI-FT7b) – framed as a method itself, a second round of debates take place online where WWViews participants come together to discuss the results of the WWViews meeting. The purpose is to comment and better understand the results and raise new questions concerning the interpretation of the outcomes at national and global levels. These online debates was not idealised as serving as a WWViews meeting with the purpose of presenting public opinions to policy makers.

(#Online_Participatory_Methods) Online debate capitalising on face-to-face deliberation experiences of participants (OI7-IA3) (OI11-IA3) (OI11-IA4) (OI11-IA4a) – the realisation of online deliberation events can be supported by face-to-face deliberation experiences of participants. Participants who attend deliberative events are familiar with the principles and rules of deliberation and possibly more motivated to keep online discussions on the matter addressed. The USA, for instance, has conducted an experiment where online deliberation is taken as a supplement to face-to-face deliberation (http://www.ecastnetwork.org).

(#Online_Participatory_Methods #Online_Solution) Online debates for non-participants (FI2-IA4) (MI-FT7a) (MI-IP7a) – upon the WWViews meetings, groups of non-participants (e.g families, students) could come together online to run (short) debates where the topics addressed in the

meetings would be discussed. The intent of this solution is to raise awareness of the public about the matters at stake, as well as serve as educational means to increase public understanding of the policy issues. Such solution is seen as a contribution to national partners' objectives.

(#Online_Participatory_Methods) International Online Deliberation Meetings (MI-EXT) – Online deliberation meetings are attended by citizens across the world to discuss global common environmental issues. In this format deliberations among participants could be enriched by the diversity of shared experiences in single online tables once participants would represent different countries/regions. Regardless of the questions commonly raised concerning online deliberations, the major barrier to such solution is the different language spoken by potential participants across the world. A possible approach could be running international online deliberation meetings based on common languages across the globe such as English, Spanish, Portuguese, etc. However, a large proportion of the global population would be disenfranchised. Hence, such method could be useful if representativeness was not to be sought, such as when collecting opinions about critical controversial issues or getting feedback on voting questions.

(#Online_Participatory_Methods) Moderated social media-based debates (MI-FTE) – online debates based on social media present higher quality level when they are moderated. The moderation in online discussions directs the threat of discussion towards deliberation and constructivist participation. However, moderation of online debates is resource consuming, potentially more consuming that face-to-face moderation because it requires knowledgeable (what has been discussed online before), continuous (along long periods od time), and attentive (prompt) moderation.

(#Online_Promotional_Solutions #Online_Solution) Online demonstration solution (MI-FT3) – an online simulation application that allows users to experience the process of WWViews in order to make them acquainted with the initiative and its method. Users experience deliberation events online just as the face-to-face method. Such solution could be attractive for introducing potential sponsors, collaborators and partners to the initiative for the first time.

(#Online_Promotional_Solutions #Online_Solution) Online advertising dedicated to online activities (MI-FT4) – Online adverts promoting online activities related to the initiative, such as online demonstrations and online stakeholder debates. Such online ads could be integrated in a sponsor strategy to increase the level of both funding and outreach.

External Threats

(#Organisational_Learning_Contexts) Organisations' lack of capacity (FI1-IP2) – a reason why some interested partners did not join the initiative was lack of capacity, experience in running technology assessment activities or public deliberations. This condition limited the number of institutions DBT accepted as partners.

(#Organisational_Learning_Contexts) Organisations' low specific functional-area capacity (OI1-IP3) (OI1-IA2) (OI1-IA2a) (OI3-IP3) (OI9-IA4) (OI8-IP3) – some organisations lack staff or

access to professionals with particular competences and skills, as well as structural procedures that are beneficial when organising national public consultations in an international context. Marketing, fundraising, external relations, translating and facilitating to name but a few, are areas in fault in some organisations.

(#Initiative_Promotion) Media resistance to new approaches (FI2-IA3) – media's working methodologies and habits tend to present resistance to new approaches that could facilitate the dissemination and access to initiative-related information. In the first edition, Biodiversity, for instance, informational clips were made available in a server by DBT, but media did not used them despite incentive from the institute.

(#Initiative_Promotion) Media biased coverage (OI2-IP3) –The framing adopted by the media to make news attractive may miscommunicate the initiative messages. Therefore, the involvement of media ought to be done in ways that avoid potential undesired effects.

(#Initiative_Funding) Fundraising system (FI1-IC1) (FI3-IC2) – as a non-governmental institution and managing institution of WWViews, the DBT is confronted with the need to raise funds for the realisation of initiative editions. That situation represents a threat once the fundraising depends on the availability of funds of other organisations. Fundraising is also very resource consuming. Funding processes take at least six months from the moment an application is presented until an answer is received.

(#Initiative_Funding) Desired independence of corporate from politics (MI-CT4) – some potential sponsors, when approached for the purpose of funding partnerships, have expressed their desire to keep themselves independent from political negotiations which the initiative intrinsically relates to. Some corporate organisations do not want to be associated to influencing negotiations by sponsoring public consultation activities.

(#Initiative_Funding) Organisations' lack of fundraising (FI1-IP2) (FI3-IP5) (FI3-IP2) (OI11-IC1) – a key reason why some potential partners did not join the initiative was lack of funding. Without financial support partners did not meet the conditions to cover expenses related to the planning and implementation of the initiative in their own country.

(#Initiative_Funding) Organisations' dependency of fundraising (OI1-IC1) (IO1-IP3) (OI2-IC1) (OI3-IP3) (OI4-IC1) (OI5-IP1) (OI5-IP3) (OI6-IC2) (OI7-IC1) (MI-IP2b) – a principal concern of potential partners is their dependency on raising funds to allow them to take part and run the initiative activities successfully, without putting the organisation under pressure and force the use of own institutional funds. This matter becomes more important when needed funds for running activities at national level encompass a bigger budget. Failing to secure funds from the outset unable the organisation to perform properly because resources have also to be directed to raising further funds. In some cases, little funding meant narrower geographical representation of participants (only recruited from a particular region). In other cases, the dependency on funding was translated in the exclusion of the fifth session (recommendations) in the second edition, Biodiversity.

(#Initiative_Funding) Late endorsement/support from government (OI1-IA4) (OI2-IP3) – national governments have tended to endorse initiative editions late in the preparation phase. Such condition delimits the support partners have to apply for funding early and the chances to develop influential strategies applied to the political realm early in time as well.

(#Methodological_Representativeness) Great demographical distribution of potential participants (OI3-IP1) (OI6-IP1) (OI10-IP1) – in some countries the population is demographically vast, so it becomes a challenge to recruit people from all the different societal segments. This is particularly the case in countries where there are numerous indigenous groups or ethnic minorities.

(#Methodological_Representativeness) Organisations' limited access to personal data of potential participants (OI5-IP1) – in some countries access to personal data of citizens is limited even if for research purposes. Consequently, the process of recruitment may be challenged because organisations have to find means to reach potential participants other than contacting them directly via email or post.

(#Methodological_Representativeness) Low availability of potential participants (FI3-IP6) (OI2-IP1) (OI11-IP1) – recruiting participants for the deliberation meetings or technology assessment events is a big challenge. At first there is the need to reach potential participants, then get positive replies from them, then select some based on the pre-defined demographic criteria selection and at last have them attending the event. Potential participants response tends to be rather low. Therefore, the whole process becomes a major challenge. For instance, in a relatively small country, Denmark, 5000 invitations are sent out aiming at 100 participants. Moreover, highly educated people tend to be available to participate while under-educated and socially privileged tend to not, so it is crucial to emphasize strategies to reach other groups of potential participants.

(#Methodological_Representativeness) Disinterest of social groups in the extremes ends of social spectrum (FI2-IA5) (OI11-IP1) – groups of people in society both at the very bottom and at the very top tend to not be motivated to participate in deliberation initiatives due to their life-style. Moreover, such groups are also characterised by high levels of illiteracy, including top executives who lack Internet skills.

(#Methodological_Representativeness) Geographical mobility barriers for potential participants (OI1-IP1) (OI2-IP1) (OI4-IP1) (OI6-IP1) (OI6-IP3) (OI7-IP1) (OI10-IP1) (MI-CT12) (MI-IP12a) – in sparsely inhabited or island-based countries, where WWViews meetings take place far away from potential participants residence, people find financial and logistical matters a barrier to their participation. The use of financial incentives and reimbursements may be an expensive strategy (bearing high transportation costs) adopted by organisers in such contextual barriers, in case the available funds allow though.

(#Methodological_Representativeness) Extraordinary mobility barriers for potential participants (FI3-IP5) (OI9-IP1) (OI8-IP1) – sometimes and predominantly in some particular countries people are confronted with mobility barriers due to, for instance, civil conflicts, war, natural hazards or

health-related factors. Such conditions limited the participants' acceptance of invitations to attend deliberation meetings.

(#Methodological_Representativeness) Low quality or no Internet connectivity (OI6-IP2) (OI6-IA3) (OI10-IP2) –reliable and fast Internet connection is not guaranteed in a range of countries across the world. This condition is particularly present in regions other than capital districts. Unreliable and slow Internet connection may compromise the progress of participatory activities dependent on online solutions.

(#Initiative_Outreach) Complex policies with very high stakes (FI2-IA2) – certain policies, such as climate change, are related to diverse areas of expertise, many different interests and wide range of stakeholders. Therefore, their negotiations and management is complex per se and so the integration of public opinions in the process is challenged. Such situation was witnessed in the first edition of WWViews, Global Warming, where no major policy measures were agreed at the COP15 although public opinion was for otherwise.

(#Initiative_Outreach) Organisations' potential association to political stances (OI4-IP1) – environmental issues, particularly climate change, tend to be highly controversial and marked by political discussions where different stakeholders stand for their interests and opinions on the matter. Organisations working with environmental issues are therefore possibly subject to association to a certain political stance (and so have their motives questioned) regardless of their intended neutrality in the participatory activities.

(#Online_Participatory_Methods) Studies on the impact of the Internet on deliberative democracy (FI2-IA5) – studies addressing online deliberative PP methods lack empiricism. The impact of the Internet on deliberative democracy has been an issue addressed, but its theoretical groundings are insufficient when adopting a practical approach in deliberative processes.

(#Online_Participatory_Methods) Open online public consultation methods (FI2-IA5) (FI3-IA5) – an online public consultation method where everyone is free to access and participate cannot ensure the proper representativeness of the opinions shared. Therefore, such methodological approach is not suitable for policy advice. Online public consultation methods do suit qualitative studies where the purpose is the collection (sampling) of diverse opinions but without estimating the representativeness of them in the society.

(#Online_Participatory_Methods) Quality of online deliberation (MI-FTD) – Ensuring the quality of online deliberation is paramount to guarantee their legitimacy. Online deliberation raise questions such as whether participants had access and made use of common informational materials, whether the discussion was conducted in a deliberative manner (everybody had the change to make their opinion heard, for instance), whether discussions took place for the same length for the different matters addressed along the whole (possibly one-day-long) online deliberation event and so on. These kinds of questions may compromise the acceptability of the outcomes of online debates.

(#Online_Participatory_Methods) Low quality of social media-based debates (MI-FTE) – online discussions may tend to become conflicting rather than constructive. The quality of the debate tends to decrease with the increasing level of personal confrontation among the participants.

(#Online_Participatory_Methods) Different outcomes from face-to-face and online deliberations (FI2-IA4) (FI3-IA5) (OI6-IA3) (OI9-IA3) – different means for deliberation potentially result in different outcomes that may well be understood and explained by participatory experts. However, such explanations are not easily communicable to policy makers and other experts and are potentially subject to misinterpretations, such as excusing arguments to justify the incongruent outcomes.

(#Online_Participatory_Methods) Low audio quality of Internet-based applications (FI2-IA5) – online deliberation among people is hampered by the low quality of audio in Internet-based applications. Such condition limits the natural flow of dialogue and so compromise understanding among the participants.

(#Online_Participatory_Methods) 2D visuals in Internet-based applications (FI2-IA5) (FI3-IA5) – online deliberation among people is hampered by the 2D visuals that do not allow participants to sense each other. Such condition limits the feeling of situated presence and the interpretation of body language. Therefore, it compromises the feeling of inter-personal relation and the understanding among participants when deliberating.

Annex 22 Quality of interviews

According to Kvale and Brinkmann, (procedural) quality criteria for a semi-structured interview may be listed into the following six points (2014, p. 192):

1. The extent of spontaneous rich specific and relevant answers;
2. The shortest interviewer's questions and longest subject's answers possible;
3. The degree to which the interviewer follows up and clarifies relevant aspects of answers;
4. The interview being interpreted throughout the interview;
5. The interviewer verifying his interpretations of the subject's answers along the interview;
6. The interview being "self-reported", hardly requiring additional explanations.

As argued by Brinkmann (Ibid.) meeting the last three criteria highly increases the quality of interviews and that tends to require craftsmanship and experience, as well as knowledge of the matter addressed and the interview techniques used. On the basis of the recordings of the interviews and retrospective reflections, the quality of the three sets of interviews is now analysed.

It might be said that *face-to-face interviews* met to a large extent the first five criteria. Although the length of answers varied depending on the topics addressed and the interviewees (revisit Annex 7 for reflections on the dynamics of the interviews), the interviewees tended to provide long rich answers. Moreover, the interviewer questioned the interviewees on points they made when those were ambiguous. Concerning the sixth criterion, the researcher finds difficult to evaluate how such interviews' reports would be understood by externals.

With regard to *online interviews*, the first two criteria were met at very different levels from interview to interview. Some online interviewees provided rich long answers while others, a small portion, were rather short on their descriptions. Nonetheless, the interviewer questioned interviewees about unclear or intriguing answers in several instances. Unlike in face-to-face interviews, the criteria four and five were not applied in online interviews in a continuous manner but still relevant for follow-up questions upon the reception of answers (sub-chapter 3.2.2).

Regarding *multi-person interview*, considering its workshop structure, the interaction between the interviewer and the interviewees was less frequent. Priority was given to the discussions between the two interviewees (sub-chapter 3.2.3). However, the first three criteria are here argued as met to a wide extent, while the fourth, fifth and sixth criteria were less present. That might have been the case due to the novelty and unstructured quality of the answers and comments emerging throughout the interview. Notice that a future-workshop structure (Annex 14) defined it.

Addressed the interviews' quality on the basis of Kvale and Brinkmann's suggestions (Ibid.), attention is dedicated to the quality of knowledge resulting from the conduction of qualitative research interviews. Matters of objectivity, reliability and validity are now discussed.

Objectivity. "[…] *reliable knowledge, checked and controlled, undistorted by personal bias and prejudice* […]", states Brinkmann (Ibid., p. 278). Aware of potential personal bias throughout this study, the researcher attempted to never share or impose his views concerning the matters addressed

on interviewees, even aside from interview events. Moreover, […] *objectivity may also mean reflecting the nature of the object researched, letting the object speak,* […], argues Brinkmann (Kvale and Brinkmann, p. 279). Particular attention in this regard was given in the characterisation of the initiative WWViews in the pre-analysis. It was there intended to let the object analysed speak freely, not constrain it. It was therefore why the interview data outcomes resulted in a long list of entries (Annex 21). Another conception of objectivity concerns […] *allowing the object to object.* [That is,] *when objects reveal themselves through acts that frustrate the researcher's preconceived ideas.* […]", states Brinkmann (Ibid., p. 279). In this study, being the initiative the object of study, this objects to some extent the integration of online solutions (e.g. issues of resource accessibility) as a means to bettering global public participation – a condition that was somehow not thought of by the researcher prior to the conduction of the study. In that line, allowing the initiative to object contributed for the production of more objective knowledge in this study. Matters of reflexive objectivity, in the sense of reflections about the researcher's influence in the production of knowledge in this study, are shared in the Annex 24 Thoughts on self-reflexivity.

Reliability. "[…] *whether a finding is reproducible at other times and by other researchers*", states Brinkmann (Ibid., p. 282). Having its origins in natural sciences, such criterion is of less applicability in social science, particularly in the context of interviews where their time-space environment very much determined its outcomes (Ibid.). It is here argued that the outcomes of the interviews conducted in this study would hardly be reproducible. After all, interviewees' reflections in another round of interviews would have this study as a background. Nevertheless, consistency and trustworthiness of the outcomes of this study was attempted by avoiding unintended leading questions in the interviews that could influence the interviewees' answers. Moreover, the process of coding and categorisation of the empirical data was conducted in a transparent way and transcriptions were not conduct but instead access to raw data is provided upon request and consent from the interviewees.

Validity. "[…] *truth, the correctness, and the strength of a statement. A valid inference is correctly derived from its premises* […]", argues Brinkmann (Ibid., p. 282). Aware of that the researcher attempted to not only ensure validity of the interviews' outcomes by interviewing practitioners most directly associated to the initiative, shape interview methods to the interviewees' circumstances, and conduct logic interpretations of the data, but also questioning on validity throughout the whole research study. From the definition of problem statement based on literature research, to the moment of reporting outcomes in congruence with the data collected and research conducted so far. Furthermore, validity of interview analyses could be attained by presenting them to the interviewees. That way, the researcher would give the opportunity to interviewees to correct interpretations, and so validate the research outcomes. After all, the analyses are on phenomenological descriptions of the initiative in the view of the interviewees. Such was not possible due to the limited time between analyses and reporting. Validity was however also sought through questioning on researcher's assertions by the supervisor of this thesis. Had other researchers provided further feedback, the validity of the analyses would be solider.

Annex 23 Ethical implications of interviews

> We believe that qualitative researcher should primarily cultivate their ability to perceive and judge "thickly" (i.e. using their practical wisdom) in order to be ethically proficient, rather than mechanically follow universal rules (Kvale and Brinkmann 2014, p.90).

It was based on Brinkmann's advice above that ethical issues in this study were sought to be reflected upon before and throughout the interview inquiry. Relatedly, the following ethical protocol was adopted in line with Kvale and Brinkmann (2014, p. 99).

- *Informed consent:* the purpose of the investigation, main features and possible risks and benefits are known by the interviewees. They are aware of their right to withdraw and information about confidentiality and who will have access to the interview is shared beforehand. Interviewees have access to transcriptions and analyses, and they know what information about the study is shared and when.

- *Confidentiality*: private information from participants is not disclosed and there is the possibility to use anonymity to protect the participants.

- *Consequences*: it is sought that benefits for the participants and knowledge acquired outweigh the risks for the participants.

- *Role of the researcher*: researcher shows empathy, sensitivity and commitment to moral issues and action, as well as awareness of ethical rules and principles. The researcher reports accurate findings, which are submitted to validity. There is transparency in what procedures are used to reach results.

In the light of these ethical considerations, the three interview methods are analysed below. The nature of the data gathered through the interviews did not concern sensitive matters. However, aspects of informed consent and confidentiality were stressed.

Face-to-face interviews. All interviewees were informed about the study and interview's process (prior and in the interview [Annex 6]) and they all agreed on the conditions shared by the researcher. In this case, confidentiality of interviewees was only assigned upon request. No interviewee demanded such but required that quotes would be subject to validation. For the purpose of this thesis and due to limited timing between the conduction of analyses and reporting, interview analyses were not presented to the interviewees for validation. However, that shall happen for the purpose of public academic publications concerning this study.

Online interviews. Here interviewees were always informed via email. First concerning the nature of the research study (Annex 10). Then (Annex 12), with their consent to go further in the interview process, that their written answers would be only accessible by the researcher and evaluators of this research project, as well as remembered that outcomes of analyses of their answers would be made available to the public through academic publications and alike. In order to attend online

interviewees' privacy, all of them were asked (Annex 12) to direct their attention to the privacy and security policies of the website where the interview form was available and replied through. Moreover, their anonymity was adopted by default and so explicit reference to the identity of interviewees in the analyses or discussion was only done with prior approval from the interviewees concerned. In the online interviews the role of the researcher was slightly challenged by the absence of physical proximity. The researcher often found himself confronted with the dilemma of requesting further attention of the interviewees to the interview form or allow them more time to reply.

Multi-person interviews. The participants of this interview had already participated in the face-to-face interviews and the ethical approach was exactly the same for informed consent and confidentiality of participants. However, the researcher made sure that informed consent was sought once again and confidentiality matters were refreshed (Annex 15).

Annex 24 Thoughts on self-reflexivity

The following reflections shed light on the researcher's own subjectivity in this study.

Research endeavour. This study emerges from the researcher's intention to contribute for a better world. In his view, exploring how online solutions can influence public participation in global environmental governance may contribute with new knowledge that positively affects society globally. It is his belief that the social contributions of the study (Kvale and Brinkmann 2014, p. 84) lay on bringing up new forms of participatory practices that, primordially, can support effective environmental governance and contribute for a more democratic global society. Nevertheless, as referred by several ethical thinkers "*The road to hell is paved with good intentions*" (unknown author). Exploring new forms of participatory processes with the integration of online solutions can result in contributing for the solidification of political power structures in global governance, for instance, and so preclude the intentions of this study. As it has become evident through the recent NSA scandal triggered by Edward Snowden, the Internet may well serve for purposes other than those intended by the public and weaken the fundamental principles of democracy in society. Bearing that in mind, the researcher attempted to conduct this study not leaving aside arguments associated to the negative implications of online public participation for the global society. Furthermore, the conduction of this study was also shaped by the researcher's background. Of particular relevance is his academic background in computer science and telecommunications engineering. That can possibly explain his personal interest and awareness of information and communication technologies. This condition may also have affected the pragmatic and solution-oriented focus in this research. With a background in computer science, the researcher tended to adopt logical rationale and be oriented to the end results of practice. Relatedly, the professional background and life experiences of the researcher in developing countries both in central Asia and Sub-Saharan Africa, as well as entrepreneurial enterprises certainly shaped the research formulation and conduction.

Research methods. The roles of interviewer and researcher in this study were both taken by the author of this text. If on the one hand the analyses of interviews were facilitated by the inter-subjectivity (relation) between the researcher and the interviewees (Beitin 2012), adopting a more neutral role as an interpreter was challenged by the relationship created between the two parts. Of particular relevance is the fact that both researcher and interviewees took part in common conferences prior and post interviews, but all before interview analyses. With regard to the conduction of interviews, it is important to reflect on the contingency of such events. After all, the outcomes of those depend on the researcher's presence itself. As reported in the Annex 7, the dynamics of face-to-face interviews varied. Much of that was due to the dynamics between the interviewer and interviewees. Relatedly, the outcomes of the multi-person interview were fundamentally originated by the intervention of the researcher in the field. Aware of his interventionist role, the researcher attempted to direct interviewees' conceptualisations to the least possible though. Concerning online interviews, it is worth mentioning that the persistence of the researcher in obtaining replies may have determined the ultimate participation or absence of some partners in this study.

Annex 25 List of online solutions

Below is presented a complete list of online solutions that were suggested in the interviews. For the purpose of helping navigation in the report text, each entry below is tagged (preceded by an hashtag [#]) with a theme that the entry is associated to in the sub-chapter 4.2 'Interview Data Outcomes'.

(#Online_Participatory_Methods) Hybrid micro meetings (MI-FT12) (MI-IP12a) (MI-IP2a) (MI-IP12b)– small number of participants come together, face-to-face, to take part in a WWViews micro meeting being supported by a web-based computer program and guided by a facilitator online. The agenda flow and main features of the WWViews micro meeting would be the same as in centralised WWViews meetings.

(#Online_Participatory_Methods) Intelligent computer system to collect public issues (MI-FTA) – a computer system that collects information automatically from the web could help mapping what issues are most relevant and what questions are to be addressed in public consultations.

(#Initiative_Promotion) Social media promotion (OI9-IA3) (MI-FTF) (MI-IPF) – the increasing number of users of social media makes these platforms an attractive means to promote the initiative, particularly when running recruitment campaigns to attract potential participants. Social media platforms may well be used to promote online initiative activities (online debates, crowdsourcing, etc.) and disseminate the outcomes of WWViews meetings among the general public in order to raise awareness about the issue addressed. Such solutions require resources to start it up and, most importantly, to keep it up.

(#Initiative_Funding) Online crowdfunding websites (MI-FT2) (MI-IP2b) (MI-IP2c) – more funding can be attained by partnering with crowdfunding companies and/or running funding campaigns in their websites so that individuals can fund initiative editions. This is seen as an opportunity due to the wish for democracy in many countries.

(#Methodological_Representativeness) Computerised recruitment module (MI-FT14) – automating the recruitment sample so that partners could easily find who is to be recruited for the WWViews meeting in order to seek proper representativeness. Such module would allow partners to know what people and how many are to be recruited (output) on the basis of the DBT-defined demographic criteria and their national demographic statistics (inputs).

(#Online_Participatory_Methods) Online debates for participants (FI2-IA4) (MI-FT7b) – framed as a method itself, a second round of debates take place online where WWViews participants come together to discuss the results of the WWViews meeting. The purpose is to comment and better understand the results and raise new questions concerning the interpretation of the outcomes at national and global levels. These online debates was not idealised as serving as a WWViews meeting with the purpose of presenting public opinions to policy makers.

(#Organisational_Learning_Contexts) Online discussion forum for partners (OI6-IA2) – the WWViews web tool used in the two first editions provided a channel of communication between

the DBT and partners, particularly for the transference of files between them. However, communication among partners was not very supported. An online discussion forum for partners could aid partners' work development by having them sharing knowledge, ideas or suggestions, especially when facing barriers.

(#Initiative_Funding #Initiative_Outreach) Online debates for stakeholders (MI-FT6) (MI-IP6a) (MI-IP6b) – key decision-makers and other important stakeholders could take part on online debates where the results of the WWViews meetings are discussed. This solution could support the diversification of funding sources due to the increase in awareness of potential funding partners about the initiative's relevance. Making such kind of debates stand out among the many COP-related activities and events represents a challenge though.

(#Methodological_Representativeness) Representation of participants processed digitally (MI-FTC) – WWViews participants could anonymously use a program to introduce their demographic characteristics and their voting answers so that it becomes possible to weighing representation of results. That is, to mathematically extrapolate the results of the WWViews meeting to the national level. Such exercise also allows better understanding of the results by having insights into how certain demographic segments answer certain questions.

(#Initiative_Outreach) Expert webinars before negotiation events (FI2-IA5) - between WWViews meetings and negotiation events there is the possibility to run webinars where experts discuss the public opinions. Such webinars could be made accessible to the general public and policy makers as well, and so serve as communication channels between the initiative meeting and the negotiation event.

(#Online_Participatory_Methods) Online debates for non-participants (FI2-IA4) (MI-FT7a) (MI-IP7a) – upon the WWViews meetings, groups of non-participants (e.g families, students) could come together online to run (short) debates where the topics addressed in the meetings would be discussed. The intent of this solution is to raise awareness of the public about the matters at stake, as well as serve as educational means to increase public understanding of the policy issues. Such solution is seen as a contribution to national partners' objectives.

(#Online_Promotional_Solutions) Online demonstration solution (MI-FT3) – an online simulation application that allows users to experience the process of WWViews in order to make them acquainted with the initiative and its method. Users experience deliberation events online just as the face-to-face method. Such solution could be attractive for introducing potential sponsors, collaborators and partners to the initiative for the first time.

(#Online_Promotional_Solutions) Online advertising dedicated to online activities (MI-FT4) – Online adverts promoting online activities related to the initiative, such as online demonstrations and online stakeholder debates. Such online ads could be integrated in a sponsor strategy to increase the level of both funding and outreach.

Annex 26 Hypothetical Hybrid Micro Meeting

In order to better illustrate how a HMM may happen, here follows an abstract example of the sequence of events in a hypothetical WWViews edition in the perspective of participants. Understanding this example requires familiarity with the concept of WWViews meetings (sub-chapter 3.1.1). This is an optimistic scenario.

Imagine that a WWViews meeting is taking place in few months. Several citizens in a town are aware that attending that WWViews meeting elsewhere would be infeasible and so they register online for a HMM. Two weeks before the WWViews meeting day, those citizens received in their email and post-box an informational booklet and a HMM guide. Until the WWViews meeting day, citizens have the chance to study the materials in order to make themselves familiar with the topics addressed and the procedures to follow in the HMM.

Two weeks later those citizens come together in a venue defined in the HMM guide (say, a group room in the town library with access to computers connected to the Internet). Those citizens are then the group of participants of that HMM. Following the guide, the citizens start the HMM computer program. The HMM program, through a virtual personal guide, introduces them to the agenda and procedures to be followed (a reminder of what was stated in the HMM guide). In the next moment, the virtual guide introduces participants to a get-to-know task and a moderator establishes online connection for this pre-session. For a few minutes, participants and moderator interact in order to get familiar with each other. Passed the few minutes, the virtual guide announces the end of the pre-session.

With the approval from the moderator, the virtual guide announces the beginning of the first session and the first informational video is played in the computers. The HMM proceeds with the deliberation among participants about the key topic addressed in that first session. The moderator online facilitates the discussion. Based on time stipulated for deliberation, the virtual guide announces the end of the deliberative phase and, with the approval of the moderator, it introduces the participants to the voting phase. Once all the participants have submitted their voting answers digitally within the time period pre-defined, the virtual guide announces the successful submission of the votes.

The HMM continues with the second session following the steps specified in the previous paragraph. At any end of the second session, for instance, based on the HMM guiding procedures, the HMM is suspended and so the HMM continues in the next day. In the following day, citizens come together again and launch the HMM computer program. The virtual guide welcomes then and upon establishing connection with the moderator online, the third session starts and follows the steps described in the paragraph above. At the end of the fourth session, the virtual guide announces the national results to which the HMM contributed too and recognises participants efforts for the last two days.

This is the end of the hypothetical example.

Annex 27 Speculative influential aspects

The following list of entries mostly presents organisational and methodological aspects that have the potential to influence the development and integration of online solutions in the initiative WWViews. The list is not thorough. The arguments here stated are derived from the interviews with an essence of speculation associated. That is, these statements are to be considered as author's reflections and not direct outcomes of the interviews – interviewees' statements – or literature.

Positive influence

DBT experts reactive to external environment (FI1-IC1) (FI2-IC1) – the initiative idea was considered due to the felt need to react to the realisation of the COP15 in Copenhagen. Alongside a global consultation, other initiatives of different dimensions were discussed as a potential response to the external environment in which DBT runs its activities.

Entrepreneurial experts at DBT (FI1-IC1) (FI3-IC1) – the idea firstly proposed by the DBT's director was discussed with two project managers, Bjørn and Søren. Together they three have accepted the challenge despite of its novel nature, particular global dimension, and risks and uncertainties associated to it.

Partners' entrepreneurial spirit (OI1-IC1) (OI2-IC1) (OI3-IC1) (OI6-IC1) (OI7-IC1) (OI9-IC1) (OI11-IC1) (OI8-IC1) (OI8-IC1) – the novel facet of WWViews has attracted partners willing to engage themselves in running a new method at a global level for the very first time. Partners are keen on not only contributing to global initiatives but also learning new methods and techniques that may support their own other activities.

Centralised decision-making at DBT (FI1-IP1) (FI2-IP5) (OI1-IA4) – Although partners and citizens were engaged in the design of the initiative, most decisions were centred in at the DBT. The exclusion of the fifth session (recommendation) at the second edition is an example where several partners were for it, but DBT was not for it. Such approach makes decision-making a faster process.

DBT recognised by organisations as experienced TA organisation (OI4-IC1) – the extensive experience of the DBT in TA activities is recognised by organisations. Such condition supports the engagement of organisations in initiatives introduced by the DBT.

Unidirectional participant testimony videos (FI1-II4) (FI2-II4) – videos reflecting participants' opinions about the initiative event are not corresponded by videos from the target audience of the documentary (sponsors, policy-makers, partners, etc.). Such feedback videos could inform participants about audience's opinions on the initiatives' events.

Countries running PP activities for the very first time (FI2-IP7) – the fact that some countries introduce themselves to PP activities through global initiatives enhances the relevance of the initiative and may trigger the interest of other countries with no experience in PP.

Organisations interested in working with environmental issues (OI1-IC1) (OI3-IC1) (OI4-IC1) (OI6-IC1) (OI10-IC1) (OI10-IA3) – the political attention dedicated to environmental issues and the pervasiveness of such matters make several organisations willing to further develop their work in that area.

Established national organisational networks (OI11-IC2) – the concretisation of the initiative in previous editions allowed the establishment of national organisational networks, which may foster the development and realisation of future initiatives.

COPs taking place in the coming years (FI1-IA5) – COP21 on Climate Change in Paris in 2015 and COP on Biodiversity in 2016, are two example of international negotiation venues where the initiative can contribute to by bringing in public opinions and so widen the scope of knowledge of the decision makers.

Cultural norm-based women depravil (OI9-IP1) (OI10-IP1) – women sole attendance of public events is not considered acceptable according to certain cultural norms in particular countries across the world. Consequently, women are deprived of attending WWViews meetings by themselves and so motivated to be accompanied by male relatives. This condition, in a western-minded view, challenges not only the representativeness of the participants, but also the independent contribution of the female participant to deliberations.

Negative influence

Centralised decision-making at DBT (FI1-IP1) (FI2-IP5) (FI3-IP1) (OI5-IC2) – Although others were engaged, most decisions were centred in at the DBT. An example is the non-presence of experts in the deliberation, which was defended by DBT, and object of much disagreement in discussions with partners. Such approach hampers, for instance, consensus among partners.

Organisations' doubts (scepticism) about online PP (OI1-IA3) (OI2-IA3) – partners question the applicability of online solutions in PP and find no answers to what the advantages are and how to mitigate the disadvantages associated to such solutions.

Few studies on online PP methods (FI2-IA5) –there are few studies addressing online PP methods. Hence, experimental projects and related studies have associated high levels of risk and much uncertainty that may demotivate potential supporting and interest parties.

Media criteria for covering news (OI11-IP3) – media coverage is used as a means to communicate the initiative's purpose and outcomes to the general public and decision-makers. However, news tend to be of interest to the media if respecting certain criteria such as being novel, dramatic, regarding conflicts, personalities, etc.

Raising public awareness measurement (FI1-IA3) – no instruments are in place to allow measuring the level of public awareness raised by initiative events. It is argued that the primary purpose of WWViews is not raising awareness of the public.

Annex 28 Practice implications

For a sustained progress of PP in GEG, on the basis of this study, future practice of PP ought to dedicate further attention to the different cultures of PP practices when realising global initiatives. Failure to account such condition may compromise the expansion of initiatives and so their intended global reach.

Also, the practice of PP ought to devote further attention to the potential associated to online solutions considering their capacity to counterbalance weaknesses intrinsic to face-to-face participatory processes (e.g. representativeness) and to expand PP beyond geo-political boarders. Nevertheless, limitations concerning the Internet ought to be born in mind and democratic principles ought to guide practitioners' efforts.

Annex 29 Recommendations for future research

A possible step further in this study would be conducting an experiment where the online solution HMM was further designed and materialised. Such exercise could capitalise on the analysis outcomes of this study, validate their applicability in practice and identify other criteria ought to take into account in the integration of online solutions in participatory practices.

In this study the conceptualisation of potential online solutions to address weaknesses of WWViews was performed by organisers of the initiative. Considering the vital role of partners and the immense pool of knowledge they provide, future research studies could explore online participatory design methods to give rise to potential online solutions conceived by partners. Relatedly, user-driven approaches could be embraced to run studies where participants themselves conceive new participatory processes. Such endeavours could be of much value for the development of global participatory practices.

This study excluded the exploration of several online solution concepts (Annex 25) that emerged throughout the research. Those were not included here due to the focus on particular weaknesses. However, they may serve to overcome some problems associated to participatory practices. Therefore, future research exploring their potential could return valuable outcomes.

Additionally, bearing in mind the unequal global access to online public participation, researching novel dedicated concepts of participatory processes could offer fairer solutions. Dedicating more attention to the field of e-Participation, particularly studies addressing mobile public engagement, could turn out fruitful.