

## Appendix 1: Methodology Interviews

### ***A1 Sampling Strategy***

Creswell noted that in qualitative research, “the intent is not to generalize to a population, but to develop an in-depth exploration of a central phenomenon”, which is best achieved by using purposeful sampling strategies (2005:203). A random sampling strategy would be inappropriate for the exploration of the central phenomenon of this study because the purpose here is not to generate a representative sample and then generalize the results to other coordination mechanisms or other contexts, but rather to learn from people who are 'information rich' and can best help to understand the specific interest of this research, UN-Water and its role in GWG.

For the expert interviews, a sampling strategy has been chosen that combines elements of the maximal variation and snowball sampling procedures. The snowball strategy is a form of purposeful sampling in qualitative research that “typically proceeds after a study begins and occurs when the researcher asks participants to recommend other individuals to study” (Creswell 2005:206). The researchers' initial unfamiliarity with the topic and the complexity of the central phenomenon at hand were the decisive factors behind the choice for the snowball approach. The sampling process was initiated by an independent expert who was not interviewed, but exclusively served as 'trigger' to get the different snowballs rolling (c.f. Figure A1).

However, once this process was underway, it needed to be steered in certain directions in order to give voice to experts from different backgrounds who might have different perspectives on the central phenomenon. The maximal variation approach allows for obtaining this diversity and thereby accounting for the complexity of the problem at hand. It is “a purposeful sampling strategy in which the researcher samples cases or individuals that differ on some characteristic or trait” (Creswell 2005:204). The characteristic of interest here is the expert's perspective(s) on UN-Water, which can basically fall in one or several of the four categories listed below<sup>1</sup>:

- *Members*: experts of UN-Water member organizations.
- *Partners*: experts of UN-Water partner organizations.
- *Affiliates*: experts working for UN-Water or one of the affiliated programs.
- *Observers*: GWG experts with no direct organizational link to UN-Water.

After consideration of the limited time availability for the research process of this MSc thesis and the relative weight of the expert interviews in relation to the literature and document review, a sample size of a total of ten interviews, each between 30 and 45 minutes, has been deemed appropriate.

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<sup>1</sup>This categorization is of course not mutually exclusive but it is exhaustive for the experts under consideration (people who are unfamiliar with UN-Water are not considered as experts here).

## **A2 Data Collection and Sample Size**

Several data collection methods exist in qualitative research and interviews are among the best suited and most commonly used instruments (Kumar 2005; Nohl 2009). Kumar noted that “[o]n one hand, interviewing can be very flexible, when the interviewer has the freedom to formulate questions as they come to mind around the issue being investigated; on the other hand, it can be inflexible, when the investigator has to keep strictly to the questions decided beforehand” (2005:123). A number of approaches can be distinguished on the spectrum between the two extremes of improvisation and determination but the one thing they all have in common is the fact that they do not give any specifications or limit the participants' freedom in answering the various interview questions.

For the exploration of the central phenomenon of this research, a semi-structured anonymous interview design with open-ended questions was deemed most appropriate. This choice was based on the following considerations:

- The semi-structured design gives the participants ample time and scope to express their diverse views and allows the researcher to react to and follow up on emerging ideas and unfolding events (Nohl 2009).
- Results obtained through semi-structured interviews can be compared among each other since all participants are required to express their views about the same general themes (Nohl 2009).
- Semi-structured interviews allow not only for assessing the participants' opinions, statements and convictions, they also allow to elicit narratives about their personal experiences (Nohl 2009).
- Open-ended questions allow the participants to freely voice their experiences and minimize the influence of the researcher's attitudes and previous findings (Creswell 2005).
- Anonymity was guaranteed in order to give the participants the opportunity to freely express their views and encourage them to also address politically delicate issues.

A list of guiding questions was compiled and used to guide the expert interviews in order to make sure that all respondents address in the interview process the issues that are of interest for this study. However, this list was not used for standardizing the data collection procedure, it merely provided a frame for the discussions and was intended to trigger and guide the experts' narratives.

Contact to experts was initiated with a personalized email request for a recorded, anonymous phone interview with a short description of the research purpose and central phenomenon attached. Interviews were then conducted individually over the phone<sup>2</sup>.

While phone interviews allow for a great flexibility in scheduling the different conversations, a drawback of this technique is that the researcher cannot get in direct contact with the participants. Creswell noted that this can cause “limited communication that may affect the researcher's ability to understand the

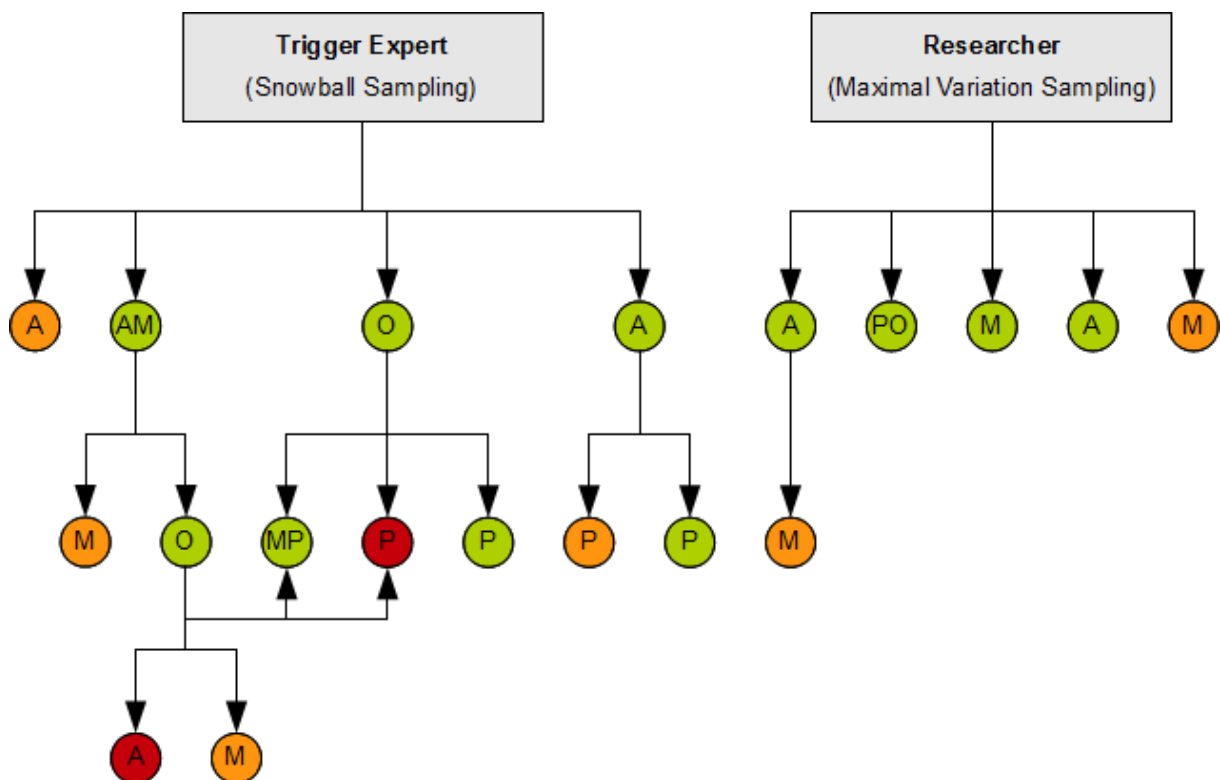
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<sup>2</sup>The researcher's approach to the semi-structured interviews was inspired by and largely consistent with the procedures described and recommended by Nohl (2009).

interviewee's perceptions of the phenomenon" (Creswell 2005:216). The geographical dispersion of the participants and their tight schedules, however, rendered a more intimate, face-to-face setting impossible.

In order to minimize the costs and facilitate the recording of the conversations, the researcher used 'Voice over IP' (VoIP) technologies for the interviews. The quality of the recorded conversations was generally good, only in one instance did minor connection issues arise which slightly exacerbated the transcription process but did not adversely affect the quality of the transcribed data.

Figure A1 Snowball and maximum variation sampling process.



The letters correspond to the different expert perspectives (O = Observer; M = Member; P = Partner; A = Affiliate). Green dots represent experts who have been interviewed, orange dots stand for experts who were contacted but did not respond to the interview request and red dots represent experts who were recommended by interviewees but not contacted by the researcher because of an over-representation of their respective perspectives.

Over a period of four weeks, a total of 17 interview requests have been sent out to various experts, using the sampling technique described in the previous section and illustrated in Figure A1. A total of 11 interviews with an average duration of 44 minutes and median length of 36 minutes were then conducted over a period of seven weeks. This corresponds to a relatively high response rate of 65 percent. Out of the 6 experts who did not respond, 4 were working for UN-Water member organizations. Consequently, the researcher had to intervene in the snowball

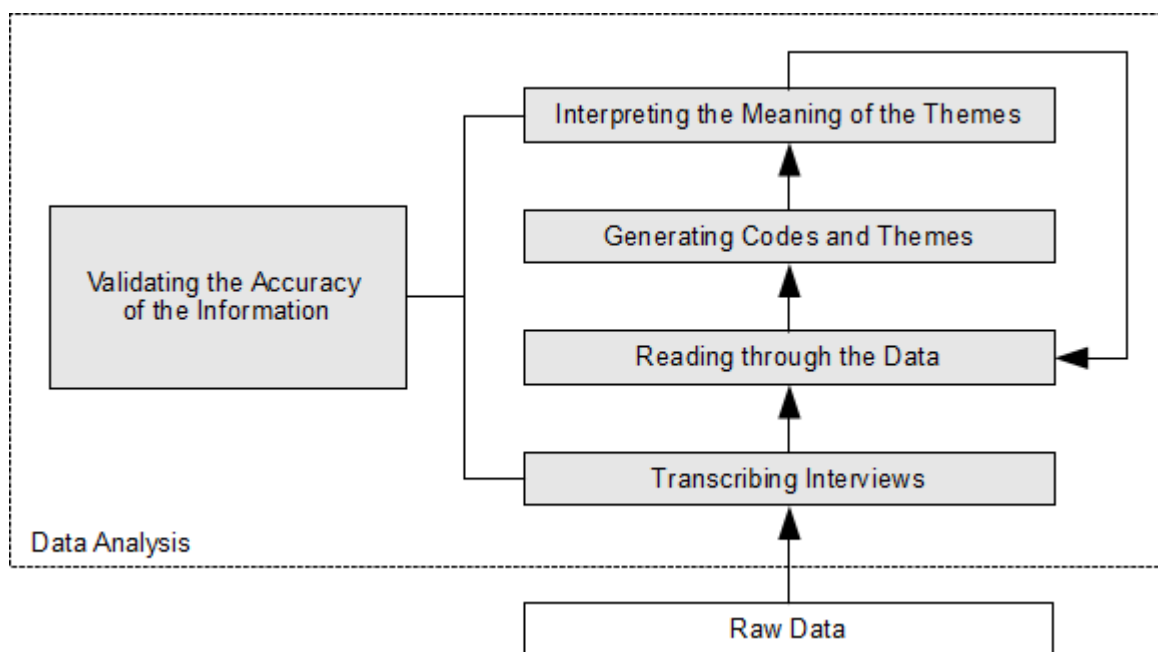
sampling process on several instances in order to assure a certain balance of observer, member, partner and affiliate perspectives. Considering the fact that some experts were able to provide different perspectives, the final ratio of observer: member : partner : affiliate perspectives was 3:3:4:4. It can thus be said that a reasonably good balance between the four perspectives has been achieved. The ratio of female to male participants is 3:8 which mirrors the unfortunate underrepresentation of women in senior UN and other GWI positions.

Figure A1 illustrates the two strands of the sampling procedure, the number of experts contacted and interviewed and their respective perspective(s) on UN-Water.

### **A3 Data Analysis and Interpretation**

The analysis of the interview data followed a simplified version of the general steps of qualitative data analysis described by Creswell (2009). This generic procedure is illustrated in Figure A2.

Figure A2: Steps of qualitative data analysis (adapted from Creswell 2009:185)



The individual steps of this procedure are listed and described below:

1. *Transcribing Interviews*: all relevant parts of the recorded interview data were transcribed from an audio to a text format.
2. *Reading through the Data*: in order to get a general sense of the overall meaning of the data, all transcribed interviews were read through. This in-depth lecture provided the cornerstones for the identification of relevant codes and themes.
3. *Generating Codes and Themes*: coding can be defined as “the process of organizing the material into chunks or segments of text before bringing meaning to information” (Rossman & Rallis in Creswell 2009:186). These segments are then labeled with terms that describe the data on different levels of abstraction. Three

such levels have been defined in the course of this data analysis, namely sub-codes, codes and themes (see Table A1. The coding process of this study was facilitated through the assistance of specialized computer software for qualitative research<sup>3</sup>.

Creswell notes that while “the traditional approach in social sciences is to allow the codes to emerge during the data analysis”, it is often helpful to use predefined codes “that address a larger theoretical perspective in the research” (2009:187). The coding procedure for this thesis used a combination of predefined and emerging categories and accordingly, the process of coding was iterating and non-linear. Categories at the highest level of abstraction, called themes, were deduced from the central phenomenon and the research questions. The intermediate level of abstraction contains codes which were derived both from the research questions and the theory of nodal governance. The sub-codes at the lowest level, finally, emerged during the process of data analysis. Table A1 shows the final coding structure and hierarchy.

4. *Interpreting the meaning of the themes:* According to Creswell, “qualitative research is interpretative research” (2009:177). After having structured and presented the interview data, the researcher interprets the meanings of the coded data against the backdrop of “her or his own culture, history and experiences” and compares these findings “with information gleaned from the literature or theories” (Creswell 2009:189).

The four steps of data analysis described here represent ideal abstractions. In practice, qualitative research procedures do not always follow this strict hierarchy as there is considerable iteration between the different stages throughout the research process (Creswell 2009).

The validation of the accuracy of the research findings, finally, occurs throughout the different steps of the research process (see Figure A2).

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<sup>3</sup>A 30-day trial version of MAXQDA was used for this study.

*Table A1: Coding structure with themes, codes and sub-codes. The right column shows the number of text passages assigned to each sub-code.*

<b>Themes</b>	<b>Codes</b>	<b>Sub-Codes</b>	<b>Total</b>
UN-Water	Mentalities	Participation	21
		Cooperation and Communication	30
		Inter-org. and Personal Relationships	22
		Conflict and Controversies	13
	Resources	General	15
		Financial	20
		Human	4
	Technologies	Tools	21
		Channels	11
		Scope	15
	Structures	Status in the UN	31
		Governance Structures	38
		Mandate	24
Discourses	General	Influence	37
	Water and Climate Change	Necessity to Act	13
		Problems	14
		Activities	27
		Recommendations	6
	IWRM	Necessity to Act	12
		Problems	20
		Activities	18
		Recommendations	24
	UN-Water in GWG	Role	Role Model

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