Accountability in transgovernmental networks

Osch, D.A.G.T. van

CHAPTER VII

WENRA; a case of a participant governed harmonisation network

7.1 Introduction

In this chapter we will address the accountability type of a participant governed harmonisation network. The function of the network combined with the governance structure we expect will lead to a predominance of political accountability. Political accountability is defined as a vertical relationship between an actor answering to a forum in which the source of control is external and the degree of control over actions is low. This type of accountability has a strong emphasis on responsiveness. This is assessed based on results of administrative performance. We will assess the credibility of our expectation by analysing the network Western European Nuclear Regulators Association (WENRA). This network operates within the domain of nuclear safety. This involves protecting people and the environment from nuclear waste, and radiation levels. The network's objective is to establish a harmonised and implemented SRLs among all participating organisations. The necessity to create a network regarding these subjects arose partly because of the inclusion of nuclear safety in the enlargement criteria for the European Union[14].

The network itself is structured as a participant governed network. This means that the networks' activities are prepared for and carried out by the participants of the network. It relies heavily on the input of participants and has no full-time positions that perform administrative or support staff tasks. Regulatory bodies of European Union member states, and third countries partake in the work of the network. The heads of the regulatory bodies convene twice a year for the general assemblies, but the day-to-day operations occur in the smaller working group or even sub working group settings. The work of the participants thus determines the advancement of the network. After we have directed our attention to the history of the network, we will discuss the organisational structure of the network in further detail.

The function of the WENRA network is harmonisation. This means that the majority of the tasks performed by the network are directed at the creation of benchmarks or standards within a specific policy area. Both the setting of new standards and the implementation of these are emphasised in the work of WENRA. Although the network cannot force regulatory bodies to comply, the harmonisation aspect is very much emphasised as the goal. This is particularly visible in the working groups operating within the network structure. For example, as mentioned the network is involved in the creation of safety reference levels (SRLs). The working group Reactor Harmonization Working Group (RHWG) reviewed the SRLs as a result of the Fukushima accident. It produced revised standards in 2014 and has since conducted a pilot study to see whether two specific SRLs worked as designed. This refers to whether they were implemented as intended. In addition, the experience regarding implementing these SRLs concerning safety improvements were assessed (WENRA RHWG,

14 In 1997 the European Union published the Agenda 2000. This outlined the importance of nuclear safety as well as a timetable when action should be taken to upgrade or decommission nuclear reactors. This had direct consequences for the accession of new member states in particular Bulgary, the Czech Republic, Hungary, Lithuania, Romania, Slovakia and Slovenia.

November 6th 2019). As such it is developed as part of an operation to create a harmonised approach to nuclear safety. This activity is tied in with the main objective of WENRA to develop safety standards (WENRA a, n.d.), but it is far from the only activity. The reason for considering WENRA an example of a harmonisation network will be explained further.

We will discuss the function of the network after we have addressed both the history of the network and the governing structure of the network first. Given our expectations we would need to find that this type of network would yield towards political accountability. This is because we expect this type of network to has a potential of a larger policy boundary shift resulting in an external type of control. In addition, due to the fact that the organisation is less formalised than for instance a lead organisation or network administrative governed network would be, the control over actions of the network will likely be low. By making use of the table 4.7 of distinguishing features for this type of accountability we will go through the different aspects of the relationship.

We will assess this by means of the distinguishing features for each accountability type, as presented in the methodological chapter. To simplify this, we will focus on three questions: To whom is accountability given? On what is accountability given? And how is account given. These three questions will form the systematic structure to our assessment of the accountability type present in this network. Moreover, they form the basic structure to the table 4.7 which specifies the distinguishing features of each of the four accountability types.

7.2 Background of WENRA

The organisation was established in 1999. It emanated from already ongoing informal meetings of the heads of regulatory bodies on nuclear safety. The founding members were Belgium, Finland, France, Germany, Italy, the Netherlands, Spain, Sweden, Switzerland and the United Kingdom. The second reason for the inception of the organisation, the inclusion of nuclear safety in the enlargement criteria, offers the organisation its right to exist. The enlargement of the European Union with members stemming from the former Soviet Union[15] increased the attention to nuclear energy, as nuclear plants in the new member states were Soviet designed (Axelrod, 2006). In preliminary talks discussing enlargement criteria the dossier of nuclear energy was also discussed. At that time there were no European wide safety levels. As the enlargement with 10 new members predominantly from the former Soviet Union was considered, the safety of the nuclear reactors there was a point of discussion. The process that followed was explained by one respondent:

> "Every country had its own safety requirements. But at that time the regulatory bodies of Europe were asked to come together. This in order to come to a list of requirements where the nuclear reactors could be tested on, in light of entry to the European Union.

15 Or from the sphere of influence of the Soviet Union.

> They [regulatory bodies] made that list and presented it to Europe. I later looked up that this was presented in the Working Party Nuclear Safety. This workgroup was part of the Atomic Questions Group, an institute of the European Council. (..) What is important is that due to this process the regulatory bodies of Western Europe came together. When the initial list was made the question arose regarding not having harmonised rules and requirements across Europe. At which point we thought, well we already have sort of a group. We should continue on this path." (Respondent WENRA I).

The respondent reflects on the establishment of the network as an almost natural development. However, what is also clear is that in the early years, before WENRA essentially was WENRA as a formalized organisation, is the European Union's involvement. The particular position of the European Union regarding nuclear energy should be considered when discussing the existence of WENRA. As stated, the right to exist is derived from this position. Although included in enlargement criteria and court ruling confirming the European Commissions' responsibility, the expansion of European Commission's capacities in the field of nuclear safety did not occur. This is due to consistent reluctance of member states of Commission intervention (Heidbreder, 2011: 127). This in turn can be traced back to the foundation of the Euratom Treaty. This treaty signed in 1957 made a distinction between 'radiation protection' and 'safety of radiation sources'. This distinction laid responsibility for the former with the European Commission whilst the latter remained the exclusive responsibility of the member states (Alvarez-Verdugo, 2015). This meant that the environmental and health issues for European citizens stemming from nuclear radiation were considered part of the Commissions' competence, whereas the safety of plants with regards to radiation, remained a prerogative of member states. The Chernobyl disaster of 1986[16] seemed to usher in a review of the competences. This disaster formed the backdrop of the court rulings (most notably C 29/99 Commission vs Council and C 115/08 Land Oberöstereich vs Czech Republic) that deemed it inappropriate to create such an artificial distinction regarding radiation protection based on non-discrimination on grounds of nationality (Álvarez-Verdugo, 2005).

Although this created the opportunity for the Commission to take on responsibility for the safety of nuclear plants in themselves, a shared competence in this field remains in existence. In the realm of nuclear safety, we do see an attempt to seek uniformity in safety standards (Axelrod, 2006). The reluctance to grant the Commission competence in the field of nuclear safety is visible in the Directive 2009/71. In the 2009 directive the focus on the responsibility of nuclear safety held by the European Commission was clear nevertheless the subsidiarity principle was also emphasized. This is particularly revealed in the fact that member states were made responsible for establishing and defining safety standards. The national competence in nuclear safety is further emphasized in chapter 5 of the directive. In this chapter the national regulatory authorities are given the task of verifying compliance with the standards. This

16 During a routine test an accident occurred at the Chernobyl nuclear plant in Ukraine. The accident has occurred due to a combination of faulty design and human error. According to the World Nuclear Association: "It was a direct consequence of Cold War isolation and the resulting lack of any safety culture" (World Nuclear Association, April 2020).

chapter, in effect, is attenuating the potential for the Commission provided by the Court rulings. The provisions in the directive did hint at a more soft governance approach. This type of approach means that non-binding rules are sought after to produce effects in practice rather than rules through binding treaties or other types of legislation (Trubek et al. 2005). The responsibilities listed for the member states combined with the competences of national provide the backbone for nuclear legislation in the EU. As harmonisation was stressed, it followed quite naturally that a transgovernmental network would become invaluable. WENRA's establishment actually fulfilled the need for the harmonisation of policies without the expansion of competence of the European Commission. The policy field of nuclear safety thus remaining a regulatory policy.

With regards to nuclear safety, especially the creation of safety standards WENRA was and is most equipped. WENRA was effectively given the job of monitoring the new European Union candidates' nuclear plants and installations. They wrote a report on their findings in both 1999 and 2000 that were used as recommendations by the European Commissions' Working Party on Nuclear Safety (Heidbreder, 2011: 131). This also shows that even though WENRA operates independently, it does go through the European Commission, as well as the Council to be able to effectively force candidate countries to implement safety standards. In the following years, the reputation of WENRA, and its ability to ensure compliance has increased. Again, a nuclear disaster proved instrumental in the progress of the formation of activities regarding nuclear safety, albeit considerably sooner. The Fukushima disaster of March 11th 2011[17] led the Council to decide on stress tests to be carried out in all member states and to determine a uniform assessment (Álvarez-Verdugo, 2015). The Council also gave the Commission the mandate to review the existing legal and regulatory framework (Södersten, 2012).

WENRA, together with ENSREG[18] (European Nuclear Safety Regulators Group), took the lead in organising the stress tests. It devised the standard and the content of such tests (Ylönen and Litmanen, 2015). It is necessary to explain the interplay between both WENRA and ENSREG, before moving on. The interaction between both ENSREG and WENRA is evident in the amount of interaction between the two. Their roles are at times an extension of one another. Nevertheless, they do have distinct roles. The technical aspects and voluntary involvement of members in WENRA is what makes sets it apart as a transgovernmental network. Which is why will shall focus on this network.

ENSREG is an advisory group to the European Commission which was founded in 2007 by means of decision 2007/530/Euratom. Its work follows on the work of WENRA. ENSREG's main task is to advise the European Commission on issues related to nuclear safety. ENSREG has a more political role than WENRA (respondent WENRA I), they have been involved

17 Following a seaquake and a subsequent tsunami power supply and cooling of three nuclear reactors on the site of Fukushima Daiichi in Japan, all three cores of the reactors melted resulting in a nuclear accident.

18 ENSREG (European Nuclear Safety Regulators Group) is an independent advisory group to the European Commission created in 2007.

in the creation of European directives on nuclear safety[19]. The members of this group are high-ranking representatives of the regulatory bodies on nuclear safety of the different EU member states[20]. As ENSREG takes up a more political role than WENRA we see a difference in tasks division with for instance, the organising of the stress tests. As said WENRA devised the technical elements to the tests. These are subsequently proposed by WENRA to ENSREG and were eventually reproduced in a document of the European Commission that established the content of stress tests for nuclear plants (Álvarez-Verdugo, 2015). It is clear that WENRA played a major role in devising the actual content of the stress tests (Södersten, 2012). A first proposal was sent to be discussed at ENSREG level by WENRA at the beginning of April 2011. The then-chairman of the French nuclear regulator was quoted as saying that all European regulators committed themselves nominally to the voluntary test (Maclachlan and Stellfox, 2011, April 8). The content of the stress tests was a point of debate with industry representatives not wanting regulators (i.e. WENRA) to push for an analysis beyond "realistic" assumptions (Maclachlan, 2011, May 5). In addition, WENRA failed to include man-made disasters in their first proposal, which was a wish of Commissioner Oetinger and Commission President Barroso, but after an agreement between the Commission and ENSREG this was amended (European Daily Electricy Markets, 2011, May 25). The position of Barroso and Energy Commissioner Oettinger met with pushback from WENRA as they held the position that including man-made disasters, for instance terrorism, would result in stress tests not being credible (European Daily Electricy Markets, 2011, May 25). The French minister of Energy went as far as to state:

> "The heads of state and government gave a mandate to the safety authorities of all member states. Now this mandate has to be put into operation… Nuclear safety is much too important to be used for politicking, as is happening at the moment." (Agence Europe, 2011, May 21).

With this statement the minister is essentially accusing the Commissioners of exceeding their own mandate. On the 25th of May 2011 the member states regulators (ENSREG and WENRA) together with the Commission decided upon the criteria for the stress tests. They agreed upon a three-step approach:

- First, a pre-assessment by the nuclear power plant operators which answer the stress tests questionnaire, submitting supporting documents, studies and plans.
- Secondly, a national report will be drawn up by the national regulator checking whether answers of nuclear power plant operators are credible.
- Thirdly, peer reviews are conducted. Multinational teams will review the national reports. These teams will consist of seven people - one European Commission representative and six Members of the 27 national regulators. (News Press, 2011, May 25).

19 These are directives: Directive 2009/71/EURATOM and its amendment Directive 2014/87/Euratom.

20 The European Commission itself is also a member of ENSREG. Making it both a member as the recipient of advice. (ENSREG, November 14th, 2019)

The entire process of the stress test was concluded in the first months of 2012. In April 2012 ENSREG devised recommendations based on the outcomes of the stress tests (WENRA, September 2014). In the final report on the stress tests ENSREG posed recommendations regarding the approach of reviews to be conducted by WENRA:

> "As mentioned above, it is recommended that WENRA, involving the best available expertise from Europe, should consider how to determine a consistent approach to margin assessments for external events – probably best done through the provision of more advice regarding the scope of periodic reviews and/or in conjunction with the work of agencies such as IAEA. It would, in particular, be appropriate to encourage further development of consistent approaches to extreme weather." (ENSREG, 2012).

In addition, they emphasised the usefulness of the reference levels WENRA devised and mentioned that these levels should be included in all national legal frameworks.

> "In response to their previous commitments, regulators should incorporate the WENRA reference levels related to SAM[21] into their national legal frameworks, and ensure their implementation as soon as possible." (ENSREG, 2012).

These statements underscore the significance given to both the establishment of SRLs by WENRA, as well as the importance of a consistent review approach conducted by WENRA. The Fukushima Daichi incident opened a window of opportunity to push for more harmonisation. In addition to the stress tests, there was the revision of the European legislative framework. The Fukushima Daichi incident served as a catalyst for the revised version of a 2009 directive[22] in 2014 (Borovas, 2014, August 28). The latter was created in close cooperation between ENSREG and the European Commission, which signifies how WENRA's efforts feed into ENSREG tasks.

The revision in 2014 of this directive strengthened the position of the WENRA network in the European nuclear safety policy field even more. Article 8 on transparency was significantly expanded upon to include assessment, reporting, on-site preparedness and response, peer reviews in a detailed fashion. It also stated that WENRA would provide the methodology for the control mechanisms. Safety standards are again were decided by consensus in WENRA. With the bolstering of this position the subsidiarity principle was reiterated. The lack of exclusive Commission competence, and the zealous nature of (some) member states to retain their competence proves the relevance of existence for WENRA yet again. In addition, the trade association for nuclear industry welcomed the revision:

21 Severe Accident Management

22 It is the revision of the following directive COUNCIL DIRECTIVE 2009/71/EURATOM.

> "(..) in particular how it strengthens the role and independence of Europe's regulators and endorses agreed safety objectives for nuclear power plants, in accordance with the recommendations of the Western European Nuclear Regulators' Association (WENRA)" (Borovas, 2014, August 28).

This overview of how different steps in the organisation's history, show its increased significance to the European Union institutions and the countries WENRA has as members. How these developments are tied in with the governance structure is still unclear which is why we shall turn to these aspects now.

7.3 Governance structure of WENRA

The organisational structure of WENRA is not formalized, meaning that the governance structure does not outline specific components or administrative units to the network. Nor are there specific outlined procedures to the operation of the network. The organisation was established by the signing of a document labelled 'Terms of Reference' on February 4th 1999. This document was and, after three revisions (2003, 2010 and 2015), still is a single page. It lists the objectives of the organisation, it states that the organisation will inform stakeholders if appropriate and will take decisions by means of consensus. This last point is the only one that cannot be subject to interpretation. Point three of the terms of reference uses the phrase:

> "Decisions in the name of WENRA are taken by consensus" (WENRA, March 25th, 2015).

The other points which are formulated to maintain maximum amount of control by the members. An example is point 6:

> "WENRA will develop and maintain, when appropriate, suitable relations with regulatory authorities from other countries as well as with international organisations." (WENRA, March 25th, 2015).

This combined with the other points leaves plenty of room for the members of the organisation to assess what they deem appropriate. According to one of the founders of WENRA and its first chair Mr. Lacoste this leaves the members in charge and highlights the nature of the organisation. In an interview in 2014 he states:

> "It is important to note that WENRA is not an association of countries but a club of the heads of nuclear authorities of the European countries. This is an important distinction. WENRA was created on a voluntary basis and is not formalized in the same way as the other mentioned organisations[23]. The Terms of Reference of WENRA consist of one page,

23 The interviewer referenced EURATOM, ENSREG, INSAG and a vast number of working groups and committees

> signed by all members, and can be changed at any time. I think experience has shown that sort of light organisation has the ability to face challenges, take decisions, and produce concrete results, also under pressure and in a hurry, if necessary. WENRA was created from a bottom-up basis, from a real will of the members to work together." (WENRA, March 19th, 2014).

The reigns of this organisation very much lie with the members. Which is also seconded in one of the interviews:

> "In WENRA it is just regulators among themselves. They join on their own accord as a regulator and make agreements on a voluntary basis" (Respondent WENRA I).

Although the terms of reference offer not much of a procedural or organisational structure, we do see a horizontal organisation structure in the different components that make up the organisation. The organisation can be divided in day-to-day work which is done in working groups and sub working groups. These latter groups are set up if a subject matter is very technical and needs to be hashed out in smaller groups of members of the working group. After conclusion of the work of sub working groups, the work is presented to the working group to see if consensus on the matter can be reached (Respondent WENRA II). If consensus on a subject is reached in a working group it will then be put forward to the plenary meetings. There are two working groups currently in operation these are, the Reactor Harmonization Work Group (RHWG) and the Working Group on Waste and Decommissioning (WGWD). There was a third working group which started in 2010 and concluded its work in 2012. The name of this working group was WENRA Inspection Working Group (WIG). The work and activities of these working groups will be discussed in the paragraph detailing the function of the WENRA network.

The work in the working groups informs the speed of progress of the network. Moreover, the structure of the working groups signals the participant governed aspect of WENRA best. This is exemplified in the final report of the WIG. In it the structure of the working group is detailed and the focus in the description is placed on the individual members partaking in the working group. Below part of this description is provided:

> "The WIG had its second meeting in Bootle, UK in February 2011. In the meeting the group discussed the summary of tables completed by the participating countries and made initial conclusions concerning different national practices. Also the basic regulatory approaches and good practices were further discussed. The content of the final report of the work was agreed and a sub-group was established to write chapter 2 "Basic regulatory approaches for inspection of components and structures" and chapter 4 "Good practices

within the NEA and IAEA as the other organisations.

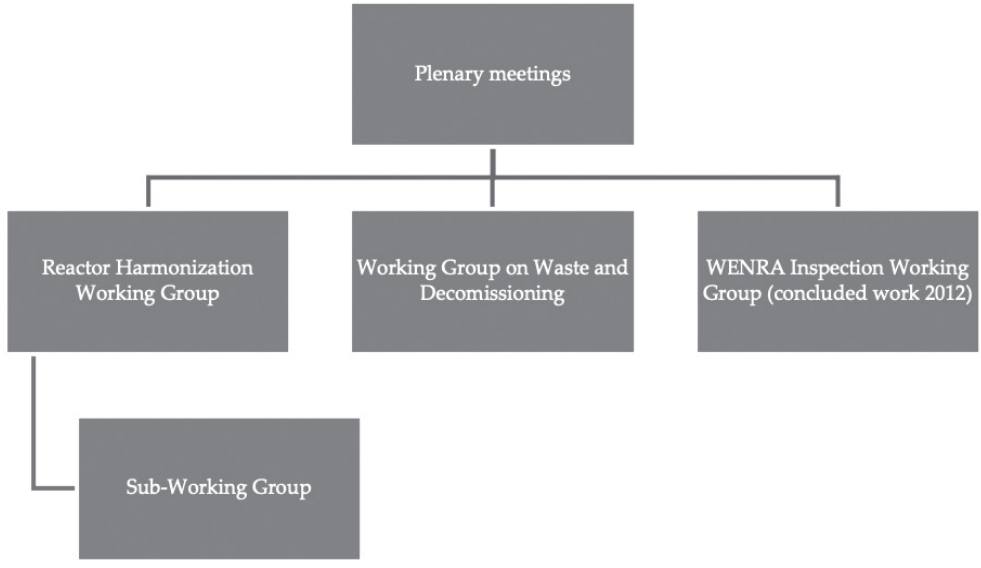
> for inspection of components and structures" of this final report of the group. Sweden accepted leadership of the sub-group. The sub-group had a meeting in Stockholm in early June. The other participating countries of the sub-group were Finland, France and UK. For the final report the participating countries agreed to write short (some pages) national summaries of their inspection practices. The content of these summaries was agreed." (WIG, March 2nd 2012).

In this description the collaborative nature of the working group is made explicit. The entire description makes clear that different participating countries were involved in different stages of the project. The discussion amongst members exemplifies this, as does the fact that the input stems from members themselves.

When a working group comes to a conclusion the work will be presented to a second platform. These are the plenary meetings. These plenary meetings occur twice a year. In the plenary meetings the heads of the different national nuclear safety authorities come together. The meetings are presided over by the chair of WENRA, and/or the vice chair of WENRA. This is different from the working group and sub working group sessions, in which experts or management level personnel take part.

The combination of the different components results in the organisational structure depicted in the figure below.

Figure 7.1: Organisational structure WENRA



Our respondents did mention a secretariat, but this organisational component is only tasked with helping plan the plenary meetings and support the communications of the network. Also, the secretariat is more of a function than an organisational component. As respondents explained:

> There is no secretariat for the sub working groups. The general working group does have a secretary role. This role is taken up by one of the members. It is sort of a contribution a member provides to WENRA. It is a role that is important for the work of WENRA. It is not a full-time job, it is a role or function. They help organise the plenary for instance as well. (Respondent WENRA I, Respondent WENRA II)

Sometimes the chairs of work groups make use of a colleague from their own national regulatory body to support them. As one respondent noted that an employee was paid by the Dutch ANVS (*Autoriteit Nucleaire Veiligheid en Stralingsbescherming*)[24] to take on a secretary role for a WENRA working to help a chairperson for a working group (Respondent WENRA I). With a member financing a secretariat position in the network they essentially show their commitment. As the same respondent noted this is seen as simply a contribution of one of the members to WENRA as an organisation (respondent WENRA I). In general, the secretariat of WENRA plays a marginal role in the operations of the network.

This description of the structure leads us to assess WENRA as a participant governed network. The emphasis of the WENRA structure is clearly placed on the input of its members and lacks formalizing procedures or the creation of supporting units within the network that would be indicative of a network administrative governed network. In addition, we have found no proof of a single member authority being in the lead of the network. There is no indication that a particular member authority is positioning itself as a broker to the network which would suggest a lead organisation governed network. All of this combined we conclude that the network WENRA is a type of a participant governed network. How they operate based on the governance style and what objectives they serve will be addressed in the section below.

7.4 Function of WENRA

In the strategy document of WENRA published in 2019 the vision and mission of the network is set out. The emphasis given to harmonisation is distinctly visible in the document. They even go as far to use harmonisation in their statements. The vision of the organisation reads:

> "WENRA is the independent association of European national nuclear regulators recognised for establishing, implementing, and disseminating harmonized model levels of nuclear safety." (WENRA, April 2019).

24 The Dutch member authority to WENRA. Tasked in the Netherlands with issues pertaining to nuclear safety and protection from nuclear radiation.

The mission statement included in the document reads:

> "Working together as national nuclear regulators to continuously improve and harmonize nuclear safety to as high as reasonably practicable, taking into account security aspects, and so protect people and the environment." (WENRA, April 2019).

These statements mention harmonisation as the intent of the organisation. Setting up levels of nuclear safety is considered core business for the work of the network. This is also reflected in the strategic objective. In table 7.1 we highlight four objectives out of ten that outline the intent of harmonisation best.

Table 7.1 : Strategic Objectives WENRA with harmonisation at its core

Strategic Objective 1	To maintain a common set of up to date Safety Reference Levels (SRL), covering all relevant topics and benchmark their implementation on a regular basis. The WENRA SRLs are a key driver for developing nuclear safety by a continuous improvement and harmonization of regulatory approaches in Europe.
Strategic Objective 3	To further harmonize regulatory approaches and practices and to tackle emerging significant issues, establishing common position statements and influencing their adoption.
Strategic Objective 6	To establish a framework allowing national regulators to consider the relevant experience and knowledge of other WENRA Members in national regulatory processes and promote practical cooperation and support.
Strategic Objective 7	To reinforce WENRA's role as the strategic partner for nuclear safety to ENSREG, providing a consistent independent view on European nuclear regulatory issues and working together to continuously improve nuclear safety in Europe.

(WENRA, April 2019).

The objectives shown in the table 7.1 mention safety reference level (SRL) as "a key driver for developing nuclear safety". This is the policy tool devised by members of WENRA to be implemented in all nuclear safety systems, as we already briefly addressed in the history section of this chapter. This tool is called reference levels because "they stipulate the level in the regulatory pyramid at which member countries are expected to have basically the same approach" (Inside NRC, 26 December 2005). The nature of the work is technical as reference levels refer to norms. The setting of these reference levels is oftentimes if not always based on scientific research that informs the members of the network of the choices they make (Respondent WENRA III). The SRLs are based on the safety requirements and guides of the IAEA but there is a difference that WENRA uses the word 'shall' instead of should because they are to become legally binding in the different participating states (Inside NRC,

26 December 2005). The WENRA reference levels require legal changes to bring countries into conformance, which is the aim of the requirements set by WENRA (Inside NRC, 26 December 2005).

As said, the SRLs are technical, but a side note needs to be placed here as well. In the presentation of new SRLs by the Working Group on Waste and Decommissioning an understanding of the reference levels was explained:

> "The SRLs cannot be considered as independent European safety requirements because current legislation in WENRA member states would not allow that due to fundamental differences reflecting the historical development in European countries. The SRLs are a set of requirements against which the situation of each country is assessed and it is each country's responsibility to implement actions to ensure that these levels are reached." (WENRA, December 22nd, 2014)

This explanation showcases the struggle for rigorous implementation of harmonised rules in the context of nuclear safety. It does say that reference levels are to be seen as requirements, but it is up to the member states to implement these. Concerning the responsibility of the member states in this, during one of the interviews a respondent reflected on this:

> "Agreements made within and by the organisation of WENRA are made with the understanding amongst members that you commit yourself to the implementation of WENRA agreements in your own national legislative system" (respondent WENRA I).

A different respondent reflected similarly as the respondent said:

> When something is decided in the plenary you go home with the understanding that you make sure that decision is implemented in the permits, legislation, regulations and so on (respondent WENRA IV).

In addition, we see this mirrored in instances in which members and observers of WENRA were called upon with regard to failing benchmarking exercises based on the safety reference levels. A first example is from Belgium. In 2016 an extension of the operations at nuclear plants Doel 1 and Doel 2 were discussed in a parliamentary committee. There it transpired that both facilities did not meet requirements of the SRLs that were adjusted in 2014. The Belgian authority on nuclear safety FANC (*Federaal Agentschap voor Nucleaire Controle*) was accussed of not integrating the new requirements in her policy conditions (Agentschap Belga, 8 March 2016). The FANC responded to this by stating that at the time of the establishment of both facilities the new requirements were not in place. Even though it is the responsibility of the country there does seems to be a push to ensure that WENRA safety references are

met. The 2014 requirement made by WENRA are currently not part of Belgian legislation, but they are taken appropriate steps by informing the facility holder of the new requirements and ensuring that the new requirements can be met, as well as to include them into Belgian legislation. This shows the function of harmonisation by WENRA.

As a second example, Belarus as an observer status member of WENRA has also been urged to adjust its decisions due to raised issues by WENRA. The Council of Europe's Parliamentary Assembly urged Belarus to suspend N-plant construction in 2017. It noted that:

> "concerns have been raised since 2009 in all competent organizations including (..) European Nuclear Safety Organization (WENRA)" (Baltic Daily, 28 June 2017).

The Baltic Times reported however that Belarus so far has not removed the deficiencies detected (29 August 2019).

Both examples show a push for harmonisation. Which confirms the explanation of the respondents indicating that there is a commitment to ensure implementation of the policies of WENRA in national legislation. And that this commitment is also understood beyond the members of WENRA.

SRLs do not cover legal and technically specific details, they reflect practices WENRA countries are expected to implement in their national legislation. The documents of SRLs are formulated to be brief, high-level and significant (WENRA, May 17th 2019). However, according to one respondent the level of technical specifities has increased in the SRLs. As the respondent remarked:

> "There are instances in which a colleague comes back from a working group session saying: 'we need a new screw, new technique or a different pipe'. Oftentimes this need not be implemented into law but can be included in a permit or regulation. This does drive companies of nuclear installations bonkers. It just becomes too unclear. Which is also why we now have instigated a project regarding feasibility which also takes stock regarding which norms are currently in place." (Respondent WENRA IV).

The SRLs are developed in the working groups as we have seen in the governance structure paragraph of this chapter. We will now go into the specifics of the work of these working groups and focus on the function that the work serves most.

The first workgroup is the Reactor Harmonization Working Group (RHWG). This work group primarily develop SRLs. In addition, they are tasked with the periodic safety reviews of nuclear plants. The objective of these reviews is stated as:

> "The review shall confirm the compliance of the plant with its licensing basis and any deviations shall be resolved. In addition, the review must consider any issues that might limit the future life of the facility or its components and explain how they will be managed." (WENRA b, n.d.)

This highlights the function and intent of harmonisation by the network. We see a similar harmonisation function in the objective of the second work group of WENRA: Working Group on Waste and Decommissioning (WGWD). The working groups states its objective as follows:

> "The working group on waste and decommissioning (WGWD) is mandated to analyse the current situation and the different safety approaches, compare individual national regulatory approaches with the IAEA Safety Standards, identify any differences and propose a way forward to possibly eliminate the differences. " (WENRA c, n.d.).

The objective clearly sets out to eliminate differences which is key to a harmonisation function, especially when combined with the setting of their own standards. As the working group specifically refers to the safety standards of another organisation this could also point to an enforcement function. However, on closer inspection of the reports published by the working group the referenced safety levels are developed by the working group themselves. These SRLs combined with the safety standards of IAEA together form the basis for the reviews (see f.i. WENRA WGWD, April 2018).

Next to these two working groups, WENRA also had a working group which has concluded its work in 2012. The group was named WENRA Inspection Working Group (WIG). The goals of this working group were addressed in the final report of the working group. The tasks of the working group were divided into two phases. The first phase was to benchmark the different national inspection practices. This phase is symptomatic for an information function. However, the information gained in this phase was needed as input for the rest of the project. The working group outlined their work in the second phase of the project as follows:

> "In the second phase, harmonization needs and possibilities in the area of inspection practices should be studied."(WENRA WIG, March 2nd 2012).

Although the report mentions how good practices could be adopted as European harmonised practices, it is unclear if this result is fulfilled. The report itself mention a list of good practices and states:

> "The good practices are generic in nature. They were developed especially for safety-related pressurized equipment but can be applied to all types of components and structures. These good practices should be adopted by all WENRA countries when they are developing

> their inspection practices either by introducing them in the national regulations or by applying them into individual safety cases." (WENRA WIG, March 2nd 2012).

With WENRA not having the mandate to enforce regulations upon its members, the reference that "good practices should be adopted" is only that. Nevertheless, with the SRLs we also see a clear follow up by the WENRA members. This combined with the experiences of our respondents we would label this as a harmonisation function with the caution that clear proof of actual harmonisation in this particular instance is not found. However, as we have addressed before there are clear indications that a responsibility regarding the implementation of standards proposed by WENRA is felt. In practice, even without the power to impose harmonisation the work of WENRA does have clear effect on policy and legislation in countries. WENRA without the formal power, does have the ability to change legislation and as such is in function operating as a harmonisation network.

Regardless, the need for furthering harmonisation is also emphasized as peer reviews on the implementation of SRLs are currently deployed. However, although labelled a peer review its methodology summons a further explanation. The peer reviews on SRLs for existing reactors was done by means of self-assessment by the regulatory bodies. The peer review was then conducted based on the information of the self-assessment by desk research by members of the Reactor Harmonization Work Group, written questions and answers, discussion in the review group of the work group as well as discussions in the plenary meeting of the working group (WENRA, March 23rd 2018). It does not include questions regarding security issues of nuclear plants (Respondent WENRA I). The scope of the work limits itself to preparing for unintended threats such as technical malfunctions or natural disasters. This means that the scope of the peer review is solely on nuclear safety and not nuclear security. The latter would also mean a focus on intended threats such as man-made threats as would be exemplified by terrorist attacks for instance. The inclusion of nuclear security in the scope of stress tests however, was up for discussion between European Union member states and the European Commission as we have addressed with regards to the response to the disaster at Fukushima. The European Commission wanted to push forward to have a bigger say in nuclear security and member states resisting this push. Peer reviews are a method of account giving as well and will be addressed further in the section pertaining to this in more detail.

Next to the activities by WENRA we need to also be aware of how WENRA interacts with other stakeholders in the nuclear safety domain. We understand that WENRA is part of chain structure. This means that organisations with a similar subject matter but differing scope or mandate work in congruence with WENRA. An example of which is the organisation ENSREG. This organisation is a network of senior representatives of national regulators regarding nuclear safety. Where WENRA has a clear focus on the technical aspect of ensuring nuclear safety, ENSREG involves itself with strategic objectives of nuclear safety. The chain structure is exemplified in Strategic Objective 7. Yet respondents clarify that WENRA operates

independently (Respondent WENRA I, Respondent WENRA II, Respondent WENRA III). It is not part of political deliberations, but its decisions and publications do have a way to seep into the political domain that is ENSREG and the European Commission as shown in the example concerning the stress tests following the Fukushima Daiichi accident.

The independence of WENRA, and the fact that its members do not all stem from the EU or any other regional governmental body, means that independence is guaranteed (Respondent WENRA III). Although a struggle of the European Commission to gain access to the work of WENRA is ongoing it is highly unlikely that this will result in WENRA becoming part of a European Nuclear Safety infrastructure as a politically operating body (Respondent WENRA I, Respondent WENRA III). This position of independence as opposed to a more political organisation is however highly desirable given the nature of the work. Nuclear safety, as already discussed, is still very much a national matter. We can observe WENRA offering a functional solution for the European Commission, whilst bypassing supranationalisation (Heidbreder, 2011:137).

In the objectives, but also in the work of WENRA we see a clear attention on harmonisation activities more so, than other activities. The work of WENRA centers around the creation of a common approach to nuclear safety. They make use of two distinct efforts to reach the goal of a harmonised nuclear safety approach by means of activities. The first is the development of SRLs and the second is the peer review assessment. The seeking of alliances by means of the chain structure to work together on subjects and feeding their own policies into policy making at the strategic levels of other organisations backs this assertion as well. WENRA moves beyond the sharing of information and thus surpassing the information function a network may have. In addition, it moves passed the definition of an enforcement network as it actively sets standards and is involved in ensuring a harmonised approach in all member authorities. This leads to the conclusion that WENRA should be described as having a harmonisation function.

Having assessed WENRA to be a participant governed harmonisation network, we need to turn our attention to how they structure their account giving relationships. In the following section we shall discuss this based on what we have seen in documents of the organisation and what respondents shared. If our expectation is correct, we would find a predominance of political accountability in this type of network.

7.5 Accountability relationships of WENRA

In the section below we will address the way in which WENRA operates and how this is translated in terms of (national) accountability relationship(s). We shall focus our attention on the establishment of SRLs as they are key to the network, and we will address the peer review system. This is an account giving system directed towards the member organisations of

the WENRA network. It is the way account giving on SRLs within the internal structure of the WENRA network takes place and as such we will focus most attention on this. We will first assess how WENRA structures its accountability relationship within the network before we will address how account giving is structured in the setting of the Dutch member authority, ANVS. We will do so by assessing what modus operandi is adopted by the ANVS organisation in terms of attending working groups as well as how information on WENRA activities is addressed within the context of the member authority.

7.5.1 Account giving structure of the network WENRA

The work of WENRA is done in working groups. Out of all the activities that are conducted in these working groups, the creation of SRLs is deemed most important to the network. In fact, respondents mentioned these as the key drivers of the WENRA organisation. This activity will therefore be addressed first in terms of account giving. We will discuss the process of formulating SRLs from start to finish.

The process of creating SRLs could take years to finalize. The working group sets out research on the adequacy of current SRLS. Based on scientific articles and work at other international organisations such as IAEA they devise a draft version of the SRLs. At the WENRA level a draft version of reference levels is consulted with the representative body of nuclear operators (Respondent WENRA I). If the work group agrees on a final version after feedback and revisions, the final document is sent to the plenary meeting of WENRA. The discussions are done, and the decisions are already reached in the work group meetings (Respondent WENRA I, Respondent WENRA II). Each plenary is a two-day event. The first day mostly concerns organisational matters. Whereas the second day focuses on the actual work of the working groups (respondent WENRA IV). The informal character of the network and the plenary meetings in particular are heralded. As one respondent stated:

> "The work field of WENRA is sometimes quite contentious. For instance, as often nuclear installations are built near the borders of countries. Officially this is because these installations need cooling capacity such as a river, which are also oftentimes located near borders. Keeping tabs on making sure your neighbour is ensuring nuclear safety can thus be discussed in an open setting with experts. It can get really contentious, but it is the strength of WENRA that this can occur but also how we move forward." (Respondent WENRA IV).

The outcomes of the plenary meeting are shared on the website of WENRA. A short summary of the overall meeting is posted as well as the policy outcomes, i.e. new SRLs, or changes in the terms of reference or the strategy of WENRA. After adoption of the new SRLs, these are published on the WENRA website. After publication of the SRLs the process of peer review of all members by WENRA starts. The procedure is outlined in a report on the peer review

of the 2014 SRLs. These were implemented after the Fukushima Daiichi disaster. This disaster ushered in a new line of accountability altogether. After this major incident, the European Energy Council of ministers agreed on developing stress tests of nuclear facilities in the EU (BBC, March 21st, 2011). It gave impetus to the creation of a new and more formalized peer review system, which we will outline now.

The recommendations of ENSREG that followed the stress tests, focused on the use of reference levels as devised by WENRA. ENSREG felt that the Fukushima Daichi incident proved that WENRA should update its reference levels and seek harmonisation. The stress tests results showed that there were "significant differences between Member States, but also gaps in ensuring comprehensive and transparent identification and management of key safety issues" (European Commission, 2012, October 4).

In 2014 WENRA released a statement following a revision of their SRLs in which they also expressed "commitment to improve and harmonize their national regulatory systems, by implementing the new SRLs until 2017 as a target date. "(WENRA, 2014, October 27). They decided to initiate a peer review process to benchmark whether national regulator had implemented the revised SRLs in their legal framework. This review method concerns the work of the regulators themselves. The questions that are asked in the review method centre around if the regulator is up to date with the safety reference level in their own legal frameworks. With regards to the checks on SRLs being implemented at actual nuclear plants, WENRA has decided to conduct periodic safety reviews, at least once every ten years.

The peer review of national regulators themselves is a clear indication of conduct by national regulators. The implementation of internationally agreed upon standards are assessed in these. In a report regarding the peer review of the revised 2014 SRLs the approach of this peer review was described as follows:

> "Every WENRA country performed a self-assessment of the implementation, as of the end of October 2015, to conclude on the degree of implementation of each RL. The peer review was therefore based on a snapshot of implementation in the member countries at that time. In addition, members developed action plans for those RLs which were not implemented yet. In 2016, the self-assessments were peer-reviewed by RHWG members by desktop review and submission of written questions and answers, and by discussions in review groups and in the RHWG plenary. "(WENRA, March 23rd, 2018).

According to respondents this process is really used as a means to gauge the implementation of the SRLs in the different countries. As one respondent explained:

> "It is insufficient to say we have translated this reference level in national legislation. You have to say how." (Respondent WENRA II)

Respondent WENRA I added that multiple members were asked for additional information. It also occurred that a member said it had implemented a SRL, when after the peer review it was concluded it had not (Respondent WENRA I). Feedback on implementation is, in the words of Respondent WENRA III about "comply or explain". This position was also confirmed by respondents WENRA I and IV. It is really the intention of regulators to implement the latest safety norms in the national context. It is not about reputation, there is both a drive and a push for this, which can only be reached because of the safe and informal environment WENRA offers (respondent WENRA IV). So far, the peer review process has resulted in one peer review report which was published in 2018, but a follow up to this method was emphasized by WENRA as it stated on its website:

> "WENRA will publish further annual reports on the status of implementation to demonstrate continued progress." (WENRA, September 2018).

It is more than likely that this review method will be used more in the future due to its positive reception (Respondent WENRA III). The benchmarking exercise that is already conducted internally by the ANVS, will be complemented with the peer review structure of WENRA.
Under the scope of ENSREG, national regulators are also subject to peer reviews. Although this is a separate organisation, we do need to discuss this peer review structure here as well because although ENSREG coordinates the review; the specifications and the content of the assessment is prepared by WENRA (ANVS, 2016, October 31). Therefore, we would argue that the peer review of ENSREG is also part of the accountability line of WENRA member organisations. The peer review system of ENSREG was codified in the Directive 2014/87/EURATOM. It states:

> "Member States, through their competent regulatory authorities making relevant use of ENSREG, and building on the expertise of the WENRA, should every six years define a methodology, Terms of Reference and a time frame for Peer Reviews on a common specific technical topic related to the nuclear safety of their nuclear installations. The common specific technical topic to be considered should be identified among the WENRA safety reference levels or on the basis of operating experience feed-back, incidents and accidents and technological and scientific developments." (Council Directive 2014/87/EURATOM).

The reference to the use of WENRA expertise, places its policy content at the heart of the topical review. The first topical review was completed in October 2018. Its result has been disseminated by both ENSREG as well as individual member authorities on their respective websites. With the creation of the topic review structure the council directive did explicitly mention that the summary reports from these reviews were not a ranking exercise stating:

> "The summary report should not aim to rank the safety of nuclear installations but rather focus on the process and technical findings of the topical peer review so that the knowledge gained from the exercise can be shared." (Council Directive 2014/87/EURATOM)

This reaffirms the precarious nature of nuclear safety as a policy field. Harmonisation is the aspiration, but the ambiguous integration trajectory of nuclear safety seems to be at the forefront of any considerations regarding advancement in that area. Discussion regarding consequences that should follow cases of infringement do not occur, nor are there any formal consequences to infringements. Nevertheless, the mentioning of that reports on topical reviews should not aim to rank, combined with the fact that we have seen a push for conformity (Example Belgian nuclear plants Doel 1, 2) suggest that this actually is the possible consequence of infringement. Moreover, we understand from our respondents that feedback on implementation is crucial: "comply or explain" (Respondent WENRA III).

7.5.2 Account giving by the participants of WENRA to the home organisation

For the Dutch member of WENRA, ANVS, there are four employees engaged in the network of WENRA. The director of WENRA is signatory member meaning (s)he will attend all the general assemblies. Next to her/him are employees on the management and technical level. The management level makes up the other three in the on-going engagement of ANVS in WENRA whereas technical expertise of particular employees is asked irregularly and occasionally (Respondent WENRA I, Respondent WENRA II). The technical expertise is asked in-house and technical experts normally do not attend meetings of WENRA although this is not excluded as a rule (Respondent WENRA I, Respondent WENRA II).

The three management level delegates perform the bulk of the work for WENRA. They attend meetings, chair working groups and offer feedback to the director of the ANVS on the developments of the network (Respondent WENRA I, Respondent WENRA II, Respondent WENRA III). These three management level delegates prepare each meeting based on the agenda of the meeting which is send to the delegates of the working group or general assembly in advance. They prepare by means of annotation to the agenda. These notes to the agenda are communicated to and discussed by the board members at the executive level of ANVS (Respondent WENRA I, Respondent WENRA III). Ninety percent of all the work of WENRA is related to the work of one department within the ANVS, which is why two of the management level delegates stem from this department and one delegate from the other department (Respondent WENRA I). These two delegates are part of the harmonisation work group and the other delegate is part of the waste and decommissioning work group. Each work group has sub-work groups. These are installed to prepare documents on topics of the work groups. Between three and eight countries participate in these sub-work groups. After the preparatory work of the sub-work group, the results are conveyed to the general work group (Respondent WENRA II). The general work group then offers feedback on the document. This feedback is

based on filled out forms by the different delegates (Respondent WENRA II). The sub-work group will implement the feedback following the discussions. Because consensus needs to be reached, the process of finalizing can be swift if all agree but it could also mean that some topics will take years to finalize (Respondent WENRA II, Respondent WENRA III). Each meeting attended by the delegates is summarised in a report which is send to the team of said delegate but also to the management team of ANVS. The report is based on a given format in which the delegate highlights the possible implications on either policy, legislation and/or the supervisory task (Respondent WENRA I, Respondent WENRA II, Respondent WENRA III). The policy of reporting on international meetings such as those in WENRA context, are also formalised in a Structural Plan Documentary Information (Structuurplan Documentaire Informatie). In the Excel sheet that accompanies this document, the reports as well as the agendas and Dutch policy positions are listed as the product to be archived (ANVS, nd). According to Respondent WENRA II a report centres on the question if there is a direct impact on day-to-day operations of ANVS. This means that policy of the ANVS needs to be amended to accommodate changes. One respondent recalls that this method is used to ensure more coordination on what occurs in international settings and is relevant to WENRA. The respondent provided an overview of international coordination:

> "Every one of the ANVS seems to be abroad all the time. We had no true grasp of what was going on. Which is why we have recently strengthened international coordination. To determine why do you join that meeting? What is the added value? What will we [as ANVS] do there? What is our input and what can we feed back to our own organisation?" (respondent WENRA IV).

For the work of WENRA, this means that delegates of ANVS often have to tick the boxes to state it will have impact. The format is a bit of a bureaucratic exercise, but the discussion that follows, should increase and feed into the organisation (respondent WENRA IV). Currently, however, this does not lead to many, if any questions by the executive level (Respondent WENRA II, Respondent WENRA III). When a working group discusses the setting up of SRLs drafts, and revisions these are consulted with the in-house experts of ANVS but they are also discussed with stakeholders of nuclear installations (Respondent WENRA II). They are asked for feedback.

When the work of the working group is concluded and sent to the plenary the preparation for this meeting starts in the Dutch context. Each plenary meeting is prepared for by the most senior management level delegate who is also most involved in the network (Respondent WENRA I, Respondent WENRA II, Respondent WENRA III, Respondent WENRA IV). Next to the working group he attends the plenary as a second to the director of ANVS. The work of WENRA is not considered part of the strategic level, which means that the director is informed about the work, but discussions are rare (Respondent WENRA II). The preparatory work for a plenary is described by one respondent as followed:

> "The most senior management level individual involved with the technical work of the WENRA working groups prepares the annotated agenda. Each point of the agenda is provided with context or background information in about a sentence or ten. Sometimes [senior management level individual] adds an attachment to the agenda. [The senior management level individual] also adds what the position of the ANVS is on the matter. A discussion between at least the director and [the senior management individual] regarding the annotated agenda ensues. The discussion is both in writing and in person." (Respondent WENRA III).

When a plenary meeting concludes with agreement on changes on for instance the SRLs, the ANVS then starts a process of benchmarking, this means ensuring that the new SRLs are implemented in the Dutch system. ANVS actively shares the new SRLs with the nuclear operators for which they are responsible. The process of implementation in national legislation is sometimes cumbersome and often takes a few years (Respondent WENRA II, Respondent WENRA III).

Other than the accountability lines discussed - i.e. to the technical staff members, to superiors in the home organisation, to external stakeholders and the peer review structure - the respondents did not perceive others to be in existence. Questions regarding third parties involved in the process such as the ministry were negatively answered (Respondent WENRA I, Respondent WENRA II, Respondent WENRA III). The ministry is not involved in the work of WENRA. ANVS has its own mandate to develop rules regarding nuclear safety. This could have to do with the governance structure of the ANVS as an independent governmental body. A side note needs to be made here. The independent organisation ANVS was founded in 2015. The Netherlands did not have an independent regulator before, which was a prerequisite pushed for by the international organisation IAEA (International Atomic Energy Agency).[25] In the beginning of 2019 an evaluation report was sent to the Dutch Parliament regarding the functioning of the ANVS. The state secretary for Infrastructure and Water Management included a response letter. The evaluation report concluded that although the ANVS has operated well since its inception, it acknowledged that the separation between the legislative and executive branches was hampered (ABDTOPconsult, July 2019). This lack of separation was also acknowledged in an interview:

> "In essence, in WENRA for instance, there is a one-on-one translation from the technical expert to politics. What the expert decided happened. There was in that sense no difference. The ministry was not involved. Rather our expert advice was simply followed. Meaning that in parliamentary debates someone from ANVS sat directly next to the minister telling her what to do." (respondent WENRA IV).

25 The IAEA had made recommendations in 2014 to establish an independent regulator in order to strengthen the review and regulatory capacity. In a follow up report in 2018 it concluded that the Netherlands had fulfilled this role with the creation of the ANVS and was performing well.

According to the evaluation report this needs to change. In her response letter the state secretary agreed. She states:

> "The researchers make the recommendation to lay the responsibility for policy preparation regarding nuclear safety and radiation protection with my ministry rather than with the ANVS. This will strengthen the position of the ANVS as a regulator and licensing authority. The formulation of policies regarding how the ANVS can fulfil its task as an independent regulator will remain the responsibility of the ANVS. I will however, create a unit within my department, after conferring with the ANVS regarding its size and ensuring the expertise of the ANVS will not be dispersed." (Van Veldhoven – Van der Meer, January 17th 2020).

This change in structure will have due effect on the accountability structure. The unit itself has been in place since around the end of June 2020 (respondent WENRA IV). Although this is still work in progress we need to reflect on this as well. It would ensure the involvement of the ministry with the work of ANVS, including their work in WENRA, will increase. The separation of the two functions is a breach from the past structure and has implication for the type of accountability adopted.

7.6 Political accountability in WENRA

In this empirical case we expected to find a prevalence of political accountability, and although this line is prevalent, the findings revealed that elements of other accountability types were used as well. Two types of accountability do appear more than the others which are political accountability and legal accountability. We shall address all the lines we distinguished and show the dominance of each when doing so.

Having described accountability relationships of the ANVS regarding their work for WENRA we see four distinct lines and one under construction. The first is the line from the delegate to technical staff members. The delegates participating in WENRA are aware that they only know so much. Therefore, they seek out experts from within their home organisation to deliberate with on WENRA developments. The experts of the home organisation (ANVS) are asked what the impact of certain developments would be in the Dutch system. The feasibility of proposed developments is part of the deliberations. This line could therefore be seen as being based on an outcome-based assessment.

The second line is account giving to superiors by means of reports and annotations of agenda's to WENRA meetings. By highlighting the potential impact of WENRA decisions on the operations of the ANVs we can see a focus on monitoring.

The third line is account giving directed to external stakeholders such as the nuclear operators who are informed and actively asked for feedback on SRLs. Again, this is a type of outcome-based assessment. They are consulted after a first agreement of SRLs are already made in workgroup sessions of WENRA. Yet comments are asked before they are finalized in a plenary which indicates that changes in position can still be made.

The fourth and final accountability line that we can distinguish is the one directed to fellow WENRA members. This is done through the mechanism of peer review on implementation. This also is a form of monitoring as, unlike auditing, the review conducting organisation has no basis to sanction by means of stripping membership for instance. It is more about: "comply or explain" as mentioned by Respondent WENRA III, no sanctions were mentioned other than reputational damage in case a member fails to comply. This last accountability line is relatively new. As both the general peer review conducted by WENRA and a single first topical review have been completed in 2018. Nevertheless, this is to be considered a fixed feature moving forward. The relevance of this accountability mechanism is already indicated by the emphasis placed by the respondents on explaining the level of implementation to colleagues (Respondent WENRA II, Respondent WENRA III). In addition, we have seen two examples (the case of the nuclear reactor in Belgium and the case of observer status member Belarus) in which compliance with the reference levels set by WENRA has been valued to such a degree that a regulator and a country have been questioned about their conduct. Whereas the first three lines of accountability (to technical staff members, to superiors and to external stakeholders) are described as being part of day-to-day operations, the peer review structure seems to indicate a higher level of scrutiny given the amount of effort as well as attention this is given.

As said, there is one line of accountability very much in the developmental phase. This is the line with the ministry. Currently, a new unit in the ministry is set up. It is designed to take on a more policy making role. This role together with regulatory oversight were conducted by the ANVS. Following an evaluation report this will change. The unit in the ministry will drastically change the relationship between the ANVS and the ministry. Were previously both roles were conducted by the ANVS, the stepping in of the ministry will ensure an increase in oversight and supervision. The separation of powers and ensuring responsibility and accountability lie with the ministry is well, will usher in a new accountability relationship. As this is still under construction, we cannot definitively state what will be the outcome in terms of accountability type. Nevertheless, the justification for the structural and organisational changes do point to a more political accountability type. However, as said, this is a preliminary statement.

The distinguished accountability lines cover all the directions of accountability as disseminated in the conceptualization of accountability types. In addition, regarding the elements of accountability we see in this network that all types of forums are part of the accountability structure. The ANVS thus deploys all classical types of accountability we have operationalized. As we would expect multiple types of accountability can and oftentimes are available in a single organisation, but it is paramount to discover the prevalent one amongst them.

What is clear is that all respondents, as well as WENRA mention SRLs as the most important outcome of the network. This does not help our assessment as all types of accountability are deployed in that setting as well. When asked about the questioning of the forum to the actor we do see differences. For instances, the superior level is less likely to ask questions as SRLs are not part of the strategic level that instructs executive level employees. In addition, the work or contact with technical level staff occurs before the finalization of the SRLs.

The accountability towards external stakeholders - i.e. nuclear operators - does occur beforehand as well as after finalization. This type of forum would indicate legal accountability. Yet, the respondents mentioned this line of accountability only in passing whereas the final line exemplified by the peer review system was mentioned by all three respondents. They emphasized the thoroughness of the peer review. The expectation that you implement the rules of WENRA, was vented throughout our conversations. However, the sanctioning of an organisation that was in default of the harmonised rules, is not in line with the sanctioning in case of legal accountability. The emphasis on following rules would nevertheless indicate a legal accountability structure.

Legal accountability which is the fourth type of accountability distinguishes three types of sanctions: revision of the administrative act, sanction or recognition of the official involved, compensation for the citizen. The first and the third type of sanction is not applicable in this instance. In this empirical case reputational damage due to results from a peer review can be seen as the sanctioning type. This is an example of the sanctioning by recognizing an organisation, which is part of the types of sanctions that can be expected in legal accountability. "Comply or explain" is again key in understanding accountability here. However, depending on where the recognition of the failure of the organisation stems from, political accountability cannot be ruled out. The type of sanctioning one would expect in political accountability also accounts for recognition although it states that this should be political recognition of failure. What is mentioned by the respondents is the focus on 'comply or explain', which hints more at responsiveness rather than procedure. This emphasis is something we would expect in political accountability. This can be explained based on the fact that the SRLs are requirements that need to be specified before implementation can take place. It is not as rule bound as is necessary for legal accountability. Because of this, combined with the fact that a lack of clarity on the rules to be monitored has resulted in a lack of sanctioning options, political accountability is therefore also most predominant. Considering the changes in structure with the ministry, we would also confer that political accountability is most prevalent in this type of network. The structural change would strengthen the position of the ministry to perform oversight. This will allow for clearer political accountability.

Table 7.2: WENRA and political accountability

	Political Accountability	
Definition	Vertical relationship between an actor answering to a forum in which the source of control is external and the degree of control over actions is low.	
Components	**According to framework**	**WENRA**
Forum	Voters, elected representatives	We have two examples in which we see questions being raised by representatives. It is unclear if this is anecdotal evidence as respondents do not mention influence by or from elected representatives as such.
Relationship	Vertical	One of the lines of accountability can definitely count as vertical yet in the case of WENRA multiple lines of accountability are discernible and not one over the other is more prevalent.
Source of control	External	Again, there are external elements to the accountability relationships but we also see a clear horizontal and diagonal source of control in other relationships.
Information on what conduct?	Responsiveness to external stakeholders (voters)	Information on technical elements and expertise seems to valued most, this can be seen in the peer review but also in the accountability relationships with the in-house experts.
Emphasis	Responsiveness	Expertise and procedure seem to be valued most which is more in line with professional accountability and legal accountability.
Techniques of review	Markets Outcomes-based-assessments Registries Whistle-blowing	The format of accountability structure within the ANVS has a clear focus on showing the impact on the organisation. Which is a way to monitor what is going on. Simultaneously the peer review system is directed more in the lines of outcomes-based-assessments which is also seen in the benchmarking practices of the ANVS. Whilst the former is indicative of both bureaucratic and legal accountability the latter is in line with the political accountability.
Discussion on what	Results of administrative performance	This is seen in all accountability lines.
Control over actions	Low	The respondents stressed that there was a lack of questions from a forum and a referral to the technical expertise given the content of the work of WENRA.
Sanctions	Political criticism or recognition Resignation or dismissal	There are no indications regarding possible consequences although the non-compliance of the example of the Doelen in Belgium do point to this type of sanction.

With regards to the question 'discussion on what?' the empirical findings indicate that it is about the administrative performance, which is indicative for political accountability. The ANVS has to indicate to WENRA how it has implemented the requirements of WENRA. There is a difficulty in assessing the direction of the accountability relationship with regards to the peer review structure. Because the peer review is conducted under the auspices of WENRA, we could say that this is a diagonal relationship, especially if we look at the topical peer reviews, in which ENSREG is involved. However, given the fact that WENRA actually provides the content of the review structure we could also argue that peers are assessing the work of peers which would mean that the direction of the relationship is horizontal. In addition, should we consider ENSREG to be a distinct organisation if we know that senior level staff of the same national regulators participate in the network? Furthermore, considering that the peer reviewers are conducting their assessment based on vertically established rules it is also partly vertical. With that we refer to the codifying of the peer review structure in the Council directive. In any case, there seems to be a slight prevalence of political accountability over legal accountability. The reason for these two accountability lines to be so clear in this example might have to do with the balancing act between harmonising rules on the one hand and not bypassing the member states in their competence.

Taking into account the current changes in the structure with the ministry, the prevalence of political accountability would more likely increase. This fits in with the expectation. This can only be determined in due course, when the structure is in place. Nevertheless, given the specifics and perhaps uniqueness of this case comparative research with other cases with similar characteristics; participant governed harmonisation network is required before anything definitive can be argued.

In the table 7.2 we highlight the different elements to the accountability relationship and why pointing to one prevalent accountability line over the others is particularly cumbersome in the case of WENRA.

7.7 Reflection and considerations

In this case we expected to find a political accountability to be the prevalent accountability line. Although we find that this is the case, we understand legal accountability is also dominant in this case. We can see this, for instance, in the peer review structure which is a key part in the work of WENRA. When we look at the actual structuring of the peer review accountability line, we see that it is too ambiguous to confidently state that this is the case. The peer review is set up in such a way that we cannot make the claim that a vertical relationship is set up. Let alone that it fulfils the other elements of political accountability perfectly.

What is also clear from this case is the influence of the supranational versus the national level is particularly strong. The subsidiarity principle, in stark contrast to the court rulings, proved

influential for the forming of policies in WENRA. It is instructive to its scope and the wording of its policies. This was apparent in the extra explanation provided in a document containing reference levels. Full attainment of harmonisation in nuclear safety will thus remain difficult. The fact that consensus is the only basis on which decisions in the network can be made, provide a platform for each opinion, values members equally but also hamper progress in relation to harmonisation. You can only move as far as the first line drawn by a member. The mentioning of the peer reviews and the "comply or explain" statement does indicate the interest of members to further plans of WENRA. Peers, or better yet the perception of those peers suggest a reason to comply with the standards of the network. Further research will need to take this issue on board.

The difficulty with this case in particular, is the level of transparency. Meeting reports including descriptions of discussions between members are not accessible to the general public. Nor was it possible to observe such meeting(s). To see if a delegate or the ANVS operates within the mandate set is thus difficult to assess. However, the work of WENRA, and by extension that of delegates operating within WENRA does not seem to infringe on the Dutch governmental policy position on nuclear safety. That position is ensuring adherence to international norms whilst simultaneously not discouraging or encouraging the building of new nuclear plants. As WENRA seems to focus most on setting safety standards a sidestepping of this mandate seems unlikely, especially when we consider the peer reviews that monitors the implementation of these references. Also, the empirical findings provided a clear and consistent picture of the accountability lines. By means of external sources such a media accounts, or public reports we were able to verify these. The ability to talk to all Dutch delegates regularly involved in WENRA, we are confident that our assessment is correct.

In addition, in this case we have found that the aspect of time and organisational development needs to be considered when assessing accountability relationships. Which type of accountability is deployed is both determined by the organisational structure vis-à-vis other organisations as well as the timeline of an organisation. In this case, the ANVS was operational for only 5 years. As such it was very much in its infancy. First evaluation reports provided recommendations on how the new organisation should be strengthened in its position. This has led to substantial changes in the organisational relationship. Organisations are prone to structural changes. In later research this is also something to bear in mind. Time as a factor is not often taken into consideration in social sciences, but it could benefit greatly by looking back, forward and expanding the time of data collection.

What all the respondents hinted at was the responsibility felt to discuss the international meetings with their technical experts. To cover all the bases but also to make sure that they had done their work correctly and will not be surprised by disparaging views after a decision of WENRA has become final. Feedback and input thus seems to be essential to the perception of others of their work. This instructs account giving behaviour. As we have looked

at the classical types of accountability there is something to be said of involving reputational accountability in discussions of accountability in networks. By this we refer to the work of Busuioc and Lodge (2016) in which they describe that the fact that a variety of audiences are in existence in accountability relationships matter. Furthermore, "sustaining one's own reputation vis-à-vis different audiences" is key to understanding accountability relationships (Busuioc and Lodge, 2016: 248). The mentioning of ranking in reports of topical peer reviews, the examples of questioning a regulator as well as a country regarding implementation does provide clues that reputational accountability might provide an explanation here that could be used alongside classical accountability types. In sum, there is a prevalence of political accountability which we assume will only increase in future due to structural changes, but other accountability lines are also discernible. What has become clear is that additional cases of a harmonisation network participant governed need to be included in further research.

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