

Identity Foundation in Learned Societies; A case study on the European Nuclear Society

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Für Flora and Johannes

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Abstract

This thesis deals with the identity and identity formation of learned societies. The author addresses the question of whether current research on identity in organisations can be applied to learned societies.

To investigate this question, the author conducted a case study of a European learned society, the European Nuclear Society. The case study approach was used, paired with an insider - outsider approach. The data was based on various sources, historical documents of the society, current documents and analyses of the society as well as interviews conducted with stakeholders around the society.

Based on the case study, an abstraction of the results was carried out in order to derive suggestions for generally applicable approaches with regard to identity and the identity foundation in learned societies. It should be emphasised here that learned societies have a different founding objective to organisations and that learned societies only change their identity to a limited extent due to external influences. In addition, a weak identity often leads to the foundation of a new one.

Finally, these findings were compared with current research on identity in organisations and the next steps for future research questions were defined.

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1. Introduction

This thesis will delve into a rarely touched matter for organizations – its identity. Nevertheless, organizational identity is of uttermost importance for each individual, group or organization. Without having an identity, nobody and nothing is able to decide what to do, where to go and how to survive. Or it would be rather lonely and boring. It is however a very complex subject that will be discussed. Starting from ones personal identity, it is not easy to apply concepts onto organizations. This thesis has chosen a study object, a network society, the European Nuclear Society (ENS). This work will try to analyse the different theoretical concepts that were presented in the past for organizations and take a look at how those concepts can be applied to ENS and use this case study to find general applications regarding organizational identity and its formation for organizations.

Firstly, lets introduce out study object, ENS briefly to get a glimpse of the context the organization is based on.

ENS was founded in 1975 in Paris. ENS is the oldest and largest learned society within Europe. These two outstanding markers are even more important looking at the topic ENS is dealing with – nuclear. Looking at this from a German speaking country, the author is living in, it seems rather surprising that this topic can be the basis for the oldest and largest learned society in Europe. Currently ENS is based in the centre of the European Union, Brussels. In Figure 1 the current logo of ENS is shown.



Figure 1: Logo of the European Nuclear Society

This thesis will bring to light why having nuclear as a topic makes it possible to have this large society up and running. We will look at the value and the mission which are set to bringing the nuclear topic not only to the public but also to create a platform or

network for members to exchange their ideas. ENS mission reads to: “ENS will be the recognised platform that brings nuclear societies and professionals in Europe together, allowing them to exchange knowledge and experience about nuclear science and technology. ENS will promote the development of nuclear science and technology and the understanding of peaceful nuclear applications” (Mission Statement European Nuclear Society 2017).

This mission statement will guide us through the work, together with the answers of several people inside and outside of ENS that were given during interviews with the author. This work will use through those interviews a case study approach to evaluate the identity of ENS further. This work can not be seen as a final document that can be used as a “this is now our identity” but shall and will lead ENS towards the further identification of its core values and be hopefully the starting point for a further strategic development process.

Using all findings from this case study, the author will analyze the outcomes and discuss their applicability for learned societies in general.

1.1 Motivation and Structure

Choosing the topic about organizational identity was not only driven by the search for an interesting and yielding topic but from the idea to pursue the understanding and the unravelling of the intricate fabric that defines ENS. The quest is not just an academic endeavour, it's a passionate sometimes personal passionate pursuit of knowledge that has the potential to shape the future of nuclear industry and science in Europe and perhaps beyond. With the current discussion about climate change, the need for a “net zero” initiative nuclear has gained a large momentum. The European nuclear society shall be one of the drivers of this momentum but can do this only with a clear strategic vision. The motivation stems from the belief that understanding the organizational identity is pivotal in shaping its future trajectory. By comprehending the essence of this esteemed society, we can pave the way for strategic decisions, impactful policies, and transformative initiatives that resonate with its core identity. and for this one of the bases is its identity. The author, who is part of the leading team of ENS has a strong interest in this strategic pathway and wants to shape ENS future together with the whole ENS team.

As we immerse ourselves in this endeavour, let us be guided by the words of Margaret Mead (Brainy Quotes 2024), who said, "Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has." Let

us embrace this journey with open minds, unyielding determination, and an unwavering commitment to unravelling the organizational identity of the European Nuclear Society.

The questions this thesis will try to answer are the following:

1. Are there any differences on identity formation between learned societies and other organisations?
2. How can an identity change over time be identified for an organization, especially for learned societies?
3. What influence does the history of an organization, especially a learned society, have on its identity?

This thesis will look at currently discussed theories about organizational identity and their relevance to organizational identity in chapter 2, followed by the description of the methodology used for this work in chapter 3.

In chapter 4 the author will discuss a case study, with results gathered from interviews and documents about a learned society (ENS) and will propose identity values for this organization. This will also cover non-identity values and lacks in the current identity discussion. In chapter 5 the author will use the outcome of the case study and generalise the discussion on learned society. The last chapter will be a discussion of all results, and the way forward will be described and discussed.

2. Theory

2.1 Identity Formation

Research on the identity formation process is rarely discussed with the full picture in literature per se, usually only “particular aspects of organizational identity formation rather than the overall process through which it occurs” is looked at (Goia, et al. 2013). This makes it for the author a bit difficult to thoroughly investigate the identity formation process of ENS. This work will still try to have a look at the process, as it is important for the current organizational identity. It will look at turning points throughout the history, but still have a focus on the current identity values of ENS. Why having a look at the historical development of ENS at all? Is it really so important to look back into the past in order to be able to create and find the identity values of the today's organization?

(Goia, et al. 2013) state it very clearly: “An important part of identity is history because an organization can only know if it is acting ‘in character’ if it has a history of action consistent with its founding or adopted core values.”

The work will be based primarily on (Albert and Whetten 1985) theory of identity, which is a “self-referential definition held by members of an organization (‘who we are as an organization’)” and pointed out that the features of the identity are seen by the members as central to the organizational character, or self-image, make the organization distinctive from other similar organizations, and are viewed as having continuity over time ((Albert and Whetten 1985), (Goia, et al. 2013)).

Looking a bit further and getting an idea why an identity is essential for organizations, we can cite (Czarniawska und Wolff 1998) who state that the fact of having an organizational identity was a crucial deciding factor in the fates of organizations.

The author will examine the identity formation of ENS in chapter 5, and show that the lack of this identity in the beginning and the discrepancies within and around the society almost lead to the failure of the society. Only by a strong focus on its identity the society was able to survive. (Goia, et al. 2013) and (Gioia, et al. 2010) showed that even in “well-established fields, organizational identity formation is a pivotal phase in a new organization's development, with the potential to foster acceptance and legitimacy on the one hand or contributes to the lack of acceptance and an early demise on the other”. What also contributes to the formation of an organizational identity is the context an organization is situated in. If, according to (Clegg, Rhodes

und Kornberger 2007) and (Czarniawska und Wolff 1998) there is a “lack of a clear industry identity presented special challenges to the organizational identity formation” arise.

(Goia, et al. 2013) elaborated on the three pillars of identity which are proposed as central, enduring and distinctive. Those three pillars can be used for the formulation of an organizational identity. They were originally proposed by (Albert and Whetten 1985) and expanded by (Goia, et al. 2013) to further discuss these items. Before explaining this theory, the author would like to take one last approach on the importance of the historical part. (Goia, et al. 2013) think that history should have been a pillar on its own, stating that “this one has emerged as perhaps the most essential feature, simply because if there are no perceived central or core features, it is difficult to even conceive of the idea of identity.

So let's discuss in the next chapters the “Central - Enduring – Distinctive” Theory regarding identity and also have a look at the identity formation process as it is described in the literature.

2.2 Pillars of identity – CED

(Goia, et al. 2013) used (Albert and Whetten 1985)s approach of features that are “central” to an organizations character, make the organization distinctive from similar organizations and have continuity over time and discussed this proposal in their work further. The stated that them as three putative pillars of identity – centrality, enduringness, and distinctiveness. They reviewed each of those pillars for the identity foundation and during identity change. This work focuses first on the identity foundation side and will examine the identity change separately. (Goia, et al. 2013) have researched in detail about the term enduringness, and if identity is not always changing over time. First the three pillars will be described in chapters 2.2.1 to 2.2.3. All three pillars were first described by (Albert and Whetten 1985). The definition they placed is that identity are the features of an organization that in the eyes of its members are central to the organization' character or “self image”, make the organization distinctive from other similar organizations, and are viewed as having continuity over time (Albert and Whetten 1985), (Goia, et al. 2013). In the next paragraphs all three terms will be discussed individually.

2.2.1 Centrality

The first pillar that is discussed by (Albert and Whetten 1985) and (Goia, et al. 2013) is “centrality”. The central featured elements to identity are described as manifested key values, labels, products, services or practices. They mark the organization as “who we are”. (Goia, et al. 2013). These values can stem from the history of an organization, are the core or central features. Without those values, the idea of identity is difficult to be conceived. (Goia, et al. 2013)

(Goia, et al. 2013) describe this term as essential to the identity notion. Features that are deemed to be so core to the organisation’s sense of who they are in the social space, they are almost never questioned, if they are not really challenged. They state further that all attempts to change these parts of the organisational identity are probably heavily resisted. They are seen as the “soul” of the identity. They features are perpetuated by members, and if challenged, they will only change slightly. These features are also seen as enduring in a retrospective way (see (Van Rekom und Whetten 2007))

2.2.2 Enduringness

The second point of the three-pillar identity discussion is the most controversial one. There are currently two main theories discussed: The first one is, that identity will change over time, but has nevertheless stable or enduring features. The second theory is that identity does not change over time, or only smaller parts of the identity are adopted over time. (Whetten und Mackey 2002)

(Goia, et al. 2013) discuss especially if enduringness is still correct in its original meaning by (Albert and Whetten 1985) or if the term continuity fits better. They explain this in the following way: The discussion dates back a long time, and was always controversial, (Whetten und Mackey, A social actor conception of organizational identity and its implication for the study of organizational reputation 2002) stated strictly that it’s not identity if it changes, and others say that identity needs a change every day. The discussion can be further traced back to (Erikson 1968) who already portrayed the necessity of personal sameness and historical continuity for psychological wellbeing.

(Goia, et al. 2013) propose further, and this is also the author’s opinion that the time frame is the essential part to discuss. There should be, according to (Goia, et al. 2013) a certain sameness over time, and this could imply stability and therefore

enduringness. They suggest that it is something “durable, permanent, unchanging, and stable over long periods of time”.

Putting the points of enduringness, sameness over time and continuity together, (Goia, et al. 2013) state further that this is possible, as the labels of identity can remain stable, but their meanings become malleable.

(Albert and Whetten 1985) proposed also a temporal aspect of identity. It is suggested that this temporal aspect can be aligned with the life cycle theory of change (Van de Ven und Poole 1995). Here critical transition points are introduced that each individual or organization will see during his /her/ its life that can influence the identity. In addition, (Albert and Whetten 1985) outlined that there exists “four common life – cycle events” as markers for transition. They also showed that identity can shift either by substitution or addition, meaning that one identity element is substituted by another, or even the complete identity, preferably at the substitution points, or over longer time periods. If this transition is not properly performed, the organization can lose its identity entirely. The addition can be, that another part of the market is analysed and taken into account, this point which has effects on the identity is described in chapter x.

Within this thesis, in chapter 5.3 the author will introduce those transition points and will try to identify the effect on the identity of ENS.

One last point to add, which is important for individuals, but also for members of organizations: Members of organizations will need stability in identity question, otherwise they can't see the points as part of the identity. (Goia, et al. 2013)

2.2.3 Distinctiveness

The concept of identity includes the implicit distinction towards someone, some other organization or some other society. (Goia, et al. 2013) However, the point of distinctiveness is discussed, as to understand how organizations are actually demonstrably distinctive to others. But according to (Brewer 1991) organizations define themselves as entities in social space and want to see themselves similar to relevant members of the industry and yet still somehow distinctive to the same organizations. The critical point is to find the optimal distinctiveness. They should be

embedded in a reference group (see (Czarniawska und Wolff 1998)¹) and find nevertheless their own outstanding identification point. (Goia, et al. 2013) states that this is not an actual distinction, but a perceived distinction. Insiders might believe that they have a distinctive identity which might not be visible for outsiders.

(Martin, et al. 1983) talk about a “uniqueness paradox” that is even more viable nowadays: While wanting to be seen as unique and individual, we all tend to have peer reviews, analyse ourselves against common guidelines or standards and share best practices.

The research on the third pillar is the least advanced one, making it sometimes difficult to find viable data about it.

2.3 Views on Organizational Identity

There are four views in the literature about organizational identity – namely the social constructionist view, the social actor view, the institutional view and the population ecology view, which will be explained shortly afterwards.

Scholars have approached this concept from various theoretical perspectives, each offering unique insights into its formation and evolution. The social constructionist view posits that organizational identity is continuously shaped through interactions and narratives shared among members, emphasizing the fluid and negotiated nature of identity. In contrast, the social actor view treats organizations as cohesive entities with distinctive, stable identities that they project to the external world, akin to individuals in society. The institutional view, on the other hand, highlights the role of broader societal norms, values, and expectations in shaping organizational identity, suggesting that conformity to these external pressures is crucial for legitimacy and survival. Lastly, the population ecologist view focuses on the environmental and competitive dynamics that influence organizational identity, arguing that identity evolves in response to ecological pressures and niche positioning within an industry. By examining organizational identity through these diverse lenses, one gains a comprehensive understanding of the complex interplay between internal dynamics, external influences, and the broader institutional environment that collectively shape how organizations define themselves and are recognized by others.

¹ (Czarniawska und Wolff 1998) studied the establishment of two new universities and analysed why one of the universities did not succeed – the main reason for this was that they did not embed within the reference group, they were not able to identify themselves as a university and were not part of the group

2.3.1 Social Constructionist view

The social constructionist view is described by (Goia, et al. 2013) to see the organization members as meaning creators. It is also called the meanings-based approach. Even though we are all influenced by the social context, we experience identity as a deeply personal phenomenon. Organization members are seen as the ultimate generators of the labels, the meanings, and other cognitive features. They produce the “understanding” (Ravasi und Schultz 2006) that constitutes the essence of organizational identity. However, others criticize, as (Whetten und Godfrey, Albert and Whetten revisited - Strengthening the concept of organizational identity 2006) that labels and meanings get too much meaning and that there is a direct analogy between an individual identity and an organizational identity.

(Ravasi und Schultz 2006) explain that if organization go through a change process, and this includes also an identity change process, that it requires “alteration in the way members interpret what is central and distinctive about their organization”. Members need to get a new sense of the organization.

2.3.2 Social actor view

The social actor view sees organisations as entities which are actors in society, gives prominence to the word “claims” made by organizations about who they are in society, and assigns great weight to the role of categories in determining organizational identity (Goia, et al. 2013). Critics say that it is not enough in putting labels on organizations for an identity, as nuances are missing. Also having only a look at labels will not lead to an information about how identity on an organization is seen from the inside.

(Ravasi und Schultz 2006) emphasize that proponents of this theory use the “sensegiving” function. They link identity construction to the need to provide a coherent guide. They describe it as a very formal way, and state that a change process is likely only introduced by external occurrences.

2.3.3 Institutional view

Together with the population ecologist view the institutional view is not seen as important within the organizational identity studies. However, for the institutional view, scholars renewed their focus, and (Goia, et al. 2013) state that the following three items mark this view as important for organizational discussion and rectify their inclusion:

1. a fundamental shift from studying the enduring aspects of institutions to studying their dynamic aspects;
2. an interest in investigating the micro-foundations and micro-processes of the macro-phenomenon of institutions; and
3. a shift in interest from investigating the normative and regulatory pillars to investigating the cultural-cognitive pillar of institutions, especially the identity element.

The institutional view emphasizes labels and claims them as representing identity, nonetheless, also acknowledges the social elements of identity. It sees that identity remains as and internally defined notion, but this happens with an emphasize on what is acceptable and legal (Goia, et al. 2013), (Glynn und Abzug 2002), (Navis und Glynn 2010)). In addition, also from the historical background this view has always treated identity as given and essentially fully formed. Only in recent years (as described above) scholars changed their approach and included a dynamic part towards this view. This is why (Goia, et al. 2013) have now included this view as well into their discussion.

2.3.4 Population ecologist view

As described above, this view was not always discussed regarding organizational identity studies.

The population ecologist view states that identity is inevitably and socially determined by taking an external view (Polos, Hannan und Carroll 2002). It states further that identity is essentially assigned by external observers and is therefore "imposed by category membership and thus overdetermined" (Goia, et al. 2013). This would further assume that external observers could allocate an identity to an organization by simply assigning it to an industry.

(Goia, et al. 2013) and others state that this view is oversimplifying the discussion about organizational identity, and the approach from the outside can give only an image and not a true picture of organizational identity.

2.4 Organizational Identity Formation Process

The idea of the organizational identity formation process is to find out the "who we are" as an organization. According to (Goia, et al. 2013) this process becomes "reified and taken for granted, perhaps even becoming 'encoded in the goals, routines,

information flows and so on' until the organizations identity exists at a generic subjective level."

Historically the identity foundation process was not always seen as a topic to be discussed. (Gioia, et al. 2010, 1-2) summarizes that organizational identity has been seen as granted for

"1) an expression of founders' values

2) derived from industry membership or organizational form or

3) assumed to come about via other processes that have not been adequately studied".

Before D. A. Goia took a fundamental research approach towards the theory of organizational identity, he only identified three works that at least touch the topic of identity foundation. The author has already introduced (Czarniawska und Wolff 1998) regarding organizational identity and is taking at several points information from their case study they performed on the establishment of two new universities.

The second work is from (Clegg, Rhodes und Kornberger 2007) that also emphasise that newly founded organizations need to define their identity in reference to rivals and non-rivals, but within their industry.

The third work by (Corley und Goia 2004) deals with the members side, regarding identity change with profound outside changes – events from the outside. In their study they addressed the identity ambiguity that members of organizations felt when being in a spin off of a company.

A basic approach to identity formation processes is the grounded theory model, that was developed by D.A. Goia and described in (Gioia, et al. 2010). They studied the identity formation process by a case study approach and formalized the findings.

In Figure 2 a visualization of grounded theory model, described by (Gioia, et al. 2010) is shown. This thesis will have a look on the different steps shown in the figure and if they can be found in the identity formation process of the organization studied in this work, the European Nuclear Society.

The first step suggested is the articulation of the vision. It is the composing and articulating ideas and goals of leaders, the initial identity claim by the founders. They should "established the guiding vision, that is the new entity's broadly construed

intentions about ideals and goals, as well as the appropriate organizational field and comparison group” (see (Gioia, et al. 2013) and (Gioia, et al. 2010)).

The second step is to experience a meaning void – usually filled with “what we are not”. Here the boundaries are delineated. People tend to state how they or the organization does not want to be perceived. Organizations may also mimic or emulate other existing organizations at this step. Here also the influence from the outside is essential.

The third phase is to fill identity with engaging experiential contrasts, e.g. comparing prior personal experiences to experiences in new organizations. This also can describe a comparison between the past and the now, or a differentiation in what the organization does in particular.

The fourth phase consists of the converge on a consensual identity. Members form a consensus about what they believe is central and distinctive about the organization and what should be carried into the future. It is considered as the final stage of the identity formation process.

The other four parts are helping the process, the part of negotiating identity claims consists of members sharing their information about the identity of the organisation and being able to discuss organizational values outside of the organisation (Gioia, et al. 2010). Part six already plays into the part of the CED theory, attaining the optimal distinctiveness, finding out where the organization is similar or different towards other organizations.

The seventh part is about the performance of liminal actions, where behaviours are tested, or new ways of working are established.

The eight part, assimilating legitimizing, feedback, organizations will receive a validation from external stakeholders.

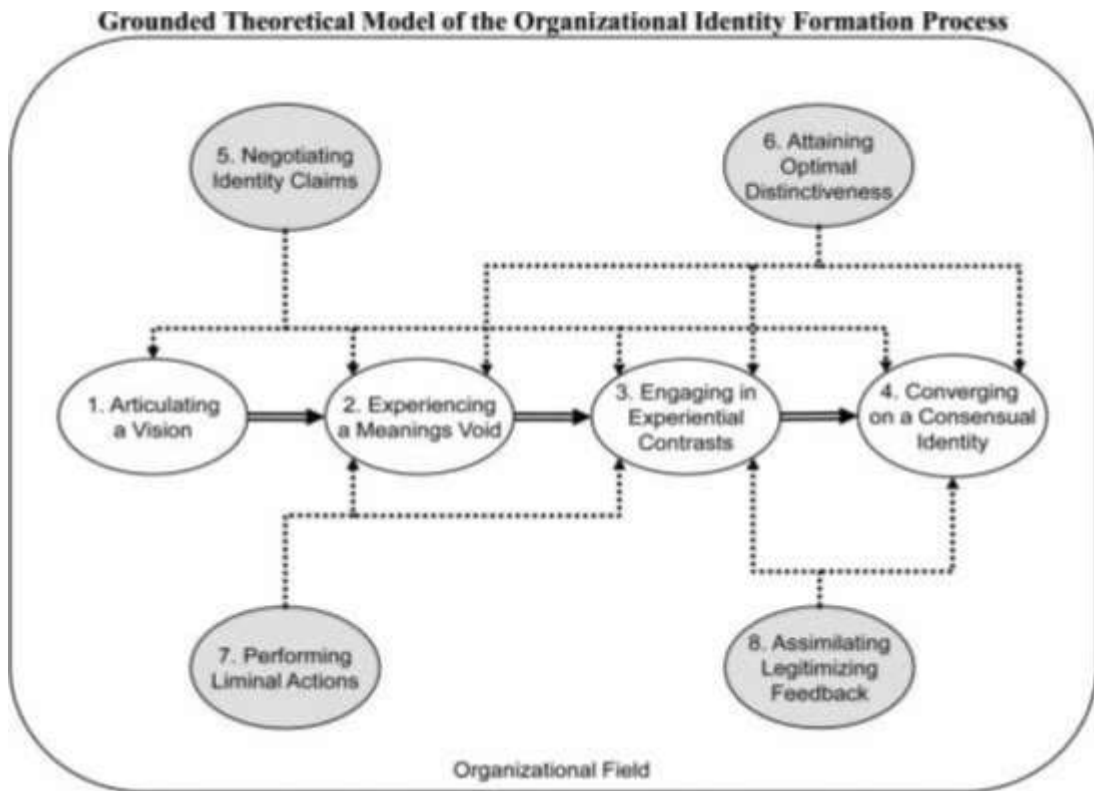


Figure 2: Grounded Theoretical Model of the Organizational Identity Formation Process (Goia, et al. 2013, 158)

(Ravasi und Schultz 2006) and (Gioia, et al. 2010) summarizes the whole process that identity formation involves an interaction between understanding, claims, that are complementary and constitutive. It will involve external and internal players that will bring together the identity of an organization.

3. Methodology

The author will address three research questions proposed in chapter 1.1. The basic question behind all three research questions deals with the identity of an organization. As the author is a single person and not part of a research team, a methodological approach needs to be found that can research the proposed questions on a scientific basis. The author will introduce which data were gathered for this thesis, and on which theoretical methods were used to analyse and interpret them.

The first methodology that is presented is the case study approach, the second methodology that is presented is the insider – outsider approach.

3.1 Case study approach

This thesis is a simple case study. To gain data about the studied object, interviews with stakeholders around the organization were performed. Studying a single case is discussed controversially in literature, (D. Goia 2021) states that it has “historically suffered from a couple of perennial problems, both of which contribute to questions about its legitimacy and credibility”. He states further, that even if the sample size is usually one, and data can’t be used to build up generalized theories, they can be transferred to other similar study objects. (D. Goia 2021) calls it “portable principles”.

(D. Goia 2021) also talks about the value of data gathered: the interviews performed are taken with people that are “knowledgeable”. This is why the information given by the interviewees is their experience and can render us information.

A single case study can be used to build portable principles, as stated by (D. Goia 2021). This happens if the findings make sense to the informants as knowledgeable actors and should be adequate at the level of theoretical insight.

So, for this thesis, the performed interviews will be analysed regarding first on the identity formation process. The second step will be to analyse the organization regarding the CED approach. The third step will be to have a look on which view on organizational identity would fit best, and lastly the author will try to build transferable findings for similar organizations.

To help this process the work of (Eisenhardt 1989) was used. It suggests a roadmap that was applied to this thesis. In (Gioia, et al. 2010) this roadmap is displayed, with comments related to this work. (Eisenhardt 1989) suggests using a (n+1) sampling method, which can’t be applied in this thesis, as it is purely related to one organization.

But as explained by (D. Goia 2021) this does not exclude a case study approach, even if the sample size is one.

Table 1: Process of building Theory from Case Study Research adapted from (Eisenhardt 1989, 533)

Step	Activity	Reason	Comment or application
1. Getting Started	Defining Research Questions Possibly a priori constructs. Neither theory nor hypothesis	Focuses efforts. Provides better grounding of construct measures. Retains theoretical flexibility	See chapter 1.1
2. Selecting Cases	Specified Population Theoretical not random sampling	Constrains extraneous variation and sharpens external validity. Focuses efforts on theoretically useful cases – i.e., those that replicate or extend	Sample is one case, researched population are stakeholders
3. Crafting Instruments and Protocols	Multiple data collection methods Qualitative and quantitative data combined. Multiple investigators	Strengthens grounding of theory by triangulation of evidence Synergistic view of evidence Fosters divergent perspectives and strengthens grounding	Methods selected, literature research, interviews and observations Qualitative-words, some quantitative, but not relevant Not applicable See chapter 4.1
4. Entering the field	Overlap data collection and analysis, including field notes Flexible and opportunistic data collection methods	Speed analyses and reveals helpful adjustments to data collection Allows investigators to take advantage of emergent themes and unique case features	See chapter 5
5. Analysing Data	Within case analysis Cross case pattern search using divergent techniques	Gains familiarity with data and preliminary theory generation Forces investigators to look beyond initial impressions and see evidence thru multiple lenses	See chapter 5
6. Shaping Hypotheses	Iterative tabulation of evidence for each construct Replication, not sampling, logic across cases Search evidence for why behind relationships	Sharpens construct definition, validity and measurability Confirms, extends, and sharpens theory Builds internal validity	Throughout chapter 5

7. Enfolding Literature	Comparison with conflicting literature Comparison with similar literature	Builds internal validity, raises theoretical level, and sharpens construct definitions Sharpens generalizability, improves construct definition, and raises theoretical level	Throughout this thesis
8. Reaching Closure	Theoretical saturation when possible	Ends process when marginal improvements becomes small	See chapter 0

The most important part is the allocation of categories or dimensions. For this thesis, the data in the interviews had to be analysed and sorted into the categories for the CED approach. According to (Eisenhardt 1989) the author chose to first cross-read all interviews, mark all statements related towards “what we are”, “identity” “role” and “Purpose” as well as change related statements. The first four statements were then filled into a table and further analysed. The change related statements were analysed regarding their timestamp (foundation, other markers) and later on used for the identity formation process and the discussion about identity change within the organization.

3.2 Insider -Outsider Approach

3.2.1 Theory

(Evered and Louis, Alternative perspectives in the organizational sciences: "Inquiry from the inside" and "inquiry from the outside" 1981) proposed within their research that there are two modes of the examination of an organization – either from the inside, e.g., by a person working within the organization or a person that has some kind of closer collaboration with the organization, or by an outsider, someone that only looks at the organization for the specific research.

The latter is proposed to be free of any interpretation or meaning, measuring data and validation of the data. The former is said to be more interpretive; categories are contextually embedded, and the validation is done through experiments. This was also described by (Louis und Bartunek 1992).

(Evered and Louis, Alternative perspectives in the organizational sciences: "Inquiry from the inside" and "inquiry from the outside" 1981) used their job change and

investigated the chances they observed. From this they draw several conclusions that are shown in Figure 3.

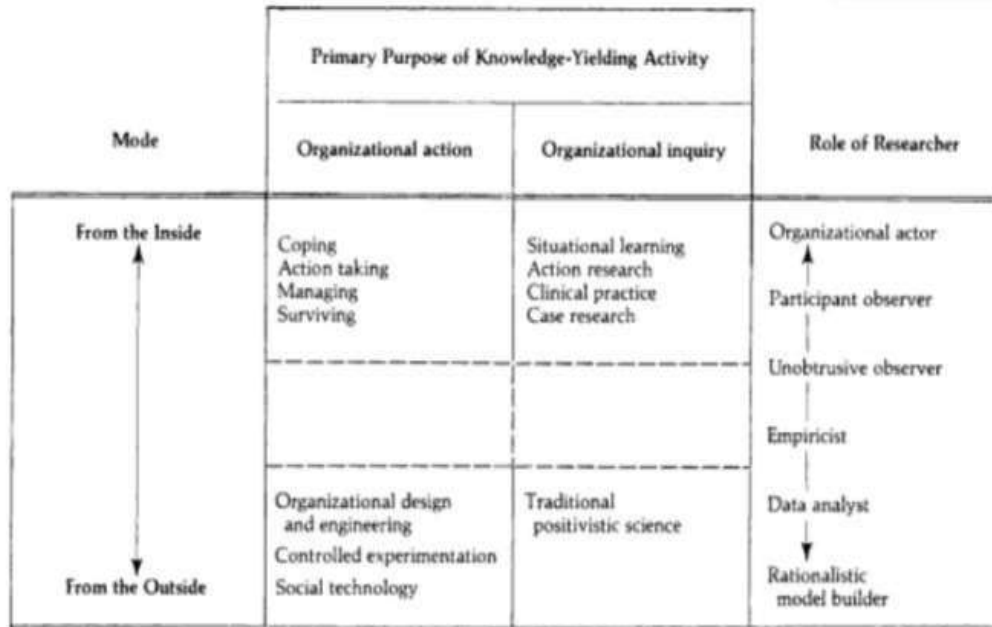


Figure 3: Alternative modes of inquiry by (Evered and Louis, Alternative perspectives in the organizational sciences: "Inquiry from the inside" and "inquiry from the outside" 1981, 388)

They also displayed the differences between modes of inquiry– which is shown here in Figure 4.

Dimension of Difference	MODE OF INQUIRY	
	From the Outside	From the Inside
Researcher's relationship to setting	Detachment, neutrality	↔ "Being there," immersion
Validation basis	Measurement and logic	↔ Experiential
Researcher's role	Onlooker	↔ Actor
Source of categories	A priori	↔ Interactively emergent
Aim of inquiry	Universality and generalizability	↔ Situational relevance
Type of knowledge acquired	Universal, nomothetic: theoria	↔ Particular, idiographic: praxis
Nature of data and meaning	Factual, context free	↔ Interpreted, contextually embedded

Figure 4: Differences between modes of inquiry (Evered and Louis 1981, 389)

The critical point is to be able to achieve the gathering of unbiased data and be able to perform an unbiased evaluation of these data. If a researcher is aware of the above-described context and performs the above described experimental validation the setup is considered acceptable. The article was published at a time where this phenomenon was only looked at separately. In a later research paper (Louis und Bartunek 1992) reevaluated the research about this approach and discovered that the up to the time seen as critical insider approach, was getting more attention as the more interpretive approach was becoming more important. This was also caused by the understanding that the logical positivism needed some interpretive input.

To have unbiased information however, the author needed an outsider information pool, which was done by interviewing people from outside the organization. To further avoid insider bias within the research, all interviewees were asked the same questions, and the interviewer did not intervene during the interviews.

As the author is not involved in the day-to-day business of the organization, the necessary unbiased view can be granted.

4. Methodology application for the thesis

For this thesis, a case study approach (Eisenhardt 1989) in combination with an insider outsider approach, was chosen. It was used and described for a similar study on organizational research (Gioia, et al. 2010), which had also a member of the organization within the research team. The approach itself was described by (Evered und Louis 1981) which proposed two basic poles, the insider and the outsider. For this thesis, the author could be seen as a participant observer, as she is a member of the organization but not within the heart of the organization.

This refers already to the two first points of (Eisenhardt 1989), namely the getting started phase, and the selecting cases.

4.1 Data sources for the case study

The author needed to find data that was reliable and had the necessary information. Therefore, several personal communications with persons in and around ENS took place to find documents and interview partners. ENS had changed the office place in 2017 and deleted several archived files. It was only possible to access data after 2004 and some published data from the times earlier than 2004.

The analysed data can be categorized into 3 categories: interviews, historical files public available and internal files available through sources.

(Eisenhardt 1989) refers to this above-described part as “Crafting instruments and protocols”, which should consist of multiple data collection methods and a combination of qualitative and quantitative data.

4.1.1 Interviews

The most important data source were interviews with stakeholders inside and outside of ENS. The author performed six interviews in total. All interviews had to be done online via MS Teams, as the interviewees are spread over Europe and travel was not feasible.

One interview was with one of the early members of the organization to get some information about the history of the organization. The person had in depth knowledge about the early times of ENS, from the 80ies to the move in 2004. The interview lasted 30 minutes. It was recorded and transcribed using an edited transcription. As this

interview was used for historical background information and not for the analysis of ENS identity, it is attached in Annex 1.

Five Interviews were conducted with stakeholders inside and outside of the organisation. This included the president at the time of ENS, the secretary general of ENS, a former president of ENS, a cooperate member representative of ENS and a president of an organization that performs within the same industrial environment. The interviews lasted between 20 and 45 minutes. All interviews were recorded and transcribed using the verbatim method. These interviews were the bases for the analyses on ENS identity. The interviews were analysed and searched for markers such as “ENS is”, “ENS represents”, “ENS does” or “ENS means”. The outcome of this is described in detail in chapter 5. The interviews are not attached to the thesis.

4.1.2 Historical documents

The author searched for historical articles on the internet. With the help of information from the interview in Annex 1, an article from 1995 about the 20 years history of ENS was found (Feuz 1995). This document was a talk the secretary general at the time had given at a conference. This document gave together with the historical interview a second insight about ENS at the time, and gave the author an idea about the founding of ENS. This also enabled the author to find some hints about the founders' view, that is needed for the historical identity of an organization.

Also, the author gained access to several documents published in 2004, after the move to Brussels of the organization, which will be an important historical point in the organization's history. The documents are so called fact sheets (European Nuclear Society 2004), and newsletters published at the time around the move of ENS (European Nuclear Society 2003) (European Nuclear Society 2004)). Another historical document that the author got access to and was able to analyse were the by-laws of 2004 (European Nuclear Society 2004).

4.1.3 Internal documents

The last category of information data the author had access to were internal documents from the years 2004 – 2006 and from 2013 onwards, mainly minutes of meetings. The author could also include sometimes personal observations into the analyses from board meetings and general assembly meetings attended. The author has also access to the mission statement of ENS (Mission Statement European

Nuclear Society 2017) and the development process of this mission statement that was performed in 2017.

4.2 Applied methodology

The case study approach described in chapter 3.1 gave the author a rough guideline on how to approach the topic of organizational identity. The author took two approaches, one about the founding of the organizational identity – which is described in chapter 2.1 and 2.4. The case study done by (Gioia, et al. 2010) served as a template, as this case study also looked at the identity foundation of a university, which is operational also in the scientific environment.

The second approach deals with the Central – Enduing- Distinctive theory. Five interviews were taken to figure out those three identity pillars of ENS, that are described within this approach (see chapter 2.2). Another part of the interview was dedicated to the change of identity over time, which is the most crucial part of the current organizational identity discussion (see chapter 2.2.2). The author was also interested in finding out non-identity values and challenged the interviewees by asking about the current setting of ENS in its industrial environment within and outside of Europe.

The historical data were mostly analysed to understand the founders' approach, the organizational identity formation and the change over time.

These two above points are part 5 of (Eisenhardt 1989) process.

The most crucial part of this thesis was to be able to perform an unbiased view of ENS identity. As the author is part of ENS organization, she is a so called “insider”. Through sources, (Evered und Louis 1981) and (Louis und Bartunek 1992)) we understood that it is not always a disadvantage to be “part of the team”, as the analysis will be with a “meaning”. Nevertheless, the access to data is necessary, and the author was able to gather historical documents and information inside and outside of ENS through the interviews performed.

4.3 Summary

The data used for the analysis of the case study on ENS and its identity stem from three different sources: interviews, historical data and internal documents. The interviews were used to get ENS values and be able to find identity indicators. The historical data was used to analyse ENS history with the view on its identity and to see how ENS identity was founded and if and how it changed over time.

The data was analysed for the three-pillar approach, Central – Enduring – Distinctive. The second analysis looked at the historical documents and the interviews to identify the identity formation process of ENS and to understand if there was a change of the identity over time.

This thesis is based on a case study approach (Eisenhardt 1989) that uses in addition an insider – outsider approach (Evered und Louis 1981).

5. Case study on a learned society

The research questions that this thesis is tackling were explained in detail in chapter 1.1. For an easier reading they are repeated here:

1. Are there any differences on identity formation between learned societies and other organisations?
2. How can an identity change over time be identified for an organization, especially for learned societies?
3. What influence does the history of an organization, especially a learned society, have on its identity?

In order to be able to understand tackle those questions, a case study was performed on a learned society, namely ENS. With the identification of the current identity of ENS and a look into the history ENS and its identity formation process the author will address the above described questions in general. This case study was performed using the methods described in chapter 4.2. The general conclusions will be drawn in chapter 6.

5.1 History and Identity Formation Process of ENS

The research question that the author tried to answer in order to understand the current identity of a learned society, was to see what influence the history has on an organizational identity. Therefore, the history of ENS was evaluated for hints on its identity and any changes therein. The author tried to access archive files or founding files but was not successful. Only after several attempts and in several personal communications with organization members, the author got the hint to perform an interview with one of the former treasurers, Mr. André Versteegh. He gave the author first hints about the history, revealed names and mentioned documents that could be accessed (e.g., (Feuz 1995), (European Nuclear Society 2003)).

The author also tried to investigate about the urban legend that was told through former members, and that were also shared in 2 stakeholder interviews and confirmed by (Versteegh 2023) that at a point in time of ENS history, “there were financial problems and they had to move to Brussels”.

In the next chapter the author will analyse this historical part of ENS and look on the founding of ENS from the identity formation point of view.

5.1.1 Foundation of ENS and lack of founders' view

According to (Feuz 1995), the history of ENS dates back to the year 1969, when the presidents of the Swiss Nuclear Society and the German Nuclear Society launched the idea of a learned European Nuclear Society.

A learned society is defined as “voluntary organizations of individuals dedicated to scholarship and research, often focused on a particular subject or method” (Encyclopedia 2024).

The first issue that Feuz identified was that if “German[y] advanced the idea, then the British or the French might be against it. [...] so Alain [the Swiss Nuclear Society president at the time] spent a frustrating four years to promote the idea of ENS around Europe.” (Feuz 1995). It took them however several years and a threat from the other side of the Atlantic to get things moving. The American Nuclear Society tried to establish a conference in Europe and wanted to create a European offspring of its learned society in Europe – this was a wakeup call for the French Nuclear Society, that then started to push the ENS idea finally forward and initiated its foundation.

So, there is a clear lack of the founders approach: “Founders and leaders’ expressions of core organizational values, as well as the actions taken to disseminate these values, influence identity construction” (Goia und Chittipeddi 1991). There are no documents to access, no interviews to read of this initiation process. By chance a document by one of the secretary generals ((Feuz 1995)) was found that showed the early perceptions of the beginning. This document was also unknown to the current management board of ENS. But to create an identity the articulation of an identity is needed. This is usually done by the founders of an organization (see (Goia, et al. 2013)).

Also (Versteegh 2023) stated that there was no clear founders’ approach, he remembers: “I saw that it was founded in 1975. I think I was participating perhaps in 1980 or something like that, so it was already existing. And I don't remember exactly what time it was. Perhaps, 1980 or 1982. It was located in Bern, and the Secretary general at that time was Peter Feuz. He was a very big guy. And also, very directive he was sticking more or less”

Step one in articulation of an identity (see chapter 2.4) is that the founders establish a guiding vision and also construe intentions regarding the organizational field and comparison group. So, for ENS this can be only partly done. However, with the

information given in (Feuz 1995), the author will try to identify the ideas from a retrospective.

There was however a founding event – a conference that was held every two years the European Nuclear Conference. Its proceedings were the first scientific output. In Figure 5 a picture of the book is shown.

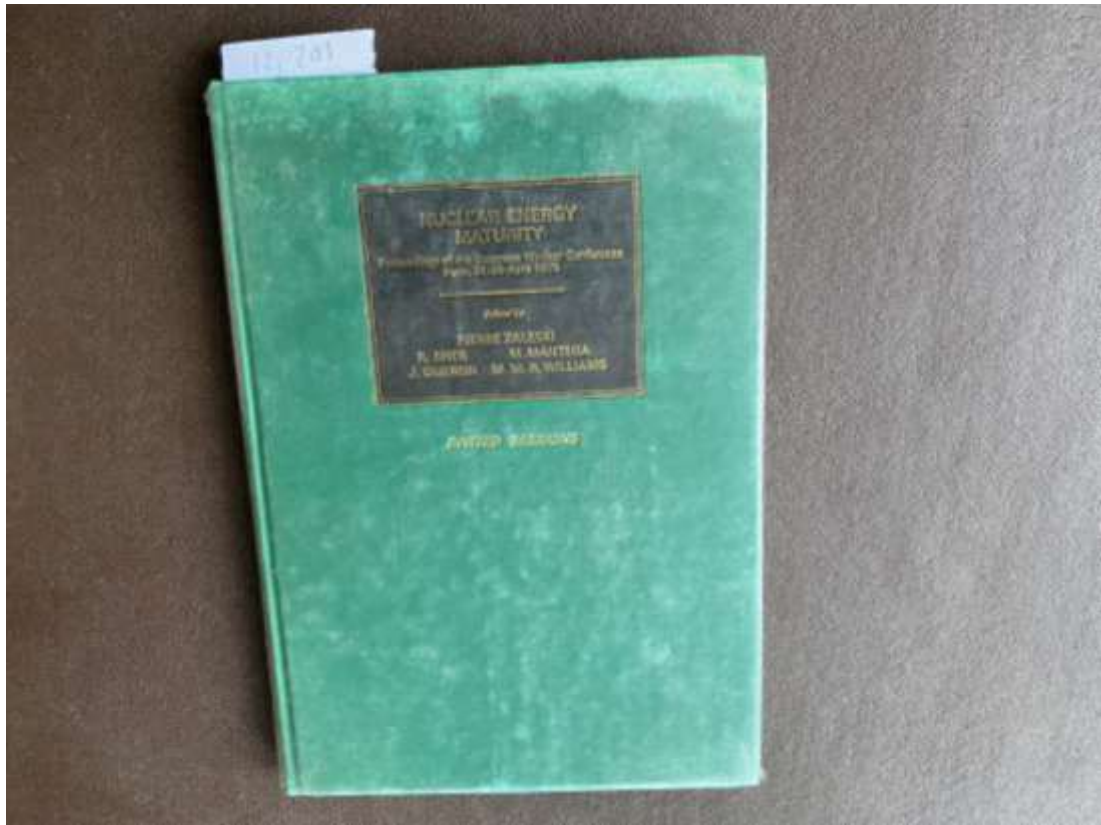


Figure 5: Proceedings of the first European Nuclear Conference (AbeBooks 20204)

The comparison group regarding ENS can easily be selected. As described above, the American Nuclear Society, a learned society within the same field wanted to establish an offspring in Europe. As (Feuz 1995) states in his speech – which he named the “the paradox of the US challenge” ENS was only founded because the American Nuclear Society proposed this offspring, and the Europeans did not want the influence of America in their societies. He goes even further in stating that ENS was only founded to keep the American Nuclear Society as a competitor out of Europe and establish a learned society within Europe for nuclear topics. So, the articulation of this vision was not a direct process but firstly a claim of territory. Nevertheless, it was clear from the beginning that ENS will be a learned society.

5.1.2 Experiencing meaning voids

The second step in the identity formation is the experiencing of meaning voids – who we are not, as described in chapter 2.4. This could be seen as the phase (Feuz 1995) referred to as “Much talk – no action”. This phase lasted about six years. No specific actions were taken.

(Versteegh 2023) describes the gap that was also mentioned by (Feuz 1995) and the consulting company that was hired to take over after this time (see chapter 5.1.3). He did further state, that ENS was existing – not acting. This is also in line with Feuz “much talk no action” – only after 1981 ENS started acting, which is described below.

The author can only make assumptions here, but it seems as after the first phase of articulating the vision it was a big black hole that could not be filled. As ENS was and is still an organization that is operated by volunteers and only stirred by an office with a secretary it could explain why this second stage took so long.

5.1.3 Engaging in experiential contrast

The third step, as described in chapter 2.4 is marked as engaging in experiential contrast can be identified in (Feuz 1995) as the “Call for professional rescue”. Members of ENS at the time in 1980 realised that ENS would not be able to survive financially and as an individual organisation as learned society.

Comparing the experience of individual members of what to do in such a case a professional consultancy agency was hired that stepped in.

Also (Versteegh 2023) recalls, that “it was ENS, the administration and also Secretary General the people were engaged by ATAG Ernst & Young. So, they were hired. They were working at the consulting firm and that was at the time ATAG E&Y, nowadays is E&Y, Yeah, so they were. ENS hired the people from there. They were I think 2-3 people, something like that.”.

5.1.4 Converging on a consensual identity

The fourth step, according to (Gioia, et al. 2010) is typically the development of the mutual conceptions of who the organization is becoming. ENS started working as a learned society. This last step of the formation process was carried out in the years after 1981. (Feuz 1995) calls it “First professional action”. The president at the time of ENS established a membership journal for all members of ENS. As (Feuz 1995) put it: “[...]first step to being a learned society is to have your own scientific journal”. It was

in addition discovered at the time that not all members of ENS were aware of their affiliation. This journal became soon the substantial part of ENS – it was one of the most distributed journals of a learned society, that became self-sustainable. An example of one of the issues from 1992 is shown in Figure 6.

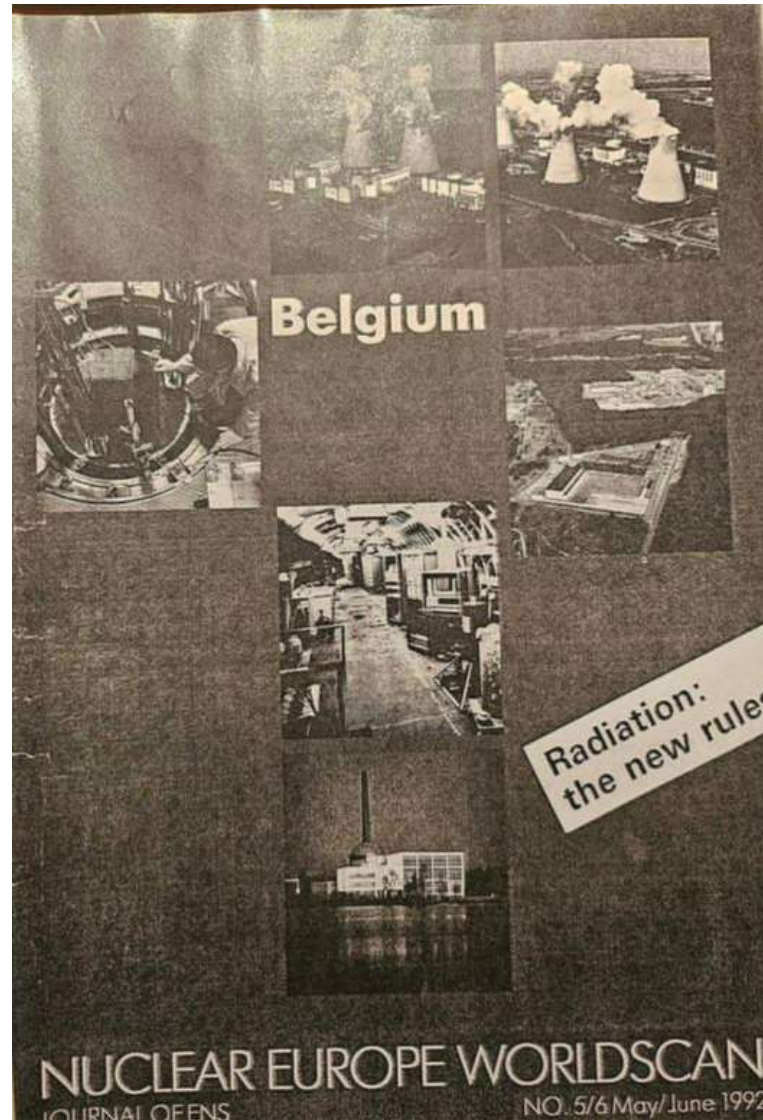


Figure 6: Example of one Nuclear Europe Worldscan from 1992 (Panagiotis 2024)

It was from the beginning of its distribution the largest circulation journal and worldwide number two. This distribution of the journal made for all nuclear societies, that are part of ENS, and so all their members are part of ENS clear that they belong to ENS. This journal could be seen as the as „motivator and integrator to the European nuclear community. (Feuz 1995)

5.1.5 Discussion of Identity foundation

Certainly, both industry category and founders' blueprints are important influences that circumscribe identity formation, but they do not give us adequate insight into important elements of identity or the actual processes by which identity forms. (Gioia, et al. 2010)

ENS was founded to mimic the American counterpart – American Nuclear Society. A study by (Czarniawska und Wolff 1998) showed that remaining a stranger in the field does not work, and a peer or a similar organization needs to be found. Also (Gioia, et al. 2010) stated that this mimicry is important to be able to sustain within the industry. An identification according to membership or other organizations in given industries is needed. This was done by selecting American Nuclear Society as an idol, that was imitated. Nevertheless, it is important to show some distinction and unique selling points, which were the free journals for members and the conferences within Europe.

This first identity construction will take place within a wider context inside the industry the organization is appearing, and according to (Clegg, Rhodes und Kornberger 2007) the organization will define its identity always with a look at rivals and non – rivals. Looking at ENS, a rival could be interpreted as the American Nuclear Society, as discussed in chapter 5.1.1, and non-rivals were the existing national nuclear societies that served for sure as blueprints for the European Nuclear Societies identity. One reason for the last statement might be that the founders of ENS were presidents or national nuclear societies and took their meanings with them whilst founding ENS.

Two general notions: Adapting to external forces is an important influence on identity change and that both internal and external images of the organization matter in prompting attempts to change identity especially discrepancies between internal and external identity/ image perception ((Elsbach und Kramer 1996) and (Dutton und Dukerich 1991))

Summarizing this and answering the third research question for the specific case, ENS did not have a typical founding story, with a clear leader and the so-called founders' view. Nevertheless, ENS was establishing its identity on the typical pathway as explained in the chapters above. The influence on ENS current identity will need to be discussed further on.

5.2 Theory of the Central – Enduring – Distinctive pillars within ENS

After having addressed the topic of ENS history, and also ENS identity formation, the author will now in a second step address the main research question: What is ENS current identity. This will be done in order to identify any possible differences a learned societies identity will have towards other organizations for their identity formation. But also in order to establish an outspoken identity for ENS.

To be able to define a current identity of ENS, the author took with the case study approach described by (Eisenhardt 1989) a step towards the identification of markers. As described in the chapter 4.2 the author performed stakeholder interviews to obtain those markers. The interviews were scanned for categories, as defined by (Gioia, et al. 2010).

All phrases that included an attribution towards and identification of ENS with something or an attribution towards a being attribution were noted. This could be for example a phrase containing: “ENS is...” or “ENS does...” or “...is important for ENS”

In Table 2 the author noted down all attributions expressed during the interviews and grouped them into identified categories.

Table 2: Values expressed by stakeholders during interviews, sorted by categories, red: science, green: neutral, yellow: networking

Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5
scientific organization	a people's association	promote scientific view	scientists	mother society of societies
Education and scientific purpose	networking	sharing information	reflect scientific aspects of nuclear	conference organizer
source of truth	society of societies	cooperation	scientific organization	education
source of repository information	bring people together	talks between cultures	scientific community of nuclear	gathering for exchange
umbrella	passionate networkers	knowledge to public	increase knowledge	lobbying inside
bringing organizations together	expertise	talking about science	networking	bring people together
scientific base organisation	neutral unbiased	get stakeholders together		
fact based scientific organization	credible source			

Four of the five interview partners were scientists, that are not used to talk about topics like identity or social science studies. It was not easy for the author to acquire the notions and feelings that are needed to analyse those markers.

All interviews were then analysed according to (Goia, et al. 2013) and divided into three bigger groups. They are marked in Table 3 in different colours. The decision on the attributes of central, enduring and distinctive is explained in chapters 5.2.1 to 5.2.3.

The proposed groups from Table 2 are the following:

- Scientific (marked as red)
- Neutrality (marked as green)
- Networking (marked as yellow)

The hypothesis is to define the first pillar of centrality with the term scientific, the second pillar of enduringness is proposed to be defined as neutral, and the pillar distinctiveness is proposed to be defined as networking. In the following chapters, this hypothesis will be analysed and questioned. The pillars of identity are described in chapter 2.2, in the next subchapters the hypothesis will be discussed and analysed.

5.2.1 Central identity pillar of ENS

The central element is proposed to be scientific.

To be a central identity element the term should according to (Goia, et al. 2013) “never be questioned”, and changes to this part of the identity are “heavily resisted”, they are the soul of the identity. This feature is perpetuated by members, and seen as enduring in history, as described in chapter 2.2.1. Key in this discussion is the perpetuation: (Feuz 1995) states in his talk the following about ENS and the scientific part of its identity by starting that “a learned society needs its own scientific journal” and later starts to talk that he felt “among all the idealistic scientists and engineers” that there were still some ideas that he could use to commercialise. He talks further that “there is another strong characteristic in the ENS philosophy: we were founded as a purely learned society”, that deal with “scientific and technical questions”, they “pursue their role as a learned society” and lastly “we remain a learned society”, “we have succeeded in becoming a vehicle both for the scientific + technical community”. This can be taken as iteration or perpetuation as asked by (Goia, et al. 2013) for the

central identity part. It also shows that this identity element dates well back in history. To strengthen this point, we can also look at the interview about ENS history, where (Versteegh 2023) states that “an important thing: they organized once every four years a big conference. This ‘exhibition’” and he also remembers “the monthly journal” – which is looking at (Feuz 1995) the “Nuclear Europe World Scan”.

This hypothesis is also strengthened by a look on the ENS newsletter in 2004, just after the move of ENS to Brussels, where it states: “ENS, as a multidisciplinary – scientific organisation can make a difference”. Looking at the current webpage of ENS (European Nuclear Society 2024) one can read “The European Nuclear Society (ENS) is a Learned Society that brings together more than 12,000 professionals from the academic world, research centres, industry and authorities”, continuing with “ENS promotes the development of nuclear science and technology and the understanding of peaceful nuclear applications. Founded in 1975, ENS is the largest society for nuclear science, research and industry in Europe.”, where again the iteration of the science approach is shown. Also, the current ENS mission document (Mission Statement European Nuclear Society 2017) – where it states that ENS is a learned society.

However, we still need to have a look at the other stakeholders in and around ENS to see if there is support to this hypothesis from the author.

Interview partner 1 says after his introduction that “it [ENS] does need an identity.[...]and as a scientific organization I think this is where I think we need to find our value.” And further “we do feel this organization is important and as a pan European [organization] it’s even more important that you know the scientific and [the] indication is there. After being asked about what ENS is, he continues to iterate: that “we ENS should be focused on education and scientific purpose of nuclear energy [...] where it’s scientific base argumentation around nuclear [...]? I think [...]this would be for me that the main principle and foundation of ENS”, he continues to elaborate that “but is really there to force the cooperation on an indication and scientific purpose of the nuclear energy that that’s how I see it.”, “I think they bring a value is by bringing the country association together and remain a scientific base organization“

“you know the Ukraine invasion from Russia has also kind of reinforced the role of ENS that it’s a fact based scientific based organization and it could be used you know through interviews”

The interviewed stakeholder does perpetuate the idea of scientific organization, does not question it once, but only enforces it, as he says: “This is why I was focusing that the scientific base make sure we don't lobby.”

Interviewee 2 states “It's the passion and it's the expertise” and points back to the mission statement.

Interviewee 3 starts directly with “So in my view the primary purpose of ENS is to bring nuclear people together and to promote the scientific view on the nuclear whatever sciences and technologies and so on [...] really, really. talking about science. He states further that nuclear engineers should “satisfy the needs of the society without breaking the physical laws” by talking about “philosophy and science [...] that's also where I see the mission of the nuclear engineers and of nuclear society”. He also talks about this element and its historical component as mentioned by Goia to be essential for being identified as a central element of the organizational identity by stating “well the purpose and the mission was probably more or less the same”. This last sentence points back to his original statement of “promoting the scientific view of the nuclear”. He further states that he sees this past for the “last maybe 20 years”.

Regarding this exact time frame of around 20 years, it is important to mention that the move of ENS to Brussels happened 20 years before this interview was taken. This will be discussed in more details in chapter 5.3.

Interviewee 4 starts after the introduction with “ENS is I would say the scientific organization supposed to reflect all the scientific aspects on nuclear. So it's not industry, it's really a bunch of scientists, researchers.[...] Representing somehow the scientific community”. He continues to iterate “this is for me this[...] European representation of the scientific community of the nuclear industry”. The last part of the sentence “nuclear industry” can be debatable, as ENS does per definition not represent the “industry” part of the nuclear.

To stay with the point to find out about ENS identity, the interviewee also sees ENS regarding the question where the organization is standing within the nuclear world as the organization that “increase the scientific knowledge of our members, share information, share scientific knowledge among ourselves” and also to “bring this knowledge and this science to the broader public or broader stakeholders” even though he says “it was not to me so clear”. This point is important to be discussed further, regarding the visibility of ENS. This stakeholder does see the importance of the scientific organization as a pillar of the nuclear industry, stating that “the industry

needs science, scientists, industry needs researchers. [...] industry needs academics” which implicitly postulates that he sees ENS as a scientific body but assumes that ENS is a service provider to the industry. Also, this point needs to be discussed further in the section about change over time in ENS identity (see chapter 5.3.)

The last stakeholder interviewed, interviewee 5 does not directly point at science, but states however when asked what ENS is or represents to him that: “we had at the end the feeling,[...] ENS is something like a conference organiser, organising three to four conferences each year” and continuing to state that the “focus is on one part education”

To be able to put the conference organization into the part “scientific” one must dig into the way of conference organization of ENS. They are all marked as scientific conferences, all proceedings are published. There is for each conference a selected programme committee that ensure the quality of the research papers handed in. The best papers of conferences will be sent to peer reviewed journals. So the organization of conferences, as stated by interviewee 5 can be evaluated for the “science” category.

The next part the author will look at to strengthen the point of this pillar are taken from the Minutes of Meeting after the first establishment of ENS in Brussels and the first General Assembly in 2003, which were published in ENS news in 2003 (European Nuclear Society 2004). In the created fact sheet the society defines themselves as “The Learned Society for European Nuclear Engineers, Scientists and Professionals” directly under the title of the fact sheet they published about ENS in 2004 (European Nuclear Society 2004). They set their aims at the time to “promote and to contribute to the advancement of science and engineering in the field of the peaceful uses of nuclear energy by all suitable means” and itinerate that they inter alia support meetings “devoted to scientific and technical matters”, “encourage the exchange of scientists and technicians”. They state that those aims are supported by the publication of position papers and the organisation of conferences.

The by-laws created at the same time also show the importance of the scientific pillar: Members can only be “organization of nuclear scientists and engineers” regarding member states, and corporate members must also be “sought preferably among scientific or technical organisations, cultural foundations and universities”.

The sources above show already the strong scientific focus of the organisation, that got even stronger after the move of the secretariat from Bern to Brussels. While Feuz

was still trying to focus the society towards a commercial organisation, the members did not want to go into this direction, which was then written down in the By Laws (European Nuclear Society 2004) and the Fact sheet (European Nuclear Society 2004).

The last part will be a look at the discussion about ENS strategy in 2016 internally. It was later published in the Vision and Strategic Plan (European Nuclear Society 2016), an ENS internal document. It states that ENS allows members “to exchange knowledge and experience about nuclear science and technology. ENS will promote the development of nuclear science and technology”. Here again we see directly the iteration about science, which is not done with the other subjects allocated towards ENS identity. In its strategic plan, ENS also put “conference organization” at their number one priority. This also is focused on the scientific outreach function of ENS.

5.2.2 Enduring identity pillar of ENS

The enduring identity pillar is proposed to be neutral.

As discussed in chapter 2.2.2, the enduring part of identity is heavily discussed. Nevertheless, an organization needs this pillar to give the member a continuity in case of identity crises (Goia, et al. 2013). The proposition of enduring or continuous identity propositions date back to the 2nd World War, where soldiers experienced issues with themselves. “the awareness of the fact that there is a self-sameness and continuity to the ego’s synthesizing methods and a continuity of one’s meaning for others” as (Erikson 1968) states it. To identify the correct pillar, (Goia, et al. 2013) say that “enduring” and “sameness”—suggested identity as something durable, permanent, unchanging, and stable over long periods of time.”. As discussed in chapter 2.2.2, the point of unchanging is debatable.

Let’s start again with a historic look back into (Feuz 1995) and see if the proposed neutral pillar is described by him at the time. He starts with a talk about the Nuclear World Scan, an information-based newspaper that brings nuclear information to members. This is also mentioned by (Versteegh 2023), stating that there was a monthly newspaper for the members.

At the time getting information was more challenging than nowadays, and informing members about things that took place within their industry was essential to have members informed. This information needed to be unbiased.

(Feuz 1995) talks further about the foundation of the ENS communication news agency offspring NucNet (NucNet 2024). It is a nuclear news distribution channel, that was founded to distribute fact-based information to its members. The information gathered for this news were directly taken from the source (e.g., a Nuclear Power Plant or a research entity), and not through official media channels. Looking into the information given by (Versteegh 2023) about ENS history, we can find also the root cause of this idea: "At that time it was much more complicated to get information from and to others and to meet also was more difficult [...] Because there was a lot of misinformation about nuclear incidents. So he [the ENS president at the time] founded an organization, where members of ENS gave information. Factual, good information." So this was a core idea of ENS, to provide members and public with fact based neutral information. (Versteegh 2023) continues to explain the idea: "It was the idea to have direct communication to the [nuclear] power plants. They know, the director of the power plant there and [NucNet] can ask what is the matter, what did happen. And then send it out [to members, and the public]. To prevent hypes and at the same place [inform]. You had also communication that went by fax. You get a fax once a day. And of course, when there was something happening there, they knew a lot of people because everybody was member of ENS. Every country had some people and when there was something happening in Slovenia, they phoned there, and this is how they got information. So. The project processed successfully as I remember".

The historical background showed the idea of ENS handing out this neutral, fact-based information. To have this pillar manifested, one should look also along the timeline and have a look if that has changed. This will be evaluated further in this thesis, in chapters 5.3. But first, let's have a look at the stakeholders' opinion on this topic.

Interviewee 1 states that he thinks that ENS should be the "the source of truth of you know source of repository of information where it's a scientific base argumentation around nuclear and that should address all topics right". He also has a look back in history and elaborates on the point that ENS has proven over the last years that they are an unbiased source of information: "But you know Fukushima has helped to position the organization and also you know the Ukraine invasion from Russia has also kind of reinforced the role of ENS that it's a fact based scientific based organization and it could be used you know through interviews on, or position paper to document the you know true facts about nuclear. Some are good facts some are

facts we need to address like the waste like a nuclear accident. But I think we are I think this is where it should be focused in my view.”

He directly states the points that ENS is a neutral information giver, and he sees this role strengthened over the years. The Fukushima accident 2011 and the invasion of Russia in 2022 shows in his opinion that over those eleven years the role as a fact giver – as he states “true facts” – was reinforced. He also points out that this should stay this way.

Asking him about the standing of ENS within the nuclear world he points out that ENS should not position itself as a lobbying organization, but as a neutral organization: “We could deviate quickly is is by providing facts we we become a lobbying organization and we now we we really there you know for those that are pro or against nuclear that they come and and get educated about the fact of nuclear and I think we need to be a neutral organization in that regards and and make sure that the topic because nuclear topic is a pretty scientific topic and. And we need to, you know, educate, you know, educate about all these facts and make sure we, we make things easier for people that are not part of the industry to also educate themselves about the nuclear technology”.

So, this person allocates the neutral position of ENS over the years as important for the public, and sees the impacts of crises events as a trigger to stabilize the role and identity of the organization (“Fukushima has helped to position the organization”, “has reinforced the role of ENS”, “To document the you know true facts about nuclear”). This annotation over the time is an important link for the enduring pillar of the identity.

Interviewee 2 answers to the question what ENS is about with the following: “. It's also, it should be my opinion it is also a source of very reliable, trustworthy information, because really the people involved, the people I met over all these times, I mean the people are very, very humbled and very, very technical.”. The interviewee states clearly that ENS is the source of reliable and trustworthy information. It continues: “For me, the strong asset of ENS is its neutrality. I always say the same thing when there was whenever there's something happening. Whether it was Fukushima² or or whether it's now Zaporizhzhia³[...] People turn to ENS. Yeah. And. I mean that there's

² The seaquake in Japan in March 2011, with an accident in a nuclear power plant Fukushima

³ The current situation in the nuclear power plant of Zaporizhzhia after the invasion of Russia in Ukraine and the caption of the plant including several black outs that could lead to a nuclear accident

no it's so clear it's I mean our website have been swamped by and the industry the website of industry associations or wherever there's industry involved not. Even if they don't they I mean they don't recognize this but it's true I mean it's and it's for example now with Zaporizhzhia it was well everybody turns to [the ENS president]. Because, well, he's a professor on top and he's very credible.”

In the last paragraph the person describes why people believe that ENS is seen as neutral. In crises times, as described above, or in case of nuclear accidents or incidents, people tend to seek credible sources of information. ENS has the advantage that it is seen as neutral and not driven by industry, as the following example shows, explained by interviewee 2: “But there was, for example, one, thing that you know that the BBC, so lots of UK television came to us and [the ENS president] wasn't available. So and then I gave them the address of [the Nuclear Institute NI – an nuclear association in UK] contacts in NI and also the Industry Association and [World Nuclear Association] as well and they received the they have been in contact but then these people weren't invited to speak out and I for me it's a question of credibility and they're actually it's also I think it was also appreciated that it was somebody from outside not from which was perceived as more neutral more credible so and I think I think this is a very strong role of ENS.”

ENS was seen in the 1980ies as credible and proved this through establishing a news agency - NucNet. As interviewee 2 described this had persisted throughout the time, after the Fukushima accident people sought reliable and basic information from ENS webpage, and ENS presidents were interviewed and cited as reliable source.

Interviewee 3 states when asked about the role of ENS that “And it's also kind of bringing this knowledge to the general public and to the decision makers in some way.”. He also tackles the historical part by stating that: “So the change in the in the history if you would like, yes, I see the change in the history. Well, the purpose and the mission was probably more or less the same.”

As assumed, ENS had of course changes in its role and identity over time, but as interviewee 2 states, it stayed more or less the same.

Interviewee 4 also talks about how ENS can inform the public in a neutral way and says: “that we want to somehow bring this knowledge and this science to the broader public or broader stakeholders”.

Interviewee 5 only addresses the possibility to share and exchange information and opinions, “Nevertheless, the the board meetings itself was a good possibility to exchange the opinions. Um, see an European view”.

This pillar is more difficult to be described by stakeholders. It can be however demonstrated by numbers from website hits that it is the right annotation for this pillar.

The author will take a look back at a former interview with one of the stakeholders in the organisation and take the view on the strategic positioning of ENS over time to further show that the enduring pillar can be defined as “neutral”. This person states (Langegger 2022): “Even if European opinion on the image of nuclear energy is currently changing, controversial issues in this area will never disappear. Information will always be sought to substantiate arguments. In this respect ENS has also shown in the past that its positioning as a professional as a learned society has always made a significant contribution.”

One example of this is the use of the website since the Fukushima accident in 2011. On its website, the ENS operates a so-called Nuclear Glossary which summarises the key explanations and definitions of all terms in the field of nuclear technology. In Figure 7 the hits on the website of ENS are shown for March 2011, directly after the nuclear accident in Fukushima. During the weeks after the accidents, the website had over 15.000 hits per day, which shows again how important it is to have this information available.

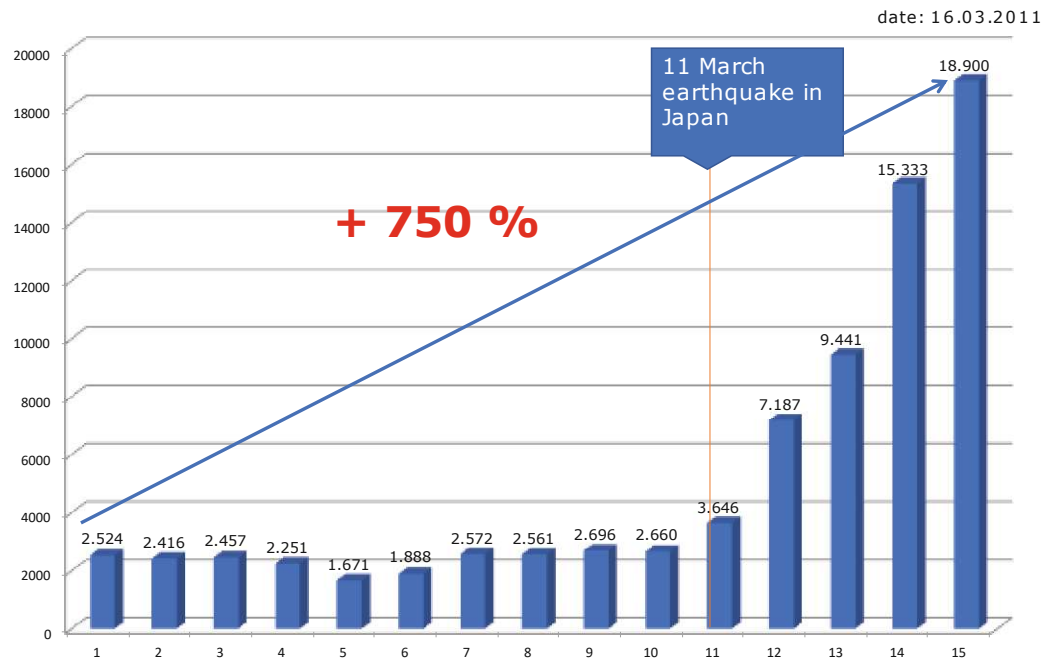


Figure 7: Website hits in March 2011 after the Fukushima accident (adapted from (Langegger 2022))

The current vision of ENS (European Nuclear Society 2016) also shows that being a neutral source of information is a key objective of ENS. It states ENS should be a “credible nuclear spokesperson”. This should be achieved by communication and public awareness: “ENS is developing, promoting and sharing knowledge and understanding of peaceful applications of nuclear science and technology in Europe and shall be the first-choice public information source on peaceful nuclear applications.” It should be a “credible information provider”.

The interviews with the stakeholders in and around ENS showed that this is achieved and that they also believe that ENS is performing this role. The change of this pillar over time is not discussed in this chapter but will be separately discussed in chapter 5.3.

5.2.3 Distinctive identity pillar of ENS

The distinctive identity pillar of ENS is proposed to be “network” or “networking”.

Looking into the theory, what is the definition of distinctiveness? As described in chapter 2.2.3, an organization needs to be similar but still distinctive within its environment. Organisations are part of a social network that they also rely on but need to be unique to be able to build up their identity.

They should be embedded in a reference group (see (Gioia, et al. 2010)) and find nevertheless their own outstanding identification point. (Goia, et al. 2013) states that this is not an actual distinction, but a perceived distinction. Insiders might believe that they have a distinctive identity which might not be visible for outsiders.

Let's have first a look at the social network that ENS belongs to. ENS is, a learned society for topics of nuclear technologies. Are there similar networks like ENS? Yes, each country involved in nuclear usually also has a learned society about nuclear technologies. So where is the exact distinction? ENS is a network of networks: They combine all European nuclear societies under their umbrella, and offer a network possibility to all members – only societies can be members of ENS; but all members of the distinctive society are part of ENS.

To underline this proposal the author will again first have a look back in history and as a second step look at the stakeholders' vision, and lastly at the current vision of ENS.

ENS was already thought to be founded with the aim to be creating a “federation of Europe's nuclear societies” (Feuz 1995) in 1969, but not all European countries were in favour. Only once a threat from the outside, and as described in (Feuz 1995) and chapter 5.1.1, was announced, the individual nuclear societies discussed the foundation of a European Nuclear Society. They however proposed a different approach as the American Nuclear Society has. In America the Society consists of several chapters, and they all legally belong to the society. In Europe the national society will continue to exist, and ENS will be a legal organization of its own. National societies can then decide if they want to be members of ENS.

Looking at the historic papers of after the move, the first one the author addresses is the (European Nuclear Society 2004): The aims of the society are outlined stating that “fostering and coordinating the activities of the member organisations”. This is a clear indication of the networking aim, and also shows how important the idea of network of networks was. Also, the second point continues: “encouraging the exchange of scientists and engineers between different countries”, again a strong networking focus.

Let's see what the stakeholders today share about this proposed identity pillar item:

Interview partner no.1 states that “ENS is an umbrella of many countries specific organization, but really there to force the cooperation on an indication and scientific

purpose of the nuclear energy that's how I see it." He continues to elaborate on this position: "I think the umbrella position is somewhat difficult" he also explains this further and states that he thinks this point is unique and outstanding by saying: "I think we need to probably look at also other industry on how they do it, but I think it helps creating the links between country organization otherwise." In this last sentence he already shows that this system of being a network of networks can create benefits for the members and can allow them to easier share their knowledge and information.

He even goes further and states that without this umbrella network, the information sharing would be limited to special topics, and only through this overall network a good knowledge transfer is assured: "I think it wouldn't be necessarily existing and I think through conferences and participation I think it allows many other country participants to meet and share education topic, career opportunity or scientific development on specific topics like you know the fuel development or advance or research reactors. So this is really where I think they bring a value is by bringing the country association together and remain a scientific base organization not a lobbying organization right"

He even sees this point as a value of ENS and states this directly.

Interviewee number two tries to first explain the value of ENS and the value of the network, before explaining that ENS is a network of networks: "I think at a certain moment you just did this as part of your job [networking] and it was it was a kind of networking that you that you did I mean face to face was the only way to do to to have a professional network and. And so ENS was just there and people, I mean was not just there, but it was just a value of itself to become to be active and to be there and to to have this network and." He starts to explain things again and argues about this added value of the network and being active in the network: "Obviously there's always the personal professional interests in creating your network but there's also I mean to do things you need to for the purpose. And so that the question of the purpose and the mission of of ENS is growing over time." He sees this value of networking even growing in the last time.

Getting further the person was asked about ENS role nowadays:

What makes the organization outstanding compared to similar organizations. It is a network of networks, which is different compared to other organizations. ENS has individual members, and has sections, but not associations as members.

Interviewee number three starts by saying that “the primary purpose of ENS is to bring nuclear people together[...] it’s sharing information, it’s cooperation, it’s talks or stimulating talks between different cultures”. He sees the purpose of ENS in networking, in sharing information. This point was already mentioned by (Versteegh 2023), saying that this cooperation between the associations is essential. This basic idea led also to the first important ENS offspring – NucNet. So only by an active networking amongst all stakeholders it will be possible to achieve ENS mission and to foster its central identity pillar – the neutrality. If all voices come together, ENS will be seen as an important spokesperson of the nuclear sector. This idea is also backed by interviewee two, he gave an example of an event that happened, and where several networks were invited to position themselves:

“Well actually a nice example was the day, the day before yesterday I would say that we were signing the declaration of Small and modular reactors with European Commissioner for Education and Research Mariya Gabriel and three other European nuclear stakeholders, the Sustainable Nuclear Energy Technology Platform (SNETP⁴) and nucleareurope⁵ and European Nuclear Education Network (ENEN⁶). So I would say that’s a little bit of my personal feeling, but perhaps, perhaps we can find some confirmation of this also elsewhere. That we kind of dominated, the ENS, this group our message probably to the community at this was the most inclusive or the widest one.”

So, as he states, only through the combination of all those networks, ENS has this strong and inclusive approach to the public.

Having a look at the next stakeholder and his view on this identity pillar: He starts with a look back in history and talks about the time of ENS movement to Brussels (see chapter 0): “So the original idea of ENS was being something like really the mother society of all the nuclear societies, Um, uh, coordinating them, um, whatever, Um. I think it’s still somehow in this role.”

So, he does not see that this point changed over the time. He uses the word „mother society” and not a “network of networks”, and also states that ENS was coordinating at the time. So, he could implicit that there is a change in this position.

⁴Sustainable Nuclear Energy Technology Platform, a platform that exchanges about the latest technological developments in nuclear

⁵ Nucleareurope is the European lobbying organisation of the nuclear industry

⁶ ENEN – European Nuclear Education Network, a network that was initiated to streamline nuclear education efforts in Europe

He states further how he experienced this over the years during ENS gatherings: “Nevertheless, the board meetings itself was a good possibility to exchange the opinions. Um, see an European view? Whatever. Um, so it was something in between.”

Here we are again at this important point seen from the stakeholders of this “holistic view” from all the members, he calls it “a European view”. It seems that ENS through its organization can give a holistic view on nuclear topics, that gather all different European opinions on the topic. And this not by forming their opinion by the input of direct members, but the formation of an view with all partners together.

During the mentioned meetings he describes: “Um, having the board meetings, at least you are getting the board members of the nuclear societies together to have their network, which is for sure or good, good good thing.”

ENS was organizing conferences for pure networking in former times, and he states that this conference: “It was really the big one, which from my point of view is really the possibility to bring all the members together and make networking”, so ENS did offer also for members of the individual societies networking events to foster the idea further. The conference was cancelled for economic reasons.

The last part to look at is the current vision document of ENS. In (European Nuclear Society 2016) it states that “ENS will be the recognised platform that brings nuclear societies and professionals in Europe together, allowing them to exchange knowledge and experience about nuclear science and technology”. This is elaborated further by using the word “mother society” in the following: “Being the mother organisation of the national nuclear societies in Europe, ENS shall support information exchange and cooperation between its member societies and their individual members.”. It also elaborates on how ENS can use this role in fostering networks: “Maintaining nuclear competence network,

- As a mother organisation of the nuclear societies of Europe, ENS constitutes a network of critical competences and skills. ENS with its member societies shall be able to, upon request,
 - guide stakeholders (corporates, research institutes, politicians etc.) to the right competent individual.
 - propose assisting teams, reference groups or similar on specific emerging topics.”

This is however the first time, that a use is allocated to the benefit of being a network of networks – having always quick access to the right and competent person and being able to provide information and resources to groups that work on new topics.

Summarizing this discussion, ENS is seen by its stakeholders and proven through papers as a network of networks, or as the mother society of all European nuclear societies. This is a unique selling point that does not exist elsewhere and makes ENS as an organization outstanding and distinctive of others. The attribution of distinctiveness can be clearly allocated to network.

5.2.4 Non-identity values

Identity values defined within the central – enduring- distinctive theory of (Albert and Whetten 1985) are important. Nevertheless, in order to be able to evaluate the proposed identity pillars, one needs to also look at the non-identity values. This was already explained in the identity formation process, the so-called step two, the experiences of “meaning voids” (see (Gioia, et al. 2010)). Already at this example, the members of the interviewed universities found it easier to talk about what they did not represent in order to get to the point of what they do represent.

To be able to do discuss non-identity values, the author examined the interviews given by the stakeholders again and looked at values that were stated as “negative” or marked by “not”. All the cited values during the interviews were evaluated in the same process as the identity values and are shown in Table 3. The author also looked at historical files. In those files there were no negative attributes that could be used for the discussion. The reason for this might be that those files are communication files for members or the internal organization team, and therefore show no evidence of negative terms.

Table 3: Non Identity values expressed by stakeholders

Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5
Not seen well enough	Not always visible and active	lobbying	Not industry	Not lobbying on nuclear
			Not part of lobbying	

There is a possibility to group those expressed non-identity values, namely the following two:

- Visibility
- No Lobby

The first one of these two, might not be seen as a possible value itself. It shows however the necessity of ENS to define a strong identity which can then enable all stakeholders to make ENS visible. The next steps of this process will be explained in chapter 0.

The second identified value “not lobbying” is essential. For stakeholders outside of nuclear or the nuclear world, all organizations that are able to speak or communicate about nuclear are very often seen as “atomic lobby” or the “nuclear lobby”. It is for outsiders very difficult to distinguish between lobbying organizations and non-lobbying organizations. However, one can look at the definition of a lobby, as stated in (Cambridge Dictionary 2024) lobby defines as “to try to persuade a politician, the government, or an official group that a particular thing should or should not happen, or that a law should be changed”.

Neither in ENS mission, nor in the statutes or any official document (see (European Nuclear Society 2004) (Mission Statement European Nuclear Society 2017) (European Nuclear Society 2004) or (European Nuclear Society 2016)) this is mentioned. Having stakeholders expressing this fact in addition shows the importance that ENS does clearly not define itself as a lobby. This position must be emphasised also towards the outside.

5.2.5 Summary of Identity Values and non-identity values

The last chapters discussed proposed identity value items and corresponding non-identity value items. The author has suggested the following terms in line with the central – enduring - distinctive theory:

- Central: scientific
- Enduring: neutral
- Distinctive: Network

This would describe ENS as a scientific, neutral and networking based organisation.

All three values were identified through interviews and documents that were analysed by the author.

The last part of this was to identify non-identity values, which were indicated by the interviewees: these resulted in 2 values, one discussable in terms of a non – identity value item – see 5.2.4 for the details. The second one as strong non-identity value:

- Visibility
- No Lobby

Especially the second non-identity value item is of great interest and needs to be evaluated in the future further, as stakeholders outside of the nuclear world are often not able to distinguish between lobbying and non-lobbying organizations.

This chapter has answered another research question for this specific case, articulated at the beginning of this thesis: What is the current identity of the European Nuclear Society? The author has evaluated this question, and proposed the above written identity for ENS.

5.3 Change of ENS Identity over Time

Is there any indication that these values defined in chapter 5.2 did change over time? The central – enduring - distinctive theory states that the enduring point might not be enduring overall. Also, non-identity values might have changed over time. The author will now address in this chapter the last and still open research question that was formulated in the beginning: Has the European Nuclear Societies identity changed over time?

Already in chapter 2.2.2 it was shown that there is also in research about organizational identity and ongoing discussion about the term “enduring” in the identity connotation. Why is this discussion so essential, and this not only for organisations? (Erikson 1968) stated that “sameness over time” is critical for psychological well-being. (Goia, et al. 2013) analysed this further and found that organisations need a stable identity over time, especially during changing times. They further state that a “change in organizational identity causes its members psychic pain, discomfort, anxiety, conflicts, and overall loss of self-esteem.” So, let’s take these findings into account when looking at possible key turning points from the author.

The author could identify through the stakeholder interviews and also from the

historical files that were analysed several turning points that might have an influence on ENS identity over time:

- The nuclear accident of Chernobyl
- The (forced) move of the organization from Bern to Brussels
- The nuclear accident of Fukushima
- The current climate change crises

In the following chapters the author will analyse those identified changing points briefly.

5.3.1 Chernobyl Accident

The first turning point, identified by the author through the interviews was the nuclear accident of Chernobyl⁷ in 1986. It was a turning point for the whole nuclear industry, and did naturally also affect ENS. It occurred only eleven years after the official foundation of ENS in 1975.

This turning point came, as (Feuz 1995) stated it after a “much word no action time”, which was identified as the second phase in the formation process, the “meaning void” and only four years after getting some first work done. This accident was hitting not only the nuclear industry as a sector heavily but also societies in and around the nuclear industry. A re-organization, a re-thinking was necessary to establish its place in these challenging times. But sometimes challenging times are more of a driver and can unify organisations – as it was the case also for ENS.

The biggest problem at the time and also regarding the accident itself, was the missing information or the bad available information. (Versteegh 2023) stated that “When Chernobyl happened, there were no drawings, no pictures nothing. There was one drawing of the reactor and everybody used it in the world, and it was also very simple. Everybody was looking, what and how did they do it. They didn't know how this reactor really was constructed. ENS at that time, was also speculating at the moment, at that

⁷ This accident happened in a nuclear power plant that was not originally designed for power production. It had an unsafe design because of its purpose to produce materials for nuclear weapons. In addition to the unsafe design, it was not protected towards the environment with a containment. The explosions and the following graphite fire in the plant killed 56 people directly, and several thousands of workers were exposed to high values of radiation. The public was evacuated, a no entry area was established. The dispersion of the radioactive material was so big, that mostly all areas in Europe were affected. This led to a severe discussion about the safety of nuclear power plants world-wide. Several countries decided to quit their nuclear power programmes, and many countries re-evaluated their designs of their nuclear power plants. A big factor was the missing information, USSR did not communicate about the accident in time, letting people in psychological state of stress regarding this fear of radiation.

time about what happened”. He also explained that ENS was not in a position to communicate about the event, as they had the same information as everybody else. ENS saw the need of an efficient communication channel and founded one extremely successful offspring – a news communication agency, nowadays NUCNET⁸ (NucNet 2024). As explained in chapter 5.2.2 this neutral information that was communicated through this news agency from the years of around 1990. Before that it was a fax-based communication within ENS. It became an essential part of ENS identity at the time. However, it was of course questioned, not everybody liked the idea of this communication tool. (Versteegh 2023) said “Feuz [the secretary general at the time of ENS] didn't liked, I don't know why, and he didn't like it too much.” So, the approach of ENS changed at the time from a purely scientific based organization towards a scientific and outreach organization. An as one of the former treasurers of ENS states, that ENS was seen after this founding as a “credible news information”.

5.3.2 Move to Brussels

The second turning point was identified to be the move to Brussels from Bern in 2002 - 2003. This point was identified from the author through the interviews and also the historical files the author has access to. Here, several small “micro levels of resistance” happened before that point (Goia, et al. 2013). Officially the story told for the move was a closer collaboration between several nuclear stakeholder societies, namely nucleareurope and NucNet, which was at the time already operating independently. Let's look into the historical files a bit closed.

The move from Bern to Brussels was initiated in 2001 and was concluded in 2003. The idea was that ENS “should move together with the industrial organization FORATOM [nowadays nucleareurope]” (European Nuclear Society 2003). At the same time a working group was formed – “with the task of translating agreed strategic views into an action plan”. It was further reported that “ the way in which ENS, as a multidisciplinary-scientific organisation, can make a difference in the already overcrowded (inter)national nuclear conference world and last but not least on possible formats of co-operation between ENS and the national member societies on the one hand and ENS and relevant international organisations on the other hand” – The secretary general up to the move had more an interest in commercializing ENS,

⁸ “NucNet was created in 1990 with the support of the European Nuclear Society as a response to the growing need for accurate information about nuclear energy and ionising radiation. The aim was the same then as it is today: to **focus on the facts behind the stories** and to only publish information that has been verified by our editorial team.”

using it as a service provider (Feuz 1995). He wanted to change the focus from being a purely scientific organization, as he put it “we were founded as a purely learned society” towards a service provider for the nuclear community “it was not enough to deal solely with scientific and technical questions”. Nevertheless, the decision makers within ENS; which are the member societies did not see this change as a positive one, and the fight made Feuz move out of ENS. This also fostered ATAG E&Y to quit their services for ENS, and ENS had to decide what to do. This ongoing controversy was also be shown in the statement regarding the largest ENS conference “which was connected with a number of controversial developments during its preparation” (European Nuclear Society 2003) that shows that this move was not only important but necessary.

The change from a commercially and service-oriented organization, such as Feuz has tried to implement during his years as secretary general towards scientific is also shown in this above remark. In addition, with the move to Brussels a new body of ENS was founded: The Higher Scientific Council (HSC) (European Nuclear Society 2004) – this marks again the continuous focus towards science. Until now, the HSC is seen as the scientific outreach body of ENS.

Analysing the step from the identity change point of view: Feuz at the time was not convinced that the move was necessary. Also, the retirement of Feuz and that ATAG E&Y did not want to continue their services for ENS were indicators for the move. (Goia, et al. 2013) show that these change influences are critical to individuals, not necessarily to the organization: “organizational members pursue an enduring identity as a way of preserving their individual social identities”. With pushing towards the commercialization of ENS, Feuz strengthened ENS identity, especially the scientific part of it. The organization resisted towards the proposed identity change that Feuz tried to implement. It stayed a scientific based learned society.

The author suggests the following hypotheses: The move to Brussels can be seen as a new starting point – as ENS has been officially newly founded. The documents shown and created at the time ((European Nuclear Society 2004) (European Nuclear Society 2004)) show that there is a new leaders vision statement. The in the above paragraphs discussed controversies within the society could be seen as a cultural change, that enabled this move and the further reorganization of ENS. However, analysing this point further is out of scope of this work.

5.3.3 Fukushima Accident

The next point that could affect the identity of ENS was the nuclear accident of Fukushima in March 2011. The author was at the time already part of the nuclear community and was connected to ENS as a national representative for Austria. The accident happened in a phase of a first small nuclear renaissance. Countries were evaluating if nuclear power was a chance for them. ENS was a well-recognized conference organizer, had a solid budget. This accident especially triggered ENS as an information provider and from the identity point of view from the networking side. Interviewee 2 states “And yeah and then then came 2011 and the sector took another hit and with the society you [the author] feel this as well. You feel the dynamics of also people approaching us being interested in participating, wanting to be member and because now we are in a more up way again with more interest. So you feel more activity, you feel more interest of members as well. [...] I've been focused on a lot of conference because this was very important as well because it was always a big part of what the society was doing. So, time wise as well and then obviously money wise was the society was very dependent on the conferences. And also, from the mission point of view you can feel that there's a change I would say a change in why you become active in an association. Because we are people's association obviously, we're connected to industry as well but being engaged in a volunteer's society, being engaged in professional network. So, the point interviewee 2 tries to make is, that the accident of Fukushima was a hit on the whole industry, it effected the society largely, especially from a financial point of view. On the other side, it enabled more people to join a network and work for the common goal. The networking aspect, the networking pillar of ENS became more important for the members after the Fukushima accident.

As explained in chapter 5.2.2 ENS was already seen as a credible and unbiased information provided. This was not questioned; it was more that ENS was in danger as a society and its identity needed to be stable in order to give its members a sort of home where they were able to get back to whilst being questioned.

Looking again at this short description of the change point: The identity of ENS was not threatened, the society was at the time. Members of ENS were also threatened in their personal identity. Everybody that was still pro-nuclear at the time had a hard time communicating. This might explain what Interviewee 2 stated, that people engaged even more within their networks. Something that is described in the literature as “organizational members pursue an enduring identity as a way of preserving their individual social identities” and that they are “motivated to affirm a positive perceptions

of their organization's identity to preserve and affirm a positive social identity for themselves" (see (Goia, et al. 2013, 134)). Again, this discussion could probably be analysed more in depth, but a scientist with a social science background is needed and not a pure physicist.

5.3.4 Climate Change Crises

The last turning point that was identified by the author that could have an impact on ENS identity is the current climate change crises.

The role of nuclear in the fight against climate change was discussed during the last decade by politicians and the public. It was often a controversial discussion. ENS used this movement wisely, to position itself as the scientific organization within not only the community but also now for the outside world. The movement ENS initiated together with several of ENS members organisations and international nuclear societies is the so-called "Nuclear for Climate Initiative"⁹. In Figure 8 the foundation ceremony is shown. ENS would not have been in the position to start this movement independently, but members of ENS were. Volunteers from all the members transported the message to the world. ENS was always in the back, ensuring that the financial part was managed and the enough resources for the organisation were available. Part of the ENS staff worked for the initiative.



Figure 8: Foundation of Nuclear for Climate Initiative in 2015 (European Nuclear Society 2024)

⁹ **"Nuclear for Climate** is an initiative gathering nuclear professionals and scientists from over 150 societies and associations, with the goal of opening a dialogue with policymakers and the public about **the necessity of including nuclear energy among the carbon-free solutions to climate change**.

It was co-founded by the European Nuclear Society (ENS), the French Nuclear Society (SFEN), and the American Nuclear Society (ANS) in 2015, ahead of the COP21 conference in Paris., accessed 25.07.2024

Why is this story so important? ENS has to make sure that they can transfer its identity from a defending environment into a nowadays positive environment.

In 2024 several milestones happened there was a first political arranged nuclear energy summit, that gathered 21 leaders of countries together that announced for the first time publicly their support for nuclear (Nuclear Energy Council 2024). This event was triggered by the announcement at COP28 that nuclear energy is a CO₂ free energy source “Accelerating zero- and low-emission technologies, including, inter alia, renewables, nuclear, abatement and removal technologies such as carbon capture and utilization and storage, particularly in hard-to-abate sectors, and low-carbon hydrogen production;” (United Nations 2023, 5).

Neither of the two events would have happened without the ongoing work of ENS. However, it is seen within ENS as a very critical point. For almost 15 years ENS was positioning itself in almost anti-nuclear environment and was always seen as a credible source of information. Now, with the current change in the overall opinion, ENS must have a strong identity to keep this role. ENS has taken initiatives to be included in several newly founded working groups (e.g.; the Small Modular Reactor Alliance) and has also initiated through this work a way to overthink its identity and strategical plan forward. This last turning point is currently questioning all three identity pillars. However, this thesis will give a good analysis why the proposed pillars seem valid and can serve as a basis for future discussions.

5.3.5 Summary of ENS identity change over time

Summarizing the possible identity change of ENS over time the author has found evidence that the identity was not always stable over time. Starting as a purely leaned society, with a strong focus on science, ENS took several turning points that altered or questioned its identity.

The accident of Chernobyl was the first turning point and had a huge input on the whole nuclear sector. It is marked as a turnkey point globally as explained in chapter 5.3.1. For ENS it was necessary to discover its values and market point: Communication and being a credible and unbiased source of information. As described in chapter 5.3.1 ENS decided to found a nuclear news agency that receives its information directly from the sources within the nuclear sector. This news agency, NucNet was so successful that it was outsourced, as explained and is now its own organization. Nevertheless, the event also had a strong negative impact financially –

the sector was no longer able to sustain non industry organizations and ENS had to look for other funding.

So, this first event routed ENS towards one of its identity pillars – a neutral news source, and not only a scientific organization that organizes conferences.

The second turning point, the move of ENS from Bern to Brussels was a late consequence of the first event. The financial situation forced ENS to move, but also ENS wanted to be closed to EU institutions. As explained in chapter 5.3.2 also internal discussions about the future role of ENS impacted this point. ENS as organization wanted to stay a scientific organization, a learned society, whilst some parts of ENS wanted to turn ENS towards a service provider. The move towards Brussels can also be seen as a new starting point, with a formulated identity that was derived from the founders.

The third point, the accident of Fukushima (see chapter 5.3.3) did not impact ENS identity strongly, but the strong identity of ENS allowed ENS to survive at this challenging times.

The last point, the current climate crises and the chance of the perception of nuclear worldwide might affect ENS identity. However, this is an ongoing discussion and will be evaluated further in the future as stated in chapter 5.3.4 and chapter 0.

This chapter concludes by answering the research questions for the specific case by addressing the last open research question: Has ENS identity changed over time? This question was difficult to address. A change of ENS identity over time can clearly be identified. Taking into account that the author has proposed a new founding point of ENS after its move, especially for its identity, only adaptations in ENS identity can be seen. Nevertheless, as interviewee 1 puts it: For the identity, yeah, I think identity as I see it may not be one thing you solve for a long time, right? And I think we need to find a way that we adjust the identity per also the other stakeholders' adjustment. And I think this is where we need to constantly reevaluate who we are versus our members and our stakeholders and make sure we adjust accordingly".

The enduringness of identity is always very important, but it will always be questioned throughout the history of an organisation.

6. Results

6.1 General Aspects of identity formation and identity change in learned societies

Which conclusions can we draw from the above case described in chapter 5? Is it possible to derive general conceptions for the identity of learned societies, the foundation of learned societies and the input of this foundation on its identity? Isn't it quite often the case that a bunch of people interested in a specific scientific topic tend to get together on a regular basis and exchange their ideas? So, at some point they will start to think about sharing their interest with others, or just with further interested people and start to organize an event. In order to do so, they will have to formalize themselves. Looking at the case study above, this is also found for our case, (Feuz 1995) and (Versteegh 2023) talk about the initiating conference. The author has also shown the initial publication of this event (see Figure 5).

Looking at organisations in general, it is often the case that a single person starts to articulate a vision (see (Gioia, et al. 2010, 13)). Looking at a company, you will have a person or perhaps two persons that will use an idea and start building their story about this idea and forge the identity of this company. This can't be said for learned societies, as the basic purpose of a learned society is not an advancement of something in principle but the exchange.

So, the basic starting phase of an organisation or society takes time and also the initial identity formation phase will take some months or years. The author tends to suggest that learned societies will take even longer for this phase, as associations or especially learned societies will not think of the necessity of a mission, vision or even identity.

In Figure 9 the author has marked this starting point and phase with number 1. Looking at further literature (Koch, Sydow und Schreyögg 2009) has shown that so called "critical events" can impact the identity formation process.

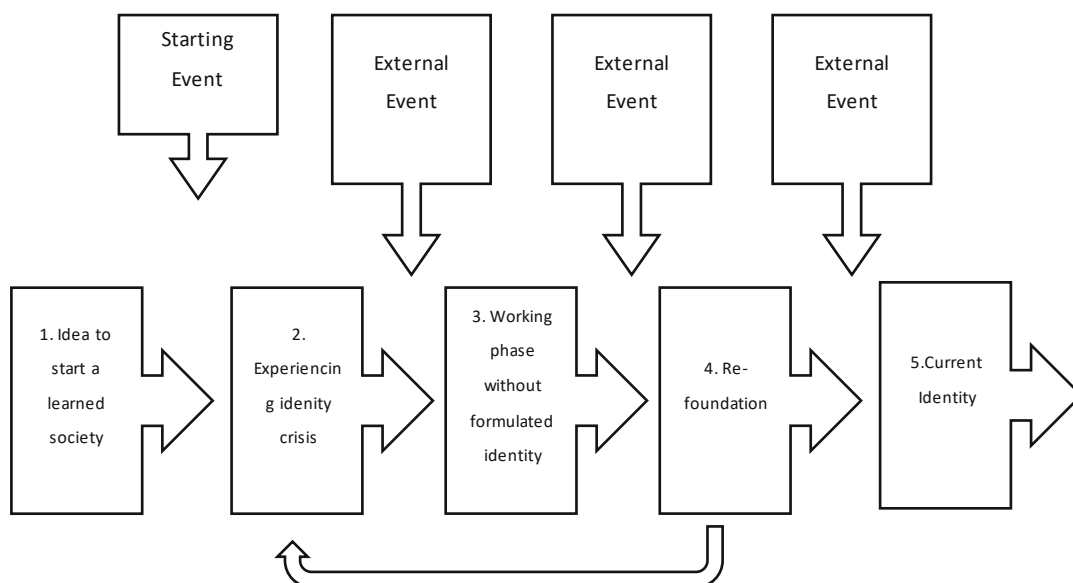


Figure 9: Founding Identity of Learned Societies

Is this identity now already formed after this first and initial start? Looking back at the case study, we see that in the case there was a long phase of “much talk, no action” – we discussed this with (Gioia, et al. 2010) and applied the phase of “experiencing meaning voids” for this phase. Societies tend to fall into that kind of “meaning voids” or “identity crises” as they had not expressed a dedicated mission and vision in the beginning, only as described an idea about what to do. This is shown in Figure 9 as phase 2. They share a common interest about a cause, but they don’t have, in the beginning an aim to do something with this common interest. Saying this, we have to take into consideration that the societies wanted of course to share their interest, and they do this by initiating a starting event. Nevertheless, usually, as they are scientists they don’t look further, and don’t have a clear vision about what comes next. There are several ideas about what to do, there are several groups that have been founded within the societies (see (Versteegh 2023)) but there is no clear pathway.

As we saw in the case study, some external event triggered the process towards a working phase. The society has found a way how to operate, but only caused by a trigger from the outside. This is shown in Figure 9 as phase 3. As discussed in the case study, the identity of learned societies is influenced from the outside. There are parameter that tend to be stable, enduring but others are shaped in influenced from outside events.

This is a critical point to discuss. In the current research we found that identity change is described as a fluent change, or an envisaged changed that is done on purpose.

Another impetus as (Goia, et al. 2013) put is an identity gap, and the need to adapt to the peer group.

What is interesting to see is that (Tripsas 2009) and (Biggart 1977) showed in two cases that a financial burden can lead to a quick identity change. In our above case study, one of the major changes within the society was triggered by a critical financial situation. This situation led to a change in the identity, a cultural change that was started was stopped and the identity was reforged.

The author suggests a further notion to this research, that major external events can trigger identity changes, especially within learned societies as their topic might be questioned from the outside or their research questions have been partially answered and changed. This will be discussed further in the next paragraphs.

The next phase that we can indicate is a refoundation. This happens quite regularly in learned societies, and usually this is triggered by an external event. It is described in the literature only for rare elements, like the discussed financial burden phases. For learned societies this poses an even bigger burden and can lead to a necessary refoundation. In Figure 9 this is shown in number 4. These external events might be anything from an unpredicted change in the management of the society to global events. In our case study we had financial issues after a global event that triggered this refoundation.

Can societies learn from their own past? In our case yes. This is a question that can be further pursued in the future, if learned societies can learn from their mistakes in the past. Here, the refoundation was somehow for the society a start from zero. And if societies have after re-starts suddenly articulated visions and missions this is a good indicator that this re-foundation was successful.

Nevertheless, an identity of an organization, and here especially a learned society can actually evolve. As shown in Figure 9 in Number 5, the current identity can also be changed or adapted by external events. This can lead to a consolidated identity, if the organisation has experienced a strong foundation in the beginning. The author would propose that this process might be repeated from step 2 to step 4, if this foundation process was not done correctly.

Also something needs to be kept in mind is that learned societies usually don't want and are often not allowed to gain money. They only need to be self-sustaining and will not follow rules of typical organizations that often have a growth mind.

This is also shown in the above case study and can be taken as a general notion for identity change in learned societies. This answers one of the research questions, stating that identity change within learned societies can be triggered by outside events, and it's unlikely that this happens from an internal initiation.

6.2 Differences in identity and identity formation in learned societies towards other organisations

In the literature, Goias' grounded model is currently the bases of organizational identity formation processes. We have three study objects, the above discussed case study, (Czarniawska und Wolff 1998) regarding identity foundation in universities and in the case study of (Clegg, Rhodes und Kornberger 2007) regarding identity in business coaching. The second and the third one were compared by (Goia, et al. 2013) and discussed the in Figure 2 proposed grounded model on identity formation. Which information can we now add with the case study on learned society toward identity formation processes? Can we draw conclusions from the above case study?

Let's start by a comparison the proposed model in Figure 9 to Goias' grounded model (see Figure 2).

We can see similarities between the grounded model Goia discussed and our case.

Starting with the foundation of the organization, in the grounded model it was described as the founder's view. The case discussed in chapter 5 is a learned society, with an aim to gather for exchange of their members and to discuss their specific topic mainly within their network, described as phase 1 in Figure 9. Sometimes learned societies also touch the outside world, by publications or specific communication to the outside. In the above case this is on the one hand side a working group that has the aim to publish for the public and on the other hand side the founded news agency. A university has as primary goal education, and only little touch to the outside. We saw in the case of (Czarniawska und Wolff 1998) (university without identity definition) how this organization did not survive. We also have the urge of Goia 2013 that organizations are in deep need of an identity and its impossible that they survive without.

What about learned societies? As shown in the case study above, a clear founders view on the identity values is needed in order for a society to define their identity.

What information do we have about the founding and its influence on the identity? For learned societies there is often a story behind the founding of the society: “We gathered to exchange about this hobby” “The author is now dead long enough, we should keep his oeuvre alive and talk about him”¹⁰ or as the case study – there are some others interested in the topic, so let’s don’t let them come and found our own society.

Universities don’t have this random factor when founding, they have a dedication already, and this can then be seen in their input towards their identity (see (Gioia, et al. 2010)).

When it comes to organizations in general, we usually find this very strong founders view (see (Goia, et al. 2013)) that is used for the beginning, that also is expressed in their identity.

For learned societies this is not the case, and identity is shaped. It is shaped by external influences, by threats from the outside. However, as explained in chapter 6.1 this will lead to a vacuum, a meaning void after its foundation. This is of course not only true for learned societies but also for other organizations, but the author thinks that this has a much stronger impact on learned societies than other organizations. In the above case study, this is shown through the very long time this meaning void existed. Just have a look at some of the learned societies you know about and check the updates on their websites. If a learned society is managed professionally with an aim towards commercialisation, its primary aim changes and the learned society becomes an organisation, it’s no longer a purely learned society. It will overcome the meaning void quickly. Otherwise a learned society will at some point show voids, no updates towards members, of e.g., an old website¹¹. This second step (experiencing meaning voids) is now equivalent to Goias’s grounded model approach.

Analysing the current identity of the case study, the author did not see any differences to cases discussed in literature. It was easy to establish categories as proposed by (Albert and Whetten 1985) and (Goia, et al. 2013), which the author could identify through data sources. This will be in general the case for all learned societies. Learned societies will all have the same documentation that can be used for this

¹⁰ From personal communication with the Heimito von Doderer Gesellschaft about how their learned society was founded

¹¹ An example can be <https://www.doderer-gesellschaft.org/main.shtml>, which is an active learned society but has no intention to change anything if not forced to by outside events. (Doderer Gesellschaft 2022)

analysis. There are always archived data about their values, and researchers are able to access and speak to people about the past of a society. What is also important as a data source to analyse are talks about anniversaries of societies. They tend to summarize changes in the past and will give the researcher an even deeper view and a view that dates back even longer than any other data source.

Learned societies have in general a similar approach towards identity than any other organization, this was also shown by analysing the current identity of the case study object. There were no major differences or obstacles whilst analysing the case, and the author had no issues in pursuing pathways suggested from literature such as (Gioia, et al. 2010).

Even if the identity formation process in a learned society might differ from a general organisation, as the founding aims are different, an analysis on the current identity does not give any differences to the cases analysed in literature.

6.3 Identity Change in Learned Societies

The next step in Goias' grounded model is the step 3, engaging in experiential contrasts and then step 4 converging on a consensual identity. Here, the author will show, that learned societies don't necessarily go towards step 4 in a straight process, but may use loops to achieve step 4. This will be discussed shortly hereafter through a discussion on the enduringness of identity.

A very important topic to discuss is the continuity or the enduringness of identity. Literature has given this topic a high priority over time, and the author had to evaluate several theories whilst addressing the topic of the identity change over time. As suggested in chapter 6.1 the author proposed that identity change is very unlikely in learned societies. The only possibility to change identity in a learned society is by a major external event. Even then, as shown in the case study, learned societies will tend to heavily resist any changes towards their identity. The strong focus on their main research topic and usually only the aim to disseminate this information makes learned societies even more resistant towards identity change.

The author has analysed several external events and saw only that the huge financial burden lead towards a re- foundation and a new start, including also a re-forging of its identity.

There will be of course incremental change in the identity of a learned society. As they are usually scientifically driven, they will tend to adapt to new findings and allocate their identity if necessary.

A point to stress out again is the point that the identity of a learned society will be strong if in the starting phase the values have been clearly defined and communicated. If this point was missing the society will probably end up in a loop that is described in Figure 9 until they escape this loop and define their values and their identity correctly and can leave the loop and start the working phase. Nevertheless, it can always be the case that they will lose this momentum and drop back to phase 1.

It is difficult to address identity change for a learned society from the inside. Looking at the case study, one can see that imposed identity changes to the society were heavily resisted and not possible if they were not driven from the society itself. This is again because of the aim and reason for a learned society, a topic that is of interest for all members.

For identification of these changes, the researcher shall look at major events that could trigger identity change within a society. This might be external events, like crises, wars, changes in the scientific knowledge but also financial changes that force the society to adapt. Comparing this discussion to the literature, the author could only identify the financial threat as a common possibility to identity change between learned societies and other organizations. The other triggers that were identified in the literature for organizations do not touch learned societies as strong as they would effect the organizational identity.

Learned societies don't need to achieve a financial output. In case of failure, they will be able to reorganize and refound themselves. They are not dependent on people that run the society in case they get paid. This is the main difference to (Czarniawska und Wolff 1998) cases, that showed that the lack of identity will lead to a disappearance of an organization. In the case of a learned society, they will reshape, hopefully with a stronger identity and restart the society.

This answers also the last remaining research question, that identity change over time can only be anticipated by looking at external events. Change from the inside will only happen if the learned society decides to start a re-foundation and needs to define new values and goals and re-shape their identity. External events can impact the identity of a learned society but compared to other organizations much less then usually anticipated.

7. Discussion, conclusion and the way forward

7.1 Discussion about identity of learned societies

The author took a case study approach to identify identity within learned societies and paid special attention towards identity change in those organizations. Addressing three research questions, the author had first a look at the historical influence on the identity formation. What stuck out were two things: Learned societies tend to lack a so-called founders view that is important for forging an identity. (Goia, et al. 2013) showed the importance of this founders' view and its impact on identity formation within organizations. The author showed that a lack of this founders' view will lead to a long meaning void, and eventually an identity crisis within the societies. This is enforced by the second remarkable point – learned societies don't necessarily need to produce an output and are most of the time a random gathering of enthusiasts about a topic. It will need several impacts from the outside till those societies get together and discuss their vision and mission. Only then learned societies will somehow discuss their identity.

In comparison the author proposed in Figure 9 a model for the identity foundation of learned societies. This is, as discussed in chapter 6.2 only partially comparable with the model currently discussed in literature, the grounded model of Goia (see Figure 2). The author assumes, the main difference between the two models stems from the different aims of organizations and learned societies. While learned societies don't have to produce a financial outcome, they usually gather to exchange on a topic, organizations must produce outcome to survive. The author showed that learned societies that have not expressed an identity will be captured in a loop of refoundation until they have formulated strong enough identity values that will keep them in the working phase, which is equivalent to Goias' step 4. External events can trigger changes in all kind of organizations, however, learned societies are more resilient towards external events, and only financial crises or huge external events will have an impact on their identity. In learned societies change from the outside is almost impossible, in cases (Goia, et al. 2013) discussed, also small events can affect the identity.

The above discussed cases can only touch the topic slightly, and it would be good to see future discussions about further comparison of identity formation processes in different kind of organizations, learned societies, industrial companies or f.i. investment banks.

7.2 Conclusion

This thesis has analysed the identity formation and change process of learned societies. This was done by performing a case study on one learned society, namely ENS. The European Nuclear Society was founded in 1975 and defines itself as a learned society that brings together people (European Nuclear Society 2016).

The author has chosen this case study approach (Eisenhardt 1989) with some formal points from the “insider outsider approach” (Gioia, et al. 2010) and (Evered and Louis 1981) to inquire answers to the three research questions regarding learned societies identity formulated in chapter 1.1. The underlying theory for this work was the “Central – Enduring – Distinctive” theory of identity, formulated by (Albert and Whetten 1985) originally and analysed by (Goia, et al. 2013). In order to receive answers to the research questions, the author performed several interviews with stakeholders of ENS, inside and outside of the organisation to get an overview of possible values. The other data sources for this thesis were historical files, internal documents of the organisation and an interview about ENS history that is written down in Annex 1.

With the help of this data sources, the author gained information about ENS history and its identity formation over time. The results of the case study are explained in chapters 5.1.1 to 5.1.5. The main outcome to be pointed out is the missing founders view on ENS at the beginning of the organization, that led to a long period of meaning voids. Nevertheless, the basics of ENS identity were formulated and were consistent throughout ENS history.

This led towards a discussion on identity formation in learned societies, which are discussed in chapter 6.2. Special importance was given to differences regarding identity formation in organizations.

The second point to address was the current identity of ENS in order to draw conclusions to identity formation and change processes in learned societies. The author used the already described case study approach and used (Gioia, et al. 2010) as a blueprint to analyse the data from the stakeholder interviews. The author generated values, shown in Table 2.

The values were then gathered in categories and the author proposed the following terms for the requested identity pillars:

- Central: scientific
- Enduring: neutral
- Distinctive: networking

Those categories were challenged in chapters 5.2.1 to 5.2.3 against the theory in chapters 2.2.1 to 2.2.3. To underly the proposed categories, the author also analysed all historical files and internal documents.

In order to further discuss the proposed identity of ENS, the non-identity values were gathered. The author applied the same research method as for the identity values. The author could identify that ENS is not considered as a lobbying organization and is not visible enough. The details of this can be found in chapter 5.2.4

This summarized the discussion about the identity of ENS; which is proposed to be ENS is a scientific, neutral and networking organization.

This discussion was of great importance for the greater research position regarding the continuity of identity over time for organizations. The author could show that learned societies are especially resistant to change, as their intrinsic motivation to operate these societies is usually a common topic that is researched and not a commercial interest. Change comes usually only from the inside and not the outside, the only critical event that can cause a change in a learned societies identity is a financial crisis.

This was also the last question the author had to address.

Regarding the specific case, the author identified several turning points in history over time, and analysed if those points had an impact on the identity of ENS. The detailed discussion is found in chapters 5.3.1 to 5.3.4. Whilst remarking that not all turning points showed an impact on the identity of ENS, the author assumes that the current turning point of a changing environment will affect the identity of ENS strongly. This explains also why the author took the approach of performing this study on ENS identity, and is eager to continue to develop the and supervise the next steps of ENS.

7.3 The way forward

The next step regarding the identity process and the strategy of ENS was defined during a meeting in 2024. With the outcome of this work a working group was founded to further analyse the thoughts of ENS members. A questionnaire will be distributed to the member societies of ENS in order to evaluate what the wishes towards ENS

are. It will also be asked what members think of ENS and evaluate if the results of this work are consistent with the thoughts of members.

A second questionnaire will be distributed to cooperate members, as they have different requirements towards ENS.

In a second step, the outcome of the questionnaires and this thesis will be combined in a strategy plan.

ENS has already taken first steps to show their identity better, the author accessed the ENS webpage again after the results of this work were communicate towards ENS. The following picture, a screenshot shows the impact this work had on ENS, and also proves that change can only be addressed from the inside.

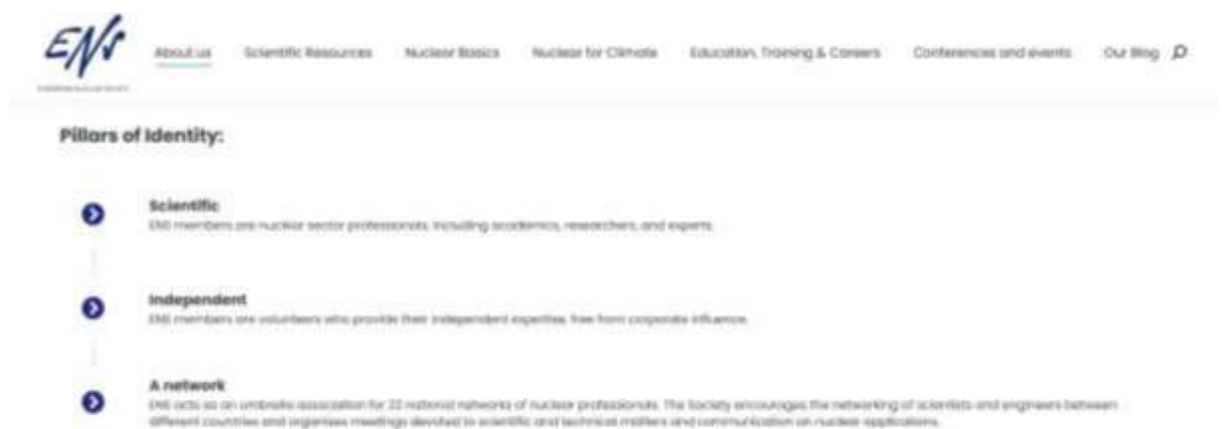


Figure 10: current "about us" of, (European Nuclear Society 2024) accessed 31st of August 2024

ENS will celebrate its 50th anniversary in 2025, and the ENS board thinks that all outcomes together will path the way forward for a successful future. Keeping in mind that the environment for nuclear is currently changing it is of uttermost importance to have a clear understanding of the organizational identity and a clearly defined strategic process of an organization. This can only be achieved if the organization has a firm knowledge and appreciation of its identity.

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Appendix 1

Interview with former ENS Treasurer

Date 11.January 2023

Held online via MS Teams

Interviewer: Thank you for agreeing to do this interview. Can you introduce yourself shortly and tell something about your work within ENS?

Former Treasurer: I myself, I can tell you something about me. I worked short time in [the research center] Ispra in 69, and afterwards at RDM that's at that time a company who made reactor pressure vessels for a lot of [nuclear] power stations still operating some and then I went to Petten working at what was called at that time Reactor Center Netherlands. And I worked there for 40 years or something like that. So. I was involved. At the moment I'm involved in several things and that's also a little bit complicated because of course I was at ENS in the board some time, I was the treasurer sometime and in some of the working groups. But I was, chairing NucNet, And formally NucNet was [within] ENS, and they went apart from ENS, long time ago. Uh, I'm also what's called executive vice president to European Atomic Energy Society. So the name is more or less the same. It's somewhat different club, existing longer than ENS. There is a club of directors of research institutes Nuclear Research Institute in Europe. So they assembling them throughout the year 3-4 days and discussing items, Associating experiences and so on. And I am doing something we have a nuclear journal. I'm chairing the research Board of energy that is the research Center I came from. And I'm also part of. what's called the Borsselle Benchmark Committee. That's a committee, who have to look, if Borsselle belongs to the 25% safest reactors of the Western world that was conditioned to continue operation. Every five years we have to make a report. It's an international board, in the International club for Climate board. I'm a board member of the foundation, in energy transition and nuclear. It's about it, I think. Advisor Nuclear Netherlands. I advise the the Dutch nuclear sector. So that's what I did when I retired. I was director of NRG and NRG was the nuclear Research Center. I looked yesterday at some photos back, and I saw that Helmuth [Böck] was also a member of the ENS because I saw some pictures, there were people from ENS there and he was also there. I know Helmuth very well. I've worked with him together. 3, 4 years in in Bangkok. We made a master degree on Nuclear Safety, so we were there together so and

I knew already before so and that was why I believe. Yeah.

[...]

Back to ENS – what do you remember about the history?

I saw that it was founded in 1975. I think I was participating perhaps in 1980 or something like that, so it was already existing. And I don't remember exactly what time it was. Perhaps, 1980 or 1982. It was located in Bern, and the Secretary general at that time was Peter Feuz. He was a very big guy. And also very directive he was sticking more or less. So anyway, it was ENS, the administration and also Secretary General the people were engaged by ATAG Ernst & Young. So they were hired. They were working at the consulting firm and that was at the time ATAG E&Y, nowadays is E&Y, Yeah, so they were. ENS hired the people from there. They were I think 2-3 people, something like that. What I remember, of course, the main, not the main thing, but an important thing: They organized once every four years a big conference. This "exhibition". Uh, the first conference [of ENS] was in Genevre, I remember, and then they moved to Lyon because there were problems, with security and demonstrations and things like that. It was too close to Germany and Switzerland at that time. Not positive. So they changed it to Lyon, that I remember, and then after they transferred to several other places and That was a big, big conference with a big exhibition.

Was it like the European Nuclear Conference?

It was much bigger, nearly half of the exhibition was with very big installations. A very, very, very large. very, costly also, but they gained I believe at that time more or less 1,000,000 Swiss francs on it, and they lived more or less the four years from that money. It was different of course at that time. But it was much bigger at the time. It was the only nuclear exhibition in Europe, really the big one. And I remember also that they had, I believe, a monthly journal. A short magazine or so you know. It was I think monthly. This was about nuclear news and nuclear items and so on. They they started also the communications item as an important item. Communication was the communication working group.

So they had working groups at the time because nowadays they only have like the High Scientific Council?. And the board was from all the countries?

The chairman of the local societies. The chair of a nuclear society was the principal member of the Board. They met like two times a year or something like that, also meeting at places like London, or in Amsterdam or Paris, or in Kiev, I remember that

we went to Chernobyl also. And in Moscow, because at that time also the Russian were Member and the Ukrainians.

Was the principal aim at the time to organize the exhibition or also to communicate, or what was it?

It was some sort, yes. That people talk to each other knowing what is going on. It was at that time different from nowadays. Now you have everything on the internet or whatever you can find. At that time it was much more complicated to get information from and from others and to meet also was more difficult. So. I remember that also EDF was a member. So not only societies, but EDF as well. In what form? I don't know exactly, but I remember the director of EDF, Remy Carl. He was a member of the board, and he was had the idea to found a new working group. Because there was a lot of misinformation about nuclear incidents. So he founded an organization, where members of ENS gave information. Factual, good information. So I remember that Peter Feuz didn't like that too much but yeah, it's went on, first as a project for three or four years. Several countries of ENS donated some money to start it up and then it became afterwards NucNet.

It was the idea to have direct communication to the [nuclear] power plants. They know, the director of the power plant there and [NucNet] can ask what is the matter, what did happen. And then send it out [to members, and the public]. To prevent hypes and at the same place [inform]. You had also communication that went by fax. You get a fax once a day. And of course, when there was something happening there, they knew a lot of people because everybody was member of ENS. Every country had some people and when there was something happening in Slovenia, the phoned there, and this is how they got information. So. The project processed successfully as I remember. NucNet was part of the working groups and it was called NucNet and at the certain time NucNet was bigger than ENS and also too much risk and so it was decided to separate it to ENS and NucNet. Two separate organizations. That's still [the case], ENS and NucNet are a little bit connected. It's still from that time. In the beginning, I think the Secretary General, ENS was also the Secretary General of NucNet.

Yes this was the case till last year, now they also separated here. As you said, you joined in the 80s - Could you feel any impact on ENS from first the separation of Eastern Europe and Western Europe and then secondly, do you remember the Chernobyl impact on ENS? Anything that comes up to your mind?

Of course there was. With Russia it was difficult at that time. Already there was one, I don't remember his name, Russian guy who did everything. He was at the IAEA. He was there. He earned money on both sides it was also something. He was always there and he did not really the participation of Russia [to ENS], it was more a personal representation from him. It was him, who did that and not the behind that was because before it was, of course. everything in Russia was secret and so on. When Chernobyl happened, there were no drawings, no pictures nothing. There was one drawing of the reactor and everybody used it in the world, and it was also very simple. Everybody was looking, what and how did they do it. They didn't how this reactor really was constructed. ENS at that time, was also speculating at the moment, at that time about what happened. In August [1986] there was the first big IAEA meeting in Vienna where the Russian came to explain what did happen. That was after that. I've still the papers of some members of the presentation. I was there, it was an enormous happening. There's a lot of publicity people. I was on the television at that time every day more or less to explain what went on. The role of the ENS at that time. They had no good connections to get more information than anybody else. But it was perhaps, I don't know, the reason for Remy Carl to set up the information group, could be.[...]. I remember also the startup of Woman in Nuclear. Also, Feuz didn't like that. But it happened. It was a Swiss lady at the time. She was very active, also in communication. I don't know it exactly who was active also at that time as technical Director, but she was in also in the communication group. And she became later chairman of the director of WNA [World Nuclear Association] up to a few years ago. And then, they started again. with something, Feuz didn't liked, I don't know why, and he didn't like it too much. Feuz asked me, once when he retired, he asked me to follow him up to replace him. Had some discussions with me. He wanted that we work together half a year to get in and and I didn't see working with him half a year. So I didn't do it. It came somebody else from Finland. Later on he stayed one year or something, one or two years, but it didn't work too well. He was in later in the at the ministry in nuclear the nuclear guy in the ministry. On the second moment after E&Y wouldn't continue do the organization because it was not their core business, so they stopped it. Then I remember the decision we had to go and then it was logical to go to Brussels. Because we were in Bern, it was ATAG E&Y who was the facilitator who did the work. NucNet continued to stay there for some time. Because I don't know exactly. The guy who was running NucNet there, so he did this with E&Y, he had his own office and he continued for some time the Secretary General. And he. he would

like to stop because he has in more informatics, and then also NucNet moved to Brussels, to ENS and FORATOM, same office for all three.

The Secretary General of the ENS was often invited by local societies to make presentations. So when you were Secretary General, you traveled a lot. And knew a lot of people. But the president changed every year.

[...]

Of course, the importance of ENS went down a little bit. In the beginning it was a big organization moving, but of course, nuclear was at that time also booming. And there was a lot of constructions [of Nuclear Power Plants], there was money that was available. So then ENS could easily grow, they had a good environment to raise more money. And I think there were less alternatives at the time. Now you have a lot by the European Commission and they have all kinds of meetings and clubs who which cooperate for safety or whatever, there is a lot of common research. So perhaps also there are alternative possibilities know to generate money.

You said in the beginning there was only one conference, but like when I joined there were like 5, now there were like 2.

They posted the communication group you had, what other working groups did we have?. Of course, the young generation came at a certain time, 25 years ago. There was Women in Nuclear, of course. Then the Research Reactor Group, they did a conference after the first global one. It's still existing?

The Research Reactor conference is still existing, and one of the best conferences of ENS. Together with the Top Fuel conference, that is shared between US, Asia and Europe.

ENS tried of course at that time to have a conference in several subjects. PIME was in the beginning. Um in the beginning yeah 10 years successful, more successful, around 80 people or whatever. Communication was the topic. PIME was organized by ENS, and I think by the communication group [NICE].

There is also a conference on Education and one on Safety.-

[...]

I think that you already gave me a very good first impression. Do you want to add anything?

Yes, about the conference - I remember because it were very big events. But I also remember the event because the Swiss didn't want it anymore because of the protection [they would have had to provide to the conference] and then eventually they moved it to Lyon there was also always a partner program more or less. So they could no longer provide this program for security reasons. So then it started to go down for ENS. The general setting changed a little bit and of course everything went down. There were no new builds anymore, so there was no FRAMATOM [later AREVA, now again FRAMATOM), no KWU. So, if the money is gone that is always the point.

Ok, thank you very much for your time, and all the information. Have a good day.

You too!