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# Trade associations in Nordic construction – their role in procurement and project delivery

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**Abstract.** A trade association is a not-for-profit organization made up of companies and/or individuals with common interests or who work in the same industry. They act as a representative body for the industry they represent. As the ‘industry voice’, trade associations speak on behalf of their members to government, agencies, regulators, the media, and other opinion formers. There are several trade associations connected to the construction industry in all Nordic countries. The purpose of this paper is to investigate what role they play in improving procurement and project delivery in the Nordic countries. Based on interviews with trade association representatives across all Nordic countries, the paper maps their structures, roles, and strategies for involving in procurement and project delivery across the construction industry in each country. Similarities and differences are analysed and discussed considering the situation in each country. The result shows that trade associations have important and similar roles in each country, motivated by the wish to support their members. The first observation is that most trade associations across the Nordics are actively involved in developing procurement trends and knowledge accumulation. The motivation for engaging in procurement and project delivery is the well-being of members. They all depend on fair competition and access to market, and they all need to be associated with successful projects. The second observation is that it seems generally accepted across the trade associations that it is important to promote more collaborative procurement strategies and project delivery methods. The third observation is that all trade associations across the Nordics take an active role in gathering, analysing, and distributing knowledge and experiences connected to this development. Dissemination is both possible and probable through the trade associations effort.

## 1. Introduction

A trade association is a not-for-profit organization made up of companies and/or individuals with common interests or who work in the same industry. Trade associations are key actors in their

industry. They act as a representative body for the industry they represent, putting forward the collective view and position of its members. As the 'industry voice', trade associations speak on behalf of their members to government, agencies, regulators, the media, and other opinion formers [1]. Trade associations are also an active part of the national innovation system (NIS) [2] and have also been found to act as change agents and adopt different kinds of institutional roles in industry level change processes [3]. They are typically organized as rather small secretariats with membership-based governance structures.

Procurement is the act of obtaining goods or services in a business environment. It includes processes that lead up to the final decision to enter a contract relationship with one or more suppliers [4]. Important aspects are preparations, solicitations, negotiations, contracting and follow up of these contracts. In professional organizations, procurement involves many individuals and is often under the responsibility of one dedicated officer with a strategic perspective on procurement. Procurement is an organizational level concept but is relevant in the construction context because most large-scale procurements are made in the form of projects.

Project delivery is a wider concept that includes how projects are organized and how decisions are made about other important issues than procurement. One practical description of project delivery is simply how to get the project done [5]. The concept of project delivery is normally studied in light of the structure (project delivery models) or the process (project delivery methods). Project delivery meets procurement in that the organizational structure, roles and responsibilities need to correspond to the procurement strategy and that the risk and reward mechanisms, as well as dispute resolution arrangements, must be agreed and formalized in a contract through procurement.

The construction sector is well known through media and research for lack of productivity, cost overruns, late delivery, and defects [6]. Reasons for these negative characteristics are pointed out as being its fragmented organizational structure, long supply chains, complex technical interdependencies, and one-off nature of its products. Another way the situation can be explained is the use of adversarial contracts, conflict-laden culture, and competitive mindset. Effective procurement and project delivery models are considered key to success in the construction industry [6,7].

These characteristics of the construction industry are known from international and Nordic context [8,9,10]. Little room is thus left for doubt that there is a significant potential for improvement, and that lack of knowledge is one probable cause of this situation. This is a problem that concerns the whole construction industry, and thus should be of interest to the collective organizations and not left to each individual firm. Considering this description, we ask: *What is the role of the trade associations in improving construction procurement and project delivery in the Nordic countries?*

## **2. Methodology**

This study is part of a lasting collaboration between 14 different universities and research institutes with research interest in the above-mentioned aspects of construction business across the Nordic countries. Given that both research and industry discuss procurement and project delivery in many different perspectives and contexts, we have settled for discussing these two concepts as one combined issue. This will give a more holistic picture of the situation. In this paper we gather knowledge about the trade associations' role in developing and spreading relevant knowledge through the construction industry in these countries.

The Nordic countries share several characteristics, geographical, economical, and judicial similarities. Still, the construction industry has differences in size and organization that need to be taken into consideration, and which invites slightly different approaches in each country. In the following we describe the research process as it was performed in different countries. The base case reflects the process in Norway, and additional sections clarify adaptations for each country.

The process in Norway started by contacting selected trade organizations in the construction industry addressing the issue in form of five questions by e-mail:

1. What do the trade association see as the most important developments in procurement and project delivery today?
2. How do the trade association gather and develop knowledge about procurement and project delivery (including organizing, procurement processes and contracts)?
3. How do the trade association communicate this knowledge in the construction industry?
4. What means are used to reach the firms and individuals working in construction?
5. How many do you reach every year?

Follow-up calls were made to key individuals in five initially selected associations to make sure the questions were received and understood. These associations responded positively and not only did they promise individual answers, but the questions were also lifted to the Council for the construction industry where they discussed these matters on a common arena without researchers present. On this arena the questions were shared among a total of ten relevant associations. The associations cover all major aspects of construction: clients, architects, consulting engineers, contractors, sub-contractors, and more specialized functions.

Five trade associations individually answered the five questions in a written format directly to the researcher. High ranking representatives of three associations were interviewed in a semi-structured group interview based on the written answers. These represented the architects, machine contractors and public clients. Then the researcher made a written summary and analysis of all answers and discussions. This were distributed to all the relevant associations for confirmation, responses, and a few adjustments. The resulting version of that document is the basis for this paper.

The approach in Iceland was similar to the approach in Norway. A memorandum in Norwegian containing the questions was translated to Icelandic, referred to as the interview protocol. The document contained a brief explanation of the research as well as four specific interview questions. The Federation of Icelandic Industries (SI) was contacted, since this is a venue that combines most trade associations that are participants in the construction industry in Iceland. A division of SI ("Mannvirkjasvid") deals with the interests of these unions. The "business manager" was the first interviewee. He then established contact with the chairmen of four trade associations. In continuation they were approached and all of them agreed to participate in interviews. In preparation of each interview, the interview protocol was sent to the interviewee a few days in advance for the person to get acquainted with the subject and prepare the discussion. Five interviews were performed.

In Finland five semi-structured interviews were performed over the same questions as in Norway, based on direct contact with the trade associations. High ranking officers of Finnish Property Owners; RAKLI, The Finnish Association of Consulting Firms; SKOL, Confederation of Finnish Construction Industries (RT), RT/Building Construction (BUILD) and RT/Infrastructure (INFRA) were interviewed.

The Danish findings draws on preliminary data from two interviews conducted with representatives of the Danish Association of Construction Clients and the Danish Association of Architectural Firms. While not representative of all Danish trade associations, the answers provided are nevertheless indicative of the general development in Danish context. In addition, interview and questionnaire data from an evaluation of the role of trade organizations in disseminating knowledge to improve building processes in Denmark [8] is used.

In Sweden, interviews with The Swedish Construction Clients, The Swedish Construction Federation, Federation of Swedish Innovation Companies and The Swedish Installation Federation were performed as a part of a larger study on perceived needs for procurement research in the sector. The Swedish text is also based on homepages and other input.

Summary of all interviews and material is shown in Table 1.

**Table 1** Summary of research material in this paper, gathered from 2022 to 2024.

Country	No of trade associations approached	No of written answers	No of interviews
Denmark	7	-	2
Finland	5	-	5
Iceland	5	-	5
Norway	10	5	3
Sweden	4	-	4

### 3. Findings

This chapter summarizes the findings from each of the Nordic countries in alphabetical order.

#### 3.1. Denmark

Trends: The biggest trends highlighted by the Danish organizations are the increasing societal demands for sustainability and new forms of project delivery. Sustainability comes with added complexity and uncertainty that should be handled in construction projects. It includes adhering to standards defined by the EU and influencing the sustainability agenda locally. Although important, digitalization and new technologies are not seen as a trend on the same level as sustainability. One respondent related the missing impact of digitalization to the use of outdated forms of procurement and contracting that replicate traditional procedures and processes within the industry. Digitization and data driven processes are believed to have great potential, but project organizations and digitization have been out of sync.

The transparency of collaborative contracting practices, like IPD, arguably catalyze digitalization. Similarly, sustainability is a strong driver for the need for new forms of organizing projects. This is due to the public procurement process that, at the outset, is quite rigid and poses a challenge for generating alternatives and discussing pros and cons between client and suppliers during tendering. Demands on sustainability and digitalization is argued to strengthen an existing uneasiness among various construction clients and push them towards contractual models from the past, where the client assumes an inactive role and a rigid phase model makes different actors play institutionalized roles without incentives for collaboration. As there has been several bad experiences with classical contracting forms in highly complex projects, e.g., hospitals and university laboratories, clients are increasingly looking for new forms of cooperation with more team-based approaches. This in argued to require a more active client throughout the process and an earlier involvement of contractors.

**The trade associations' role:** The role of trade associations can be understood in two dimensions: horizontally and vertically. Vertically, trade organizations mobilize the interest of member organizations (downwards) and represent their interest towards the relevant ministries (upwards). Horizontally, they coordinate the development with other trade organizations. In this way they are capable of collectively setting agendas and mobilizing members in the ongoing development of the industry. Two noteworthy examples emerged from the interviews. First, the development of agreed documents defining the legal agreements for contracts among the parties in the industry. Second, the initiation of a new coordinated "action-tank" for sustainable construction among the most influential trade organizations that mobilizes frontrunners of the industry and set the agenda towards politicians.

**Communication and knowledge building:** The trade organizations articulate their close connections to their members as a core component in the continuous development of knowledge. Some have specific support functions to help member navigate the various contracting practices by contacts to experts. This gives them detailed insight into the daily challenges of the members that is leveraged in the broader industry development. To support the broader industry development, most Danish trade organizations support a collective network for developing best practices; *Værdibyg* (Value Creating Construction Process) where they participate to define develop best practices for creating value in the construction process. This is done by mobilizing practitioners from member organizations, sometimes supported by researchers from universities, to develop guidelines on topical issues. These guidelines are formed from a practitioner's perspective but always within the current regulation. Consequently, regulations are not drivers of radical innovation in the industry.

**Means for knowledge distribution:** The trade organization uses a mix of strategies for the distribution and diffusion of knowledge. This includes websites, courses, network, and interest groups. The Danish Association of Construction Clients (DACC) e.g., organizes three networks on procurement and contracting, collaboration with consultants, and new forms of collaboration and contractor involvement.

**Knowledge diffusion:** The organizations represent most of the professional actors in the industry ranging from clients, over consultants/advisors to contractors and supplies. The engagement of members varies with more active SMEs compared to larger organizations. The interviewees suggest this is because large organizations hold inhouse resources making support offered from the trade organizations redundant. DACC has 270 public, general, and private members, whose employees include more than 2,000 of the most important decision makers in construction. The Danish Association of Architectural Firms organizes app. 700 companies. The network Value Creating Construction Process hosts in the region of 40 seminars per year that in total attracts 3500 registrants. The announcements of these seminars result in more than 18.000 annual views on their website.

### *3.2. Finland*

**The trends:** Promoting sustainable development, digitalisation and making project implementation more efficient are now the most important topics. These also have implications for procurement and cooperation. In implementation of projects, particular emphasis is placed on early-stage planning, or more broadly on project system design. Focus is also on finding the right resources: what skills are needed and at what stage of the project, and how to ensure that right skills are acquired in procurements. Changes in the regulatory environment pose new skill requirements. A concrete example mentioned by RAKLI is a construction permit application with digital information content and what expertise is required in different types of projects as a result.

SKOL observes that the development is also dependent on the context – a bit different emphasis e.g. in public procurement, industrial sector/private sector. The construction industry has changed over the last decades. The industry is restructuring towards fewer and bigger firms. One important trend is also the additional competence and skill requirements, which has implications for small and medium sized companies and their possibilities to participate in tender competitions. Therefore, the associations want to ensure that there are also proper paths for smaller companies to participate in projects and that the competence requirements from client side are realistic. Another trend is observed by BUILD: The role of sub-contracting is growing. “Even traditional contractors that perform traditional contracts have all the work done by subcontractors.” INFRA adds it is crucial to promote collaboration practices across the entire network of actors, including the extended subcontractor network.

In terms of procurement and project delivery, a major trend is moving towards partnership agreements and annual contract types, focus on larger procurement packages. Another trend are new forms of procurement such as alliance and collaborative deliveries. RAKLI observes that development phases are also becoming more common in so-called traditional forms of project delivery. What kind of development phases and collaborative processes are applied is not straight forward since there exist various possibilities. Instructions are being made on how to succeed in traditional projects that include the development phase. SKOL observes that regarding the procurement process and contracts, procurement units on the client side have tightened their requirements and grip on suppliers. Liability for damages, penalties for delays, sanctioning things more precisely, has moved towards industrial world. Procurement has also become more legalistic: “Before there were project professionals in the procurement units, now there are more lawyers, and they want to leave their mark.” What is needed is establishing early market dialogue, proactive informal discussions between clients and suppliers on procurement. This may also require the strengthening of the procurement competences of the clients, particularly of the municipalities. INFRA also emphasizes the importance of advancing innovation in the context of projects and finding ways to share the benefits of the innovation in a transparent manner.

The trade associations’ role: SKOL explain they provided comments on new construction law and regulations in 2023: “We act in the committees of the Ministry of the Environment and follow the preparation of the law as well as public procurements related legislation (Ministry of Economic Affairs and Employment).” INFRA has been particularly active in promoting and advancing the use of new collaborative models in the industry. In alliance projects, they have also played the role of an impartial observer. In cooperation between the Finnish Transport Infrastructure Agency, the Association of Finnish Local and Regional Authorities, SKOL, and the Association of Finnish Civil Engineers, definitions of good cooperation practices in infrastructure construction have been established. A summary statement from RT highlights the aim to create better conditions for success in projects: “We promote the functionality of the market and fair competition. We develop procurement and contract models in cooperation with the owners and we train actors correspondingly. We promote digitalisation through standardisation and harmonisation of information models.” SKOL gives another example “We have joint projects with other associations to improve the attractiveness of the industry, targeting social media campaigns to schoolchildren and university of applied sciences students”. Particularly referring to procurement and project delivery the main impression is that the role of trade associations is to promote the spread of good practices.

Communication and knowledge building: Organizations actively follow industry and legislative developments and acquire background information by participating in various



networks and events. They regularly arrange meetings with key members and authorities to discuss important matters and exchange experiences and collect feedback. INFRA participates in development working groups and engages in dialogue with clients. In terms of collaboration, there has been an active effort to communicate the benefits to the member base, also addressing their concerns. BUILD organises thematic events on the results of current projects and other issues, but these are not related to procurement or project delivery. SKOL mention regular theme surveys for members. E.g. in 2020 about contract terms and complaints, last fall artificial intelligence and market information, and currently focus on training expertise and need for experts. RAKLI mentions foresight workshops and roadmap exercises. Following development trends is a general impression of all trade association activity.

Means for knowledge distribution: A variety of channels are used, including announcements, events, collaboration forums with key actors, workshops, seminars, publications and working groups as well as traditional means like membership letters and press releases. RT mention work- and theme groups, webinars aimed at members (e.g., the topical reform of the Building Act) and case-specific training. INFRA has also close co-operation with educational institutions within the regional level, which is a very important channel for distributing knowledge and developing new talents for the industry. BUILD adds that seminars are organised in connection with district/chapter meetings. RAKLI reports that they have eleven themed networks for the members, one of which is owners' construction management. Each thematic network consists of a management team, a wider committee, and a further wider thematic network. In addition, to response to ad hoc needs, other groupings are brought together, such as the topical drafting of the Building Act.

Knowledge diffusion: RAKLI holds more than 240 member organizations in the form of networks/individuals. SKOL reports membership base of 120 member companies which make up more than 20.000 experts. In newsletter distribution about 2000 recipients, including members and stakeholders. They add "we track newsletter distribution, how many times articles are opened, what type of content is of interest etc." BUILD explains that member communication reaches a couple of thousand people. Separate communication to decision-makers of the same order of magnitude. INFRA is the second-largest sector within RT. The communications reach over 2600 members, many of which are small and medium-sized enterprises, in addition to direct members that are large, significant infrastructure companies. Their newsletter reaches over 3900 stakeholders.

### 3.3. *Iceland*

The trends: Environmental issues and technological developments are at the forefront. The key question is "what are you buying?". Carbon footprint of buildings, LCA analyses count much more than before. The capacity to implement cutting-edge technology, refine design strategies, and enable contractors to work from models is crucial. The environmental issues weigh the most and environmental conditions are now set in the tender terms and a part of the quality assessment. Design will take environmental issues much more into account, both emissions from construction and operation. Architects observe that there is more development in public sector than in private sector. Public clients are experimenting.

In terms of procurement, trade associations have advocated for increased quality in this field among project buyers. It has helped that since the financial collapse in 2008 we have become familiar with good working practices and methods in the other Nordic countries. We have a recent and interesting example - a large public construction project in the planning phase. "There was a design competition, and the contractor was brought in, and the design took place in collaboration.

This is an innovative method that raises questions because the law does not directly offer this. There is some concern that the regulatory environment does not offer too much flexibility.” Several new purchasing methods are available. Suppliers respond to developments proposed by the buyers, mainly the public sector. “Big changes are happening in the digital environment. Purchasing methods are changing and what designers must deliver is constantly changing.”

**The trade associations’ role:** The industry is responding to changes coming from buyers. The associations keep an eye on the development. They work for the benefit of their members and provide them with knowledge and legal support. Concerning purchasing methods, the Federation of Icelandic Industries (SI) recently put together a document with 12 points about improved bidding methods - this applies to all members. Clients should take more time with their purchases. It is too frequent that clients wait until the last minute with purchases and asking for offers. Consequently, valuable time is lost. There is internal tension within the trade associations. They encompass everything from single person companies to the biggest companies in Iceland. Everyone agrees that we need to advocate for quality. One respondent mentioned that it is also about building culture across both sides of the table. Another mentioned that there is a lot of talk about harmonizing processes. For example, a database to store such information as CV, to avoid making everyone deliver their CVs repeatedly. Standard construction contracts were also mentioned, given the current situation where every tender is unique.

**Communication and knowledge building:** Trade associations have introduced knowledge and experiences internationally and from the other Nordic countries. It sometimes proves hard to implement due to interpretations. One respondent said “It’s hard to build up the knowledge, maybe you are hiring this year, and everything is booming. Then there’s recession and layoffs and the knowledge is lost.” One respondent highlighted: “Due to competitive considerations, we cannot share much information. We are working together within SI (Federation of Icelandic Industries). But once we’re out there, we’re in competition. I do not know how I can obtain information about other companies, cf. competition law.” Members must put in a lot of work to monitor and make use of the good work done in SI. Attending the monthly SI meeting is important. Another comment that illustrates the situation in Iceland is that anyone working on professional purchasing also works on other assignments. One respondent commented on competence: “An example of this is hydroelectric power plants and the consultancy Verkís - which had a dominant position there. When Iceland stopped harnessing hydropower, Verkís’ knowledge faded away in a decade.” The size of the market is relevant to what is possible. There is no organized sharing of knowledge on procurement methods according to this informant. Also, one of the other informants confirmed – nothing is done in procurement: “Competition laws are strict and consultation on procurement would be poison in the eyes of the competition authorities.”

**Means for knowledge distribution:** Information meetings and social meetings work best. New purchasing methods are presented, usually by those driving the changes. They want to hear what the stakeholders have to say. Meetings are held by SI or parties proposing the changes. Newsletters and notification email communication was also mentioned. A general assembly is held once a year (“Útboðsþing” - Tender meeting). In this event the project buyers come and present what they plan to buy this year. Projects are briefly reviewed, and what was achieved in the previous year. It is impossible to build plans or make changes based on this data because of competition and rapid changes. One respondent said, “We need continuing education and courses, we need to get knowledge from abroad.”

**Knowledge diffusion:** Meetings and presentations, social gatherings - this is held to be most important. Others opt for training seminars. “It’s all about meeting attendance, interest in the

subject and timing matters a lot. Winter is the best, summer is hopeless.” One informant pointed out “There is a need for a specialized analysis of information that is suitable for our members, it is necessary to fish out what is suitable for each branch individually. There are too many general informational emails and people stop reading.”

#### 3.4. Norway

The trends: Wanting to become more sustainable and need to become more cost-efficient drives development. New delivery models are tried out, and the traditional contracts lose their dominant position. Different versions of partnering models, often based on Design-Build contracts are common, some models inspired by alliancing contracts, early contractor involvement and integrated organizations increasing. The new models differ between clients, and there is no common understanding of partnering in the industry. The procurement process Best Value Procurement is actively piloted, and quality is used actively as a choice criterion. Consequently – traditional positions and business models are challenged – especially for architects and consulting engineers. Critical comments include the observation that complexity is consequently increasing, and the effects are unclear and debatable. These continuous experiments and pilots seem to lack a holistic approach, and standardization has been wanted for several years. It is observed that some actors fall back on traditional models when things do not turn out as expected. Trade associations observe some clients do not have competence to implement the new procurement and delivery methods.

The trade associations’ role: Gathering and distributing knowledge is at the heart of the trade associations’ purpose. They all find this important and recognizes gathering experience and involvement with their industry members as key activities. They actively seek to develop a strong basis of knowledge as possible. This is their basis for securing good future business conditions for members. They seek to influence through industry politics and knowledge diffusion. The associations acknowledge procurement and project delivery as key issues across the industry – because these issues concern the collaboration across firms and directly influences their businesses. Not only do trade associations see their role as building competence but also to contribute to developing a culture in the construction industry that makes successful collaboration possible. In this field the network structure and negotiations across different associations are essential. They also promote the need for more research in this field. The trade associations have a role as knowledge partners for members, and they actively play a role as contributor and advisor to government and clients in the construction industry.

Communication and knowledge building: Trade associations in Norway acknowledge the increasing requirements for high degree of quality in a market that includes international competition. Dialogue and exchange of experience remains important, as well as distribution of knowledge to build a common understanding in the member group. This requires sharing thoughts and facts, and developing common positions on what this means for the members. There are elements of negotiations and one way distribution of established knowledge. Each association has a secretariat that seeks to gather information and views from members and compile this into a common knowledge platform. This base is used for collective strengthening of members’ position and to influence government and other associations. This way the secretariat becomes a knowledge hub and influence base. It is a balance between professionalism and politics. The associations of architects, designers and engineers are more engaged with academic partners than the other trade associations in Norway.

Means for knowledge distribution: All associations consider this a key function and thus use significant resources on knowledge distribution. The target groups are highly diversified, and so

are the means to reach them. The difference between reaching top management and employees were commented on; They require different approaches. All associations use websites, events, and courses for members. Several associations have certifications, make special reports on timely issues, written guidelines, and several hold their trade journals to be of great value. All associations have had a transition from mainly physical arenas to digital arenas over the last decade and this has strengthened their ability to reach out to many members. They see the future as hybrid mix of physical arenas including courses and digital mass distribution of information.

Knowledge diffusion: The trade associations reach many firms and individuals in the construction industry. The exact number is impossible to know, but the associations mention between 60% and 90% of all firms in their target group. Surveys to members often have response rate of approximately 50%. For example, the MEF (sub-contractors) School has 4000-7000 individuals in courses and recertification every year. Often though, information from associations is sent to contact individuals in firms and may stop there. The association of consulting engineers commented that the most influential form of knowledge diffusion is by the good example. The association for architects made a very important observation: One thing is how many you reach OUT to – more important is how many you reach IN to. How strong is the ability to influence actual behavior and thinking among members?

### 3.5. Sweden

The trends: Looking back to the early 2000s, there was a strong momentum in the Swedish construction sector towards collaborative contracting. In the building sector, the construction clients' association was an important champion, organizing study trips to the UK and training for practitioners and partnering facilitators. They also engaged lawyers to develop model contract supplements for two-stage open book contracts. This led to a sharp increase in the number of collaborative contracts and today, the largest contractors have more than 50% of their turnover in partnering, including strategic partnering.

In the infrastructure sector, the development has been more mixed, with strong pendulum movements. Conflicts in several large contracts spurred an industry-wide initiative to improve relationships by non-contractual partnering models in 2003 (FIA Förnyelse i Anläggningsbranschen, Renewal in the Swedish Infrastructure Sector). This was relatively successful, but when the Swedish Transport Administration (STA) was formed in 2010 by a merger of the Road and Rail administrations, the focus shifted to achieve political goals for increased efficiency and innovation by use of fixed price DB contracts. A few years later, in 2013, calls from the contractors that these contracts were often too risky caused the STA to embrace a new fit-for-project policy, where one option was two-stage ECI contracts similar to the partnering contracts used in the building sector. Early problems in the first such contracts however put a stop to this model in 2018, after less than 10 projects. In 2022, the contractors again called for less risky models and the STA then launched plans to test contracts inspired by the Finnish alliance model in three projects. In parallel, however, ECI-type contracts are increasingly used by other infrastructure clients (municipalities, regions, other government clients).

The trade associations' role: In general, the trade organizations have small resources of their own and they engage members to represent them in various industry developments. However, while they represent members of very different size and types, it is mainly the large members that have the resources to engage in such work. The associations often find it hard to position themselves too much in the forefront, in order not to alienate too many of their members "Our members are sometimes our worst enemies", as one of the interviewees said. Also, preferences may differ between members. For example, the Swedish Construction Clients (SCC) have been

urged by some members not to champion collaborative contracting so much, and to also promote other models, such as CM.

The Swedish Construction Federation (SCF) is involved in industry-level development on procurement mainly in the infrastructure sector. This is because STA, which stands for a third of the market volume, takes such initiatives. However, apart from promoting “sound competition” and better collaboration in general, the SCF has not had a clear policy regarding contract strategies. Especially the larger contractors have advocated both collaborative ECI contracts and DB contracts, while smaller contractors often prefer the less risky construct-only contracts. They also find it hard to drive general development in contracting when there are large disputes between the main participants. The Swedish Installation Federation is active in several projects to drive innovation for energy efficiency, also with implications for procurement. More generally, they call for procurement models that are less focused on lowest price and more knowledge on use of non-price criteria.

The Federation of Innovation Companies mainly promotes output-based models that may build structural capital in their member companies. For example, to invest in developing AI-based products that can be sold many times, but also increased use of fixed price contracts in general. However, many consultancy firms still prefer low-risk procurement of individuals based on hourly rates. The Swedish Innovation Companies is not at all involved in wider discussions about business models for projects.

All four associations are part of the Construction Contracts Committee (BKK), which is responsible for the development of the Swedish standard contracts. The negotiations for updating the current provisions have been going on since 2016 but have been delayed by difficulties to reach agreement. In general, wider industry collaboration has focused more on other issues than procurement, such as safety, crime prevention, climate action, circularity, and digitalization. A successful industry level collaboration is the initiative Fossil free Sweden, where the SCF is the process owner for the roadmap for the construction and civil engineering sector. Here, the role of procurement to drive carbon emission reduction has been emphasized, but actual development is fragmented and often driven by local arenas and individual organizations. Notably, the industry-wide collaborative R&D oriented organization IQ Samhällsbyggnad, in which all the trade associations are members, has not focused on procurement. However, Swedish actors from the construction sector have been active in developing the standard ISO 44001 for Collaborative Business Development, perhaps due to the lack of other forums.

**Communication and knowledge building:** Most associations have small resources, and their contacts with research are limited. Although they are often represented in organizations funding research, such as InfraSweden, Smart Built Environment and The Development Fund of the Swedish Construction Industry (SBUF), it is primarily members that are active. On procurement research, they primarily mention the large program ProcSIBE (Procurement for Sustainable Innovation in the Built Environment, 2014-2021). There are international contacts with peer trade associations, especially the Federation of Innovation Companies, and there are arenas for Nordic knowledge exchange.

**Means for knowledge distribution:** All associations provide their members with training, supporting guidelines and templates, as well as with individual expert guidance. In procurement, this primarily relates to legal and contractual issues. The SCC still organizes courses in collaborative contracting.

#### 4. Discussion

As can be seen from the summaries from interviews with high-ranking representatives of trade associations across the Nordic countries, there are more characteristics that unite than those that differ.

Drivers of the development is pretty much the same in all Nordic countries (and probably internationally): The need for a green transition into sustainable development and circular economy. Construction is one of the most important industries in this perspective as one of the biggest users of energy and producers of waste. Construction is also one of the most value creating industries and main employers in every country, so what happens in construction matters. The drive for quality and high performance is everywhere. Another main driver today is the competition for limited economic resources as the world has been and still is in a turbulent state with resource shortage and cost increase. This drives construction towards “doing more with less”. Becoming more efficient and productive is a must for construction to be competitive and attractive in the future. Professionalism and digitalization seem to be promising and necessary trends in this direction. Trade associations have a role in these developments as promoters of knowledge, certification, and standardization necessary to keep up with these demands [2]. These trends are mentioned in all Nordic countries as dominating forces.

The main role of the associations can be understood as being a knowledge hub and support for members. This is a key “reason to be” for all trade associations. This is obvious as far as we talk about the common interests these members have in the professional standards of their profession (clients, architects, engineers, contractors etc.). The common interest also includes the spreading of good practices among members and across the wider supply chain and subcontractor network. This part of the trade associations’ role is to promote members’ interest in relation to clients and “the market”. This is to promote their competitiveness in the marketplace. It seems reasonable to assume that this is partly driven by development that includes bigger and more complex procurement packages and more competition from international actors. The reality of current development is that most projects and contracts are now too large and risky for many firms in Nordic construction. The consequences include need for restructuring into larger units, and the increased use of collaborative strategies to handle the risk. It seems obvious from the interviews that keeping an eye on these trends and the situation among members is another key function that all trade associations hold high.

The trade associations work with political and strategic issues in dialogue with government and other trade associations on issues that influence the industry. One issue that unite them is mentioned in Finland and Norway as making construction attractive to future generations. This can be seen as a competition for talent alongside other industries like services, production industries, and health sector for example. With decreasing numbers of young candidates, it is of utmost importance to secure that construction is an attractive place to work. In general governments in the Nordic countries seems to leave procurement and project delivery to the markets and industries. Their involvement is focussed on digitalization and sustainability in general, except for Finland.

In all countries competition and reasonable and fair conditions for members is an important area of work for trade associations. This issue is a natural link to the procurement and project delivery theme of this paper. We have found in all Nordic countries that the trend is going towards more collaborative practices both in procurement strategy and project delivery. It seems that Finland is leading on in this field with extensive use of alliance models, integrated project delivery, and implementing development phase in traditional contracts. Knowledge is

systematically collected across projects by the trade associations and new guidelines are developed and published to help firms and projects succeed. A similar development is found in Norway, although a few years behind in practical implementation. Denmark had this back in the early 2000's but not so much anymore. Sweden has seen trials and errors form basis for a strong knowledge base.

Iceland stands out in this regard. The government seems to hold a more conservative line in terms of allowing experiments and innovation in procurement than is the case in other Nordic countries. The competition regulation and authorities in this area is explicitly said to be critical to change and experimentation. Knowing that the size of the Icelandic population is only approximately 7% of the Norwegian population, and thus also its construction industry is correspondingly smaller, it seems natural to assume it is very important to keep tight control with fair competition and avoid irregularities that break with the assumption of a free market. Given the above-mentioned reluctance to experiment with procurement arrangements, Icelandic trade associations stress the need for transfer of experience and knowledge from neighbouring countries and internationally. This need is less explicitly mentioned in the other countries. Still, it is well known that for example Norwegian academics and companies look to Finland to learn from their experience with alliancing and collaborative practices. Sharing experiences and knowledge among likeminded professionals is just as important in all countries and trades.

All trade associations interviewed across the Nordic countries are united in the view that they have an important role in gathering, analysing and dissemination of information and knowledge in procurement and project delivery. To do this, all associations use a mix of meetings, workshops, surveys, and other means to gather relevant information. Information is distributed through similar channels, most of them traditional, like newsletters, press releases, emails, workshops, courses, and conferences. Professional journals and awards are mentioned. Over the last decade digital means like social media and webinars has become more important for knowledge distribution.

As the interviews show, trade associations are instrumental in reaching out to the construction industry. Each one of the trade associations reaches a major share of their designated membership base. This counts most of the total numbers of firms, and thus a significant share of the people involved in construction. There is a risk that information stops with the contact person and does not always reach all individuals in the organisation. Knowledge dissemination is a question of how many are influenced by the information and that picks up on new knowledge and changes their practices.

## **5. Conclusion**

What role does trade associations play in procurement and project delivery across the Nordic countries?

The first observation is that most trade associations across the Nordics are indeed involved in developing procurement trends and knowledge accumulation. This should not come as a surprise, given that procurement is a key element in doing business across all trades in construction. It is very important for clients, both private and public sectors. It is important for architects and consulting engineers, and it is equally important for contractors, both first tier and beyond. The motivation for engaging in procurement and project delivery is the well-being of members. They all depend on fair competition and access to market, and they all need to be associated with successful projects.

The second observation is that it seems generally accepted across the trade associations that it is important to promote more collaborative procurement strategies and project delivery methods. This trend is clearly dominating development in all the countries but developing in different pace. Finland seems to lead on, with Denmark, Norway, and Sweden in middle positions, and Iceland seemingly lagging. It is not clear what started the development in Finland, but it may have to do with a combination of tight economic development and a drive for innovation. Norway has for decades had a strong economy and less need for change. Nowadays the need for change and new models is clear. Iceland is a much smaller economy where everyone knows everyone and transparency and competition regulations are held extremely high, which hampers experimentation and gives a slower uptake of new trends.

The third observation is that all trade associations across the Nordics take an active role in gathering, analysing, and distributing knowledge and experiences connected to this development. The way this is done includes a wide range of different means, most of them either in workshop or meeting form, or digital surveys for collection. Collective knowledge makes the associations into knowledge hubs for this kind of information, and a promotor of the importance in relation to government, politicians, and media. The activity is normally based on collective and voluntary effort by members.

The knowledge is distributed through meetings, seminars and conferences, courses and certifications, newsletters and professional journals, social media, and written guidelines. In short – any format or communication channel that reaches members on individual and organizational level.

Dissemination is both possible and probable through the trade associations effort. In theory they reach out to all corners of the construction industry. This does not guarantee that they reach all individuals that ideally should take up the new knowledge and change their ways. The level of interest in these issues varies. Procurement and project delivery is still a nerdy interest. Its importance considered; it should be interesting to a large proportion of construction professionals.

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