Evaluation of Nordic Smart Government 3.0 Final Report 2020-10-06





Executive summary

Background and objective

The main objective of this evaluation was to identify areas for improvement, success factors and lessons learned from the NSG 3.0 programme.

The evaluation was commissioned by the Swedish Companies Registration Office (Bolagsverket) and was conducted between 18th of May to 15th of September 2020. It encompassed 35 interviews followed up by a survey with 45 respondents among internal stakeholders, it also included a study of four similar Nordic programmes.

Results

The results show that in general NSG is a well-functioning programme with highly committed participants. It is clear that the internal culture established over its lifespan is one of the strong points in the programme. Participants give witness of an open and inclusive internal culture were highly skilled people have built a strong trust cross borders and cross agencies to fulfil an inspiring vision. There is also a broad consensus that NSG is on the right track.

There are also challenges ahead in order for NSG to improve going forward. Key challenges identified include the allocated time for participants were a lot of participants struggle to combine an ambitious NSG agenda with day to day work. Also, the external stakeholder involvement is a main challenge going forward. These areas of improvement were likewise identified as lessons learned when researching and interviewing similar programmes to NSG. In general, improvement needs were primarily found concerning the organizational side or related to governance. Such areas are typically addressable with improvements to program structure and change management efforts, which are covered in the recommendations of this report.

The results are consistent across the Nordics with some notable variations. Concerning external stakeholder involvement, the results seem to be notably better in Norway and to some degree Iceland. Norway, together with Denmark generally rate highest on all aspects within NSG. This in contrast to Sweden which rates among the lowest, with only minor exceptions.

In conclusion, NSG has many strong points. At the same time NSG 3.0 has shown room for improvement within certain areas. Given the new and different agenda in NSG 4.0 new challenges for the NSG programme are introduced. With this background the following recommendations are given.

Recommendations

Ensure a high degree of participation in NSG

• Minimum of 50%, preferably 70-100% allocated time for participants (excluding experts), as a general guideline. If resources are a constraint, more time per participant is preferred to additional participants.

Improve communication and information sharing

- Apply one or more new information sharing channels
 - o Regular online meetings with the programme leader
 - o An appointed participant responsible for communication within each WP
 - o Newsletters via email
- Develop the current information sharing platform especially the structure of the document database needs improvement.

Ensure an efficient start-up of NSG 4.0

Given the challenges seen in the start-up phase of NSG 3.0 it is imperative that the
roadmap is further developed in terms of goals, deliverables, roles and milestones.
NSG is working with an agile approach. However, it is none the less vital that work packages have a clear understanding of what is expected of them, their role and mandate,
outline time plans and what the process looks like for moving forward. This includes the
decision-making process for narrowing down the scope as the specific project or work
stream moves forward.



Establish a clear structure for roles and responsibilities

- The PMO could benefit from dedicated roles to ensure sufficient focus on key aspects of the program. Examples of such could be the communication manager to ensure all work packages get relevant information, and the external stakeholder manager to ensure external stakeholder involvement coordination.
- Regular joint leadership meetings between PMO and WP chairs to strengthen ownership and coordination as well as information sharing

Strategies for external stakeholder involvement

- A clear idea of the way forward helps in building trust with external stakeholders. Another important factor is transparency. Even if there is uncertainty about an issue within the program, transparency about this facilitates trust.
- If external stakeholders are expected to invest time and or money into a specific project, it is vital that they gain trust in NSG and potential solutions and if they are likely to become standard in the future.
- Adapted methods and strategies for externals stakeholder involvement should be implemented depending on the specific goals and circumstances at hand, this could for example be top down approach or bottom up approach to external stakeholders.

Maintain and improve programme trust and performance in times of digital meetings

• The resulting consequences on group cohesion, trust and performance due to remote work can be mitigated by a structured approach. One example of this, "High Performing Team", focusses on group dynamics presenting a framework for improving group performance that can be used regardless of digital or non-digital setting.

Be agile with Agile

The Agile way of working should be chosen for suitable work packages and work streams
with clear concrete deliverables and not forced on all work packages. Methods should
only be applied if they add value. If Agile is found suitable, ensure a clear definition of
Agile within NSG, and that the principles are well known in projects where Agile is applied. Also, ensure adequate resources and time allocation to fulfil key Agile components
such as retrospectives.



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2 Background and assignment

2.1 Background

Nordic Smart Government (NSG) 3.0 has been developed over the past 2 years and will be concluded in September 2020 before moving on to the new phase. The goal of NSG 3.0 was to define requirements and evaluate how existing digital solutions can be adapted in order to exchange data and automate processes and it was presented in the form of a roadmap. NSG 3.0 was conducted adopting an agile way of working with a focus on communication and continuous learning. In order to form a solid foundation for the NSG 4.0 phase, the NSG leadership decided to perform an evaluation to identify what went well during the 3.0 phase and what can be learned and improved with a focus on NSG organisation, collaboration and governance.

2.2 Objective and scope

The objective and scope of this evaluation was to identify areas for improvement, success factors and lessons learned in the NSG 3.0 project. This as part of a change management process to identify how to increase the value for participants and chances for success for the overall programme.

The objective of the evaluation also includes identifying unique features of NSG as an international collaboration programme and what makes this programme innovative, both in itself as a programme but also compared to other similar programs in the Nordics. The organisation for this evaluation can be found in the appendix.

2.3 Limitations

In this evaluation, the limitation was that the results, conclusion and recommendations solely is based on the information available during the research period and hence describes the thoughts and opinions of the participants at a specific point in time.

The participants in the evaluation, both for interviews and survey, was selected by NSG.

The evaluation is based on interviews and a survey among active NSG participants. Even though some of them are external experts that have participated and contributed to NSG, the evaluation is in general based on sources that are internal to NSG.



3 The Nordic Smart Government Programme

3.1 Vision and Scope of NSG Programme

The vision of Nordic Smart Government (NSG) is to create value for businesses, society and public authorities. This by making business data accessible and usable across the region in a secure, consent-based and automatic way. NSG is in this perspective a driver for making the Nordics the most integrated region in the world. Five business registry authorities and several tax and statistical authorities in the Nordic countries therefore initiated NSG to simplify the lives of small and medium sized enterprises (SMEs), and to create new business opportunities and growth.

In 2016, the scope of the 1.0 phase of the NSG program focused on the establishment of a Nordic collaboration with a working group from four business registrars. During this phase, onboarding of sponsors, building teams, first drafts of vision and concept as well as a high-level conceptual data model was created.

NSG 2.0 started in January 2017 and concluded work in February 2018. In this phase, the feasibility of the vision laid out in the first phase was further explored. A high-level business architecture was made; a proof-of-concept demonstrated that it was possible to tag bookkeeping data and automate aggregation of reports; a business case was produced; and stakeholders were generally positive towards the vision. Around ten persons from five institutions in the five Nordic countries worked together. In the collaborative set-up of NSG 2.0, the responsibility for the different tasks were allocated to the different participating institutions. The active involvement of the whole group was mostly in the stakeholder analysis, which was undertaken in close cooperation. The other tasks were mostly divided between the different countries and institutions, and findings were shared in common meetings.

The lesson learnt from the organizational model was that responsibility and activities in the next phase should be shared between countries and institutions, in order to increase ownership, understanding and value of deliverables for all involved parties.

3.2 NSG 3.0 and roadmap ahead

Based on the results of NSG 2.0, in May 2018 the Nordic Ministers of business launched the third phase of NSG. This phase set out to define the prerequisites for a digital ecosystem of interoperable digital solutions based on business data. A kick-off was held in September 2018, were around 30 persons from the Nordic Business Authorities, most Tax authorities and some other governmental agencies participated.

Agile working methods were introduced to facilitate a set-up with people working across both institutions and countries. Gradually, the programme grew to include several ministries and associated authorities from some countries, for a total of 18 involved government authorities (contributing to different degrees). By Christmas, the organisation had grown to include more than 50 participants, and there was also some turnover of participants, including some chairs and co-chairs, who had responsibility for the work packages.

The NSG organisation was set up to increase involvement of institutions and to share responsibility for common tasks. The work packages of NSG each worked on different but related areas, all contributing to defining the prerequisites of the ecosystem. The tasks included

 Defining User Principles (formulated from the point of view of small companies) and identifying legal barriers and enablers for each country. On the technical side, architectural principles for digital infrastructure were defined, and possible architectures for the implementation were constructed



- Guidelines for the use and implementation of digital business documents in business systems, a desktop study of the current use of digital documents across the Nordics and recommendations on further adoption of e-documents, and a Business Case estimating the gains of such digital documents
- Technical specifications and "rules" for the exchange of business data, allowing different systems to access data with the user's consent
- Demonstrations and tests of the exchange of business data for government purposes (automated, standardised reporting) and for innovative third-party solutions, developed during Hackathons and Proof-Concept work
- Communication material, web and social media communication, and general stakeholder communication

The concluding deliverable of NSG 3.0 was the Roadmap, which outlined the steps needed to implement the vision of the digital ecosystem.

These plans were carried out by the following programme organisational structure:

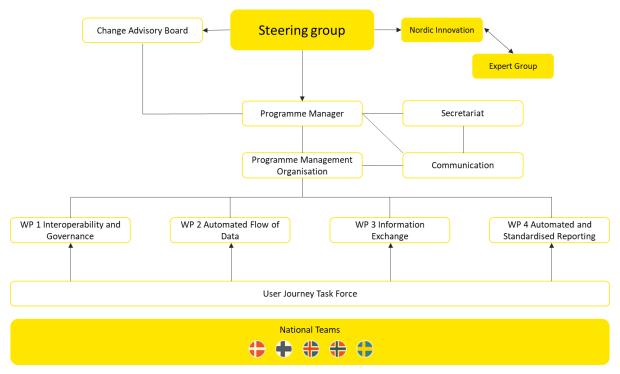


Figure 1: The NSG 3.0 programme organisation¹

Each work package contained participants from every Nordic country, and in most cases from several institutions from each country. The work packages had weekly or bi-weekly digital meetings and frequent face-to-face meetings during the programme period. The various skills and competencies of staff allocated to NSG were distributed according to the set of tasks of each work package.

Each work package had dependencies to several other work packages, and thus had to cooperate across the work packages at various stages of the programme.

¹ From NSG general presentation



3.3 Comparison with other programmes

To be able to compare the NSG programme with similar programmes within the Nordic countries, four programmes (Figure 2) were evaluated based on interviews and reports. Members from two of the programmes, Nordic Scalers and Nordic Smart Mobility and Connectivity, were interviewed while for three of the programmes, different types of pre-existing evaluation reports were studied. These programmes were: Nordic Scalers², The Nordic Region - leading in green growth and Sustainable Nordic Welfare³ respectively. The studied programmes all encompassed the Nordic countries. The results from this study is presented in the following pages in the form of what lessons the programmes learned during their lifetime.

The Nordic Region - leading in green growth	Sustainable Nordic Welfare	Nordic Scalers	Nordic Smart Mobility and Connectivity
Years active: 2011-2020	Years active: 2013-2015	Years active: 2017-2019 (pilot pe- riod)	Years active: 2018-2021
Participating countries: All Nordic countries	Participating countries: All Nordic countries	Participating countries: All Nordic countries	Participating countries: All Nordic countries
Number of participants: -	Number of participants: -	Number of participants: <10	Number of participants: <10
Purpose of programme: Identify areas within green growth where the countries could continue to build on their strengths within the area, improve the coordination between the Nordic countries and be the leaders within the area in relation to the European Union.	Purpose of programme: Create innovative solutions within the Nordic welfare societies for the Nordic's 25 million inhabitants. The solutions should contribute with enhanced quality and equality within the topics education, work, health and care.	Purpose of programme: The purpose of the Nordic Scalers pro- gramme is to help the 'best-of-the-best' Nor- dic companies in the scale-up phase to pre- pare and accelerate their next stages of growth through access to competence build- ing.	Purpose of programme: Changing the way people and goods move towards a sustainable future through innovative Nordic mobility solutions. Making the Nordic region the most sustainable and integrated region in the world within a decade.

Figure 2: General facts on the studied programmes

The above programmes had different approaches on management and way of working. The Nordic Region - leading in green growth, Sustainable Nordic Welfare and Nordic Smart Mobility and Connectivity were all built up by underlying projects. Nordic Scalers, on the other hand, was instead of projects, divided into four different batches in which different scale-up companies participated in each batch.

Furthermore, Nordic Scalers had a mix of physical and online meetings. The companies participating in the programme mostly met online, while a lot of physical meetings such as local sessions took place to allow companies and stakeholders to network.

Both of the programmes "The Nordic Region - leading in green growth" and "Sustainable Nordic Welfare" were cross-sectional, coordinated by the secretary of the Nordic Council of Ministers. Within

² (Salminen, Halme, Härmälä, Walker, & Barge, 2019)

³ (Sweco, 2016)



each project at The Nordic Region - leading in green growth, the project had a project leader from an existing organisation or authority from the Nordics.

Nordic Smart Mobility and Connectivity had representatives from all the Nordic countries with all team members coming from Nordic Innovation. The programme did not have a set method of working, but because of the nature of the programme, they worked in an agile way. Additionally, the programme did retrospectives after big events.

3.3.1 Lessons learned

Based on the interviews held with the programmes and the studied evaluation reports, lessons learned could be identified from the four programmes. These are previously identified in the reports studied and statements from the interviews. In total, eight lessons learned and key takeaways were identified and covers the following topics:

- Commitment among the participants in the programmes and external stakeholders
- Countries need to be on the same level of development
- Well performed and thorough planning important
- Highly competent team and participants
- Use experts extensively
- Networking possibilities offered
- Governance
- Involve large companies as well as SME's

The commitment among the different stakeholders in the programmes varied. High commitment was experienced to be spread across entire teams, from project leaders to the participants in the programmes. One of the main drivers for the high commitment, as stated by one of the studied programmes, was a result of the programme being a Nordic collaboration. Among external stakeholders, the commitment was sometimes lacking, which had a negative programme impact. One of the reasons behind this lacking commitment, was stated by one of the programmes, as a result of the countries being on different levels of development within the specific programme area. This was related to the countries that were too far behind, or ahead, in the development and led to an inability to benefit from the programme outcomes. Hence, it is important that the countries participating are at the same level of development or has a thorough understanding of mutual expectations so they can mitigate possible tensions between countries and see benefits of the programme not only at the country level but for the Nordics as a whole.

Furthermore, thorough planning was perceived as a crucial part of the programmes' success. A common opinion among the studied programmes was the importance of allocation of adequate time for planning. This enabled programmes to set appropriate goals and decide on the ways of working within the programme. For example, one of the programmes planning phase included time for the steering group to identify and onboard relevant external stakeholders, such as the private sector and specific individuals.

The competencies and composition of the teams were highlighted as success factors in several of the programmes. In addition to this, the professionalism and competence of the project leaders, mentors and participants was also rated as high among several programmes. It was also stated, by three of the programmes, that the use of experts should have been greater. By doing so, it was believed, that the chance of implementing best practices from the start of the programmes would have increased. Furthermore, the programme should also not hesitate to consult experts from countries outside of the Nordics to accomplish best practice, this since lessons learned can often be shared regardless of country.

In relation to this, the possibility to network, both internally and externally, was highlighted by the programmes. The possibility to network among people and companies in the same position was highly appreciated and something that the programmes expressed they would have liked to have prioritised even more.



Additionally, it was stated within two of the studied programmes that to be able to have a successful programme, a well-functioning and unified governance is essential. This was not always the case. In one of the programmes, lack of effective governance was experienced through the inability to give clear directives regarding responsibilities and ownership.

Lastly, the importance of including large companies in a programme dedicated for SME's was high-lighted by one programme. By doing so, the programmes and SME's can take advantage of the larger companies' knowledge and learn from these even though they may not be the target end user.

3.3.2 What makes NSG stand out

The NSG programme differs from previous Nordic collaborations because of the unique combination of scale, scope and budget. The extent of the NSG programme, combining these three pillars together, makes NSG stand out. Reflecting on the scale of the programme, NSG influence an extensive number of stakeholders such as SME's, authorities and legislation in all the Nordic countries as well as the Nordic countries themselves. Further, the scope of the programme is very wide. It will impact the business environment and different business standards as well as legal frameworks. NSG has also ambitions to develop and create tangible work products. This could be software solutions, integrations, new standards or similar. Other studied programmes have only had these ambitions to a limited extent. At the same time, NSG has a focus on simplifying and improving the business-to-business and business-to-government relationships and the transparency among these, which also is a unique initiative among the studied programmes.



4 Method and delivery

The information gathering in this evaluation was done through interviews and a survey including mainly internal participants of the NSG 3.0 programme. Programme documentation such as project application, organisational documentation and the NSG Roadmap were also studied. The interview questions were focused on the three perspectives: organisation, governance and collaboration, and assessed both on a national and a Nordic level.

4.1 Evaluation plan and delivery

The evaluation started in the middle of May 2020 and continued through to September 2020 with a short pause in July. The evaluation was presented in a report as well as a summary presentation at the 15^{th} of September.

Below is an overview of the timeline with its set checkpoints and milestones.

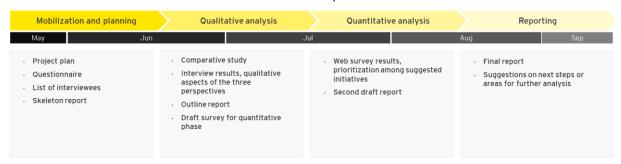


Figure 3: The evaluation timeline

4.2 Evaluation methods

The evaluation was split into two different phases, a qualitative phase and a quantitative phase.

4.2.1 Qualitative phase

The qualitative phase focused on one to one interviews with specific selected people to get a thorough understanding of what people involved in the programme thought about the way they worked in the programme. Through this semi-structured approach, people could elaborate on their thoughts and follow up questions could be asked to broaden the knowledge on important subjects.

The people to be interviewed were chosen by the evaluation steering group and contacted through email. In total 35 interviews were held, and they took between 30 minutes to 1 hour. The questions asked were iterated thorough the steering group and were mostly open ended to give the interviewee the possibility to elaborate on his or her initial thoughts. All interviews were documented anonymously, and the questions asked at the interviews can be found in the appendix.



Number of interviews in each country

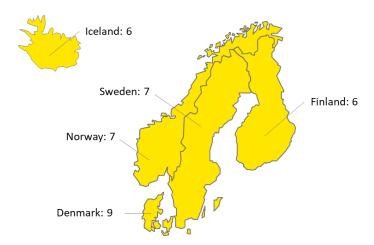


Figure 4: The qualitative interview phase consisted of 35 interviews representing all the Nordic countries

4.2.2 Quantitative phase

A quantitative phase was initiated after all one to one interviews in the qualitative phase had been held. Its purpose was to sort, prioritise and evaluate suggestions and information gathered during the interview phase. Gathering data from a broader set of respondents through web survey enabled a data driven quantitative approach to complement the evaluation. Also, the web survey contained a limited amount of open questions to, where relevant, complement suggestions and viewpoints previously collected.

In total, 70 people from the five Nordic countries were asked to fill in the web survey during the survey period 19-28 of August. In total 45 responses were received, a participation ratio of \sim 66%. The questions asked can be found in the appendix.

4.2.3 Workshops

During the final weeks of the evaluation, two workshops where held with the steering committee of the NSG 3.0 evaluation. One workshop focussed on the results and the other on the recommendations that are proposed as a result of the evaluation.



5 Survey results

In this chapter, the results from the qualitative and quantitative studies are presented.

5.1 Results from Qualitative study

Presented below are the results from the qualitative study. These results are presented under their respective topic: Collaboration, Organisation and Governance, where each topic is divided into the subcategories "what worked well" and "what worked less well". Additionally, the interviewees suggestions and challenges are presented along with a comparison between the different countries. Below the eight most frequent statements are presented regarding what worked well and less well (Figure 5). Several of the listed were also identified among the lessons learned the similar programmes stated. A full list of results, suggestions and challenges can be found in the appendix.

8 most frequent statements

Worked well Worked less well High commitment/engagement Not enough time and/or commitment Physical meetings allocated by resources Cooperation/collaboration Slow start The steering/governance Internal involvement and communication/information sharing Trust and openness (culture) Vision and/or goals Complex structure Unclear tasks and/or deliverables A lot of good competencies Not so agile Continuous learning Involvement and communication of external stakeholders Many people involved

Figure 5: Most mentioned statements regarding what went well and less well

5.1.1 Participant group in qualitative study

Out of the 35 people interviewed, the majority had been a part of the programme since the start of phase 3 in 2018. Out of these 35 people, 21 of them stated that they had worked with the NSG programme less than 5% of their work week since they joined (Figure 6). The biggest variation amongst the national teams were within the Danish team, where out of the nine people interviewed, seven had only been able to be active 0-5% while the other two interviewed participants contributed 100% of their respective work week to the programme. Furthermore, among the interviewed, almost half were part of the programme work packages while the rest were among the programme management, experts or external which can be seen in Figure 7 below. This is important to remember when looking at the presented results.



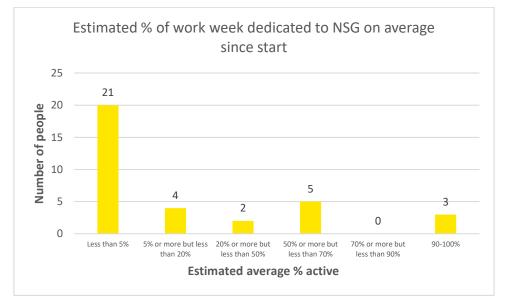


Figure 6: Graph describing estimated % of work week dedicated to NSG, on average, since start

Role in NSG	Number of people
Work Package Participants	16
Programme Management	5
Experts	8
External	6

Figure 7: Participants per role

5.1.2 Collaboration

The topic "Collaboration" includes areas within communication and involvement as well as ways of working and continuous learning.

Worked well

In total, the interviews gave a clear indication that the collaboration within NSG was one of its strong points. Out of all positive aspects identified with the NSG programme, most of these fell within the collaboration topic.

Out of the 35 interviews conducted, 18 mentioned that the number one thing that worked well with NSG 3.0 was the high commitment and engagement shown by the involved participants. It was described as having the right people involved who truly believed in the product and wanted to share and learn from each other. The importance of this issue was also identified among the lessons learned by the similar programmes. Interviewees also described their fellow participants as very helpful. As a driver for this commitment and engagement, many participants mentioned physical meetings as it was during those, relations, trust and a deeper understanding mainly was formed.

One interviewee stated the following:

"Online work might not be prioritised by people, but offline meetings have made online work better since people get more engaged after the meeting"



The physical meetings can therefore most probably have contributed to "the cooperation/collaboration" and "the trust and openness" also being mentioned by many as areas that worked well within the NSG 3.0 part of the programme. Additionally, physical meetings inspired a lot of knowledge sharing which was appreciated by many. One interviewee stated:

"We had room to teach and learn about each other's mistakes, people listened".

Worked less well

When it came to reflections around what worked less well within Collaboration, the primary thing mentioned was the internal involvement, communication and information sharing. The interviewees reflected upon that it was difficult to get an overall picture of NSG 3.0 while being involved at the different organisational levels and work packages. This was believed to be a consequence of inadequate communication and an information sharing processes since information could get stuck if participants were not involved enough. This was accentuated by the following statements from interviewees:

"The information chain was not the best. It was difficult to get people to understand and get involved. People might not have known what happened in other WPs in case they were not very active themselves"

"It has been a quite hierarchical organisation structure which has made it difficult to get all the information. It does not really reach the bottom"

"Information got lost and not all in the organisation knew the same things. People could start a process that was already started somewhere else. I think I knew more since I worked 100%, but others knew nothing. It varied a lot in the countries on who knew what"

A little more than 20% of the interviewed mentioned that they did not think they worked very Agile. The reason could partly be that the Agile way of working was not a good fit for their respective deliverables and therefore not a helpful methodology in their specific cases. Also, the fact that the majority of people involved in the NSG programme were not able to put in more than 5% of their time could possibly have affected the ability to use core Agile components such as retrospectives.

Within the topic "Collaboration", the third most mentioned issue that worked less well was the involvement and communication with external stakeholders. Here, one interviewee mentioned the following as the suggested reason behind this:

"We sent out information, which worked well but it was difficult to get information back from external stakeholders. We didn't have enough resources and time to involve them enough"

5.1.3 Organisation

The topic "Organisation" includes areas within responsibilities and competencies as well as the organisational structure and size of NSG.

Worked well

Within "Organisation" the prime issue mentioned most often was the level of competency the organisation and its work packages showed. One interviewee said the following:

"We had a lot of good and different competencies which made us learn a lot from each other"

Furthermore, the chosen organisational structure and the different work packages were seen as something valuable in order to work well across the country borders. Here, some of the interviewees believed that the structure of the organisation was suitable due to the different levels it contained, which made working internationally more efficient.



In addition, one interviewee underlined the positive effect a work package leader and a work package leader assistant had. This had the effect that the workload could be shared in case one had to prioritise other things in their organisation without the work package process coming to a halt.

Worked less well

In the category "Worked less well", most issues mentioned were in some way or another related to the topic "Organisation". A third of the interviewed participants mentioned that too many of the people involved in the programme did not have enough time allocated to work efficiently. This was mostly stated by people who were active in NSG at 50% of their time or more. Some interviewees mentioned the following:

"Too many people with too little time. It was difficult to delegate to people since we didn't know if they had the time, so I took on some things on my own because it was easier"

"We should not take in people who do not have enough time allocated for NSG. 50% should be minimum. We had co-chairs who didn't have time to lead"

"Some were more engaged and could get overloaded with work since the allocation of time was not optimal. People should be able to put in 100% to be able to work fully agile"

The time people were able to dedicate to NSG had effect on how efficient the work process was. Many of the interviewed people who were able to allocate 50% or more of their time also stated that the start of the third phase was slow. The reason for this could be that it took a long time for people not as active as them to understand and familiarise themselves within NSG and to build a shared understanding of concrete deliverables for work packages, establish clear roles and responsibilities. Contributing factors were the rapid expansion of the NSG organisation itself in combination with turnover of key personnel which required onboarding efforts to come into effect.

In addition, some interviewees mentioned that the organisation included too many people, who also mainly had too little time. This created confusion in several different areas, regardless if they were able to allocate 100% of their time or less than 5%. Many interviewees stated that they found the organisational structure to be too complex. A quote that summarizes several opinions regarding this stated that:

"I didn't know why it was structured the way it was. Why the specific work packages? And why the different levels? Everything was just so unclear"

As a result of not understanding the organisational structure fully, interviewees mentioned that the roles and responsibilities, and thus the tasks and deliverables, were difficult to get a full understanding of in NSG's third phase.

5.1.4 Governance

The topic "Governance" includes areas within vision and goals as well as value and scope.

Worked well

Within the topic of "Governance", the interviewees did not have any extensive reflections compared to the other two topics. One issue that was mentioned was regarding the steering of NSG. Interviewees mentioned the strength in having all the involved countries within the steering committee as well as the fact that the top leadership of central Nordic Governmental agencies participated actively in the leadership of NSG. One interviewee had the following to say about the steering:

"They have done a good job in general in steering the programme with so many stakeholders. This is a difficult task. [...] It is complex to have so many stakeholders involved."



The steering group also did an appreciated job in promoting the programmes vision and goals, as this was mentioned as something that also worked well.

Worked less well

Nevertheless, the steering, vision and goals were also seen as something that worked less well, according to some participants. This regardless of how much time they stated that they were able to allocate to the programme.

The vision and goals were not fully understood by all involved in the programme. One participant mentioned that it took too long time to start up the phase due to unclear goals of NSG 3.0. Furthermore, the following was mentioned regarding goals and deliverables:

"Goals for work packages were not clear. Also, it was hard to understand what the concrete goals and deliverables were. People were not fully onboard and aligned on vision and goals in 3.0 "

Regarding the steering, one interviewee stressed the value in having a firm steering. It was believed that in some cases, the direction and decisions were not clear enough to get the involved to proceed forward efficiently enough. This came across in the following quote:

"More clarity in direction and decision making is needed. More of a push, I could hear the leader say things they wanted the rest to do, but nobody really did it. We could have benefited from a "we are going to this" way of saying things rather than "can you please".

5.1.5 Interviewees suggestions for improvement

During the interviews many suggestions surfaced on what could have been done differently or what can be done to improve the process during the next phase. One suggestion that was reiterated in many interviews was to increase **external stakeholder involvement**. Both in the sense that external stakeholders could benefit from more information on the progress of NSG, but also that NSG can benefit from the knowledge and experience from other parties.

It was mentioned that holding workshops together with external stakeholders around common issues was a good approach. Others mentioned building communities as an effective way of establishing external stakeholder involvement, where an example was to have a light weight (i.e. easy to set up and maintain) Slack-channels where NSG together with external stakeholders can share information, test prototypes and build momentum around concrete issues rather than bigger visions. A prerequisite for this kind of approach is that goals and deliverables are very clear and that the roles for NSG and external stakeholders are defined, i.e. what needs to be built "bottom up" and what needs to be built "top-down".

One participant elaborated on this and suggested an "aggressively transparent" approach. This means NSG gives full access to information, goals, visions and co-creates plans and deliverables together with external stakeholders. The reasoning behind this being that the value for external stakeholders can increase, and their involvement be stimulated, if they also can influence the direction, priorities and contents of future work products.

Another common suggestion moving into the next phase was to allocate more time for planning before the start of the phase. This was not only identified as a lessons learned by the NSG participants, but also by the similar programmes as presented in 3.3.1. The main reason being experiences from NSG 3.0 which took a long time to start up and establish clear goals and deliverables for work packages. Therefore, some interviewees suggested the steering committee to be very clear on roles, responsibilities and deliverables in the different work packages ahead of the next phase. Interviewees shared these thoughts:

"Bring up all the potential questions, they need to be fully answered before start"



"Agree beforehand on a vision and roadmap for the next year to then find out which participants and competencies are needed in the work packages. Be open minded in creating the teams and focus on what is best for the product, it is not essential to have everybody on the same level at the start"

One of the other top suggestions mentioned in interviews was the need to **demonstrate working solutions**, such as demos, a proof of concepts (PoC) etc. By developing prototypes NSG can show potential solutions and test their value on the probable market. In doing so, there is something tangible to discuss and build upon.

Within the areas of "improve the collaboration" and "way of working" several suggestions were mentioned. Among those the need for **more allocated time for participants** was identified as the most important one. Many mentioned that fewer, but more heavily involved participants are preferred before additional, but less active, participants. The NSG programme is in itself complex and it takes time for participants to establish themselves within the programme and become effective contributors. This is harder to achieve when many other day to day tasks competes for attention.

Also, the **Agile way of working** is based on small highly active teams working in iterations ("sprints") on specific tasks. The Agile methodology is harder to apply across distributed teams working only part time, maybe out of phase with each other, and essential Agile methods such as retrospectives⁴ may therefore fall short. This was observed by participants in NSG 3.0 who suggested more focus on establishing Agile methods within the different work packages from the start to improve collaboration and thereby make the teams work more efficiently. One interviewee gave the following suggestion regarding this:

"We need to do continuous improvements with retrospectives and actually have those meetings. Facilitate each other's retrospectives to learn from each other and continue to have an Agile coach would also increase the work process"

5.1.6 Identified challenges going forward

During the interviews, the following were the top challenges identified:

- Country politics
- Level of readiness in the different countries
- Finances

Country politics

This was the number one challenge identified. What this means is that different countries across the Nordics have different political and legal environments that are necessary to either harmonise or accommodate if implementation of NSG is to be realistic. For instance, it has been identified that over 30 different laws need changing only in one of the Nordic countries in order to implement a portion of the current ambitions of NSG. With details becoming increasingly clear for the NSG work products, it can be expected that the impact in terms of legal challenges also will become clearer, and possibly grow. Also, the different political systems present challenges as the governments and agencies across the Nordics are subject to different regulations and forms of functioning. Swedens governing system is based on independent agencies where mandate and power is distributed. In other Nordic countries, such as Denmark, governmental agencies are subject to direct political control. This can present itself as a challenge as the speed at which NSG can be implemented can differ substantially as a consequence.

Level of readiness in the different countries

The starting point of each of the Nordic countries has also been seen as a potentially major challenge. Not only regarding the differing political landscapes as mentioned above, but also when it comes to

⁴ A meeting held by a team at the end of a project or process to discuss success, failure and future improvements after each iteration



the readiness for change and the differences between countries in terms of maturity. This could lead to tensions between countries as some might strive for a higher pace in the change agenda where others are lagging. Some comments on this from the interviews were:

"It will be difficult to achieve a united solution in the Nordics since we are on so different levels and have different starting points"

"I think the best way is to divide the implementation and decide how to do it within each county since we are not on the same level"

Finances

Since a successful implementation strategy is dependent on the amount of money received, enough funding was seen as a potentially crucial challenge. Several reasons for the concern regarding finances were mentioned. A potential inadequacy of marketing and presentable working prototypes could have an impact on the extent external stakeholders' actors felt confidence in the product and their willingness for co-financing. Moreover, with the current situation regarding Covid-19, potential funding from government and SMEs could be absent due to lack of priority in their current budget and timeframe. Hence, NSG may have to prioritize among initiatives that in an ideal scenario would have been of equal importance.

Other challenges

Apart from the mentioned, another challenge brought to light by several was the importance, and also the potential difficulty, to keep the engagement and commitment at high levels among participants. This regarding both the directly involved participants and the external organisations that had some stake in the NSG work. One interviewee reflected as follows:

"I feel like there is more engagement during this phase than it is for the implementation phase. Lack of funding and resources can make people less engaged going forward."

5.1.7 Nordic comparison

When it comes to the top things mentioned by each country regarding what worked well and worked less well, there is no considerable difference as can be seen in the picture below (Figure 8). More interesting results however comes when a comparison between the single countries most mentioned things that worked well and worked less well is made.



Figure 8: Top mentioned issues per country



Finland had a high count of participants who thought that the vision and goals were clear, but they had an equal amount that stated that the vision and goals were unclear. Also, those that stated that the vision and goals were unclear had been mostly been active above 50% while those who thought the opposite had mainly been active below 30%. Finland, along with Denmark, also had the highest count of people who mentioned that the internal involvement and communication/information sharing was lacking.

Participants from Denmark are also the ones who stressed the organisation and governance most often. They generally thought that the governance/steering worked well while the organisation was too big and complex for the third phase to be efficient. This could be related to the viewpoint among the Danish participants that the communication/information sharing was not good enough.

For Iceland the most important issue mentioned was the cooperation and collaboration, and they thought that the internal communication, both nationally and internationally, worked well. Furthermore, the physical meetings were highly appreciated by people from Iceland while things such as "unclear scope and plan" and "unclear priorities and decisions" were identified as areas with room for improvement. Overall opinions from Iceland were very distributed with no clear overall identified consensus.

Opinions from Sweden on what worked well did not stand out in comparison to other countries. Sweden is nevertheless alone in believing the Agile way of working was a top issue that worked less well. In addition, Sweden also has "the difference between countries" on their top five most mentioned issues that worked less well which potentially could have a correlation to each other. Lastly interviewees in Sweden stressed, in comparison to other Nordic countries, that the involvement of and communication with external stakeholders did not work as well as planned.

Lastly, compared to the other countries top three most mentioned things that worked well, Norway truly appreciated the trust and openness within the NSG programme. Here one participant voiced that it was easy to express yourself and share thoughts. However, participants from Norway were the only ones who mentioned that the steering and participants of the NSG programme could sometimes go in to too much detail. This was believed by some of the Norwegian interviewees to be a reason for the presumed slow start that is also among the topmost mentioned things that worked less well.



5.2 Results from Quantitative survey

In the quantitative study, 45 answers were received with the country spread as seen in Figure 9 below. The majority of the participants who answered were active members in work packages, while the rest were within the categories "leadership" or "experts". The results were in general very positive, therefore, this chapter focusses on outliers - the results that in general were rated higher or lower than the average.

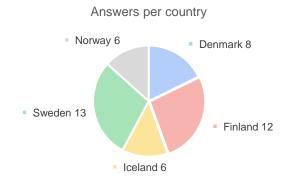


Figure 9: Number of answers from each country

5.3 Overall issues that worked well in NSG 3.0

The overall assessment of the NSG programme is that it seems to be a well-functioning programme were the overwhelming majority (90%+) believe NSG is on the right track. On the positive side, there are some issues that stand out.

- Internal culture that is open and inclusive
- An organisation that consists of highly committed people with relevant competencies
- Physical meetings are highly valued
- Organisations see a lot of value with the NSG programme
- NSG is a continuous learning experience

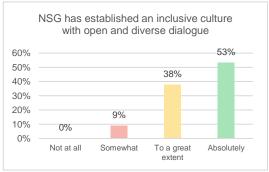


Figure 10: Ratings on culture

In general, the most appreciated issues with NSG were related to the internal culture, commitment, engagement and inclusion within NSG. Regarding the culture, over 90% of the involved in NSG consider that NSG have, to a great extent or more, established an inclusive culture with an open and diverse dialogue. This could potentially be a result of the physical meetings and the experienced quality in the high commitment and engagement seen in the people involved in NSG 3.0. Both were ranked by almost half of the participants as one of the top three issues that worked well with NSG 3.0.

The evaluation also shows that the participants rated the competencies within NSG as adequate to support the NSG vision and goals. Furthermore, the participants and the organisations involved in NSG see a major importance in working in and with the NSG programme. The answers to the question "NSG is valued by my organisation", shows that the participants and organisations value NSG fairly high and one participant had the following comment regarding this:

"By being a part of the organisation, we really can ease the administrative burden for SMEs and also create great value to the society as a whole. By being a member of NSG my organisation also learns a lot, develop and continue to be in the forefront of the digitalization."



This being said, the survey was only conducted among people and organisations within, or with a close relation to, NSG.

Another ambition with NSG has been to establish continuous learning as a pillar in the internal culture. The survey shows that this ambition has been met with some success as about over 85% of participants in the survey think NSG has been a continuous learning experience.

This also adds strength to the point that during NSG, people were conceivably open to share and learn from one another and did not hesitate to ask or reach out due to the inclusive culture established in the NSG programme.

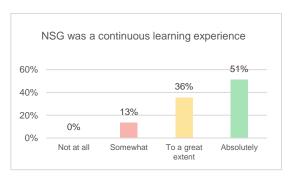


Figure 11: Ratings on continuous learning

5.3.1 Challenges and priorities moving forward

The following were the main challenges and issues that worked less well during NSG 3.0

- Not enough time allocated to participants
- External stakeholder involvement is one of the main challenges going forward and involvement of private sector is the top priority
- Create usable work products that can be demonstrated
- Not entirely clear how vision translates to roles and responsibilities.
- Complex organisation across the Nordics with many people involved. Information sharing and communication has room for improvement

The most frequently mentioned issue, also seen in the qualitative study, was regarding the participants time allocation. In NSG 3.0, the majority of the participants in this evaluation were able to allocate under 50% of their time to the NSG agenda, as can be seen in Figure 12.

This however was not optimal for the participants since a lot of them rated low on the question "I have enough time allocated to contribute to NSG". It was also the most common answer in the category "Top issues that worked less well", where 64% of the people who answered said that not enough time allocated by resources was an issue.

The time allocation issue could thus be a reason for other identified challenges in the NSG programme, such as a complex organisation structure and gaps in the communication and information sharing, simply because participants do not have the time to understand the organisation or information shared.

Furthermore, among the top issues that worked less well in NSG 3.0, the roles and responsibilities were mentioned. This issue can also be a potential consequence of the allocated time and experienced complex organisational structure mentioned above, but also due to the management of

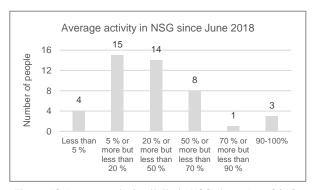


Figure 12 Average rated activity in NSG since June 2018

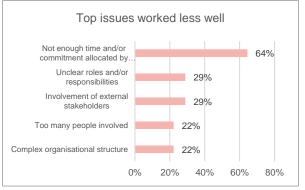


Figure 13: Top issues worked less well



communication. Even though information sharing rated fairly high, some mentioned that it can be improved for the next phase. One comment regarding the communication in NSG 3.0 was:

"It has been a quite hierarchical organisation structure which has made it difficult to get all the information. It does not really reach 'the bottom'"

This can indicate that it was difficult to understand the roles and responsibilities in the NSG 3.0 organisation.

Other commonly mentioned priority for the NSG 4.0 phase include the involvement of external stake-holders and the possibility to create a usable work product to demonstrate. For participants of NSG, SMEs are seen as the most important stakeholders. Therefore, several participants see a need to include external stakeholders into decisions and creative processes moving forward. In the survey, participants were asked if any competencies were lacking in NSG, several mentioned competences in relation to SMEs, understanding of private sector needs and similar. One comment regarding this was:

"Knowledge of private sector solutions and needs. How we can involve software companies so they can create solutions that provide customer value to Nordic entrepreneurs."



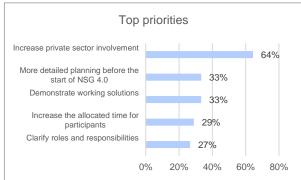


Figure 14 Top 5 rated challenges

Figure 15: Top 5 rated priorities

In order to maintain and improve the relationships with external stakeholders, creating demonstratable working solutions was rated highly both among the challenges and priorities moving forward, as can be seen in Figure 14 and 15 above, but the top priority was "Increase private sector involvement" moving in to the next phase, where 64% rated it in top as can be seen in Figure 15 above.



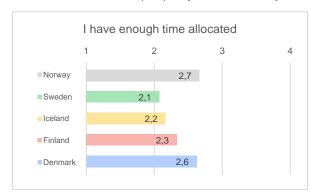
5.3.2 Results based on country

Apart from splitting the results into groups based on activity level, a grouping based on the different countries was also made. In the below graphs, results are translated into country averages were the question answers were translated into points. "Not at all" is given 1 point and "Absolutely" is given 4 points as follows

Survey answer	Translated to points
Absolutely	4
To a great extent	3
Somewhat	2
Not at all	1

Figure 16: Translation of answers to points

The differences between countries were small, but in general Denmark and Norway rated higher than average while Sweden rated lower on most questions. This can notably be seen on the question "I have enough time allocated" (Figure 17) where Norway and Denmark have the highest ranking while Sweden clearly has the lowest. At the same time, Sweden was the country with the highest rating on how "NSG is valued by my organisation" (Figure 18). This can be seen as a bit counter intuitive.



NSG is valued by my organisation

1 2 3 4

Norway 2,7

Sweden 3,3

Iceland 3,0

Finland 3,1

Denmark 3,0

Figure 17: Country differences on time allocated

Figure 18 Country differences on organisation value

A deeper analysis showed that there is a strong negative correlation between the sentiment "I have enough time allocated" and "NSG is valued by my organisation". That means in general - the more time participants feel they have allocated - the less NSG is valued by their respective organisation and vice versa.

Other significant differences are Iceland's ratings on the questions "NSG has established an efficient organisation across the Nordics" and "I have worked in an Agile way within NSG". On the former question, Iceland have a fairly high rating of 3.0 out of 4.0, but on the latter Iceland rate the lowest among the countries with a score of 1.8. Since Agile was the preferred project management method, it is of significance to understand what made them work so efficiently if they did not apply Agile.

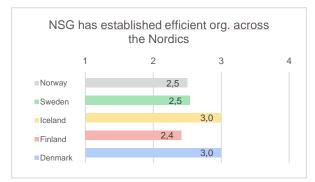


Figure 19 Country differences on efficient organisation

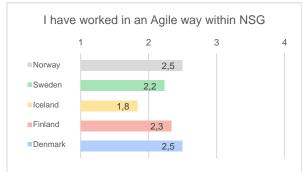


Figure 20 Country differences on Agile work



Additional questions where countries stood out in their rating were "There is a clear vision and direction of NSG" (Figure 21) where Iceland rates the lowest among the countries, "NSGs work packages have the right competences" (Figure 22) where Sweden is significantly lower than the rest, and "NSG involve external stakeholders effectively" (Figure 23) where Norway and Iceland seem to have good practices to share with other countries.

It is also worth noting that Finland rate in the middle on almost all questions. One exception to this is their rating on the question "NSG is on the right track" (Figure 24), were they have the lowest rating among the countries with a slight margin.

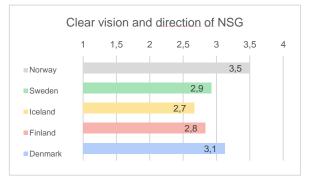


Figure 21: Country differences on clear vision

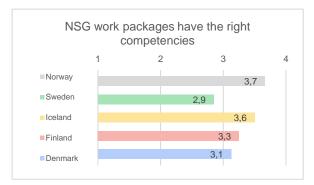


Figure 22: Country differences on competencies



Figure 23: Country differences on stakeholder involvement

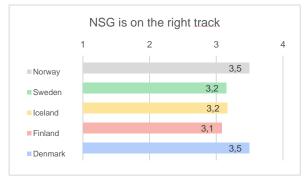


Figure 24: Country differences on overall direction of NSG



5.3.3 Results based on activity level

The results within different activity levels were divided into three different groups depending on their allocated time in NSG 3.0. The groups were: 0-20%, 20-70% and 70-100%. Since these groups where of different sizes, the options were translated to values between 1-4 in order to calculate averages in the same manner as in the chapter above.

With this translation it is possible to observe that participants who were able to allocate 0-20% of their time to NSG, generally scored lower than other groups. Not surprisingly, that group also rated significantly lower on the question "I have enough time allocated to contribute to NSG" as seen in Figure 25 below. In contrast, it is apparent that participants with a time allocation of 70-100% believe that they have enough time to contribute to NSG.

The participants who stated that they were able to allocate 0-20% of their time also rated lower on questions regarding the overall understanding of NSG such as "NSG is on the right track" and "The work I did in my part of the programme contributed in a clear way to the NSG vision". It is likely that these participants simply do not have the time to fully understand those aspects of NSG.

Even though the general results for the 0-20% group were low, they did not rate the lowest in all aspects. The 70-100% group rates the lowest on several questions regarding the NSGs way of working. These questions include "The organisation and work packages have the right competencies", "NSG involve external stakeholders in an effective way" and "I have worked in an Agile way within NSG". A possible reason for these low ratings may be that, since these participants spend more time active in NSG, they are also more likely to find gaps and points for improvement within the structure.

This might be especially true in the question regarding Agile work (Figure 26). Since the Agile framework requires highly in-

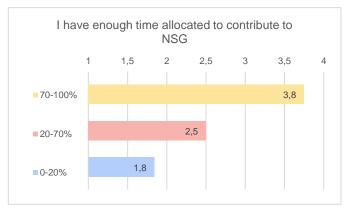


Figure 25 Average answer on question regarding time allocation

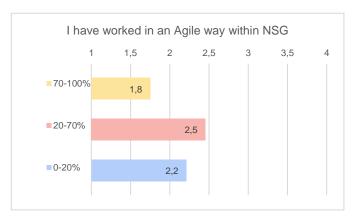


Figure 26 Average answer regarding Agile

volved participants to optimize the way of working, the participants within the 70-100% allocated time group would thus see the gaps and perhaps even experience frustrations in relation to the Agile way of working.



6 Recommendations

The evaluation has shown that the NSG programme as a whole has a lot of strong points, with highly committed and engaged participants, bringing relevant competencies together in a collaboration built on a solid foundation on trust.

At the same time, NSG has several areas to improve. For instance, internal structure and information management, external stakeholder engagement and not least the time allocation for its participants.

As a result of the identified challenges and potential improvements, in combination with the lessons learned from similar programmes, seven different recommendations have been composed within various areas. The recommendations are presented with their respective background and motivation. The recommendations are not presented in order of importance or implementation.

A note on Covid-19 in regard to the NSG 3.0 evaluation

The Covid-19 pandemic also had an impact on NSG and the programme will have to adapt to new ways of working and collaborating. The recommendations have not changed due to the current (September 2020) situation, but some of them have become even more important going forward.

General impact

The Coronavirus (COVID-19) outbreak presents an urgent need for organisations and businesses to **be resilient and ready** for the impact on organisations now, and **be prepared** for what is to come.

This outbreak is only the latest in an increasing number of **complex and unexpected disruptions** that are impacting business performance within

- Employee health and well being
- Talent and workforce
- Customer safety and brand protection
- Financial and investor
- Risk
- Government and public policy
- Technology and information security
- Insurance and financial recovery
- Supply chain and global trade

Effects on NSG

For NSG this means, among other things, that the digital agenda will be even more prioritized in the market.

This can be seen as an opportunity for NSG as the ambitions within digitalisation will receive more attention among business and governments

At the same time Covid-19 will also be a challenge for the NSG organisation itself since internal and external collaboration must be shifted to mostly digital platforms.

Physical meetings, workshops, presentations in physical form will become less frequent in the future which makes information sharing and management, a well defined organisation with clear roles and responsibilities even more important going forward.

Impact on recommendations

For the recommendations this means that some issues are highlighted even further.

We believe that the following recommendations are especially important when considering the impact of Covid-19 are

- Improve communication and information sharing
- Ensure an efficient start-up of NSG
 4 0
- Establish a clear structure for roles and responsibilities
- Maintain and improve programme trust and performance

For NSG this means, among other things, that the digital agenda will be even more prioritised in the market. This can be seen as an opportunity for NSG as the ambitions within digitalisation will receive more attention among business and also governments

At the same time Covid-19 will also be a challenge for the NSG organisation itself since internal and external collaboration must be shifted to mostly digital platforms. Physical meetings, workshops, presentations in physical form will become less frequent in the future which makes information sharing and management, a well-defined organisation with clear roles and responsibilities even more important going forward.



6.1 Ensure a high degree of participation in NSG

Background

In the NSG 3.0 phase, the majority of the participants have been able to allocate 50% or less of their time to the NSG programme. The participants within this group state that they do not have a satisfactory amount of time allocated to contribute to NSG, where Sweden rates the lowest on the question. Furthermore, low time allocation was the top mentioned issue that worked less well during NSG 3.0. In addition, is it likely that several other issues such as "too many people involved" and "a complex organisation structure", have been influenced by the lack of time for participants to engage in and understand the NSG organisation.

Recommendation

Minimum of 50%, preferably 70-100% allocated time for participants

It is important that the NSG programme ensures that the organisation and its participants have enough time allocated to contribute to the NSG programme. This could be realised by having fewer active participants in the programme but those who are active have a higher activity level. The participants should be able to allocate a minimum of 50 %, but ideally 70-100%, of their time to NSG. Note that this should only be seen as a general guideline and not be expected by experts nor other specialised roles whose contributions have to be worked out on a case by case level.

If this goal is difficult to achieve and a position in one of the WP's of NSG does not fill up to more than a 50 % part-time job, the same employee/participant could fill the same role in another WP, which would lead to a 100 %-time allocation to NSG in total.

High engagement preferred over many involved

Furthermore, high engagement in the programme should be prioritised above many participants involved. This will also likely reduce the potential challenges such as a view of a complex organisation structure and unclear responsibilities.

More allocated participation time potentially mitigates other challenges

In addition, several more issues can potentially be linked to the low rates in the participants allocated time. Therefore, a high time allocation could strengthen the possibility for a greater success within several areas. An example of this is the Agile way of working. In order to maintain working Agile, smaller, high active teams are necessary. The current situation with distributed teams with a medium to low activity level is not ideal if working Agile is a goal.

A low time allocation has also led to an unbalanced distribution of the programme's work. People already participating a lot, had to take on even more because less active members of the programme did not have the time. This is not an optimal structure for an efficient organisation since people will get an uneven workload in combination with an uncertainty of other participants capability to produce necessary material.

"Some were more engaged and could get overloaded with work since the allocation of time was not optimal. People should be able to put in 100% to be able to work fully agile"



6.2 Improve communication and information sharing

Background

Even though the overall communication and information sharing was highly rated by the participants within NSG 3.0, several participants mentioned that they experienced gaps. These gaps may have had an effect on the impression of unclarity in the organisation structure, responsibilities and deliverables as well as a lack of overall understanding of the NSG programme. The concern regarding the inadequate communication and information sharing was among the top-

"The information chain was not the best. Difficult to get people to understand and get involved. People might not have known what happened in other WPs in case they were not very active "

most mentioned issues that worked less well within NSG 3.0. This was mentioned by interviewees both in the qualitative and the quantitative study and has therefore room for improvement going into the next phase.

Recommendation

Develop the current information sharing platform

In NSG 3.0, the participants had a platform to share their information and work on. However, since it is believed by several participants in NSG 3.0 that the information sharing and communication within the programme has been deficient, further development of the current information sharing platform is proposed. Interviews and the web survey have shown that especially the structure of the document database needs improvement in order to facilitate a more efficient way of working within the organisation.

Apply one or more new information sharing channels

In addition to this, the NSG programme could adapt one or more different types of information sharing channels to ensure sufficient information sharing across the organisation and its work packages. Due to the current situation with Covid-19, a structured approach with frequent and adequate information sharing is even more important than before for everybody to feel included and informed. In the quantitative study, the following was rated the highest among the list of choices by participants in NSG 3.0:

- Regular online meetings with the programme leader
- A person responsible for communication within each work package
- Newsletters via email

The NSG leadership would thus be advised to consider these information sharing channels since they are among the main suggested improvements according to the NSG participants.

A designated information manager and structure for information sharing

It is of value to have a set structure for where and how to share documents. This to ensure adequate information sharing and a non-overlapping delivery between the different work packages. It is also of importance to ensure that the chosen platform for information sharing is understood by the programmes participants to avoid a potential problem of participants not using it due to complexity. To strengthen this understanding as well as the overall communication, each work package could have a person responsible for their communication agenda and information sharing. A person with that responsibility could ensure that their work package will receive the necessary information in order to work efficiently as well as address any concerns to the rest of the organisation if they experience any gaps.

<u>Develop a structured onboarding process to ensure no future complications</u>

Lastly, the NSG programme is experienced as complex and it takes time and energy to become an effective participant. In order to speed up this process, NSG should consider developing a structured onboarding process. This to ensure that the information sharing channels are established immediately and that the new participants know how and who to contact in case of uncertainty. This should include



connection to all relevant information channels and a well-structured document database which also helps in assisting newcomers in getting an overview, history and context of the work at hand.

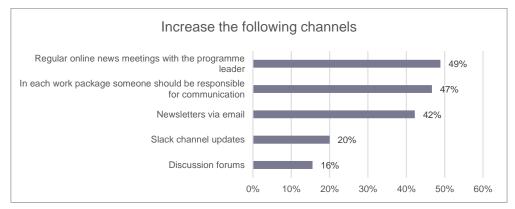


Figure 27: Percentage of votes on each preferred communication channel

6.3 Ensure an efficient start-up of NSG 4.0

Background

A recurring theme in interviews was that NSG 3.0 took a long time to start up, and for work packages to become effective. Initially, even though there was a broad consensus around overall vision and scope, specific deliverables were not clear for work packages. This was developed along the way.

It took a long time for work packages to become operational and develop a clear picture on what the visions and plans meant for them and the specific deliverables that they were supposed to work on as a consequence.

"I didn't know my role in my work package, I didn't understand the plan and scope of this phase, I didn't know why it was structured the way it was, why the packages, why the different levels, everything was just so unclear. It took a long time to start work. Time was wasted"

In the quantitative study, this sentiment is reiterated as the number two priority for the next phase is "More detailed planning before the start of NSG 4.0" and a need to "Clarify roles and responsibilities". This in combination with one of the found lessons learned by similar programmes: Well performed and thorough planning is important.

Recommendation

At the 1st of September the Roadmap was approved by the Nordic ministers of Business. This gives and outline framework and vision for the NSG 4.0 phase to commence in January 2021.

Build on the Roadmap

Given the challenges seen in the start-up phase of NSG 3.0 it is imperative that this roadmap is further developed in terms of goals, deliverables, roles and milestones. Within this context a mapping of competencies at hand and analysis of competencies needed for the next phase can be conducted. With this said it needs to be understood that NSG has an overall agile approach to project management. This means that specifics on scope and deliverables are not entirely clear and needs to be defined in a collaborative effort, sometimes with external stakeholders. In this context, goals and deliverables for work packages does not necessarily mean finished products, it could for example mean a further detailed plan or a deeper understanding of market needs or legislative hurdles within the scope of work.

When working with an agile scope, it is still imperative that work packages have a clear understanding of what is expected of them, their role and mandate, outline time plans and what the process looks



like for moving forward. An example of this that needs to be clear is the decision-making process for narrowing down the scope as the specific project or work stream moves forward.

Iterative approach - keep flexibility

In order to further develop the roadmap an iterative approach can be applied together with relevant work packages or parts of work packages. When goals and deliverables for work packages are further developed, the organisation, division of work into work packages or work streams can be developed and or adjusted. Therefore, it is recommended to keep room for flexibility regarding the specific organisation as this will have to be adjusted due to the details set out in the developed plan. Also, depending on the outcome of the planning, certain workstreams might need to be set up horizontally to work cross work packages.

The organisation is there to support the goals

It is important that the organisation is set to support the goals since the organisation is a means to an end. Our experience shows that it is not uncommon that the organisation can otherwise become a goal of itself.

During development of the organisation, strategies for stakeholder involvement should be considered, since the approach to stakeholders might differ depending on specific goals and deliverables. These strategies are outlined in further detail in the recommendation "External stakeholder involvement".

6.4 Establish a clear structure for roles and responsibilities

Background

ganisation.

In the study it became evident that the organisational structure of NSG 3.0 was not fully understood by the participants. It was seen as too complex and, according to several interviewees, inefficient. The impression of a complex organisation structure could be a result of the impression of unclarity in tasks, deliverables and responsibilities. To have unclarity within these areas could thus have influenced the stated level of complexity of the NSG 3.0 or-

As an indication of this, several interviewees mentioned that the roles and responsibilities were unclear, potentially due to gaps in the communication and information sharing. However, this could, as stated before, also be related to the issue regarding the complex organisational structure where participants did not fully understand who in the organisation was responsible for what.

"Information got lost and not all knew the same things. People could start processes that were already started. We knew more since we worked 100% but others knew nothing"

Therefore, possibly as a result of unclear relationships, roles and responsibilities, as well as a vague communication tree within the organisation, several participants saw the organisational structure as too complex to work efficiently.

Recommendation

As presented, the organisational structure in NSG 3.0 was seen as too complex. This participation experience could be a result of unclear responsibilities, roles and deliveries in combination with an insufficient communication between work packages. In order for the organisation to be less complex and more efficient, a number of suggestions are presented.

Responsibilities within PMO

The first step suggested to achieve a less complex organisational structure is to establish clear responsibilities within the PMO. For instance, the PMO could benefit from additional dedicated roles within several different areas. Examples of such are: a communication manager to ensure all work



packages get relevant information, and external stakeholder manager to ensure sufficient external involvement and coordinate the involvement of external stakeholders. A manager position should be created when there is an area that needs extra care to ensure an efficient way of working. Several people can be responsible for the same area in case the expected scope and delivery is too extensive. An additional note in case of the latter is to ensure that the rest of the organisation understands this shared responsibility to avoid confusion.

Strengthen PMO and Work package collaboration

To ensure that the information sharing as well as the line of communication is adequate, PMO and Work package collaboration can be strengthened. This could be achieved through various ways, for instance regular joint leadership meetings between the PMO and WP chairs. This could strengthen the collaboration in several ways

- Alignment and agreement on overall priorities
- Increased ownership on the overall NSG agenda and direction
- Strengthen coordination between WPs and in relation to external stakeholders
- PMO and WPs get mutual status updates in joint meetings at regular intervals

The strengthened collaboration could aid in clarifying the work packages deliverables and also increase feedback from work packages to the PMO. This would potentially increase the understanding of the overall organisation and NSG goal and vision, since there will always be a room for discussion and clarification.

Ensure the work of deputy leaders within the work packages

In order to ensure a clear direction and efficient work packages, each work package also benefit from having a deputy leader to assist in managing the work package. This would be of advantage in case the work package leader is unavailable or have too big a workload. It is of additional importance to ensure that the deputy leader understands what is expected of him or her and that the rest of the work package participants know it to. This to diminish the complexity of the organisational structure as well as guarantee clarified responsibilities.

6.5 Strategies for external stakeholder involvement

Background

To increase private sector involvement is by far the number one issue to prioritise in the next phase according to the web survey. It is also identified as one of the top issues that worked less well during NSG 3.0 and an important lesson learned by similar programmes. This suggests that NSG needs to emphasise this issue going forward, but also that NSG has yet to develop an adequate strategy and method for external stakeholder involvement and management.

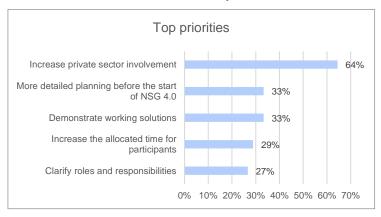


Figure 28: Top priorities ahead of NSG 4.0



Furthermore, due to the study it became evident that one of the main competencies lacking in the organisation was competencies with experience from the private sector, such as knowledge of private sector solutions and needs as well as knowledge of the SMEs actual, current business practices. Yet, the situation is not the same in all countries. Norway, and also to some extent Iceland, rate their involvement of external stakeholders higher than other countries. This suggests the development of external stakeholder strategies could draw from experiences in these countries.

Recommendation

The evaluation clearly shows that external stakeholder involvement is identified as both one of the main problems with the current setup of NSG, and also that it should be the number one priority going forward into NSG 4.0. The setup and method for external stakeholder involvement should therefore be adapted to the specific goals that are to be achieved with NSG 4.0. Furthermore, external stakeholder involvement at the top level should mainly focus on building trust and strong relations. Experiences from Norway and Iceland have shown good examples to learn from and could thus be the starting point for an evaluation and development in this area.

On this general level, there are a number of factors that have to be in place in order to successfully engage and inspire external stakeholders.

Clear vision and goal

Initially, there must be clear vision and goals for NSG, with a distinct idea on what success looks like. This makes it easier for NSG to identify the relevant stakeholders, but it also makes it easier for them to understand if and how to best contribute to the NSG effort. Several meetings and discussion forums with the desired external stakeholders are therefore recommended to further strengthen their understanding of and communication with the NSG programme.

Establish and build trust

A clear idea of the way forward helps in building trust with external stakeholders. Another important factor is transparency. If matters are still to be developed or detailed, transparency about this facilitates trust. One additional way to strengthen this trust is to create a working product or proof of concept (PoC). As several interviewees have mentioned, this is an important step in order for the external stakeholders to trust the upcoming delivery of NSG 4.0.

Moreover, if external stakeholders are expected to invest time and or money into a specific project, it is vital that they gain trust in the main solutions or infrastructure that is supposed to be built long term, and if the potential solutions are likely to become standard in the future. When approaching external stakeholders this trust can also be built - or eroded - if they do not get a good impression of the structure and organisation NSG and the coordination of WPs.

Consider the approach

Beside general factors, there are specific strategies to apply depending on the specific goals and deliverables in work packages. This means:

- 1. That development of clear goals is a first crucial step in order to select the appropriate strategy for external stakeholder involvement.
- 2. Varied methods and strategies for externals stakeholder involvement must be implemented depending on the specific goals and circumstances at hand, but also based on the specific type of stakeholders to involve

As a basis for discussion varied strategies could have the following characteristics:

Top down: External stakeholders to be informed and included, but NSG has final say. For instance, in Development of legislation, Government to Business solutions and Government to government.



Bottom up: Delivery largely depends on external stakeholders. NSG can facilitate, nudge, clarify value etc. For instance, in Business to Business solutions or development of standards not controlled by government.





Figure 29: Top down or bottom up approach visualization

6.6 Maintain and improve programme trust and performance in times of digital meetings

Background

It was identified in this evaluation, both in the qualitative and the quantitative study, that the physical meetings and workshops during NSG 3.0 were highly appreciated by the participants. As a lot of participants stated that the project suffered from a slow start - that it took a long time to work out roles and responsibilities and concrete deliverables. The physical meetings were instrumental in order to quickly build trust in each other. These physical meetings were also essential in the interest of clarifying misunderstandings as they could easily be overcome when talking face to face.

Unfortunately, The Covid-19 will restrict the possibilities for physical meetings in the unforeseen future. Therefore, NSG will have to adapt and develop strategies to mitigate the impact and to maintain the trust and affiliation in the programme. This as the NSG programme will have to rely on working remotely with a limited ability to have physical meetings in the fourth phase of the programme.

Recommendation

The Covid-19 situation puts a strain on all organisations. Working remotely makes project structure, clear roles and responsibilities, communication, and group cohesion even more important than it was before. This since there will be fewer possibilities to meet in person to clarify any misunderstandings that occur online. The resulting consequences can be mitigated by a structured approach to team performance. This recommendation focusses on group dynamics presenting a framework for improving group performance that can be used regardless of digital or non-digital setting. An example of such a framework is HPT, High Performance Teams.

What distinguishes a High Performing Team?

Developed by American consultant and author Patrick Lencioni and outlined in his 2002 book "Five dysfunctions of a Team", HPT identifies key success factors for team performance and presents a step by step guide in how to improve these key aspects

The DNA of the High Performing Team is:

- 1. Shared vision
- Shared commitment to values
- Mutual trust and accountability
- Sense of purpose to deliver exceptional service
- Clear, achievable team and individual goals
- 2. Right mix
- Clarity of roles and responsibilities
- Diverse mix of people with relevant skills and knowledge
- Agility to team without boundaries
- Healthy conflict
- Honest and relevant communication







- 3. Quality results
- Focus on achieving the highest standards and the right outcome
- Consistent use of best in class approaches, tools and methodologies
- Clear processes and procedures, e.g., for decision-making
- Ongoing team and individual development through learning, experiences and coaching



Why HPT and how can it improve NSG

HPT is built on five winning behaviours: Trust, Healthy conflict, Commitment, Accountability and Results. The framework includes guides and tool sets to improve those aspects step by step.

There are several other frameworks that can be used, and this should not be interpreted as a recommendation for any specific framework, but merely that there are structured ways to mitigate identified issues and this is one out of many ways to address them.

In HPT group performance is built from the bottom up. Trust is the foundation in any team. This is also a prerequisite for the next step - Healthy conflict etc. Each level is accompanied with a set of guides, tools, exercises that can be used in order to temp check the team and improve even further.



Figure 30: High Performing Team framework

6.7 Be agile with Agile

Background

The Agile way of working have been the preferred methodology within NSG 3.0. However, the Agile way of working has not been applied to the desired extent according to some of the NSG 3.0 participants. Both in the qualitative and the quantitative study it was mentioned that participants did not work very Agile in NSG 3.0. As Figure 31 shows, the majority claims that they worked "Somewhat" Agile, regardless of country they represented, even if the rates were significantly low in Iceland. This indicates that if working Agile is the desired way of working going forward, improvements need to be done.

Furthermore, some interviewees reflected on the reasons why the Agile way of working did not work as well as anticipated. The reasons that were discussed included that resources needed to be highly involved (for instance some participants in NSG only observed) and evaluations were not performed enough.



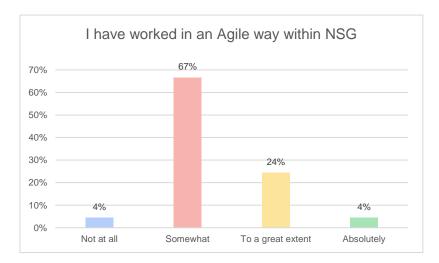


Figure 31: Distribution of answers on question on Agile work

Recommendation

NSG is a broad programme and needs different methods for different tasks

If the Agile way of working was the desired way to work within NSG 3.0, it is of importance to evaluate and improve this for the NSG 4.0 phase. Some participants stated that the Agile way of working might not fit their work package due to their work packages deliverables, e.g. communication. Therefore, they decided not to use it. For the next phase, it is recommended that the Agile way of working should

be chosen for suitable work packages and works streams with clear concreate deliverables and not forced on all work packages. Methods should not limit the work packages if it does not fit their work to produce value. Also, if Agile implemented in some work packages, it is of importance to ensure a clear definition of Agile within NSG, and that the principles are well known in projects where Agile is applied.

"Agile, [should be used] within a more detailed plan of coordinated deliverables. The agile work might lead to a need to update the plan. But Agile should not be confused with not having a plan"

If Agile is applied

• Have sprints to ensure a project overview

Within IT projects, in order to assist product development and creating a product, Agile can be a relevant method. In those cases, sprints are recommended. This not only to ensure that the delivery is Agile (to be able to change and adapt scope along the way), but also to give the work packages an overview of each other's work and progress after each sprint. This will limit the risk for overlaps between work packages as well as a way to work in parallel and learn from each other.

Have retrospectives to learn from each other and improve



Retrospectives are the Agile way for continuous improvement. Therefore, it is recommended that after each sprint have set times for retrospectives and stick to them. As some interviewees indicated, the retrospectives were planned, but not carried out, often due to time allocation. This step is essential for all participants to create a more effective organisation. Furthermore, work packages could facilitate each other's retrospectives, this to gain an outside perspective and to learn even more from each other.

If Agile is not applicable

Evaluate what is important for the work package or work stream. This can be within several factors such as:

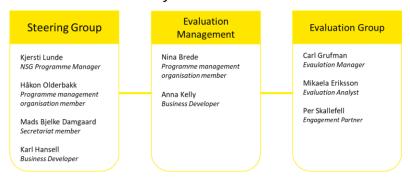
- Focus area (deliverables)
- Stakeholder involvement
- Set time and budget
- Need for adaptability
- Need for presentable end product

There are other methods than Agile to apply. Examples include classic project management such as Waterfall, a linear sequential design approach where progress goes in one direction. This is a relevant approach when scope and timetables can be set more firmly. Research and evaluate the potential methods to find what works best for a team in order for them to work effectively and not be held back due to its set way of working. The key point is, the method should assist and bring value to project management, this necessitates different methods for different tasks.



7 Appendix

7.1 NSG Evaluation organisation





7.2 Quantitative study

7.2.1 Questions

Country *

Denmark Finland Iceland Norway Sweden Other

Role in NSG 3.0 *

Since June 2018 I have on average been active in NSG (approximately) *

Less than 5 % 5 % or more but less than 20 %

20 % or more but less than 50 % 50 % or more but less than 70 % 70 % or more but less than 90 % 90-100%

Year of joining the NSG programme *

2013-2020

There is a clear vision and direction in the NSG programme *

Not at all Somewhat To a great extent Absolutely

The work I did in my part of the programme contributed in a clear way to that vision *

Not at all Somewhat To a great extent Absolutely

NSG is on the right track *

Not at all Somewhat To a great extent Absolutely

I have enough time allocated to contribute to NSG *

Not at all Somewhat To a great extent Absolutely

NSG is valued by my organisation *

Not at all Somewhat To a great extent Absolutely

Why it is important that my organisation is part of the NSG programme

[Open question]

The top three things that worked well with NSG 3.0 were:

Pick ONLY 3 of the choices below

- Physical meetings
- National teams
- Relevant competencies participated
- Internal culture based on openness and trust
- Work across borders
- I had clear responsibilities and/or deliverables
- The collaboration and cooperation
- The organisational structure
- The tools used
- NSG had a clear vision
- Knowledge sharing
- How the PMO governed NSG
- High commitment/engagement in people
- Internal communication
- Other:



The top three things that worked less well in NSG 3.0 were

Pick ONLY 3 of the choices below

- The Agile way of working
- Too many people involved
- Unclear vision of NSG
- Work across borders and/or cultural differences
- The tools used
- Not enough time and/or commitment allocated by resources
- Internal communication/information sharing
- How the PMO governed NSG
- Involvement of external stakeholders
- Complex organisational structure
- Lack of trust and openness within the organisation
- Unclear roles and/or responsibilities
- Moving too fast forward
- I had unclear tasks and/or deliverables
- Not moving forward fast enough
- Other:

The top three challenges for NSG in the next phase will be

Pick ONLY 3 of the choices below

- Increase external stakeholder involvement
- Create usable work products that can be implemented in practice
- The NSG organisational structure
- How the PMO governs NSG
- To continue as a Nordic collaboration programme
- Work across borders
- Create awareness of NSG
- Different legal frameworks across the Nordics
- Maintain involvement and engagement
- The differences between SMEs
- Level of readiness in the different countries
- To get my organisation to see the value of NSG
- To get enough time allocated for participants
- Other:

The top three things to prioritize in the next phase of NSG should be

Pick ONLY 3 of the choices below

- Include more experts
- Strengthen the Nordic collaboration
- Increase the allocated time for participants
- Change the steering of the programme
- Change the organisational structure
- Increase engagement of participants (e.g. through workshops, team building etc.)
- More detailed planning before the start of NSG 4.0
- Improve external communication
- Evaluate and improve the available tools (e.g. online platforms, communication channels etc.)
- More physical meetings
- Improve internal communication
- Demonstrate working solutions
- Marketing to get people interested and to understand the value of NSG
- The Agile way of working
- Clarify roles and responsibilities
- Increase private sector involvement
- Other:

NSG have established an efficient organisation across the Nordics *

Not at all Somewhat To a great extent Absolutely

The NSG organisation and its work packages have the right competencies *

Not at all Somewhat To a great extent Absolutely

If you did not choose "Absolutely" above, which competencies are lacking? NSG involve external stakeholders in an effective way *

Not at all Somewhat To a great extent Absolutely



I have worked in an Agile way within NSG *

Definition of Agile: "A time boxed, iterative approach to delivery that builds a product incrementally from the start of the project, instead of trying to deliver it all at once near the end. The Agile group is able to deal with new situations or changes quickly and successfully."

Not at all Somewhat To a great extent Absolutely

What working method should be used in the next phase?

[Open question]

How can trust and collaboration be maintained and strengthened during the next phase working digitally? [Open question]

Due to the Covid-19 pandemic physical meetings will probably be less frequent. Therefore NSG must adapt and even further emphasize digital collaboration and ways of working. Please share your experiences and suggestions on how NSG can improve digital collaboration during the next phase.

[Open question]

Information sharing has worked well throughout NSG 3.0 *

Not at all Somewhat To a great extent Absolutely

Did you experience gaps in the communication and/or information sharing from other parties in the programme? *

Not at all Somewhat To a great extent Absolutely

I suggest NSG increase the use of these information channels to communicate *

- Newsletters via email
- In each work package someone should be responsible for communication
- Blog posts on website
- Regular online news meetings with the programme leader
- Slack channel updates
- Discussion forms
- Other:

NSG has been a continuous learning experience *

Not at all Somewhat To a great extent Absolutely

NSG has established an inclusive culture with open and diverse dialogue *

Not at all Somewhat To a great extent Absolutely

Other comments and suggestions

[Open question]



7.3 Sources

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