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NORD STREAM 2
SOCIAL IMPACT ASSESSMENT – FINNISH COASTAL AREA SURVEY REPORT

RAMBØLL

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APPENDICES

1. INTRODUCTION

Nord Stream 2 AG is planning to construct two underwater natural gas pipelines in the Baltic Sea. The approximately 1,200 km long pipelines are planned to be routed from the southern coast of the Gulf of Finland in Russia through Finnish, Swedish and Danish waters to the German coast in Lubmin.

The Nord Stream 2 Pipeline Project builds on the initial Nord Stream pipeline system which was constructed in 2010–2012. During the implementation of the earlier project, the coating and logistics contractor for Nord Stream stored pipes at a temporary storage facility located in Hanko harbour and stored and applied concrete coating to pipes at a facility located in Mussalo harbour in the City of Kotka. The Nord Stream pipelines were commissioned in 2011 and 2012.

According to the plans for the Nord Stream 2 project presented during the implementation of the survey in April 2016, related onshore supplier operations and some ancillary operations during the Nord Stream 2 project are intended to be carried out in the cities of Kotka and Hanko located on the southern coast of Finland.

In the Finnish section, a national environmental impact assessment procedure is applied to the Nord Stream 2 project, as required by law. Ramboll Finland Oy, as the environmental consultant for Nord Stream 2, has carried out the assessments during the EIA procedure. Part of the assessment includes consideration of impacts on the comfort, health and safety of the human living environment. A resident survey for the residents of the coastal region of Finland was among the methods to collect information and opinions for assessing the impacts of the project.

Methodology of the survey implementation and data analysis is explained in Chapter 2, results in Chapter 3 and summary of the results in Chapter 4. More detailed information on the planned project can be found in the project description in Appendix 1.

2. METHODOLOGY

2.1 Survey design and implementation

Ramboll Finland Oy conducted a survey of residents of the coastal municipalities of Finland to find out general opinions on the Nord Stream 2 Pipeline Project and its possible impacts. The survey consisted of 19 questions which were designed to gather information concerning the respondents' background (Questions 1-7), familiarity with the Nord Stream 2 (Questions 8-11), opinion on the possible impacts of the planned operations (Questions 12-18) and additional comments (Question 19). Questionnaire of the coastal survey is presented in Appendix 1.

The survey was delivered to a random sampling of the population in 25 coastal municipalities (Espoo, Föglö, Hamina, Hanko, Helsinki, Inkoo, Kaarina, Kemiönsaari, Kirkkonummi, Kotka, Kökar, Lemland, Loviisa, Maarianhamina, Naantali, Parainen, Porvoo, Pyhtää, Raseborg, Salo, Sauvo, Sipoo, Siuntio, Turku and Virolahti). On 15 April 2016, 2,000 questionnaires were delivered by post to residents in these municipalities. Based on the selection criteria, the survey could only be delivered to households, which had residents between 18 to 80 years old, and did not have a ban for direct marketing. There were in total 1,021,109 residents within 648,703 households fulfilling the selection criteria in the area of survey delivery. In each selected household, the survey was delivered randomly to one of the adults between 18 to 80 years old (Table 1). The first delivery included a cover letter, a questionnaire, a Nord Stream 2 project description and a response envelope, on which postage was paid. A reminder letter was sent to the households that had not responded by the original response deadline 29 April 2016. The letter notified the recipients that the response deadline had been extended to 4 May 2016. As of 16 May 2016, 305 responses had been received.

Some of the households in the coastal area belong to the Swedish speaking population. To enable responding in one's native language, the language of the respondent household was detected during random sampling. In total 226 Swedish language questionnaires and 1,774 Finnish language questionnaires were delivered. Out of 305 returned questionnaires, 33 were in Swedish and 272 in Finnish. In the analysis, all responses were combined, and no analysis was made specifically based on respondents' language.

Table 1. Information about survey delivery statistics

	Number of all residents in the survey area	Number of all households	Number of residents fulfilling the sample criteria	Number of households fulfilling the sample criteria	No of delivered questionnaires	Number of received questionnaires	Response rate
Survey delivery area	1,459,048	738,446	1,021,109	648,703	2,000	305	15.3%

The questionnaires were processed anonymously and in a highly confidential manner. It was at no time possible to identify individual respondents, unless the respondent had written his or her name on the questionnaire (anonymous survey). Printing, delivery and optical reading of the returned questionnaires was undertaken by JP-Postitus Oy, and only JP-Postitus Oy processed the address details. These details were used only to deliver the survey and its notification letter. The responses were sent to JP-Postitus Oy, which converted the forms into an electronic format and supplied the data to Ramboll Finland Oy.

2.2 Data analysis

Ramboll analysed the results. Data was processed with a statistical program (Excel-based Tixel). The statistical analysis took into account all responses received by 16 May 2016, excluding only one questionnaire form where the respondent had responded only to the first four background questions of the survey. The total number of analysed questionnaires (304) is large enough for statistical analysis. The analysis consisted of taking one-dimensional distribution curve from each question. In questions which consisted of multiple statements, the responses were gathered into a single chart. In cross tabulations between two questions, the results only comprise of responses in which the respondent had given an answer to each of the analysed questions.

Statistical significance was studied against background variables (respondents' gender, age group, occupation and location of permanent and holiday residence) using chi-squared test. In addition, statistical significance of the questions in relation to respondents' familiarity with the monitoring results of the Nord Stream Pipeline project, familiarity with the Nord Stream 2 project, and opinion on the impacts of the project in the Gulf of Finland, were also analysed using chi-squared test. Only statistically significant results that are of practical importance in the context of the survey and social impact assessment are discussed in the text.

2.3 Data validation

Missing respondents

In the survey questionnaire respondents were asked to inform the location of their permanent residence. Seven respondents responded that their permanent residence was other than one of the 25 municipalities, and one responded did not answer the question at all. Thus there were in total 8 responses received from unspecified municipality. Over half of the respondents had their permanent residence in either Helsinki or Espoo, the largest cities of Finland located in the capital area, while the rest of the responses were scattered (Table 2). Although the municipality of Föglö, located in Åland, was within the sampling area, due to random sampling no questionnaires were delivered there. While only one response was received from Hanko, Kemiönsari, Loviisa and Sauvo, no responses were received from the municipalities of Kökär and Lemland. As it can be seen from the table 2, the total population, as well as the number of questionnaires delivered to those municipalities, was small, and they are also located relatively far from the pipeline route.

Because there were only few responses from several municipalities, the responses about permanent residence were combined into three classes; to those living in Helsinki/Espoo, in the East coast, or in the West coast of Southern Finland. All municipalities located east from Helsinki were located into category "East coast" (Hamina, Kotka, Loviisa, Porvoo, Pyhtää, Sipoo and Virolahti) and those located west from Helsinki into category "West coast" (Föglö, Hanko, Inkoo, Kaarina, Kemiönsaari, Kirkkonummi, Kökar, Lemland, Maarianhamina, Naantali, Parainen, Raasepori, Salo, Sauvo, Siuntio and Turku). Information about the survey delivery statistics, as divided into the aforementioned three categories, is presented in Table 3.

Table 2. Information about population and the number of delivered and received questionnaires from each municipality in the sampling area

Municipality	Population	Number of households fulfilling the sample criteria	Number of delivered questionnaires	Number of received questionnaires	Response rate (%)
Espoo	266,692	106,913	303	50	**16.5**
Föglö	568	236	-	-	**-**
Hamina	20,497	9,228	28	5	**17.9**
Hanko	8,599	4,073	14	1	**7.1**
Helsinki	614,315	283,465	832	114	**13.7**
Inkoo	5,447	2,159	8	3	**37.5**
Kaarina	32,128	12,735	49	10	**20.4**
Kemiönsaari	6,871	3,009	7	1	**14.3**
Kirkkonummi	38,430	14,647	47	7	**14.9**
Kotka	53,629	24,934	81	16	**19.8**
Kökar	247	113	2	0	**0**
Lemland	2,002	774	3	0	**0**
Loviisa	15,108	6,733	24	1	**4.2**
Maarianhamina	11,443	5,545	15	3	**20.0**
Naantali	18,796	7,971	28	3	**10.7**
Parainen	15,366	6,414	37	4	**10.8**
Porvoo	49,524	20,803	64	10	**15.6**
Pyhtää	5,246	2,126	10	3	**30.0**
Raasepori	27,671	12,250	48	8	**16.7**
Salo	53,003	23,292	86	10	**11.6**
Sauvo	3,001	1,227	7	1	**14.3**
Sipoo	19,579	7,322	20	2	**10.0**
Siuntio	6,069	2,299	10	2	**20.0**
Turku	181,584	89,022	270	41	**15.2**
Virolahti	3,233	1,413	7	2	**28.6**
Other (unspecified)				8	
Total	**1,459,048**	**648,703**	**2,000**	**305**	**15.3**

Table 3. Information about the statistics of survey delivery area divided into three categories

	Number of delivered questionnaires	% of all delivered questionnaires	Number of received questionnaires	% of all received questionnaires	Response rate
Helsinki and Espoo	1,135	57%	164	54%	14.4%
East Coast (7 municipalities)	234	12%	40	13%	17.1%
West Coast (16 municipalities)	631	32%	93	30%	14.7%
Other (unspecified)			8	3%	
Whole survey area	**2,000**	**100%**	**305**	**100%**	**15.3%**

As 2,000 questionnaires were delivered and 305 returned, the response rate was 15.3 %. As can be seen in Table 3, the share of received questionnaires responded with the share of delivered questionnaires within the municipalities divided into Helsinki/Espoo, East Coast and West Coast. The response rate is smaller than for this type of resident surveys in Finland. Assumption is, that a lack of knowledge of the project, and a lack of interest on the issue, have been the main causes for not responding to the survey. Majority of the respondents were not familiar with the project, as only 28% had followed news on it and had some information about the project, while only few were very familiar with it (Figure 10, p.11). As the survey delivery area covering a sample of respondents within 25 municipalities on the coast of Finland was relatively wide, it may have also affected the decision to respond, if respondent did

not feel that the topic was relevant, or touched his/her life. Often people who are more concerned on the issue are more probably going to express their opinion and answer to the survey compared to those who have more neutral opinion.

Table 4. Demography of Helsinki, Espoo and Turku compared with the respondents of the survey

	Total population	Female	Male	18-65 years old	Over 65 years old
Helsinki	612,664	53%	47%	81%*	19%*
Survey respondents from Helsinki	114	57%	43%	73%	27%
Espoo	260,753	49.5%	50.5%	83%*	17%*
Survey respondents from Espoo	50	50%	50%	66%	34%
Turku	183,824	52.5%	47.5%	77% **	23%**
Survey respondents from Turku	41	50%	50%	66%	34%
All survey respondents	**305**	**54%**	**46%**	**68%**	**32%**

*Percentages of age groups in Helsinki and Espoo have been calculated from the total number of residents over 18 years old

** Age categories for Turku were 15-64 year olds and over 65 year olds as obtained from official statistics

Source: Helsingin kaupungin aluesarjat: www.aluesarjat.fi, Turun kaupungin tilastollinen vuosikirja 2014

When the respondents' background information was compared with the demography of Helsinki, Espoo and Turku, it can be seen that the elderly age group (over 65-years) was overrepresented in the survey results (Table 4). It seems that the older generation was more interested in responding to the surveys compared to the younger generation, which is often the trend in postal surveys. There may be some systematic bias due to the overrepresented older generation. However, as there were no statistically significant differences in the results between the respondents of elderly age group (over 65 years) and other age groups, it can be assumed that overrepresentation of the elderly age group has presumably not affected the survey results.

Missing data

The survey data was subjected to partial item nonresponse, meaning that some respondents had not responded to each question. Yet majority of the respondents had responded to all questions. In the postal survey it is not possible to control the responses in the same way as in an internet survey, where it is possible to design the survey in a way that requires the respondent to answer all questions.

In some questions it is understandable that the number of responses can be smaller. This can be the case for instance with questions about familiarity with pipeline project implemented in 2010–2012, or impacts of the planned project. Some people may opt not to respond, if they feel like they do not have an opinion on the question, or they feel it is not relevant to them. It was noted that there were some missing values even in questions where an option "I cannot say" was available. The missing values seemed to be random.

A decision was made to do available-case analysis including all available data from 304 respondents. No imputation methods were used, in order to keep the number of available cases large enough. As a result of the selected approach, the number of responses varies per each question. The number of all responses and missing answers in each question are presented in Table 5. In questions 6, 10, 11, 13 and 14 missing responses have been calculated as the average from all statements within the question and the variation is presented in brackets. In questions 9 and 10 the response was expected if the response to question 8 was positive. In questions 13 and 14 the response was expected if the respondent gave a response to question 12 suggesting that there would be positive and/or negative impacts of the project. Question 19 was about additional comments, if the respondent had anything else he wanted to comment on. Regarding only questions where response was expected from all respondents the number of missing answers in the whole survey was on average 3% and in its highest 9% from all responses. In cross tabu-

lations of two variables pairwise deletion was used taking into account only units where the respondent had given an answer to each of the analysed questions.

Table 5. Number of total responses and missing responses per each question in the survey

Question	Total number of responses	Expected responses	Number of missing responses compared to the expected ones
Question 1	297	304	7
Question 2	303	304	1
Question 3	301	304	3
Question 4	303	304	1
Question 5	298	304	6
Question 6	300* (average)	304	4* (min 2-max 8)
Question 7	295	304	9
Question 8	298	304	6
Question 9**	184	196	12
Question 10**	189	196	7
Question 11	280* (average)	304	24* (min 21–max 28)
Question 12	299	304	5
Question 13***	167* (average)	176	9* (min 6–max 13)
Question 14***	113* (average)	123	10* (min 2-max 13)
Question 15	292	304	12
Question 16	298	304	6
Question 17	296	304	8
Question 18	296	304	8
Question 19 (additional comments)	76	-	-

* Average value calculated based on missing answers for all statements within the question
** Response to the questions 9 and 10 was expected only if the response to question 8 was positive
*** Response to the questions 13 and 14 was expected only if the responded gave a response to question 12 suggesting that there would be positive and/or negative impacts of the project

In questions where the expected number of responses was 304, the number of actual responses is presented in the graph using a capital letter N (e.g. N=301 signifies, that the number of responses to the question was 301). Regarding the questions, where the expected number of responses was less than 304 (questions 9, 10, 13 and 14), the number of responses is presented using a lower case n. The variation in the number of respondents is taken into account in the analysis of the results.

Sources of uncertainty

Missing respondents and data may distort the results, if nonresponse does not distribute randomly. Variation in the number of respondents per each question and the possibility that some questions may have been understood differently by different respondents, may cause uncertainties in the analysis of the results.

In question 11 respondents were asked to give their opinion on various statements concerning the Nord Stream 2 project and related activities. Two of the statements asked about the general opinion of the Nord Stream 2 project as a whole (“I have no opinion on the project” and “My overall opinion of the Nord Stream 2 project is positive”). There was inconsistency in the responses, which can be a sign that the questions have been partly understood differently than were meant to.

While only 64 respondents stated that they had an opinion of the Nord Stream 2 project (disagreed with the statement “I have no opinion on the project”), in total 155 respondents agreed with the statement “My overall opinion of the Nord Stream 2 project is positive”. One could have assumed that, respondents with no opinion on the project, would have responded to the statement of the overall opinion by selecting “I cannot say” option, yet this was not the case. The inconsistency can partly be explained by social desirability bias, a tendency of survey respondents to answer questions in a manner that will be viewed

favorably by others or how the respondent has though he has been expected to respond, by agreeing with the statements. It is possible that, respondents have understood the statements differently than they were meant, and have thus responded with inconsistency. Some respondents may have thought about only the Nord Stream 2 project related activities planned to take place in Finland, while others may have thought about the Nord Stream 2 in the wider European scale. Due to inconsistency, it is not possible to get an unambiguous picture of the overall opinion the respondents have about the Nord Stream 2 from this specific question alone.

In question 14 there was a mistake in the response option in the Finnish language questionnaire. In question 13 about the negative impacts of the project, one of the options was “0=No negative impacts or insignificant negative impact”. In question 14 the corresponding response option should have been written “0=No positive impacts or insignificant positive impact“, but by mistake it was written “0=No positive impacts or insignificant negative impact”. Yet, there was a number scale under each response option from 0 to 3, and based on the results, it can be assumed that this mistake has not affected the way how respondents have responded, as in the explanation of the question, respondents were also clearly asked to assess possible positive impacts that might be caused by the project.

The descriptions of questions 7, 15, 16 and 17 included information about the assessed impacts of the Nord Stream implemented in 2010–2012, describing that the impacts were mainly short term or not significant, while the only negative change caused by the project mentioned was the increase in vessel traffic. As monitoring of the impacts of the Nord Stream project has taken place, a decision was made to give information to the respondents about the findings. Descriptions in the beginning of the questions may give impression, that they would be leading opinions of respondents. This was the case especially with question 17, where it was mentioned that two existing Nord Stream pipelines have not caused significant impacts to commercial fishing, but the respondents were asked, if they nevertheless were concerned of the impacts of Nord Stream 2 on commercial fishing. It is possible that the formation of the questions in this way may have led the respondents to respond in a certain way. This may have had an impact especially on respondents, who tend to respond in a socially desirable way. Social desirability means that the respondent may unconsciously search for cues how to respond in a “right” way, in order to respond in a way he thinks is desired by the one posing the question. Social desirability may cause a person with a neutral opinion to select an option which takes more sides. In the additional comments seven respondents had criticised some of the questions to be leading. It can be assumed that those respondents have not been in a same way affected by social desirability bias, because they are aware of the issue. Still, if respondents think that the questions seem leading, it may be a source of annoyance, especially for respondents, who have a critical opinion on the survey. It may cause them to respond even more critically than they otherwise would have. Yet, as it can be seen in results of the questions 15 to 18, there are a large number of both those, who nevertheless are worried by the impacts or find them significant, and those who are not worried about them. At the same time there were also many respondents, who could not state their opinion on the issues.

The aim of the survey was to find out information about opinions and concerns of the residents regarding the Nord Stream 2. One possible source of uncertainty in this kind of survey could be that some of the concerns are left unnoticed. Yet, as often people who are more concerned on the issue, are more probably going to express their opinion and answer to the survey, it can be assumed that, respondents who have been reached by the survey have brought up the main issues and concerns of the people.

3. RESULTS

In questions where the expected number of responses was 304, the number of actual responses is presented in the graph using a capital letter N. Regarding the questions, where the expected number of responses was less than 304, the number of responses is presented using a lower case n.

3.1 Background information on the respondents

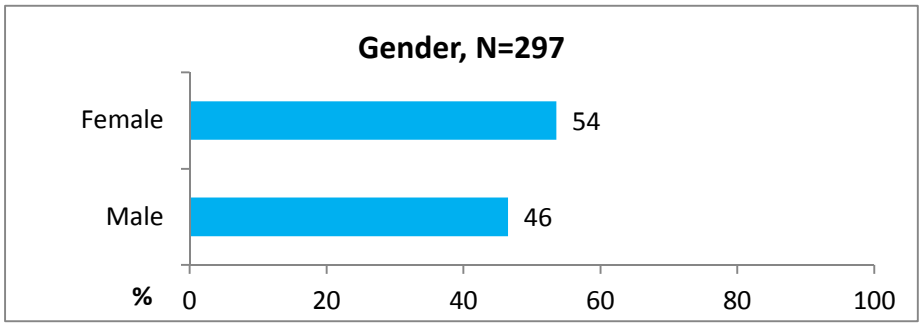


Figure 1. Gender distribution of the respondents.

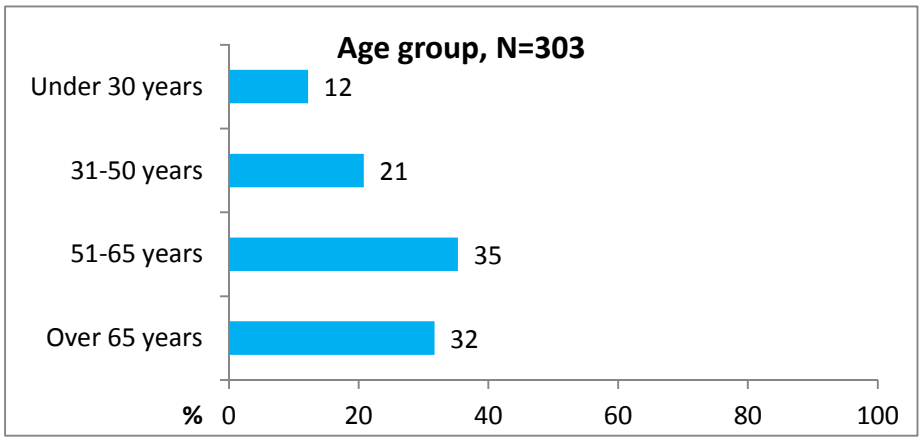


Figure 2. Age distribution of the respondents.

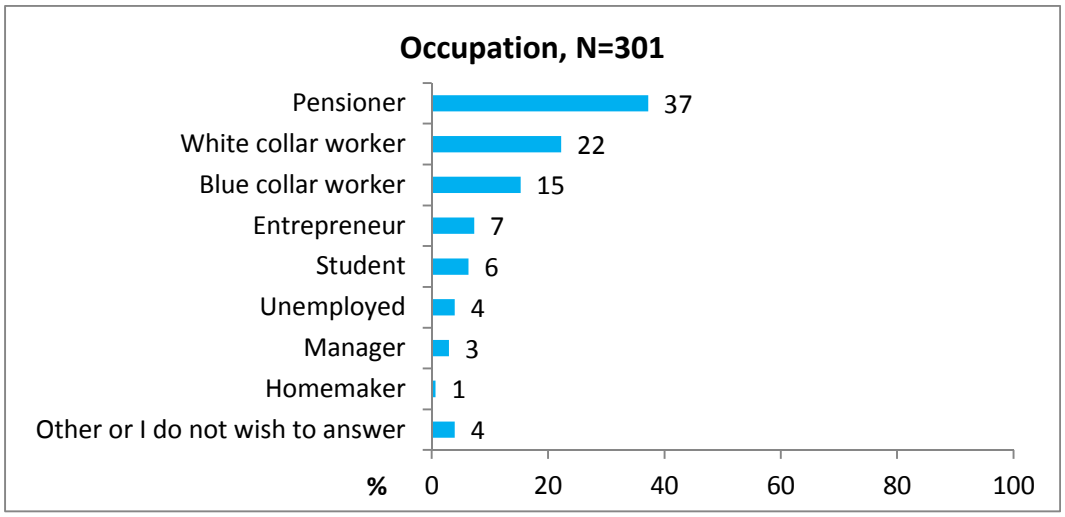


Figure 3. Occupations of the respondents.

Because the number of responses in some occupational categories was very low (Figure 3), nine original categories were combined into three classes to enable further statistical analysis. The three classes, as presented in Figure 4, are: “employed” (comprising "white collar worker", "blue collar worker", "entre-

preneur" and "manager"), “pensioner” (comprising “pensioner”) and “other” (comprising “student”, “unemployed”, “homemaker” and “other”). Forty-eight percent of the respondents were employed, 37% were pensioners and 15% represented the group “other” (Figure 4).

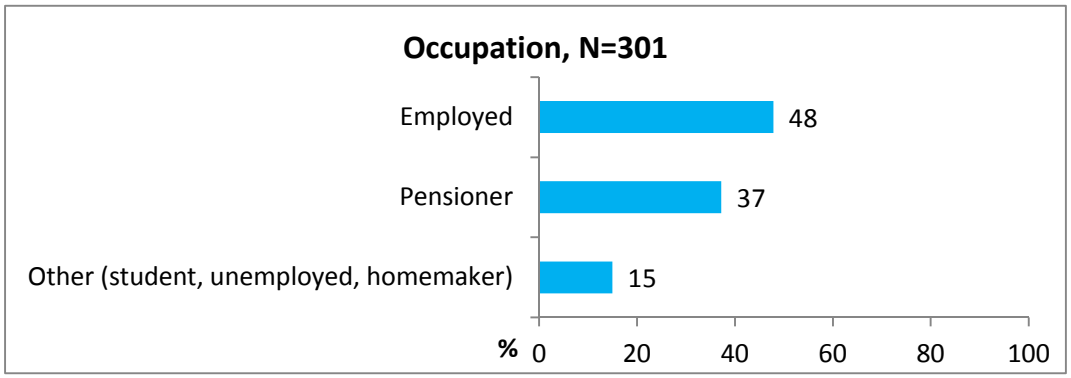


Figure 4. Occupations of the respondents, combined classes.

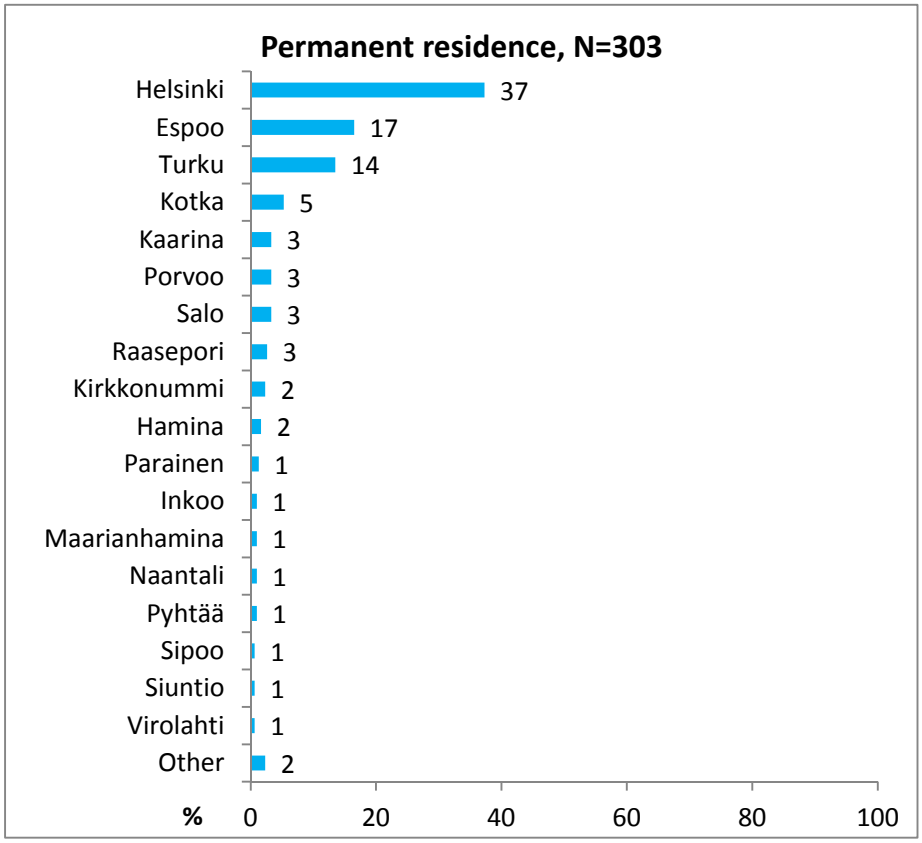


Figure 5. Locations of the permanent residences of the respondents.

Over half of the respondents had their permanent residence in either Helsinki or Espoo, the largest cities of Finland located in the capital area, while the rest of the responses were scattered (Figure 5). Because there were only few responses from several municipalities, the responses about permanent residence were combined into three classes; to those living in Helsinki/Espoo, in the East coast, or in the West coast of Southern Finland (Figure 6). All municipalities located east from Helsinki were located into category “East coast” (Hamina, Kotka, Loviisa, Porvoo, Pyhtää, Sipoo and Virolahti) and those located west from Helsinki into category “West coast” (Föglö, Hanko, Inkoo, Kaarina, Kemiönsaari, Kirkkonummi, Kökar, Lemland, Maarianhamina, Naantali, Parainen, Raasepori, Salo, Sauvo, Siuntio and Turku). Respondents who had selected “other” as their place of permanent residence (N=8) were left out of the combined classes as it was not possible to know the exact location of the residence. Only one fourth of

the respondents had a holiday home located in Southern Finland by the coast line, while nearly half of the residents did not have a holiday home at all (Figure 7).

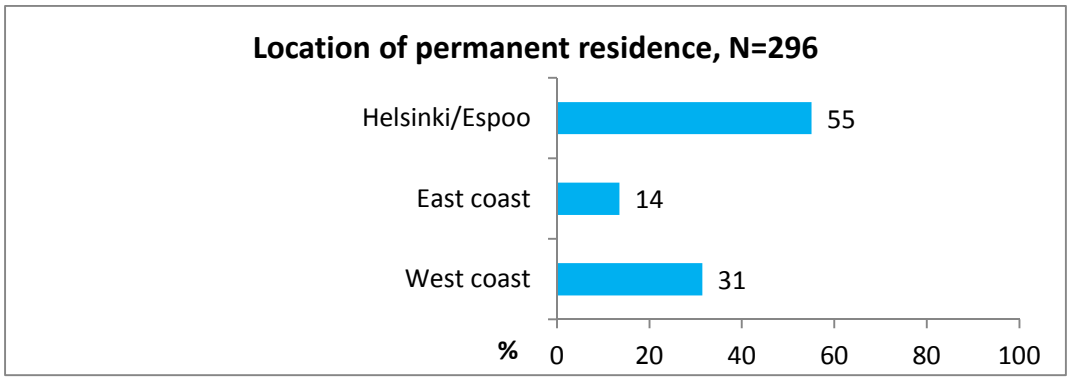


Figure 6. Locations of the permanent residences of the respondents, combined classes.

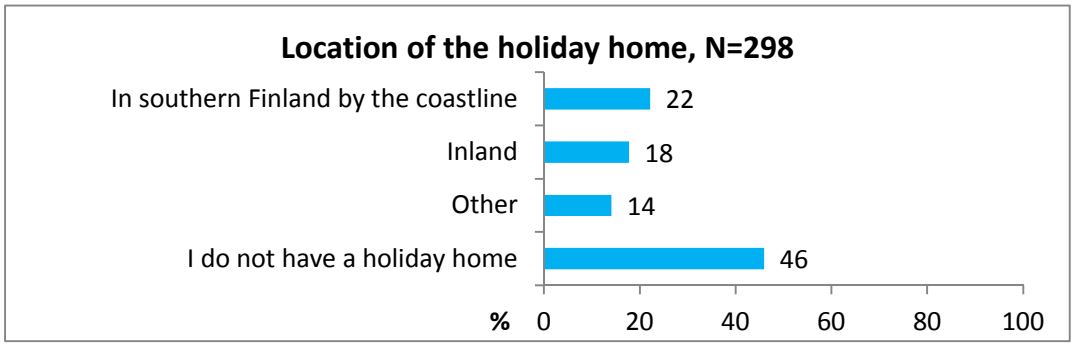


Figure 7. Locations of the holiday homes of the respondents.

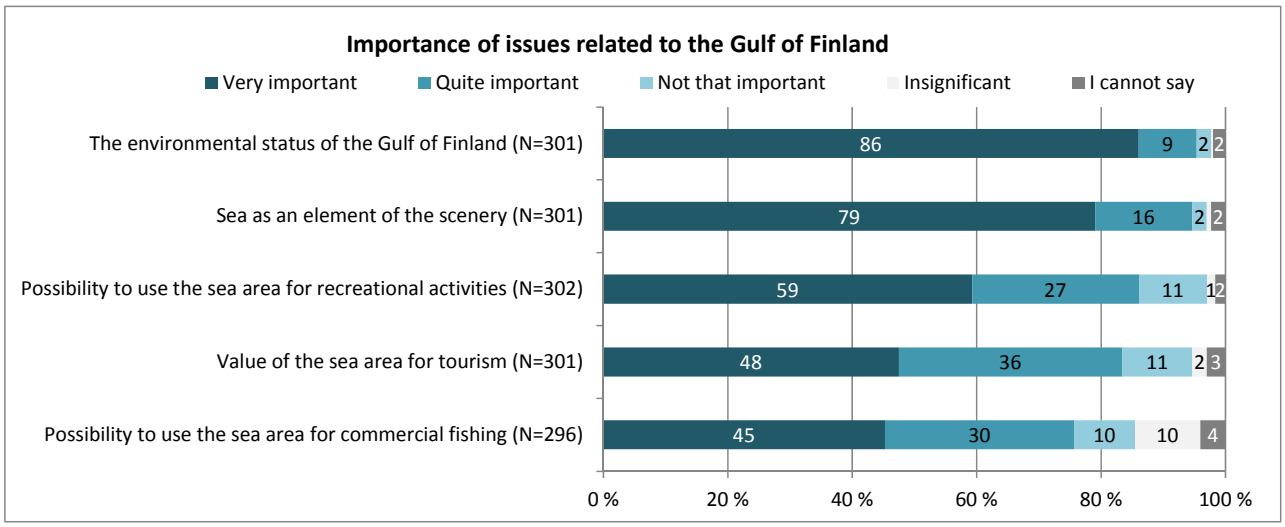


Figure 8. Opinions of respondents on issues related to the Gulf of Finland.

The respondents considered the environmental status of the Gulf of Finland and the sea as an element of the scenery to be very important (Figure 8). For statements with a statistically significant difference in the variable “gender”, the importance of sea as an element of the scenery, and value of the sea area for tourism, were rated higher by women. There was also statistically significant difference with respondents in different age group considering the statement about the value of sea area for tourism. More than half of the respondents over 50 years of age considered the value of the sea area for tourism to be very important. The responses of respondents under age 30 were more varied in comparison with other age groups. Eleven percent of the respondents under age 30 could not state their opinions, while in other groups this figure was only few percent. Overall, the value of the Gulf of Finland in terms of tourism, rec-

reational use and commercial fishing was considered important, although less important than its value in terms of environmental status or scenery.

The environmental impacts of the Nord Stream pipeline system implemented in 2010–2012 have been monitored since 2010 in the Finnish and Estonian Exclusive Economic Zones (an area in international waters), and the results of the monitoring have been published in the Nord Stream website. While only a third of the respondents was aware of the monitoring results, nearly 70% of the respondents were interested in them (Figure 9). Twenty respondents (6%) who responded to the category "other", questioned the reliability of the monitoring results, considered the monitoring period too short to be able to draw conclusions on the impacts, and criticized that the results were only available in English.

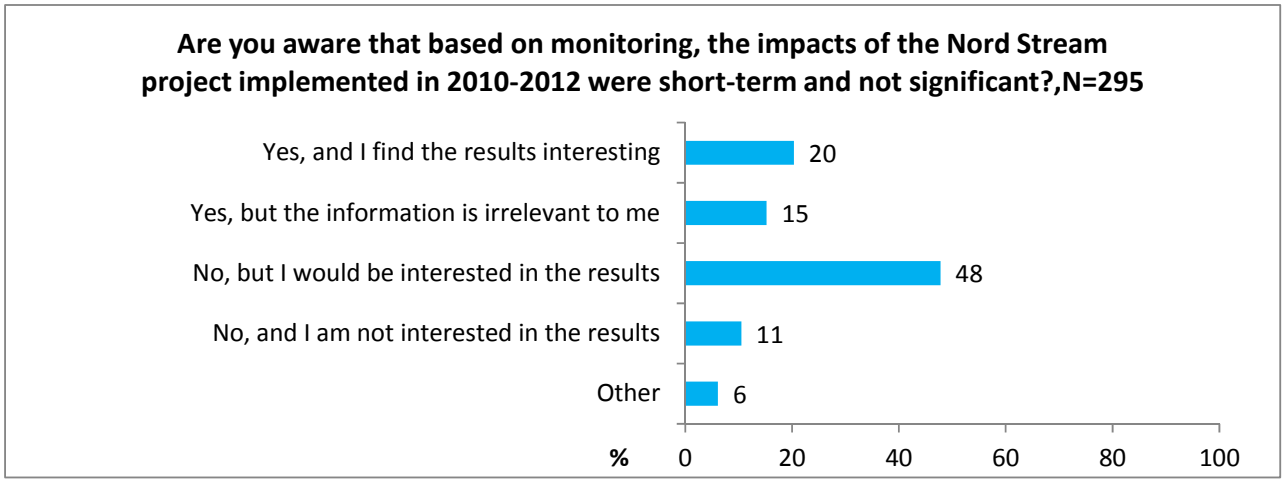


Figure 9. Familiarity of respondents with the environmental monitoring results of the Nord Stream implemented in 2010–2012.

3.2 Knowledge of and opinion on the planned Nord Stream 2 project

For one third of the respondents, the questionnaire and accompanying information sheets were the first time they had heard about Nord Stream 2 (Figure 10). Thirty percent of the respondents knew the project and had followed it in the media, yet only two percent had actively sought information about it. The main sources of information were television, radio, newspapers or magazines (Figure 11). The majority of respondents found the available information to be easy to understand, and sufficient for their needs (Figure 12). However, approximately one-fourth of the respondents were more critical, and considered the available information to be insufficient and difficult to understand (Figure 12).

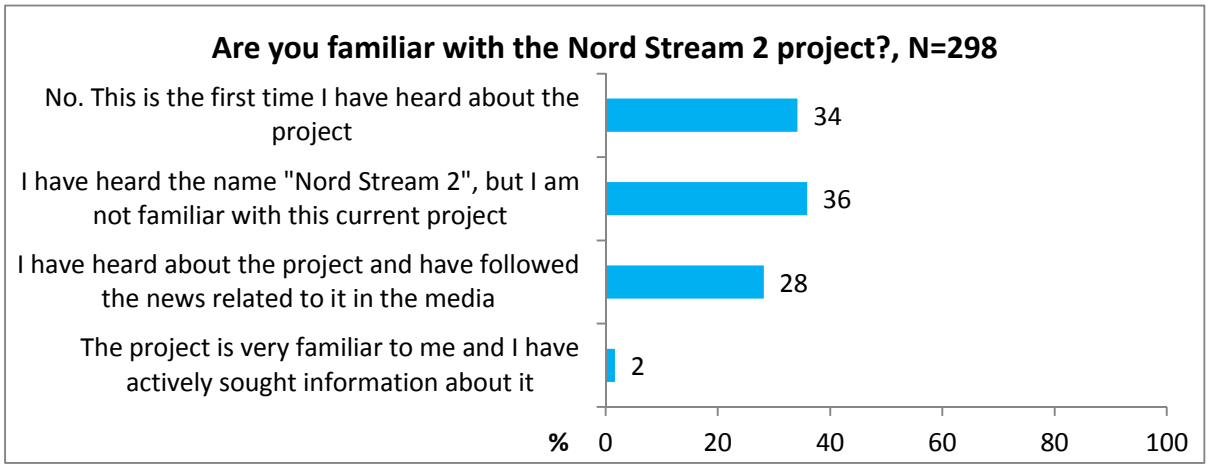


Figure 10. Familiarity of respondents with Nord Stream 2.

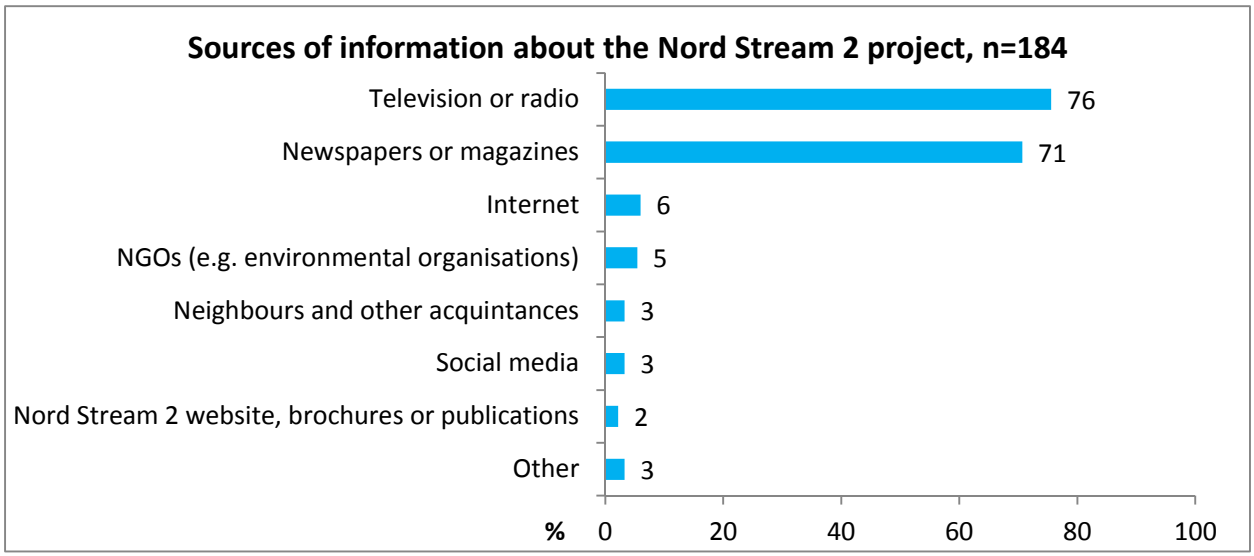


Figure 11. Sources of information about Nord Stream 2.

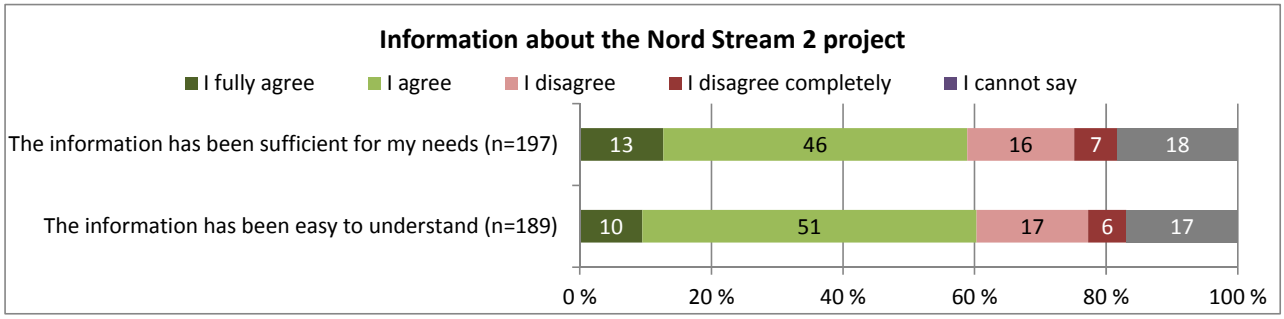


Figure 12. Opinions of respondents on the information about Nord Stream 2.

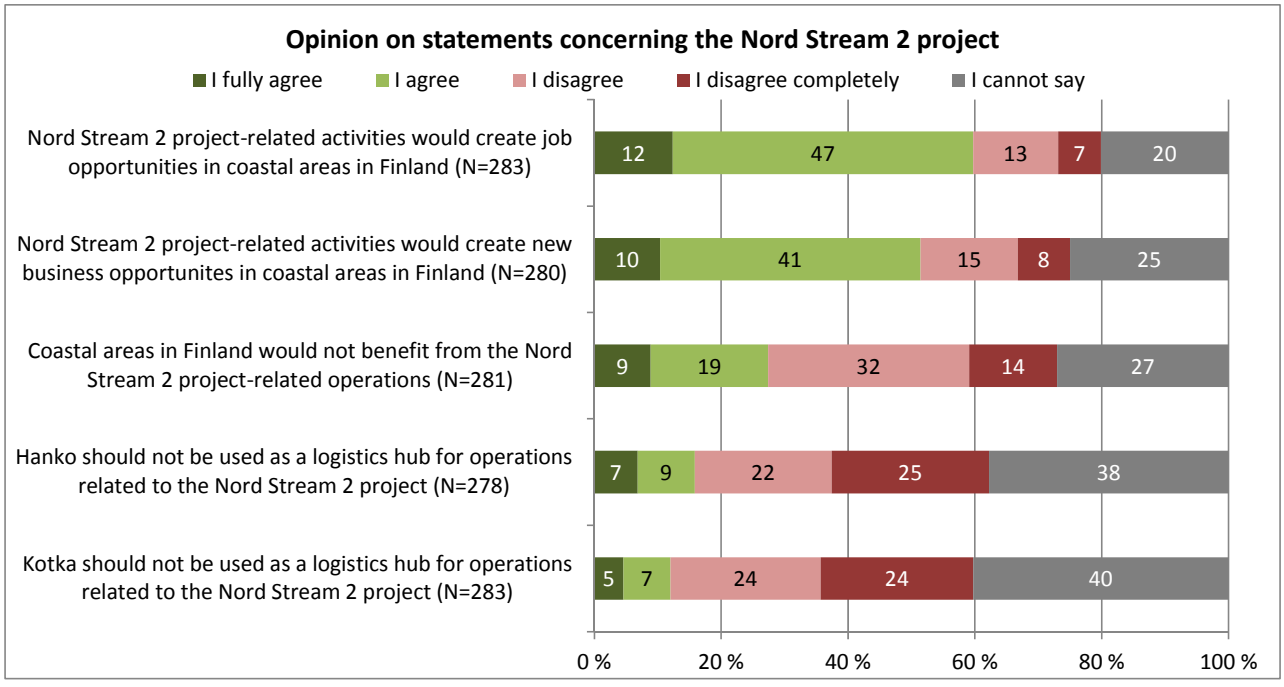


Figure 13. Opinions of respondents on statements related to Nord Stream 2.

Respondents were asked about their opinion on statements concerning the planned Nord Stream 2 project-related activities in coastal Finland (Figure 13). Around half of the respondents had positive opinion about possible job and business opportunities the Nord Stream 2 project-related activities would create

in Finland (agreed with the statements). Half of the respondents supported the idea of using Hanko and Kotka as logistics hubs for operations related to the project (disagreed with the statements). However, there were also a relatively large number of "I cannot say" responses in each statement, which can reflect the difficulty to assess the statements, if the respondent feels he or she does not have adequate knowledge on the issue. This is understandable, considering that a third of the respondents had heard about the project for the first time when receiving the survey, and a third had heard about the name but was not familiar with the current project (Figure 10).

While twenty-three percent of the respondents had opinion on Nord Stream 2 (disagreed with the statement "I have no opinion on the project yet"), sixty-five percent of the respondents did not have an opinion on the project as yet (Figure 14). However, at the same time more than half of the respondents (55%) stated that their overall opinion of the project is positive. One could have assumed that, respondents with no opinion on the project would have responded to the statement of the overall opinion by selecting "I cannot say" option, yet this was not the case. After cross-tabulation of the responses of all respondents who had responded to both statements, the analysis revealed that half of all respondents with an opinion of the project (n=64) stated that their overall opinion of the project was positive, and half had a negative overall opinion. Only one-fourth of all respondents who stated that they had no opinion (n=170) selected the option "I cannot say" while fifty-eight percent of them had positive opinion, and eighteen percent had negative opinion. Even out of the respondents who could not say whether they had opinion of the project or not (n=28), a third stated that their overall opinion was positive. The inconsistency of the responses to the two statements may indicate the difficulty to form an overall opinion of the project which is complex, and has many dimensions.

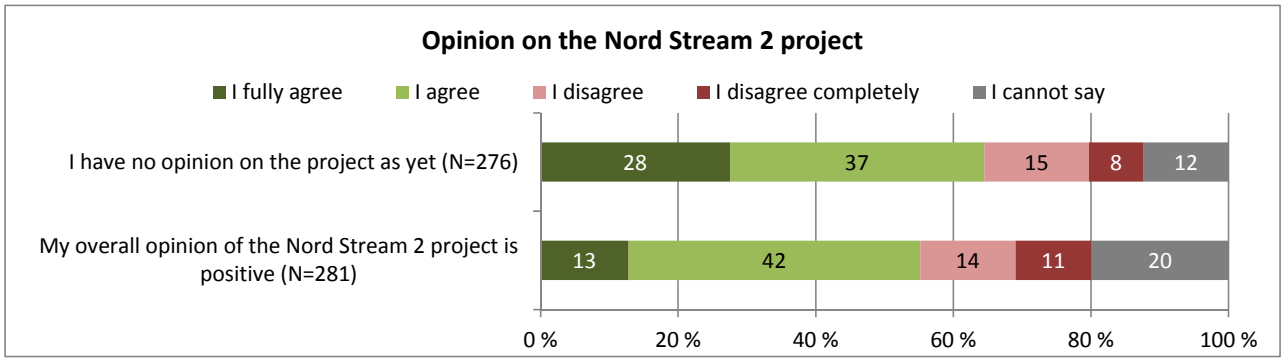


Figure 14. Opinions of respondents on statements related to the Nord Stream 2 project.

When respondents were asked about their opinion on possible impacts of the Nord Stream 2 pipeline in the Gulf of Finland, the worry for possible negative impacts was larger than expectation of possible positive impacts the project might cause (Figures 15 and 16). The most negative perception of respondents was with regard to the possible impacts on marine life, conservation areas, animals and impacts concerning possible accidents related to gas pipelines (Figure 15). For statements with a statistically significant difference in the variable "gender", female respondents were more concerned over the negative impacts related to munitions clearance, marine life, conservation areas and animals. Respondents could also describe in writing other concerns they had, related to possible negative impacts of the project. Twenty two respondents gave additional comments mainly related to concern over national security, risk of terrorism, political implications of the project and the role of Russia.

Fewer respondents expected possible positive impacts on the Gulf of Finland, but the positive perceptions were mainly linked to munitions clearance, ship traffic and tourism (Figure 16). Fourteen respondents gave an additional comment on possible positive impacts of the project, related to employment opportunities, increased environmental monitoring of the seabed, removal of scrap such as munitions and other material from the seabed, and economic benefits for countries involved in the project. Mostly, the respondents who stated that there would be both negative and positive impacts of the project, thought that there could be both positive and negative impacts related to ship traffic, munitions clearance and tourism.

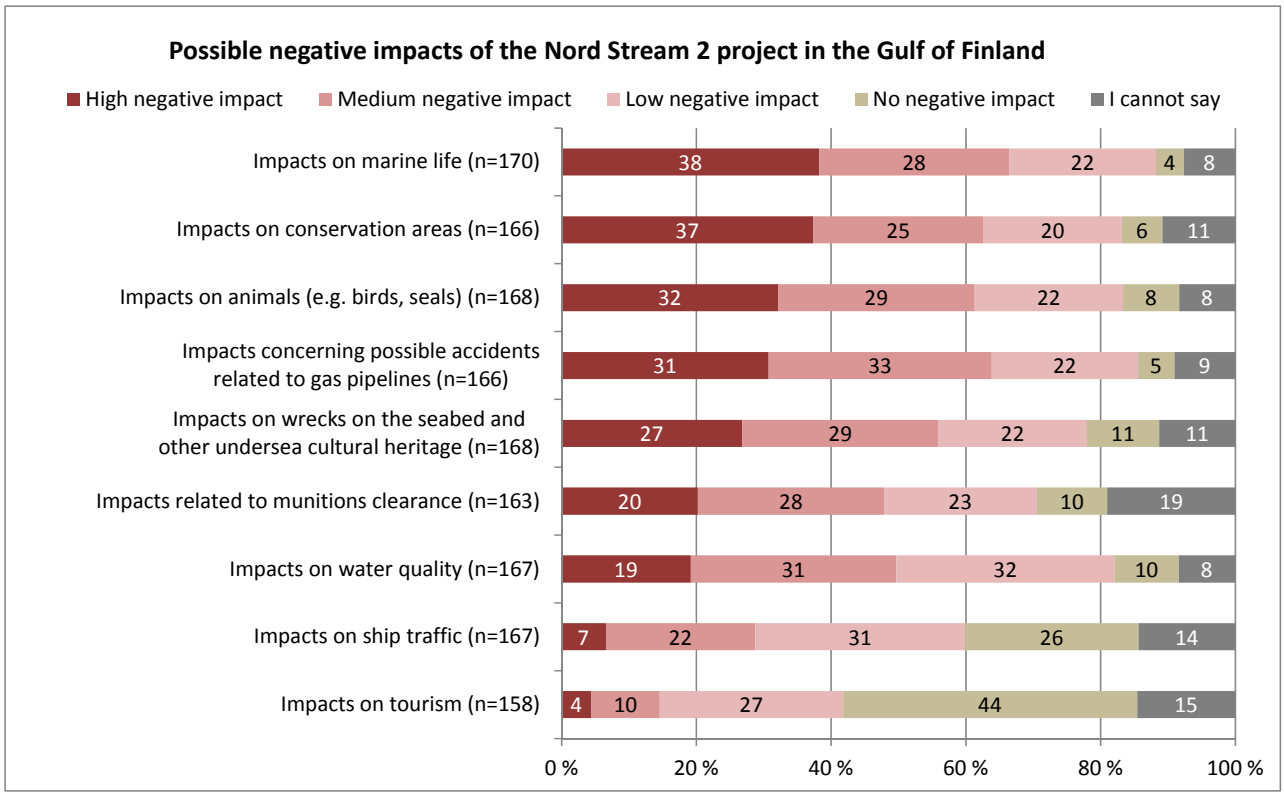


Figure 15. Opinions of respondents on negative impacts of the Nord Stream 2 project in the Gulf of Finland.

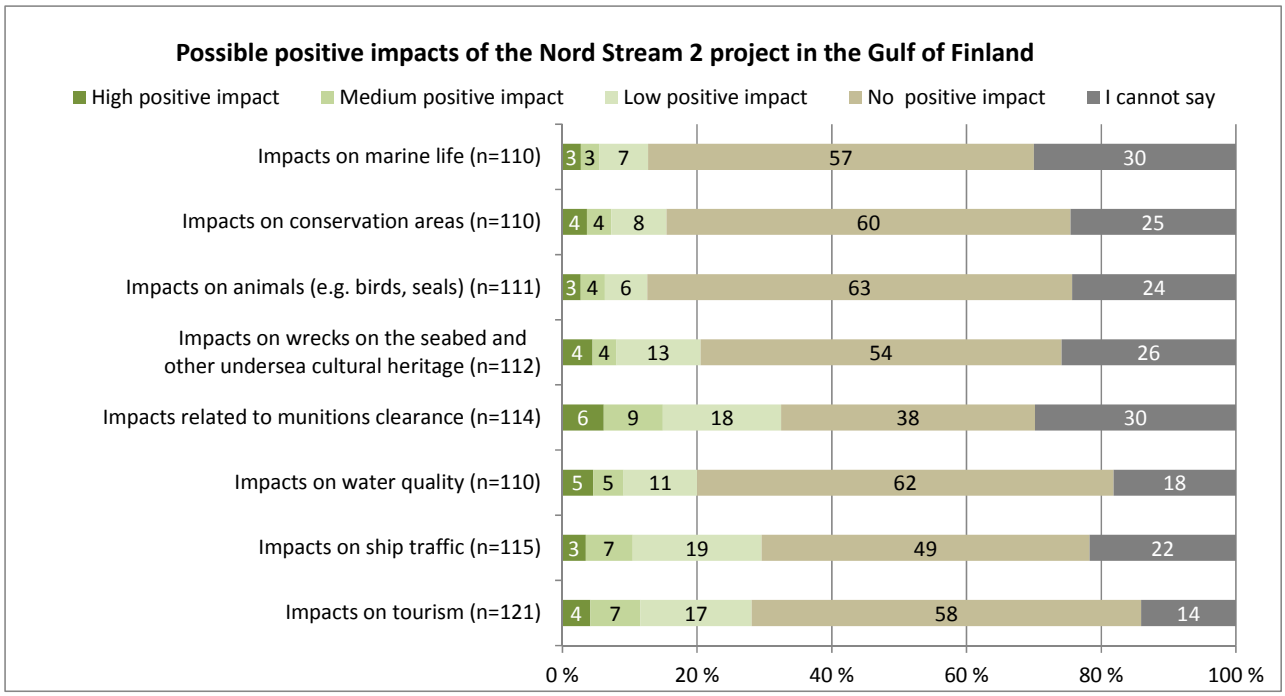


Figure 16. Opinions of respondents on positive impacts of the Nord Stream 2 project in the Gulf of Finland.

Respondents' opinions on whether or not Nord Stream 2 would have an impact on the Gulf of Finland varied (Figure 17). Sixteen percent of the respondents thought Nord Stream 2 would not cause any impacts in the Gulf of Finland, 23% expected the impacts to be solely negative, 5% solely positive, and 20% could not state their opinion. Thirty-six percent considered impacts to be both negative and positive. When the results of the findings in the figures 15 and 16 were analysed against different response classes, it showed that, over half of the respondents who considered the impacts to be both positive and negative, were worried about high or medium level negative impacts, while positive impacts were mainly

expected to be low or insignificant. Thus, possible negative impacts caused more concern among respondents, compared to the expectations created by possible positive impacts of the project.

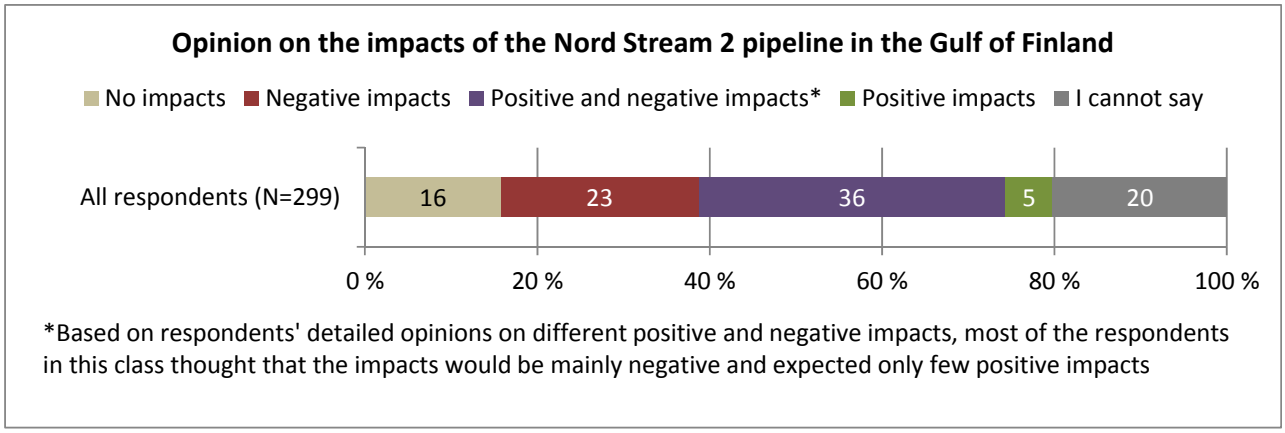


Figure 17. Opinions of all respondents on the impacts of the Nord Stream 2 project in the Gulf of Finland.

When respondents' opinions on the impacts of the Nord Stream 2 pipeline in the Gulf of Finland were analysed in relation to the respondents' familiarity with the results of the environmental impact monitoring of the Nord Stream project implemented in 2010–2012, there were statistically significant differences between respondents with different levels of knowledge (chi-squared test) (Figure 18). Based on the results, people who knew about the environmental monitoring results of the impacts of the existing Nord Stream pipelines were less concerned of the possible negative impacts of Nord Stream 2. Most sceptical was the group of people, who would have been interested in the monitoring results, but had no knowledge on them, as seventy-two percent of the respondents in this group expected negative impacts to occur. Information about the monitoring results seems to decrease the level of concern of possible negative impacts. Yet, while reviewing the results, one should bear in mind that, some of the response classes are relatively small compared to bigger ones.

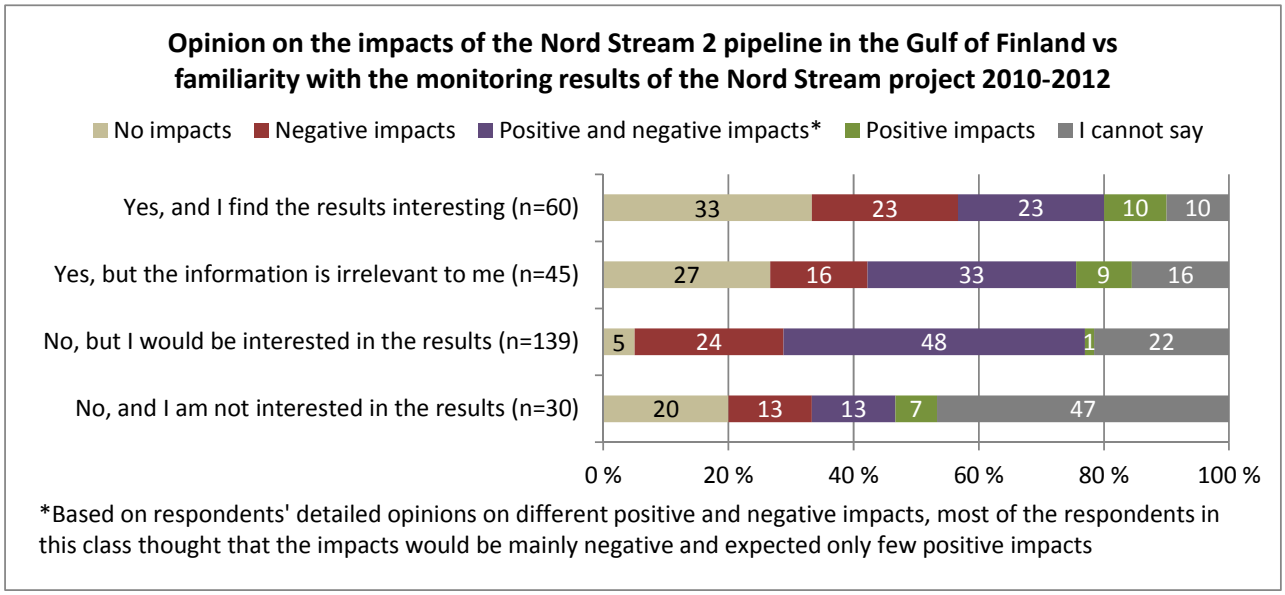


Figure 18. Opinions of respondents on the impacts of Nord Stream 2 in the Gulf of Finland in relation to their familiarity with the environmental monitoring results of Nord Stream implemented in 2010–2012. The graph does not include responses of 16 persons who selected the category "other" in question about the familiarity of environmental monitoring results.

Over half (55%) of the respondents considered Nord Stream 2 to have positive economic impacts on Finland, while only 3% considered the impacts to be negative, and 24% though the project will not have any significant economic impact (Figure 19).

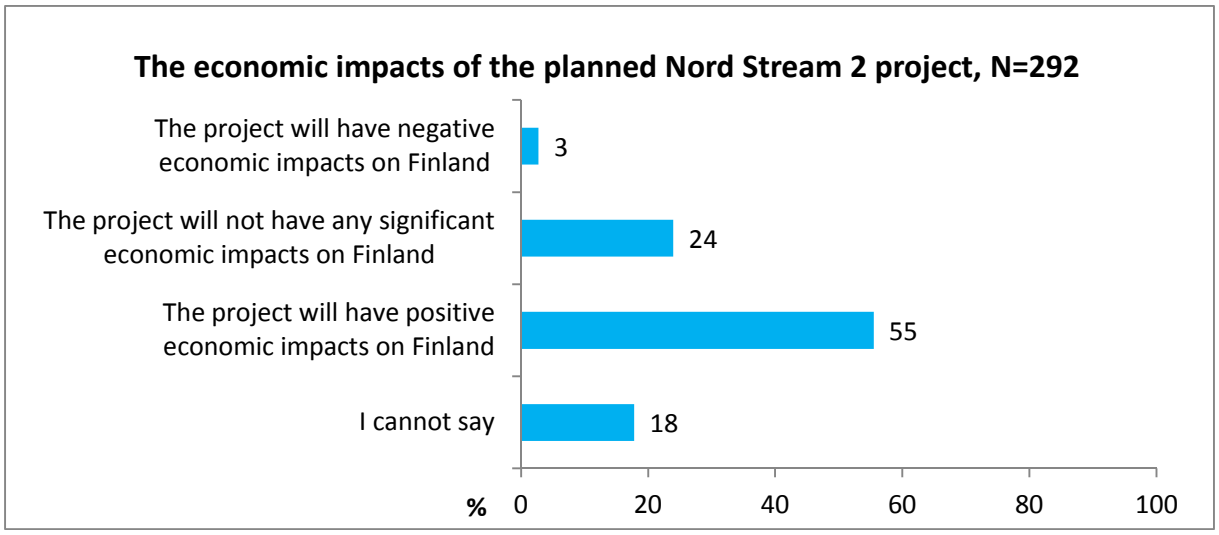


Figure 19. Opinions of respondents on the economic impacts of the Nord Stream 2 project on Finland.

Respondents were asked for their opinion on the impacts of the construction activities on water quality and aquatic life (Figure 20), impacts of increased vessel traffic (Figure 21), and impacts of the pipelines on fishing in the Gulf of Finland (Figure 22). They could specify whether they found the impact significant or worrying on a general level or personal level. Most of the respondents were concerned on the impacts on a general level, while only 2–3% of the respondents had a personal concern. Responses of all respondents who expressed that they were worried of the impact, whether it was personal or general worry, were combined in the analysis under a single category "Yes". Respondents also had an opportunity to express their reasoning behind the concern in additional comments, which are summarized in the text below the figures. Additional comments explain the respondents' personal concerns relative to the project. Should be noted that, although respondents were informed about the findings of the environmental monitoring of the Nord Stream pipeline implemented in 2010–2012, and estimations of the magnitude of the impacts (mainly minor and local), many respondents still expressed their concern over the possible impacts of Nord Stream 2.

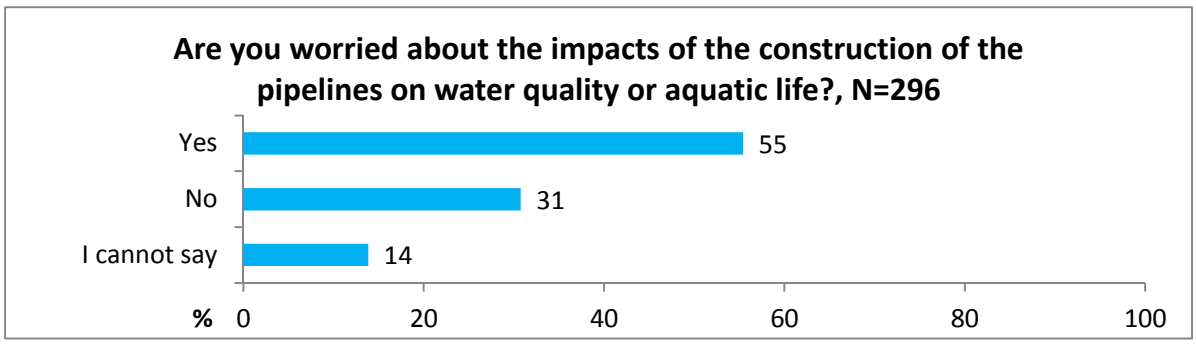


Figure 20. Opinions of respondents on the impacts of the pipelines on water quality and aquatic life

Construction of the pipelines caused most concern, as over half of the respondents (55%) were concerned over the impacts on water quality and aquatic life (Figure 20). There were 14 additional comments concerning the impacts of the construction of the pipelines on water quality and aquatic life. The respondents expressed concern about possible pipeline accidents, impacts on fish, benthos and fishery, and the reliability of the monitoring results. One respondent was also concerned about possible impacts of the construction activities on scuba-diving, if operations would decrease the water quality and lift hazardous materials from the seabed.

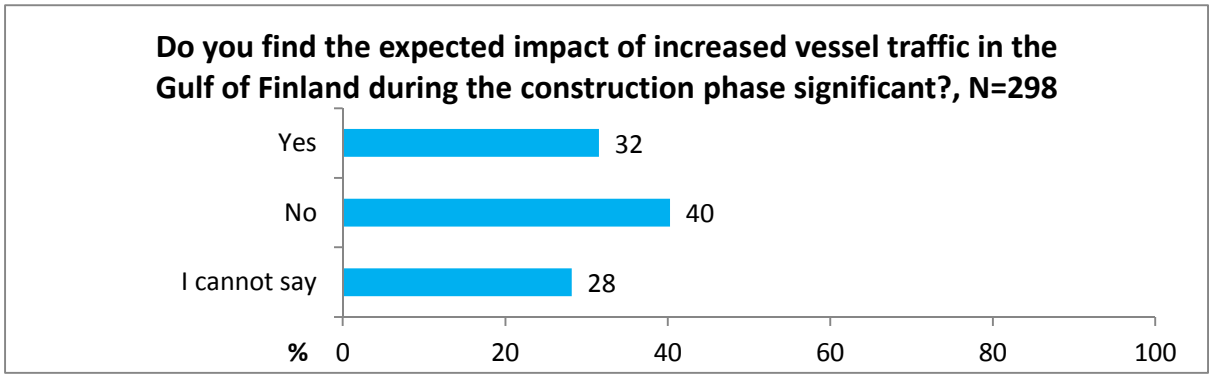


Figure 21. Opinions of respondents on the expected impact of increased vessel traffic during the construction phase.

One third of the respondents found the impacts of increased vessel traffic during the construction phase significant, while almost one third could not state their opinion (Figure 21). There were ten additional comments concerning the impacts of increased vessel traffic, in relation to possible impacts on commercial fishing, sailing, route changes and incidents with oil tankers resulting in pollution of the coastal areas.

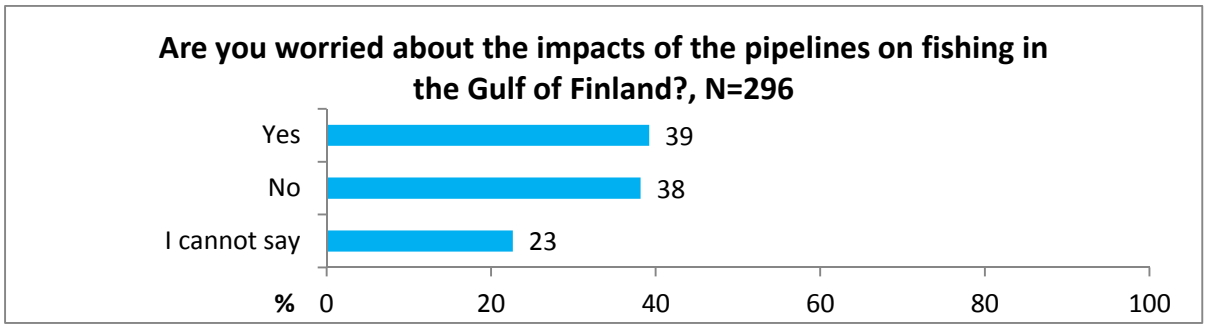


Figure 22. Opinions of respondents on the impacts of the pipelines on commercial fishing in the Gulf of Finland.

While one fourth of the respondents could not state their opinion on the impacts of the pipelines on fishing, the rest of the respondents were equally divided into those who were concerned, and those who had no concern over the issue (Figure 22). Ten respondents gave additional comments concerning impacts on fishing. They expressed concern about the possible long-term impacts on fish and aquatic life, and possible decrease in habitat. Few respondents criticized the formation of the question, and the reliability of the monitoring results.

3.3 Additional comments

At the end of the questionnaire the respondents were provided an opportunity to include additional comments about Nord Stream 2. In total, 76 respondents provided additional comments. The comments were divided into categories, which are presented in Figure 23. As the total number of responses was only 76, the graph is based on frequencies, not on the percentage.

The largest number of comments (n=27) within a single category were related to the "Concern over the political implications of the project", and the role of Russia in particular. Some respondents criticized the survey for being purpose-oriented. Environmental impacts and pipeline maintenance issues were also raised, while some comments emphasized the need to hire employees locally and not to use foreign workers. Only nine percent of the comments directly supported the implementation of the project. Examples of the additional comments are listed below the graph.

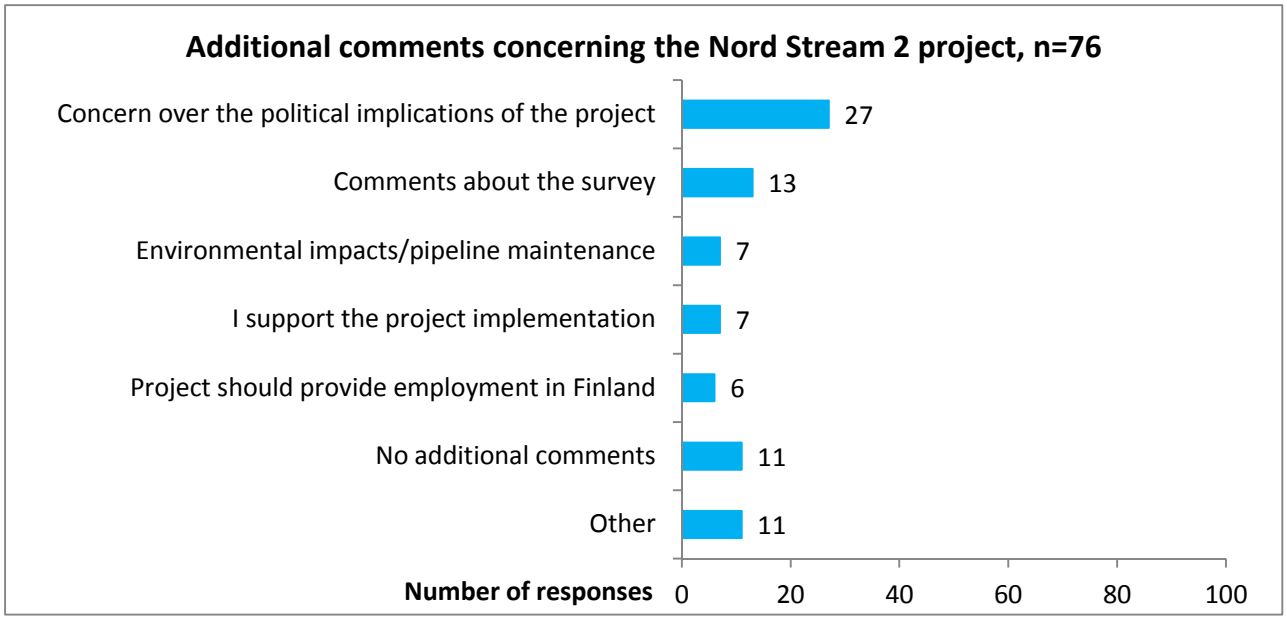


Figure 23. Additional comments from respondents about Nord Stream 2.

Examples of the additional comments. The original comments are in Finnish and translation in English is provided in brackets after each comment.

Concern over the political implications of the project

"Miksi välittäisimme kaasua alueemme läpi (sekä maa, että vesi)? Eikö Ukrainasta jo opittu, ettei Venäjän kaasua (öljyä) pidä vuotaa maamme läpi?"

[Why should we convey gas through our area (both land and sea)? Did we not learn from the Ukraine case that Russian gas (oil) should not be spilled through our country?]

"Poliittisesti hanke on suunnattu Ukrainaa vastaan eristämällä se kaasun toimittajana marginaaliin. Ei vakauta Eurooppaa vaan hyödyttää yksinomaan Venäjää. Ei hyvä myös balteille. Käsittämätön veto Saksalta!?"

[Politically, the project is intended against the Ukraine by marginalising it as a gas supplier. This does not stabilise Europe but benefits solely Russia. Not good for the Baltic people either. An unbelievable move from Germany!?]

"Epästabiili ja käytökseltään ennakoimaton Venäjä on aina riski. He voivat aina laittaa putken venttiilit kiinni. Samoin Venäjän sotilaallisen aktiivisuuden lisääntyminen on riski. Suomelle ja NATO:lle. Energiatarpeiden tyydyttämiseen tulisi käyttää muita keinoja varsinkin kun energiateknologiat kehittyvät (aurinko, bio etc.) nopeasti."

[An unstable and unpredictable Russia is always a risk. They can always shut off the pipeline valves. Equally, the increasing military activity of Russia is a risk. To Finland and to

NATO. Other sources should be looked at to meet energy needs, especially, as energy technologies are developing fast (solar, bio etc.)

”Vastustan hanketta koska: Itämeren tila huolestuttaa näiden putkien rakentamisen myötä, taloudellinen, poliittinen ja sotilaallinen tila. Hankkeessa ei ole mukana (osakkaana) muita Itämeren maita kuin Saksa.”

[I object to the project because: the impact the pipeline construction may have on the Baltic Sea, the economy, politics and security is worrying. The project does not include (as partners) countries around the Baltic Sea other than Germany.]

”Hanke voi vaikuttaa Suomen ja Itä-Euroopan maiden poliittiseen asemaan.”

[The project can have an effect on the political situation of Finland and the Eastern European countries.]

”Venäjän suhde Ukrainaan ja energiantuotanto painostuskeinona mietityttää. Vaikka kyseessä on kaupallinen hanke, sen tulisi ehdottomasti edistää energiaturvallisuutta ja EU:n ja Venäjän välistä vakautta. Nykyinen terrorismiuhka lisääntyy eri puolilla maailmaa. On täysin mahdollista, että Venäjään vihamielisesti suhtautuvat keksivät tehdä tuhojaan yllättäen jolloin olemme vaaravyöhykkeellä! Haluaisin, että mieluummin merialueita puhdistetaan kuin lisätään sinne tavaraa, joka ei sinne kuulu!”

[Russian relations with Ukraine and the use of energy production as a means to put pressure provides food for thought. Though this is a commercial project, it should definitely improve energy security and stability in Russian and European relations. The current threat of terrorism is increasing in different parts of the world. It is totally feasible, that those antagonistic towards Russia suddenly get the idea to wreak havoc, in which case we are in the danger zone! I would prefer that sea areas are cleaned up rather than adding stuff that does not belong there!]

”Putken rakentamisessa on ainakin 2 näkökulmaa. Putken rakentaminen ja sijoittaminen teknisesti ja siihen liittyvät vaikutukset Itämeren ympäristön tilaan saattavat olla vähäiset kuten saatekirjeessänne toteatte. Toinen näkökulma liittyy asiaan, jota YVA:ssa ei huomioida, eli että putket saattavat tulla politiikan teon välineiksi ja näiden vaikutusten arviointi tulisi myös ottaa huomioon. Yhteistyö on usein hyvä lähtökohta ja että kaikki osapuolet hyötyvät. Hyvä on jos putki tuo työpaikkoja.”

[Constructing the pipeline has at least two sides to it. Technically, the construction and location of the pipeline and the impacts associated with that as regards the condition of the Baltic Sea may be minor as you state in your introductory letter. The other point of view relates to an issue that has not been considered in the EIA, i.e. that the pipelines may become tools for the purposes of politics and these impacts should also be assessed and considered. Cooperation is often a good starting point and that all parties benefit. It is good, if the pipeline brings employment.]

Comments about the survey

”Hanke pitää ehdottomasti haudata. Kysely on tarkoitushakuinen ja äärimmäisen epäasiallinen.”

[This project must definitely be buried. The survey is self-serving and extremely inapprioriate.]

”Tällä hetkellä minulla on niin vähän tietoa hankkeesta, että vastaisin kysymyksiin tavallisena asukkaana, en valitettavasti voisi kommentoida laajampi tai ammattimaisempi.”

[At this time I have such little knowledge of the project that I would like to answer the questions as a regular resident and, unfortunately, cannot comment more widely or professionally.]

”Vähäisistä vaikutuksista ja ei merkittävistä vaikutuksista haluaisin tietää enemmän. Tuollaiset sanamuodot ovat vähättelyjä aina.”

[I would like to know more about the minor and negligible impacts. That sort of phrasing is always downplaying.]

”Tämä kysely oli johdatteleva ja pyrki ohjaamaan vastaajaa antamaan hankkeen kannalta myönteisiä asioita. Turvallisuus- ja talouspoliittiset vaikutukset on sivuutettu tässä kyselyssä täysin. Pitkällä tähtäimellä hankkeella on erittäin kielteiset vaikutukset sekä Euroopan että erityisesti Suomen taloudelle ja riippumattomuudelle. Hanke ei siis ole Suomen eikä Euroopan etujen mukainen.”

[This survey was leading and intended to steer the responder to put forward positive issues as regards the project. Impacts relating to security, the economy and politics have been completely left out of the survey. In the long run, the project has very negative impacts on the economy and independence of Europe and, especially, Finland. In other words, the project is not in the interests of Finland or Europe.]

Environmental impacts / pipeline maintenance

”Maakaasu on vain väliaikainen ratkaisu, jossain vaiheessa on pakko siirtyä käyttämään uusuituvia luonnonvaroja. Ihmisten työllistäminen ja taloudelliset edut ovat suuri plussa, mutta olen silti huolissani meren tilasta ja sitä mieltä, ettei ihmisten tarvitse koskea kaikkeen. "That You could do something doesn´t always mean that You should.”

[Natural gas is only a temporary solution. At some point it will become necessary to move to using renewable resources. The employment of people and the economic benefits gained are a big plus, but I am still concerned for the condition of the sea, and of the opinion that people need not mess with everything. "That You could do something doesn´t always mean that You should.”]

”Hyvä juttu, jos taloudelliset vaikutukset ovat suotuisia, mutta luonto on lähellä sydäntä ja huoli sen vahingoittumisesta hankkeen myötä on suuri, samaten onnettomuudet ynnä muut kertaluontoiset riskit ja niiden huolellinen harkitseminen. Toisaalta, jos tätä ehdottomasti tarvitaan, niin ei kai siinä sitten yhden ihmisen sana paljoa paina.”

[This is a good thing, if the economic impacts are positive, but nature being close to the heart, there is a grave concern that it will be damaged in the process, similarly accidents and other one-off risks and their close consideration. On the other hand, if this is really necessary, the opinion of one person probably does not hold much weight.]

”Kuka korjaa putken pois tai haittavaikutuksen minimointi, kun putki tulee käyttöiän päähän?”

[Who will remove the pipeline or minimise the negative impacts when the pipeline reaches its end of life?]

I support the project

“Hyvin suunniteltuna hyvä hanke.”

[This is a good project provided it is well-planned.]

”Putket pohjaan vaan.”

[Just get those pipelines down there.]

”Hanke positiivinen ja tuonee lisäarvoa + turvallisuutta maallemme! Siis OK!”

[The project is positive and will probably bring added value + security to our country! So, OK!]

Project should provide employment locally in Finland

”Toivottavasti Suomi ja suomalaiset yritykset myös hyötyvät taloudellisesti ja työntekijöitä tarvittaisiin tekemään töitä mitkä liittyvät putken rakentamiseen.”

[I hope that Finland and Finnish companies also gain some economic benefit and that staff will be needed to carry out the works associated with the construction of the pipeline.]

”Mahdolliset työt tulee teettää vain suomalaisella työvoimalla.”

[Any associated works should be done using only a Finnish workforce.]

4. SUMMARY OF THE RESULTS

Respondents over 65-years old were slightly overrepresented in the survey results. Over half of the respondents had their permanent residence in either Helsinki or Espoo, the largest cities of Finland located in the capital area, while the rest of the responses were scattered. Only twenty-two percent of the respondents had a holiday home located in Southern Finland by the coastline. Majority of the respondents considered the environmental status of the Gulf of Finland and the sea as an element of the scenery to be very important.

Only a third of the respondents were aware of the environmental monitoring results of Nord Stream pipeline implemented in 2010–2012. When asked about the familiarity with Nord Stream 2, a third of the respondents had not heard about the project before, while almost a third had followed news related to it in the media. Yet, only two percent had actively sought information about the project. Television, radio, newspapers and magazines were the main sources of information, which was found sufficient and easy to understand by over half of the respondents.

Around half of the respondents had positive opinion about possible job and business opportunities the Nord Stream 2 project-related activities would create in Finland, and they also supported the idea of using Hanko and Kotka as logistics hubs for operations related to the project. Yet, a relatively large number of “I cannot say” responses in each statement can reflect the difficulty to assess the possible benefits caused by the project in Finland.

Sixteen percent of the respondent did not expect Nord Stream 2 to cause any impacts in the Gulf of Finland, while twenty percent could not state their opinion. For the rest of the respondents, worry for possible negative impacts was larger than expectation of possible positive impacts. Over half of the respondents who considered the impacts to be both positive and negative, were worried about high or medium level negative impacts, while positive impacts were mainly expected to be low or insignificant. The most negative perception of respondents was with regard to the possible impacts on marine life, conservation areas, animals and impacts concerning possible accidents related to gas pipelines. Positive perceptions were mainly linked to munitions clearance, ship traffic and tourism.

While half of the respondents expected the project to have positive economic impacts in Finland, impacts of the construction of the pipelines on water quality, as well as impacts of increased vessel traffic and impacts of pipelines on commercial fishing raised concern among the respondents. This was even despite the information provided on the survey questionnaire about findings of environmental monitoring of the Nord Stream pipelines established in 2010–2012, which confirmed the impacts to be mainly short-term or insignificant. A third of the respondents who provided additional comments in the end of the survey (n=76), raised concern over the political implications of the project, especially in relation to Russia. Other comments were about critics towards the survey content being purpose oriented, concern over environmental and maintenance issues, and local employment. Only nine percent of the comments directly supported the implementation of the project.

APPENDIX 1
COVER LETTER, PROJECT DESCRIPTION AND QUESTIONNAIRE FORM

Intended for
Nord Stream 2

Date
July 2016

Document number
W-PE-EIA-PFI-QST-805-030400EN-07

NORD STREAM PROJECT 2
SOCIAL IMPACT ASSESSMENT – FINNISH COASTAL AREA QUESTIONNAIRE

RAMBOLL

Revision	**07**
Date	**20/07/2016**
	W-PE-EIA-PFI-QST-805-030400EN
Ref	**1100019533 / PO No. 15112600**

COVER LETTER OF THE QUESTIONNAIRE FOR THE COASTAL RESIDENTS

Dear Recipient

Nord Stream 2 AG is planning to construct two underwater natural gas pipelines in the Baltic Sea. More detailed information on the planned project can be found in the project description on page 3.

As required by law, an environmental impact assessment of the project is underway and carried out by Ramboll Finland Oy. Part of the assessment includes the consideration of impacts on the comfort, health and safety of the human living environment. Information and opinions for assessing these impacts of the project are compiled by conducting, among others, resident questionnaires. Three separate questionnaire surveys will be carried out in Finland; one for the residents of the Kotka region, one for the residents of the coastal region and one for commercial fishermen.

According to current plans, related onshore supplier operations, such as pipe storage, are planned to be carried out in Hanko. Similarly, project related supplier operations and some ancillary operations such as pipe coating and storage as well as storage of rock material are planned to be carried out in Kotka.

The resident questionnaire for the coastal region has been delivered to 2000 randomly selected households as depicted in the map overleaf. Each response is important in order to obtain as reliable overview as possible from the responses of residents. Your thoughts and opinions are of the highest priority, responding does not require any specific background information.

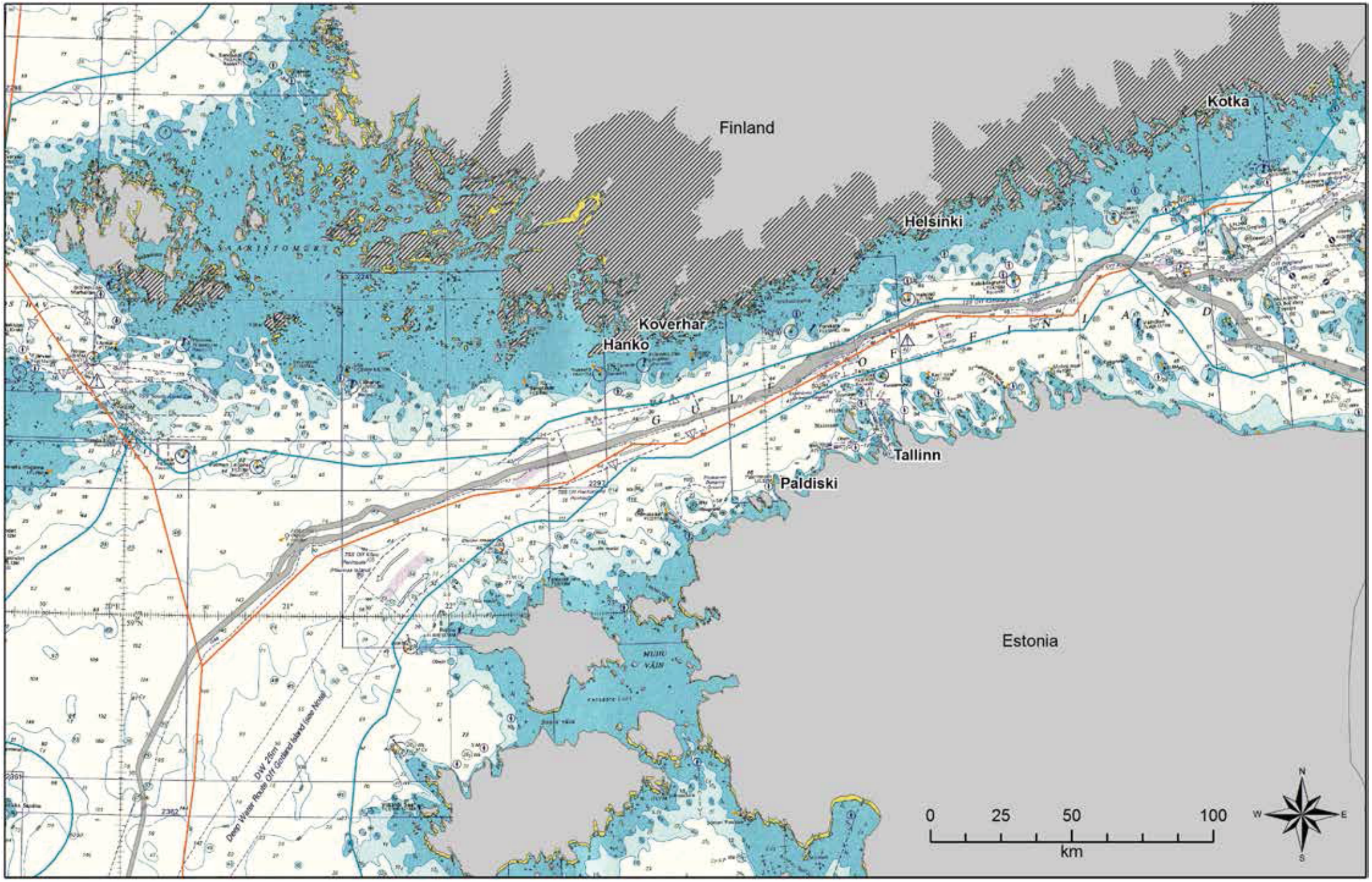
Would you, please, send your response by post no later than Friday 29 April 2016 using the attached return envelope (postage paid). Unfortunately, responses posted later than the deadline will not be included in the assessment.

All responses will be handled with confidentiality and anonymously and no individual respondents can be identified from the results. Address information is only used for the purposes of sending out this questionnaire. Return envelopes will be han- dled by JP-Postitus Oy, who will deliver the responses in an electronic format to Ramboll Finland Oy for statistical analysis. The response data will be used as baseline information for the impact assessment.

Thank you for your response!

More information on the EIA can be obtained from
Sakari Salonen
Ramboll Finland Oy
firstname.lastname@ramboll.fi
tel. 020 755 611

More information on this questionnaire can be obtained from
Hanna Herkkola
Ramboll Finland Oy
firstname.lastname@ramboll.fi
tel. 020 755 611


Finland
Kotka
Helsinki
Koverhar
Hanko
Tallinn
Paldiski
Estonia
0
25
50
100
km
N
W
E
S
EEZ border
Territorial water border
Survey corridor
Questionnaire area

BACKGROUND INFORMATION ON THE NORD STREAM 2 PROJECT

Nord Stream 2 will consist of two natural gas pipelines running parallel on the seabed across the Baltic Sea. The Nord Stream 2 natural gas pipelines will have an annual capacity to transport 55 billion cubic metres (BCM) of Russian natural gas to the EU for at least 50 years.

The approximately 1200 km long pipelines are planned to be routed from the southern coast of the Gulf of Finland in Russia through Finnish, Swedish and Danish waters to the Bay of Greifswald in Germany. The length of the Finnish route section will be approximately 370 km and it will run within the Finnish Exclusive Economic Zone (EEZ) in international waters. In order to implement the project, Nord Stream 2 requires an authorisation from all the countries, whose economic zones or territorial waters the pipelines will traverse.

Nord Stream 2 AG is the company that has been established for the purposes of designing, constructing and operating the pipelines. Signed partners include PJSC Gazprom from Russia, E.ON SE and BASF SE/Wintershall Holding GmbH from Germany, Royal Dutch Shell plc from the UK/The Netherlands, OMV AG from Austria and Engie S.A. from France. Nord Stream 2 is based in Zug, Switzerland. The estimated budget for the project stands at approximately EUR 8 billion and it is entirely privately funded.

Coupled with the fact that gas demand in the EU is increasing while production is decreasing and that Norway's gas reserves are expected to dwindle significantly in the coming years, the EU will need to rely on approximately 140 BCM of additional imported gas by 2035[1)]. Transport of natural gas across the Baltic Sea is an environmentally sustainable and economical alternative to meet the increasing demand of natural gas within the EU. Nord Stream 2 is a direct link between the largest gas fields in the world and the gas markets of the EU. The project also constitutes a complementary, reliable and competitive addition to existing gas transport routes.

The Nord Stream 2 project builds on the successfully implemented, initial Nord Stream pipeline project which was constructed between 2010 – 2012. During the implementation of the earlier project, the logistics contractor for Nord Stream stored pipes at a temporary storage facility located in Hanko harbour and stored and applied concrete coating to pipes at a facility located in Mussalo harbour in Kotka. The Nord Stream pipelines were commissioned in 2011 and 2012.

The results of the environmental and social monitoring of the impacts of the Nord Stream pipelines have demonstrated that the construction of the Nord Stream pipeline had no significant environmental impact on the Baltic Sea. The monitoring results over the past six years have confirmed that the impact of the construction work has been minor, local and short-term. The construction and operation of the Nord Stream 2 pipelines are intended to follow the same technical, ethical, environmental, and health and safety standards as applied to initial Nord Stream project.

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1) IHS CERA Long-Term Supply and Demand Outlooks to 2040, july 2015.

NORD STREAM 2
ENVIRONMENTAL IMPACT ASSESSMENT – FINNISH COASTAL AREA QUESTIONNAIRE

BACKGROUND INFORMATION

1 Gender

☐ Female ☐ Male

2 Age group

☐ Under 18 years ☐ 18 - 30 years ☐ 31 - 50 years ☐ 51 - 65 years

☐ Over 65 years

3 Occupation

☐ Manager ☐ White collar worker ☐ Blue collar worker ☐ Entrepreneur

☐ Student ☐ Pensioner ☐ Homemaker ☐ Unemployed

☐ Other or I do not wish to answer

4 Permanent residence (municipalities in alphabetical order)

☐ Espoo ☐ Kemiönsaari ☐ Naantali ☐ Sipoo

☐ Föglö ☐ Kirkkonummi ☐ Parainen ☐ Siuntio

☐ Hamina ☐ Kotka ☐ Porvoo ☐ Turku

☐ Hanko ☐ Kökär ☐ Pyhtää ☐ Virolahti

☐ Helsinki ☐ Lemland ☐ Raasepori ☐ Other

☐ Inkoo ☐ Loviisa ☐ Salo

☐ Kaarina ☐ Maarianhamina ☐ Sauvo

5 Where is your holiday home located?

☐ In southern Finland by the coastline ☐ Somewhere else in Finland by the coastline ☐ Inland

☐ Other (please specify) _____ ☐ I do not have a holiday home ☐ I do not wish to answer

6 How would you personally rate the significance of the following issues related to the Gulf of Finland?

	Very important 2	Quite important 1	Not that important -1	Insignificant -2	I cannot say
The environmental status of the Gulf of Finland	☐	☐	☐	☐	☐
Possibility to use the sea area for recreational activities (e.g. boating, diving or leisure fishing)	☐	☐	☐	☐	☐
Possibility to use the sea area for commercial fishing	☐	☐	☐	☐	☐
Value of the sea area for tourism	☐	☐	☐	☐	☐
Sea as an element of the scenery	☐	☐	☐	☐	☐

7 **Environmental impacts of the Nord Stream project, implemented in 2010 – 2012, have been monitored for six years in the Finnish and Estonian Exclusive Economic Zones (an area in international waters). Based on the monitoring, no significant impacts were identified. Are you aware that the impacts of the project implemented in 2010-2012 were short-term and not significant?** You can find the monitoring results on-line at *www.nord-stream.com/environment/environmental-monitoring/* in English.

- ☐ Yes, and I find the results interesting.
- ☐ Yes, but the information is irrelevant to me.
- ☐ No, but I would be interested in the results.
- ☐ No, and I am not interested in the results.
- ☐ Other (please specify) _____

FAMILIARITY WITH THE PLANNED NORD STREAM 2 PROJECT

Nord Stream 2 AG has started the planning of a new pipeline system similar to the Nord Stream pipeline implement in 2010 – 2012. More information about the Nord Stream 2 project can be found in the cover letter and in the project description.

8 **Are you familiar with the Nord Stream 2 project?**

- ☐ No. This is the first time I have heard about the project. *Please go to question 11.*
- ☐ I have heard the name "Nord Stream 2", but I am not familiar with this current project
- ☐ I have heard about the project and have followed the news related to it in the media.
- ☐ The project is very familiar to me and I have actively sought information about it.

9 **If you are familiar with the Nord Stream 2 project or have followed news related to it, where have you gained information about the project?**

- ☐ Newspapers or magazines
- ☐ Television or radio
- ☐ Nord Stream 2 website or other Nord Stream 2 brochures or publications
- ☐ Internet, which sites _____
- ☐ NGOs (e.g. environmental organisations)
- ☐ Neighbours and other acquaintances
- ☐ Social media, which one _____
- ☐ Other (please specify) _____

10 **How would you rate the information you have obtained concerning the Nord Stream 2 project?**
Please read the statements and indicate the level to which you agree with the statement by ticking the relevant box.

	I completely agree 2	I mostly agree 1	I mostly disagree -1	I completely disagree -2	I cannot say
The information has been sufficient for my needs	☐	☐	☐	☐	☐
The information has been easy to understand	☐	☐	☐	☐	☐

11 **What is your opinion on the following statements concerning the Nord Stream 2 project?**
You can find more information about the project and project related topics in the cover letter and in the project description. Please read each statement and indicate the level to which you agree with the statement by ticking the relevant box.

	I completely agree 2	I mostly agree 1	I mostly disagree -1	I completely disagree -2	I cannot say
I have no opinion on the project as yet.	☐	☐	☐	☐	☐
Nord Stream 2 project-related activities would create new business opportunities in coastal areas in Finland.	☐	☐	☐	☐	☐
Nord Stream 2 project-related activities would create job opportunities in coastal areas in Finland.	☐	☐	☐	☐	☐
Coastal areas in Finland would not benefit from the Nord Stream 2 project-related operations	☐	☐	☐	☐	☐
Kotka should not be used as a logistics hub for operations related to the Nord Stream 2 project.	☐	☐	☐	☐	☐
Hanko should not be used as a logistics hub for operations related to the Nord Stream 2 project.	☐	☐	☐	☐	☐
My overall opinion of the Nord Stream 2 project is positive	☐	☐	☐	☐	☐

IMPACTS OF THE NORD STREAM 2 PROJECT

12 **What is your opinion of the impacts of the planned Nord Stream 2 pipeline in the Gulf of Finland?**

☐ I think the project will have no impacts on the Gulf of Finland. *Please go to question 15.*

☐ I think the project will have a negative impact on the Gulf of Finland. *Please go to question 13.*

☐ I think the project will have a positive impact on the Gulf of Finland. *Please go to question 14.*

☐ I think the project will have both positive and negative impacts on the Gulf of Finland. *Please answer both questions 13 and 14.*

☐ I cannot say. *Please go to question 15.*

13 **If you think that the Nord Stream 2 project will have a negative impact on the Gulf of Finland, which impacts are you concerned about?**

	No or insignificant negative impact 0	Low negative impact -1	Medium negative impact -2	High negative impact -3	I cannot say
Impacts on tourism	☐	☐	☐	☐	☐
Impacts on water quality	☐	☐	☐	☐	☐
Impacts on ship traffic	☐	☐	☐	☐	☐
Impacts related to munitions clearance	☐	☐	☐	☐	☐
Impacts concerning possible accidents related to the construction and operation of gas pipelines	☐	☐	☐	☐	☐
Impacts on marine life	☐	☐	☐	☐	☐
Impacts on conservation areas	☐	☐	☐	☐	☐
Impacts on animals (e.g. birds, seals)	☐	☐	☐	☐	☐
Impacts on wrecks on the seabed and other undersea cultural heritage	☐	☐	☐	☐	☐
Other impact, please specify	☐	☐	☐	☐	☐

_____

_____

14 **If you think that the Nord Stream 2 project will have a positive impact on the Gulf of Finland, which impacts do you expect?**

	No or insignificant positive impact 0	Low positive impact 1	Medium positive impact 2	High positive impact 3	I cannot say
Impacts on tourism	☐	☐	☐	☐	☐
Impacts on water quality	☐	☐	☐	☐	☐
Impacts on ship traffic	☐	☐	☐	☐	☐
Impacts related to munitions clearance	☐	☐	☐	☐	☐
Impacts on marine life	☐	☐	☐	☐	☐
Impacts on conservation areas	☐	☐	☐	☐	☐
Impacts on animals (e.g. birds, seals)	☐	☐	☐	☐	☐
Impacts on wrecks on the seabed and other undersea cultural heritage	☐	☐	☐	☐	☐
Other impact, please specify	☐	☐	☐	☐	☐

_____

_____

15 **What do you think the economic impacts of the planned Nord Stream 2 pipeline will be for Finland? The construction of the two existing Nord Stream pipelines employed 200 persons directly for project-related supplier operations and 100 persons indirectly. The economic benefit from the project for Finland was approximately 180 million euros. In your opinion, what do you think the economic impacts of the planned Nord Stream 2 pipeline will be for Finland?**

- ☐ The project will have negative economic impacts on Finland.
- ☐ The project will not have any significant economic impacts on Finland.
- ☐ The project will have positive economic impacts on Finland.
- ☐ I cannot say.

16 **The average number of vessels operating daily in the Gulf of Finland is 92. This number increased by a few vessels (approximately 5-15 vessels during pipe-lay) during the construction phase of the two existing Nord Stream pipelines. A similar impact is expected from Nord Stream 2. To ensure a safe working environment, other ship traffic will be informed about construction and safety zones will be requested around construction vessels. This may cause some restrictions or local changes to the routes of other vessels.**

Do you find this impact significant?

☐ Yes, on a general level ☐ No ☐ I cannot say

☐ Yes, on a personal level, please explain why

_____

_____

_____

17 **A separate study was conducted in 2015, in which the impacts of the two existing Nord Stream pipelines on fishing were monitored. The results of the study indicate that the existing Nord Stream pipelines have had no significant impact on fishing (pelagic trawling) in the Gulf of Finland. Nevertheless, are you still concerned about the impacts of the project on fishing?**

☐ Yes, on a general level ☐ No ☐ I cannot say

☐ Yes, on a personal level, please explain why

_____

_____

_____

18 **Environmental monitoring results of the construction of the two existing Nord Stream pipelines indicate that the construction (including munitions clearance, rock placement and pipe-lay) did not cause any significant impacts on water quality or aquatic life. All identified changes were minor and local. The impacts from the construction of two new identical pipelines are expected to be similar. Are you concerned about the impacts on water quality or aquatic life?**

☐ Yes, on a general level ☐ No ☐ I cannot say

☐ Yes, on a personal level, please explain why

_____

_____

_____

19 Do you have any additional comments concerning the Nord Stream 2 project?

THANK YOU FOR YOUR RESPONSE!