The state of implementation of the Marine Strategy Framework Directive in Finland in 2013

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ABBREVATIONS

CART Country Allocated Reduction Target, given by HELCOM in Baltic Sea Action Plan
Common Fisheries Policy (CFP) A set of rules introduced in the 1970s for managing European fishing fleets and for conserving fish stocks.
EC European Commission
EEZ The Exclusive Economic Zone; an area beyond and next to the territorial sea, dependent to the specific legal regime established in this Part, under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of this Convention.
EIA Environmental Impact Assessment
ELY-center The Centers for Economic Development, Transport and the Environment
EU criteria Criteria for good environmental status in Commission decision on criteria and methodological standards of good environmental status of marine waters (2010/477/EU)
FANC Finnish Association for Nature Conservation
FinMoE Finnish Ministry of Environment
GES Good Environmental Status
GTK The Geological Survey of Finland
head-group 19 March, 2013 the Ministry of Environment appointed a head-group to prepare the program of measures.
HELCOM The Helsinki Convention; a Regional Sea Convention established in 1992 for the Protection of the Marine Environment of the Baltic Sea.
IA InitialAssessment; evaluation of current status of marine environment, one element of the first part of marine strategy
indicator In this context species or habitats that define a characteristic of marine environment
National Forestry A state enterprise that administers state-owned land and water areas. Responsibility of managing and using these areas in a way that benefits Finnish society to the greatest extent possible.
Member States European Union countries within the planning process
MSFD Marine Strategy Framework Directive
Program of measures Third part of MSFD; a program that includes all the actions what will be taken in order to improve the status of EU marine areas.
Regional cooperation group Established for every ELY-region in order to involve local people in the implementation process of WFD.
River Basin Management Plan A requirement of the Water Framework Directive and meaning of achieving the protection, improvement and sustainable use of the water environment across Europe. It is made for every River Basin district in the Member State.
RKTL Finnish Game and Fisheries Research Institute
sub-group Working on a program of measures under the head-group that the Finnish Ministry of Environment established for making program of measures
SYKE The Finnish Environment Institute
TAC Total Allowable Catches or fishing opportunities, catch limits set by European Commission that are set for most commercial fish stocks.
Trafi Finnish Transport Safety Agency is an authoritative organization developing transport security, promoting environmentally friendly transport and is responsible for administrative tasks related to transport systems.
VHA2- management area A River Basin district in Southern Finland and along the coasts of the Gulf of Finland area.
WFD Water Framework Directive; established by the EU in 2000 in order to protect fresh water quality and quantity as well as to avoid long-term degradation.

BACHELOR'S THESIS

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ABSTRACT

The Marine Strategy Framework Directive 2008/56/EY (MSFD) was adopted, because it is evident that the pressure on and the demand for marine natural resources is high and that is why the communities around EU should restrict this effect. EU marine environment needs to be maintained and protected from harmful effects and thus secure sustainable usage of marine resources.

This thesis is a midterm report of the state of implementation of the Marine Strategy Framework Directive in Finland. It is aiming to give a clear picture of the directives implementation process. As well the aim is to well as find gaps in the process which will help stakeholders, or more specific NGOs to influence in the process. Research is implemented by using official reports, interviewing and contacting people involved in the process and by participating in several meetings.

During the process it became clear that Finland has not been that ambitious in its first part of MSFD, but compared to other Baltic States Finland is on schedule and proceeding well. Despite this the work in subgroups has started too late in order to make a successful and ambitious strategy. In the end of 2013 some of the subgroups had not even started to work on new measures for the program of measures, which is the third part of the MSFD 2008/56/EY and needs to be in first audition by the end of April 2014 and accepted by the government in the end of 2015.
HELCOM threshold values are often used as targets for descriptors, which is considered good in the Finnish process. Overall the implementation of Finnish strategy is not that ambitious-, it seems that measures are not developing fast enough. Therefore NGOs must make proposals and seriously try to push planning groups to develop good measures for the strategy.

Language: English Key words: European Commission, directive, non-governmental organizations

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TIIVISTELMÄ

Meristrategiadirektiivi 2008/56/EY (MSFD) luotiin, koska on selvää, että meren ekosysteemin luonnonvaroihin kohdistuva paine on kova ja EU:n jäsenmaiden tulisi tehdä kaikkensa vähentääkseen tätä painetta. EU:n vesialueita tulee ylläpitää ja suojella vahingollisilta vaikutuksilta vaikutuksilta ja siten turvata kestävä luonnonvarojen käyttö.

Tämä opinnäytetyö on väliraportti Suomen merenhoitosuunnitelman toteutuksesta vuoden 2013 aikana. Tarkoituksena on antaa sidosryhmille selkeä kuva merenhoidon suunnittelusta ja toteutuksesta sekä löytää prosessin aukot. Tutkimuksen toteutukseen on käytetty empiiristä materiaalia kuten haastatteluja, tapaamisia ja yhteydenottoja.

Verrattuna moniin muihin Itämeren maihin on Suomen merenhoitosuunnitelman toteutus aikataulussa.Vaikka Suomi on hyvin aikataulussa raportoinnin osalta, työ alaryhmissä on alkanut liian myöhään. Vuoden 2013 lopussa osa alaryhmistä ei ollut aloittanut uusien toimenpiteiden kehittämistä toimenpideohjelmaan, vaikka ohjelman ensimmäisen version tulisi olla valmiina huhtikuussa 2014. Tähän mennessä raportoidun merenhoitosuunnitelman ensimmäisessä osassa on hyvää se, että Suomi käyttää monien indikaattoreiden tavoitteina HELCOMissa kehitettyjä raja-arvoja. Suomen suunnitelma ei ole tähän mennessä osoittautunut tarpeeksi kunnianhimoiseksi. Toimenpiteet eivät kehity tarpeeksi nopeasti, joten nyt kansalaisjärjestöjen aktiivisuutta tarvitaan.

Kieli: Englanti Avainsanat: Euroopan Komissio, direktiivi, kansalaisjärjestöt

TABLE OF CONTENTS

1. INTRODUCTION

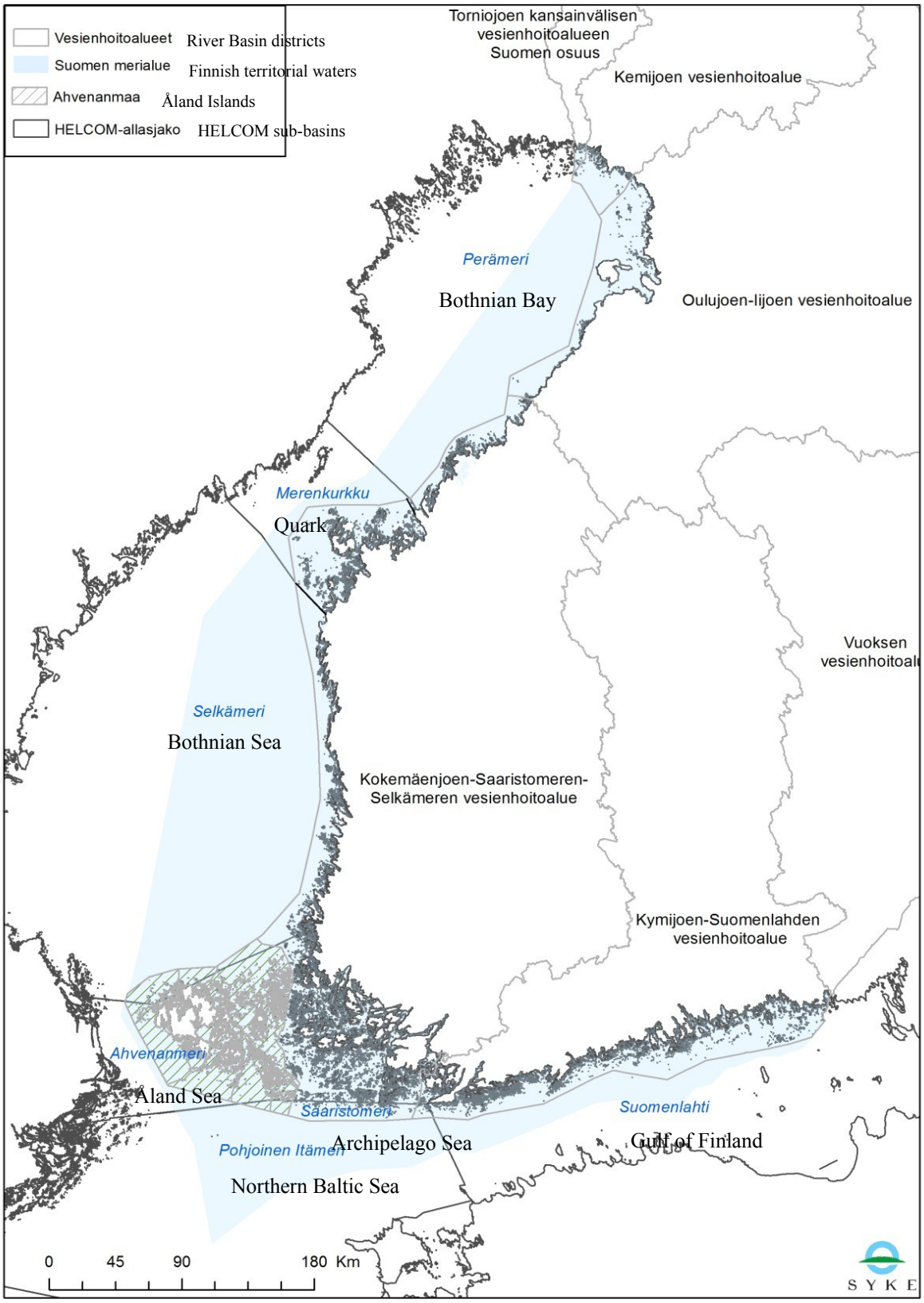
In order to effectively protect and conserve marine areas the European Commission wanted to establish a directive. As a result the Marine Strategy Framework Directive 2008/56/EY (MSFD) was adopted in June 2008. The aim of the directive is to "*protect, maintain and reconstruct when possible marine environment and its valuable heritage with a goal to maintain biological biodiversity and secure dynamic and diverse oceans and seas, which are clean, healthy and productive*" (European Commission (EC), 2012).

In the directive European Marine Regions are divided on the basis of geographical and environmental criteria. MSFD 2008/56/EY is a transmarine directive which demands EU Member States to cooperate with each other and with non- EU countries, such as Russia, when developing strategies for their marine waters (European Commission (EC), 2012). The Helsinki Convention (HELCOM) has a key role as a coordinator between all the countries (Olsson, 2013). In Finland there will be one strategy for the whole country, which includes areas from the coastal line to the border of the Finnish economic zone (Finnish Ministry of Environment (FinMoE), 2012).

The implementation process of the directive is divided into three parts; firstly the assessment of the current state of the environment (Initial Assessment (IA)), a definition of "*good environmental status" (GES)* and the establishment of environmental objectives; secondly the monitoring program and thirdly the program of measures. A program of cost-effective measures and a detailed cost-benefit analysis of the proposed measures is also required (European Commission (EC), 2012). The objective is to reach a GES of the EU marine areas by the end of 2020 and to protect the valuable resource base which is related to economic and social activities. The directive gives the opportunity for Member States to effectively protect our marine environment from eutrophication, hazardous substances, oil spills and many other harmful effects. It is vital in the Union's future maritime policy, which achieves the full economic potential to be in harmony with the good status of the marine environment.

In Finland actions to protect the Baltic Sea environment are already taken, therefore in the Finnish national system the implementation of MSFD 2008/56/EY mainly concerns information-guidance

and formal planning obligation (Hollo, 2013). In Finland the implementation involves lots of experts from different organizations, such as the river basin districs (Picture1.), which are managed by ELY-center officials. Picture 1. below shows all the relevant water areas that are somehow linked to the national implementation of MSFD 2008/56/EY in Finland.



Picture 1. Finnish River Basin districts, Finnish territorial waters, Åland Islands and HELCOM-sub-basins (FinMoE, 2014).

2. AIM AND OBJECTIVE

The thesis is done for the Finnish Association of Nature Conservation (FANC) and other NGOs. The aim is to make the organizations to understand what is going on and on what stage is the implementation of the MSFD in Finland. The aim is to give the organizations a clear overview of how the implementation of the marine strategy is and point out possible gaps in the planning process that could be of NGO interest.

Key items in this thesis are schedule and gaps, because FANC is a non-governmental organization which is using lobbying as an influencing method. Lobbying in this case means that FANC propose improvements to the plan if needed. As an NGO they do not have financial resources to hire someone only focusing on this process, which is why it is important to do this study listing possible gaps and showing schedule. By reading this study a person going to the audition, can without lots of research work see on what stage is the process and possible gaps.

This topic was chosen, because I wanted to learn how EU directives are actually implemented, what the organization and schedule looks like and how much work is required in order to make an appropriate strategy. Another reason why I started this process was that my internship supervisor Tapani Veistola, from FANC, asked if I am interested to do a study. For FANC there was a need for a study on the implementation stage, because no one from the office was actively involved. FANCs interest in the process is to push officials to take new HELCOM Country Allocated Reduction Targets (CARTs) seriously, and to develop good measures to reach those. The status of endangered natural reproducing Baltic salmon and status of Ringed Seal is also important to them.

This thesis includes six chapters and several sub-chapters. In the following pages some background is given regarding; which directives, regulations and organizations are relevant in the process, followed by how the research was done and in the *"Results"* chapter the actual implementation stage of MSFD in Finland is explained. Finally, in the last chapter the process is discussed and criticized.

3. BACKGROUND

3.1 The Marine Strategy Framework Directive and the Water Framework Directive

The Marine Strategy Framework Directive (MSFD) 2008/56/EY emphasizes that conservation of coastal and offshore water bodies should address ”*all human activities that have an impact on the marine environment”*, except fisheries which are excluded. MSFD 2008/56/EY applies to four marine regions within the EU: the Baltic Sea, the North East- Atlantic, the Mediterranean and the Black Sea.

When making a study about the implementation stage of MSFD 2008/56/EY, the schedule of Water Framework Directive (WFD) 2000/60/EC must be taken into consideration. These directives are linked to each other and overlap on coastal areas. MSFD 2008/56/EY cover whole marine area while WFD 2000/60/EC cover marine areas up to 1 nautical mile from coast line. (HMGovernment, 2012). According to WFD a River Basin Management Plan is done separately for every management area, whereas in MSFD every Member State every Member State make one plan for the whole marine area. The Regional Water Authorities, in Finland, ie. ELY-center officials, are responsible for making the River Basin Management Plans. The objective of the WFD is that surface freshwater and ground water bodies are ecologically sound by 2015 and that the first review of the River Basin Management Plans should take place in 2014, in order to see the progress of the first plan (2009-2015) (European Commission (EC), 2012).

As mentioned these two directives overlap on coastal areas, but as MSFD emphazize and demand Member States to follow WFD, no problems will rise. Officials should take River Basin Management Plans into consideration when making measures for the coastal area, this is necessary because Baltic Sea problems are mainly originating from catchment areas. However officials can of course improve limit values set in River Basin Management Plans. The overlapping of these two directives concern also commercial fish species. MSFD covers commercial fish species to greater extent than WFD as it applies to all species, not only species close to coastal zone.

3.2 HELCOM Baltic Sea Action Plan

The Baltic Sea Action Plan (BSAP) is an action plan established by HELCOM in 2007 in order to more effectively commit Member States to improve the status of the Baltic Sea status, aiming at a good environmental status of the Baltic Sea by 2021. The strategy was adopted by all the Baltic Sea states and the EU in 2007 at the HELCOM ministerial meeting in Krakow. *"It is an important stepping stone for wider and more efficient actions to combat the continuing deterioration of the marine environment resulting from human activities".* BSAP has a key role in implementation of marine strategy, because the directive demands Menber States to follow Regional Sea Conventions such as HELCOM. In the BSAP are amng many other targets Country-wise Allocated Reduction Targets (CARTs) listed.

Goals of BSAP:

- *Baltic Sea unaffected by eutrophication,*
- *Baltic Sea life undisturbed by hazardous substances,*
- *Favorable status of Baltic Sea biodiversity,*
- *Maritime activities in the Baltic Sea carried out in an environmentally friendly way,*

(HELCOM, Baltic Sea Action Plan, 2007).

3.3 Linkage to other directives and regulation

There are several other directives and regulation s that the MSFD is linked to, for example the Habitats Directive 92/43/EEC and the Birds Directive 2009/147/EC, first adopted in 1979. These both have similar goal; to achieve and maintain certain species and habitats on favorable conservation status, to preserve the natural environment of the species, so that the natural range does not decrease, and to maintain a sufficient number of species and habitats, in order to secure their future position. The aim of this linkage is that Member States have the possibility to take new measures into the marine strategy in order to improve the protection of the marine habitats, species and ecosystems included in the Habitats- and Birds Directive.

The Common Fisheries Policy (CFP) is a set of rules for managing European fishing fleets and for conserving fish stocks. It gives all European fishing fleets equal access to EU waters and fishing grounds and allows fishermen to compete fairly. The first version of the CFP was established in the 1970s, its aim is to ensure that fishing and aquaculture are environmentally, economically and socially sustainable and that they provide a source of healthy food for EU citizens. The CFP is relevant when making a program of measures for the following descriptors 1:Biological diversity, 3: Population of commercial fish / shell fish, 4: Elements of marine food webs, and 6: Sea-floor integrity, as it includes relevant information on the impacts of fishing on the marine environment (Michanek & Christiernsson, 2013, 9-22). Some gaps related to the Common Fisheries Policy occur already in the directive. In Annex III many items related to fish are set on the indicative list, which means that members states are not obligated under law to assess or take that aspect into account. In the other hand in the consideration of impacts from fishing activities the directive requires analysis of "predominant pressures and impacts, including human activity" on the environmental water status. The analysis shall take "relevant assessments, which have been made pursuant to existing Community legislation" into account i.e. the CFP regulation (Michanek & Christiernsson, 2013, 9-22).

The MSFD 2008/56/EY should strengthen environmental protection and improve ecosystem quality in a way that enables sustainable usage of marine resources. It is a vital directive for EUs future marine policy, it combines all the directives into one strong law, and it will add value to other directives.

3.4 Organization

Many institutes and organizations are involved in the MSFD 2008/56/EY implementation process, but here only stakeholders relevant for this thesis are listed. **The Finnish Ministry of Environment** (FinMoE) is the leading organization responsible for the whole planning process and cooperation within the work, also the chairman comes from FinMoeE. **The Ministry of Agriculture and Forestry** and **the Ministry of Transport and Communications** are also present and working on their own field. **The Center for Economic Development, Transport and the Environment** (ELY-center) takes care of regional implementation and development tasks of the State Administration related to Economic Development, Transport and the Environment in Finland.

The ELY-center is responsible of the regional consolidation of the MSFD 2008/56/EY and the WFD 2000/60/EC. As well ELY-center participates in assessment of the current status, and make needed research for evaluation of current status as well as, setting environmental objectives and descriptors related to those, basically they are involved in every parts of the implementation process as far as their expertise reaches. Every ELY-region has a **regional cooperation group,** which is lead by ELY- official. The aim of the regional cooperation group is to involve local people in the planning process. **The Finnish Environment Institute** (SYKE) is a national research and expert institute working under FinMoE. Researchers from SYKE are responsible for the monitoring program, which is the second part of the directives implementation process. In addition to that researchers give expertise aid to ELY officials. **The Helsinki Convention** (HELCOM) is a Regional Sea Convention established in 1992 in order to more effectively protect the Baltic Sea. Every Baltic Sea State, including non-EU states, are members of HELCOM. It has a key role when implementing marine strategy for Baltic Sea, while it is the only convention that binds Russia to nutrient input targets. **The Finnish Association for Nature Conservation** (FANC) is a non-governmental organization lobbying for protection of nature on land and in water. FANCs interest in the process is to have a strategy where the status of vulnerable species like salmon and seals is improved. (HELCOM, 2014; SYKE, 2014; personal communication with an official Jun. 19, 2013).

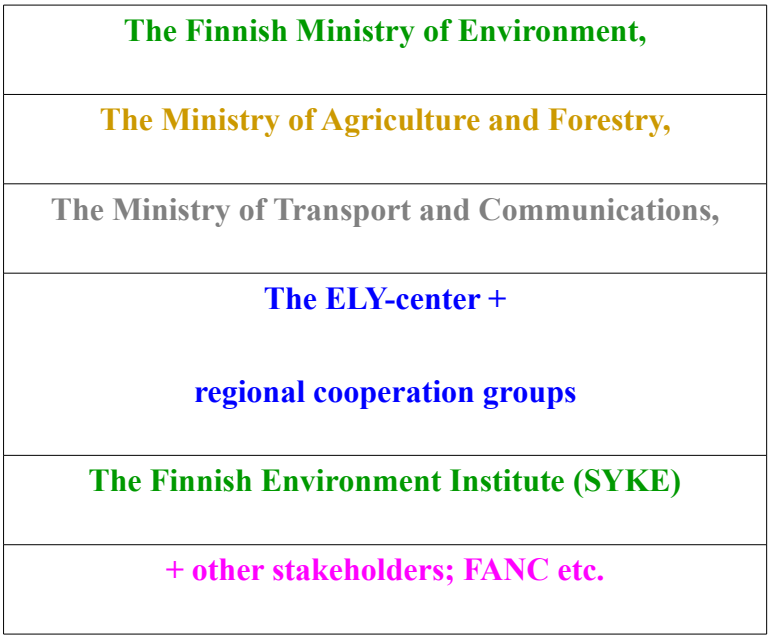


Figure 1. Key stakeholders in the marine strategy implementation process.

4. MATERIAL & METHODS

The program of measures that FANC wants to influence on is under work during 2013 which is the reason that the research is done this year. Important event is after establishing the first version of the program in April 2014 NGOs have the opportunity to propose improvements.

FANC needs to influence the strategy in a timely manner, therefore the purpose of this study is to collect all the material available in order to report to FANC about the stage of the future marine strategy in 2013. The aim of the research is to understand how the Finnish planning team is proceeding with the strategy. As the Member States follow the schedule given by European Commission the amount of items discussed and measures developed-, during this time-, gives indication of the ambition level of the Finnish strategy. For FANC it is important that the future marine strategy for Finnish marine areas will effectively protect marine species and habitats.

There are several methods and types of materials that have been used in this thesis. The directives and other reports linked to those are used as a background information. Lots of empirical material is used in the process. This material consist of minutes of the meetings from several sub-group and head-group (see abbreviations) meetings, interviews and emails. Minutes of meetings gave an overview of how groups are working. From the minutes of meetings could be analyzed what kinds of topics were discussed and based on that conclude what items are considered important in the process.

In the beginning of this process, an important meeting was held with an official involved in the process. The aim of the meeting was to get an overview of the implementation process.
I also participated twice in a sub-group meeting dealing with shipping and hazardous substances. 22nd August 2013 was my first opportunity to participate in a head-group meeting. In the meeting sub-group chairmen presented the process of their own group. In addition, new targets given in the review of the Baltic Sea Action Plan (2007) was discussed. In the end of this process six regional cooperation groups (see abbreviations) were contacted, this was done in order to see if there is any movement related to implementation of the marine strategy, four of the groups (Pohjois-Pohjanmaa, Kymenlaakso, Varsinais-Suomi and Uusimaa regional cooperation groups) responded to the

questions sent by email. Unfortunately information gained was not that fruitful, because the future marine strategy was almost not at all discussed in the groups.In February 2014 my supervisor organized a meeting with the same official as in the start, to know how the process will evolve in 2014 and what the schedule looks like until the end of the whole implementation process.

Because empirical material is used also the final sub-chapter *'Gap Analysis on Finnish implementation process'* under *'Results'* is written based on this process of collecting empirical material and researching that. Gap analysis is basically made without no further analyzing, it includes gaps that every reader can find when reading this thesis with a thought.

After many emails, meetings and interviews all the information that was needed to write a thesis and report to FANC was gathered, and the writing process could start.

5. RESULTS

According to the Finnish Environmental Law Review (2/2013) EU adapted environmental perspectives based on natural resources when making environmental laws in the 1990's. Furthermore, along with theWFD 2000/60/EY came a new monitoring and information system, which was based on inventory of water usage and water quality. The same system is now used in MSFD 2008/56/EY. In the Finnish national system the implementation of MSFD 2008/56/EY means information-guidance and formal planning obligation. Indeed there are commands in both directives meaning for example that “it is prohibited to impair the quality of sea water”. The program of measures should be formulate so that they prevent deterioration of the quality of sea water. It is presented in the directives appendix what kind of pressures and effects should be monitored. One of the main goals in the directive is to secure biodiversity in the marine environment. Therefore a program of measures should execute binding environmental goals following prescribed criteria concerning the sea water status. (Hollo, 2013)

5.1 First part of the reporting process; Initial Assessment (IA), GES, environmental objectives and indicators

As mentioned before the MSFD 2008/56/EY implementation process is divided into three parts. In Finland the first part was reported in time to European Commission (EC). 13 of December 2012 the Ministry of Environment established the first part of the Finnish marine strategy. It consists of assessment of current status of the sea, definition of ”good status” and environmental objectives and indicators. Good Environmental Status (GES) is a key component in implementation of the directive, it is the qualitative or quantitative target that should be reached by 2020.

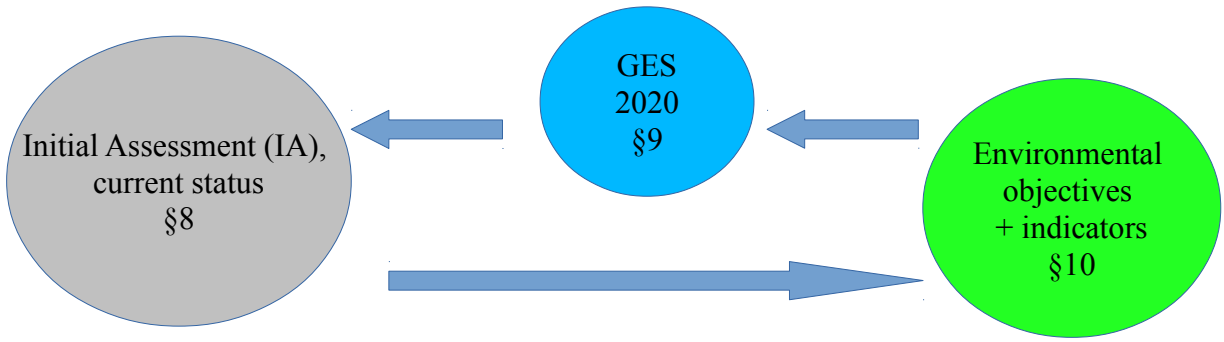


Figure 2. Three elements within the first part of the marine strategy

According to MSFD 2008/56/EY every Member State must define GES for marine environment; In the first part of Finnish marine strategy it is described as follow;

GES means: *the status of environment in marine waters where these are ecologically diverse and dynamic oceans and seas, which are clean, healthy and productive, and the use of marine environment in a sustainable and secures present and future generations to use the capacity, of it:*

1) *the structure, function and processes of marine environment, together with the associated physiographic, geographic, geological and climatic factors, enable that ecosystems function fully and maintain their resilience to human-induced environmental changes. Marine species and habitats are protected, human- induced decline of biodiversity is prevented and diverse biological components function in balance;*

2) *hydro-morphological, physical and chemical properties of ecosystems, including the human*

activities in the area support the ecosystems as described above. Anthropogenic inputs of substances and energy, including noise, into the marine environment do not cause pollution. (FinMoE, 2012)

Indicators are needed in order to reach Good Environmental Status, because those enable follow- up of achievement of GES. Indicators are measures that are taken from species (e.g. Length of Filamentous algae), habitats, ecosystems etc. in order to see if protection actions are functional and effective.

In the first part of Finnish marine strategy indicators are set for the following 11 qualitative descriptors listed in MSFD 2008/56/EY Annex I;

1. Biological diversity is maintained. The quality and occurrence of habitats and the distribution and abundance of species are in line with prevailing physiographic, geographic and climatic conditions.
2. Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems.
3. Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.
4. All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.
5. Human-induced eutrophication is minimized, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters.
6. Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.
7. Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems.
8. Concentrations of contaminants are at levels not giving rise to pollution effects.
9. Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards.
10. Properties and quantities of marine litter do not cause harm to the coastal and marine environment.

11. Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment.

The strategy developed by Member States need to take every descriptor into consideration even thought there would not be on data available. For example when Finland made assessment of current status they did it by using data available, for some descriptors like marine litter current status could not be evaluated properly, because there was no data available, therefore indicators for finding data were developed.

5.1.1 Case study: Assessment on ambition level of Baltic Sea Member States

Swedish NGO Coalition Clean Baltic (CCB) made a research about Baltic Sea Member States ambition level on first stages of implementation process, meaning Initial Assessment, definition of GES and environmental objectives and indicators (Figure 2.). Tn the study they focus on four descriptors of their interest: 1. biodiversity, 3. population of commercial fish/shell fish, 5. eutrophication and 10. marine litter.
The ambition level was ambitious if the descriptor had appropriate number of indicators listed in Commission decision on criteria and methodological standards of good environmental status of marine waters (2010/477/EU), and the indicator targets were set according to national law, a directive or HELCOM.
According to the study the Finnish ambition level for these descriptor were on medium level compared to other Member States. For eutrophication the level was good, HELCOM and WFD threshold values were used as indicator targets (EIONET, Reporting Obligations Database (ROD)). Marine litter had the weakest ambition level, because Finland has not developed enough indicators and the targets for existing indicators were poor and considered as low ambition. However even the Finnish ambition level was on medium level according to the study, the overall ambition level for all Baltic Sea Member States was very low (CCB, 2014). The assessment done by European Commission also supports this study (European Commission, 2014).

5.2 Organization: Head- and subgroups

In Finland the responsibility of the implementation of MSFD 2008/56/EY in Finnish territorial and EEZ (Exclusive Economic Zone) waters is on the Finnish Ministry of Environment. Also the Ministry of Agriculture and Forestry and the Ministry of Transport and Communications are present, but mainly involved in issues related to their own field. The chairman of the whole process is an official from the Ministry of Environment. Ministries as well as the Finnish Environment Institute (SYKE) and the ELY-center are decision making bodies in the process.

In 19 March, 2013 the Ministry of Environment appointed a head-group to prepare the program of measures which is the last part of the MSFD 2008/56/EY. The group consists of 29 individual officials representing the following organizations/institutes; the Ministry of Environment, the Ministry of Agriculture and Forestry, the Ministry of Defense, the Finnish Environment Institute, five different ELY-centers, the National Forestry, the Finnish Meteorological Institute, the Finnish Game and Fisheries Research Institute, The Finnish Wildlife Agency, the Finnish Food safety Authority Evira, the Finnish Transport Safety Agency, the Finnish Transport Agency, the WWF Finland, the Finnish Association for Nature Conservation and the Federation of Finnish fisheries associations. (FinMoE. *Merenhoidon toimenpideohjelman valmistelutyöryhmän asettaminen* Mar 19th 2013).

From the head-group chairmen for the following sub-groups were appointed;

1) Eutrophication does not harm the Baltic Sea environment,
2) Harmful substances do not impede the marine ecosystem or prevent usage of fish or game as human nutrition,
3) The protection of Baltic Sea indigenous species is on a favorable level and a long-term preservation is secured,
4) Shipping is safe and has minimal environmental impacts,
5) Usage of natural resources is sustainable.

(group names; own translation)

Sub-groups are as well working on programme of measures on their own field, but also cooperating with other collateral groups. In the Finnish planning process the idea is that all the 11 qualitative descriptors in the MSFD 2008/56/EY Annex I (p.3) are packed into five groups and all of them are discussed, while in some Member States every descriptor is discussed separately.

Sub-groups have members from the same organizations as head-group, and the amount of individuals can vary between the groups. Sub-groups as well as the head-group is working on the program of measures, they report proceedings to the head-group and together they develop the final program. The actual writing process is on the ELY-centers responsibility. (personal communication, presentation on Jun. 19, 2013)

5.3 Stage of implementation in 2013

From the Figure 3. below can be seen the overall schedule for the implementation process. In 2013 both monitoring program and program of measures is under development. A new six-year-long funding period starts in 2014 (EC decides where to allocate new funds), which apparently influences implementation of program of measures. That is why cost- effectiveness analysis of measures is needed. An important event concerning NGOs is in September 2014 when the Ministry of Environmental will request statements regarding the program of measures, from institutes and NGOs. As usual the period of time given for the statement round is short, NGOs should already before that be prepared to propose improvements.

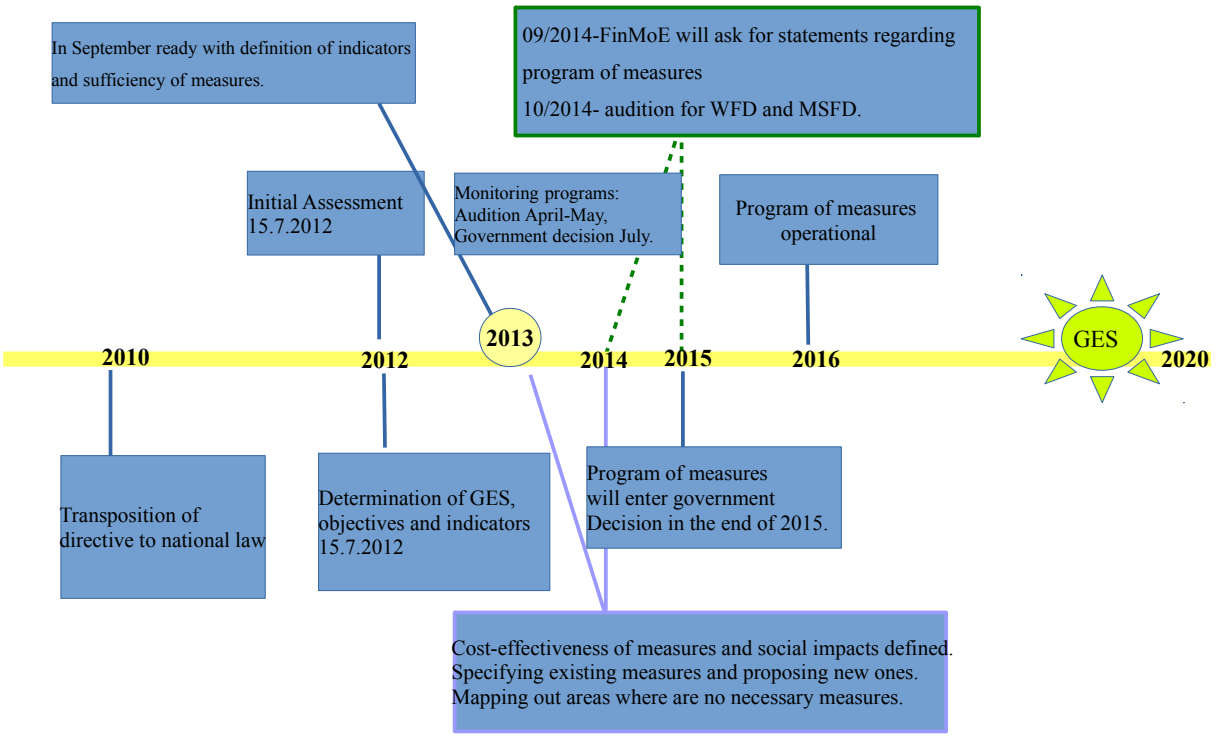


Figure 3. MSFD 2008/56/EY implementation schedule in Finland

(presentation by Leppänen, SYKE)

5.3.1 Subgroups

The work in sub-groups is shared into three categories 1) to assess sufficiency of present programs and operations made by different sectors, 2) to propose specification or intensification of present operations and if needed to propose new ideas/ operations and 3) to map out marine areas where there are no required actions and to propose operations to improve and maintain the status, and finally make an assessment of the economic costs of measures and about the cost-effectiveness. (personal communication, sub-group minutes of meeting, Jun. 18, 2013)

During the work subgroups needed to take into consideration review of HELCOM BSAP, especially new CARTs established in HELCOM ministerial meeting in October 2013, as well as other possible commitments and decisions related to good status of marine areas. Subgroups should also review all the qualitative descriptors presented in directive Annex I. (own reflection)

Below the state of process in sub-groups, based on the presentations held by the chairmen in head-group meetings (personal communication, Aug. 22, 2013, Sep. 19, 2013 and Feb. 13, 2014).

Group name: Eutrophication do not harm Baltic Sea environment
The ELY-centers are focusing on coastal areas and inland waters and SYKE on pelagic marine areas. The Ministry of Environment is represented, but the Ministry of Agriculture and Forestry does not have representative, because officials from grocery department are not available for unknown reason. Now the coastal and marine waters are divided according to the ELY-center borders, but the problem is that the impacts on marine areas might concern more than one ELY-center. The group is finished with assessment of adequacy of existing programs, where concrete measures, in MARPOL and UNCLOS etc. been reviewed. Preliminary assessment on effects of different programs to the marine management has been done. The most important programs in the coastal areas are river basin management plans and the program of measures linked to those, as well as the HELCOM BSAP. In September and October 2013 the HELCOM BSAP will be reviewed and rest of the autumn will be spend planning new measures aiming to be ready in April 2014.

The new HELCOM Country-wise Allocated Reduction Targets (CARTs) for Finland set in Ministerial meeting Oct. 2013 are only set for Gulf of Finland. This means that the ELY-officials working on WFD in VHA2- management area have a lot to do in order to reach targets by 2021.

Group name: Hazardous substances do not prevent using ecosystem or fish and game as a human nutrition

During autumn 2013 the assessment of adequacy of existing programs and measures is on final stretch.

Following programs to be reviewed in the group; WFD and program of measures from the 1st management period 200., program of measures for protection of Finnish Baltic Sea and inland waters (2002) etc.

According to the group definition of GES targets and indicators are weak and information is lacking from the monitoring programs.

Problem that the group is facing is cross border effects; e.g. products from abroad, which arrive to our marine waters through the air.

Micro-particles, mainly from wastewater treatment plants are included in this group as well.

Group name: Protection of species in the Baltic Sea and long-term conservation secured

The group differs from the other ones, because it receives "pressures" from other groups e.g. eutrophication and hazardous substances are key items affecting biodiversity.

The adequacy and functionality of 25 key programs (e.g. HELCOMs Baltic Sea strategy, program of measures concerning Baltic Sea seal populations) was reviewed.

Group decided to consider protection of species and long-term conservation of biodiversity from a target and pressure-oriented perspective.

They state that the descriptor number 4: *'Elements of marine food webs'* is the most difficult one to handle.

Challenge for the group is that there is 70 species and 12 habitats which should reach favorable protection status according to the first part of Finnish strategy, therefore lots of effective measures must be made.

Group name: Shipping is safe and has minimal environmental impacts
Group is done with preliminary analysis of existing plans and programs of measures. There were no large gaps or deficiencies found and also implementation of the existing programs has been made. As there were many different acts, regulations and laws' concerning shipping, the most challenging issue was to know what the most important ones from the existing programs are. The group invokes to MARPOL Annex I, that the Baltic Sea is special area where the control of prohibition of discharges should be intensified. The group decided to propose that Finland ratifies International Convention for the Control and Management of Ships Ballast Water & Sediments, which would reduce amount of non-indigenous species in the Baltic Sea. The group states that maybe national additional sections to ship-to ship regulation should be written. Expenses should be considered if situation requires oil spill response equipment from the ship or an external vessel, with help of these actions the risk of oil spills could be minimized.

Group name: Usage of natural resources is sustainable
The main point this group is focusing on is fishing and hunting, where fishing is dealt as pressure. In the Ministry of Agriculture and Forestry the action groups within WFD and MSFD have been tightly doing cooperation, which is good because e.g. salmon is migratory fish which uses both marine and inland water. Regional action proposals from the regional cooperation groups has been asked. What it comes to the game species, the group agrees that sustainable hunting should be promoted in implementation of the directive. During 2013 the process has been stagnant, because they have been waiting for salmon strategy, whitefish-research 2015/16, Fish Act, CFP- reform and EU management plan to resolve or to progress. The group as well agrees that many policies have been made, but now the main issue is to put them in practice.

Eutrophication group is proceeding well, the organization is clear SYKE monitor and make measures for marine waters and ELY- center for inland and coastal waters. The threshold values developed by HELCOM and targets according to WFD 2000/60/EC are used for eutrophication,

therefore the group just needs to develop powerful measures. The main concern is that officials from grocery department are not involved even-thought the measures will concern their field. In order to decrease eutrophication and make realistic measures it would be crucial to have them within the planning. Shipping group is proceeding fast it is most effective from all the groups and already in the end of 2013 they made new proposals for programme of measures. Tight cooperation is still needed in issues related to hazardous substances when making measures for oil and chemical prevention. For the group *" Usage of natural resources is sustainable"* the work is simple, because many measures already exist within different strategies and regulations, e.g. salmon strategy, Fish Act, CFP, they need to put them in practice. From the sub-groups the most difficult work is on Biodiversity group, while it includes many species and habitats, which should be maintained and protected. (personal communication, Aug. 22, 2013, Sep. 19, 2013 and Feb. 13, 2014)

5.3.2 Regional cooperation groups

WFD 2000/60/EC obligated Member States to make a plan for every water management area in the Member State. When the directive was adopted in 2000 ELY-center established regional cooperation groups for every ELY-region in order to include regional people in the planning process. The same regional groups apply also when planning the marine strategy.
To find out if regional cooperation groups have discussed MSFD 2008/56/EY six groups were contacted by email. Responds concerning the situation in four different regional groups was received.

From Uusimaa ELY-center was following information provided; ELY-center officials are leading five to six regional groups, which should consider inland water- and marine management issues in their own areas. Some of the groups have already assembled and others will during the autumn. In Uusimaa the group has discussed program of measures and monitoring program in meeting held in October 2013 at Haltia.

An official from Varsinais-Suomen ELY-center says following; "Sub-groups are working on assessment of adequacy of existing programs, separately on coastal and marine areas. After that will follow the suggestion round, where regional groups can influence, for improving existing measures

and developing new measures. Table of contents for program of measures has been worked on and the current version conforms to some extent the table of contents in the WFD 2000/60/EC program of measures. The sub-groups have discussed that in further planning of new possible measures more experts are needed, and contribution of regional ELY-centers will be needed." (personal communication, Oct. 21, 2013)

The group lead by Kaakkois- Suomen ELY-center is regularly working on both directives, last meeting was held in February 2013 and next will be in the end of November same year. During winter there will be sectoral workshops concerning WFD 2000/60/EC issues. The work concerning marine strategy has just started, they have not discussed local environmental issues or what should be included in the strategy, but when making program of measures for WFD 2000/60/EC the key issues that also concern MSFD 2008/56/EY should be taken into consideration. These issues are measures of agriculture which should be put into practice, improving underwater habitats, wastewater damage should be under control, securing the state of excellent and good waters and ensuring execution. The major part of information and measures concerning coastal areas will come from River Basin Management Plans. (personal communication, Oct. 29, 2013).

A FANC member from Pohjois- Pohjanmaa regional cooperation group respond following; "The groups has meetings few times a year and that major of the representatives are from regional water-management associations and minority from NGOs. The ELY-center officials make the background work and the group gives feedback and guidelines. The Bothnian Bay should be considered separately, because it differs a lot from the other parts of Baltic Sea. The pelagic area of the bay is classified to have a good environmental status, but the vulnerable coastal areas should not be forgotten. The group has stated also that marine strategy should be more regional, because of the big differences between catchment areas" (personal communication, Nov. 1, 2013).

5.4 Outcomes of HELCOM Ministerial meeting

As mentioned in the start HELCOM has a key role when implementing management plan. They are coordinating international cooperation between the countries to reach GES of the Baltic Sea. HELCOM Baltic Sea Action Plan 2007 aims at good environmental status of Baltic Sea by 2021. In the Ministerial Declaration in Copenhagen October 2013, Ministers and EU Commissioners assembled to assess the progress towards BSAP goal. When planning measures sub-groups need to take nutrient input limits and other goals set in BSAP into consideration.

Following is a list that Ministerial Declaration wants Member States to emphazize in their future marine strategy.

Table 1. HELCOM BSAP New Maximum Allowable Inputs for Baltic Sea sub-basins, based on new and more complete data set (HELCOM Copenhagen Ministerial Declaration, 2013).

Baltic Sea Sub-basin	Maximum Allowable Inputs		Reference inputs 1997-2003		Needed reductions	
	TN, tons	TP, tons	TN, tons	TP, tons	TN, tons	TP, tons
Kattegat	74,000	1,687	78,761	1,687	4,761	0
Danish Straits	65,998	1,601	65,998	1,601	0	0
Baltic Proper	325,000	7,360	423,921	18,320	98,921	10,960
Bothnian Sea	79,372	2,773	79,372	2,773	0	0
Bothnian Bay	57,622	2,675	57,622	2,675	0	0
Gulf of Riga	88,417	2,020	88,417	2,328	0	308
Gulf of Finland	101,800	3,600	116,252	7,509	14,452	3,909
Baltic Sea	**792,209**	**21,716**	**910,344**	**36,894**	**118,134**	**15,178**

- New Country Allocated Reduction Targets (CARTs), including both airborne and pollution from land. For Finland the targets are 2430+600N and 330+26P, of which the second number means the Finnish contribution (via Vuoksi) to inputs from river Neva catchment. They acknowledge that agriculture significantly contributes to the nutrient inputs to the Baltic Sea.

- Protection of sturgeon through projects on Baltic sturgeon and by raising public awareness among fishermen.
- Protection of depleted ringed seal population in the Gulf of Finland, immediate action is needed to significantly reduce by-catch and to improve understanding of other threats on seals. As well cooperation should be promoted between Estonia, Finland and Russia.
- Marine litter (especially small plastic particles) have harmful effects on wildlife, habitats and biodiversity in marine areas. Developing technology to remove nano-particles in municipal waste water treatment plants by 2020 and aiming to achieve significant reduction on marine litter by 2025.
- Concerned over European eel, because there has not been any significant improvement in the status of eel in the Baltic Sea countries. Migration barriers should be removed.
- Supporting development of fisheries management and technical measures to minimize by-catch of fish, birds and mammals.
- New recommendation on sustainable aquaculture by 2014, aiming at limiting potential environmental impacts, such as introduction of non-indigenous species, nutrient pollution and introduction of pharmaceuticals.
- Reducing nutrient inputs from ships sewage, and designation of the Baltic Sea as a Special Area under IMO MARPOL Annex IV (Regulations for the prevention of pollution by sewage from ships).

(HELCOM Copenhagen Ministerial Declaration, 2013)

5.5 Development of Finnish strategy in 2014

During the year 2014 the program of measures is still prepared and aiming to be ready by the end of April. In between April and August cost-benefit analysis is done and in October audition will be held. After audition during spring and summer 2015 program of measures will be checked again, finalized and submitted to governments approval which should take place latest December 2015. According to MSFD in beginning of 2016 program of measures must be operational.

As well the monitoring program is prepared, head-group have already asked for first draft of the

program. On 1st of April audition round starts and there is two months time to give a statement. In preparation of monitoring program and on issues related to biodiversity Finland is tightly cooperating with Åland Islands, Sweden and Estonia. (personal communication; notes from Veistola, 13. Feb, 2014)

According to head-group notes only three descriptors; non-indigenous species, alteration of hydrographical conditions and sea floor integrity, have good status. Biological diversity, contaminants, eutrophication and contaminants in fish and seafood for human consumption have not good status. More information is needed on descriptors population of commercial fish / shell fish, elements of marine food webs, marine litter, introduction of energy, including underwater noise. As well pressures should be emphasized in the program of measures, now the current status of 2012 was mainly described. (personal communication; meeting on 11. Apr, 2014)

5.6 Gap Analysis of the Finnish implementation process

Key problems emerging during this process has been tight schedule and cooperation. For ELY-center it is hard to stay on schedule during 2014, because too much work is set for too little time. In the Finnish process it seems that there is too much work for the amount of experts working. (personal communication, meeting with an official, 11. Feb, 2014) As well unsuccessful cooperation between stakeholders has been a problem in the process. When making a common strategy for whole Finnish marine area cooperation is definitely needed on each level. For example, many of the subgroup items are overlapping with other groups that is why they should cooperate tightly, unfortunately this is not happening. Therefore cooperation between sub-groups should be promoted and also it would be very important for groups working with eutrophication and hazardous substances to be in cooperation with ELY-center officials responsible of WFD planning.

Another problem is that Finland has not considered all the descriptors as equal, there are some that are left outside the planning process. In the planning process subgroups are mainly focusing on five descriptors; biodiversity, commercial fish species, eutrophication, hazardous substances and non-indigenous species. Rest of the descriptors have not gained that much attention, therefore NGO involvement is needed in order to develop good measures for every descriptor. In the Finnish

planning process there is gaps related to four important descriptors that need NGO involvement in order to have appropriate measures. The gaps are related to following descriptors; 2: Non-indigenous species, 5: Eutrophication, 10: Marine litter and 11: Introduction of energy, including underwater noise.

–- First; It is known that non-indigenous species in sea and on land has been a big problem for Baltic Sea area, container ships transport species in their hull or ballast water from far away seas to our waters, but also when climate change and temperature rise is increasing it might mean that more non-indigenous species will arrive to our waters by them self. The national strategy for non-indigenous species states that officials should have the responsibility of mapping out the non-indigenous species in Finnish marine areas and whole Baltic Sea, with special concern on adverse species. Therefore it is recommended that NGOs emphasize the power that climate change has on increasing number of non-indigenous species. In shipping subgroup was decided to propose a measure to ratify International Convention for the Control and Management of Ships Ballast Water & Sediments, which would reduce amount of non-indigenous species in the Baltic Sea.

–-When dealing with eutrophication the strategy should be more regional for the reason that Baltic Sea catchment area has big regional differences and most of the nutrients causing eutrophication come from catchment areas. Eutrophication is definitely one of the key elements in this directive. Uusimaa ELY-center is struggling with HELCOMs new reduction targets, because those are only set for Gulf of Finland. ELY-center officials consider that it is impossible to reach targets, even agriculture would be stopped totally they could not reach the targets. However the targets must be somehow possible to reach, therefore NGOs should pressure ELY-center to take HELCOM targets seriously and start to promote nutrient cycling and try to develop new equipment to catch nutrient runoff. As mentioned before a problem that complicates ELY-centers work is that sub-group dealing with eutrophication does not have grocery officials from the Ministry of Agriculture and Forestry, even thought agriculture is the main industry causing eutrophication. These kind of problems complicate decision making.

–- Very important point is development of descriptor number 10: Marine litter. It is not included in the names of Finnish sub-groups at all, even-thought they should include all the descriptors. Marine litter is in shade of other descriptors, there is actually no one who is responsible of making measures for this descriptor. (personal communication; discussion with Veistola Feb, 2014) It is strange that in the first part of the strategy Finland has listed few indicators related to marine litter,

but no actual measures for this descriptor has not yet been developed. As mentioned earlier in the Annex I the qualitative descriptor for marine litter is following: *"Properties and quantities of marine litter do not cause harm to the coastal and marine environment"* in order to fulfill this, NGO participation is definitely needed. Several NGOs for example WWF and Pidä Saaristo Siistinä has done research on marine litter, but these research results have not been considered in the planning team. When the head-group states that there is not enough information on marine litter the reason might be that NGOs have not understood how or are passive to deliver their results further to the decision makers.

– Underwater noise pollution is within descriptor 11. In Finnish implementation noise pollution has not been considered seriously, as marine litter it is neither included in the names of sub-groups. NGOs should propose actions related to minimizing noise pollution, for example by moving ship-lanes from coast to more pelagic sea, or by simply changing speed limits on the sensitive areas, it should also be considered of including underwater noise pollution to EIAs related to any activity on sea or coast, and as well establishment of marine protected areas and marine sanctuaries would help to protect sensitive marine habitats. The reason why underwater noise pollution is not that much considered might be lack of data. BIAS project is the first one researching underwater noise pollution on Baltic Sea, the final results will be published only in 2016, and maybe bring data that is needed, in order to make appropriate measures.

– Few gaps already occur in the MSFD 2008/56/EY it self. There are few sections which should be more specific in order to force Member States to have ambitious plan. For example the 'indicative' list of various impacts listed in Annex III is not legally binding. As well the legally obligation of Commission decision on criteria and methodological standards of good environmental status of marine waters (2010/477/EU) and indicators related to those has a gap, while the MSFD 2008/56/EY does not legally obligate Member States to use indicators which actually are chosen in order to be the best to improve the status of species and habitats. (Michanek & Christiernsson, 2013, 9-22). Gaps in the directive make the ambition level of all EU Members States lower. These gaps are mostly parts which do not legally bind Member States to follow for example qualitative standards set for GES, meaning that no sanctions will be given if directive is not followed. This means exaggerated that if the marine area do not reach GES by 2020, it does not matter, no sanctions will be given.

6. DISCUSSION

Finland is effectively developing own strategy and can be expected that two last parts; monitoring program and program of measures, of the strategy will be reported to European Commission on time. However as the schedule given by the European Commission is quite tight and as already mentioned for the ELY-center it is hard to stay in the schedule, we can assume that ambition level will suffer as Finland is following schedule tightly. Schedule being more important than strategy is definitely a disadvantage. Some Member States have not followed Commission schedule at all, for example in Poland the transposition of the MSFD 2008/56/EY in to their national law took place recently. Poland has not yet even reported official GES definition or indicators which is obligatory when implementing the first part of the strategy. When looking at data about Polish planning process, even-thought they are not on schedule it seems that the Polish first part will be ambitious (CCB (2014)). Therefore it is controversial if the Finnish style where Commission schedule is followed detailed is better than the Polish way where planning is proceeding slowly and much behind the others, because in the end might be that Polish marine areas has reached better status than Finnish by 2020. There are several gaps in the process that need NGO involvement, the officials simply do not have time to consider all the qualitative descriptors and measures deeply and might just do it easy way by choosing the most “economy-friendly” measures, which then again do not always effectively improve status of marine environment.

What it comes to the FANC they want that new the HELCOM Country Allocated Reduction Targets are taken seriously, and that good measures to reduce nutrient inputs are developed. They also attach great importance to vulnerable status of natural reproducing Baltic salmon, as well the status of Ringed Seal needs to be improved, therefore FANC would appreciate if good measures for Baltic salmon and Ringed seal would be done. Especially breeding places for seals should be secured by keeping enough coastline and islets free of human activities. When making measures for Baltic salmon, regional groups should more effectively cooperate with officials in order to more effectively improve regional status of salmon. What I want to emphasize is that all the gaps listed in previous chapter are linked to status of marine environment and its species like Baltic salmon, because in seas harmful effects like eutrophication impact a lot on many species through food chain.

HELCOM BSAP and MSFD are aiming at good environmental status of Baltic Sea by 2020 and 2021, without good measures and cooperation between countries and regions inside countries we do not reach it. If NGOs feel that they are not heard by the officials they can always bring the gaps in front of public, which might provide more visibility. Even-though it seems like the implementation of a directive includes a lot of bureaucracy, ordinary citizens have always an opportunity to influence, but the way they can express opinion is hard to find if not familiar with the process.

6.1 Critical Analysis

First criticism is related to subgroup proceedings, because the work in subgroups is developing every month it was necessary to decide to what extent the information is gathered. Therefore when this thesis will be established the process in subgroups might be more advanced, but still it is good to understand that the situation described that time reflects the working rate of the group. Overall a midterm report has been very difficult to write while the process is going on and developing all the time, and to draw a line where to stop the writing has been challenging, while new information comes all the time. Especially what it comes to the schedule of the implementation process, it has been sometimes difficult to follow, while the officials change dates quite often, which is of course natural if the process is stagnant and not developing as wanted.

Secondly, what it comes to *" Gaps"*, the listed items related to descriptors are based on my findings and what I as a student of Integrated Coastal Zone Management think is important to influence in the process.

Lastly, above written pages include lots of material; memos, interviews, presentation etc. which has been used as source material. During the process I found that the best method that can be used in this kind of thesis, when lots of detailed information on specific case is needed, is to find and interview few experts from different institutes who know a lot about the topic, this way the material will be reliable, but still comparison is possible. When the material includes a lot of personal communication, the process of collecting should have been planned forehand and like said only

focus on few experts, but as a consequence lack of planning and due to the fact that the officials are very busy it could have been a risk to rely extraction of material on few specific persons. For the reader it might be disappointing that the material used is mainly information that is only circulating among stakeholders and is not available in internet or library, but without the material this kind of thesis could not exist.

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