

# Vision of PSSA 2020

**- using the PSSA classification to  
increase maritime safety in the  
Baltic Sea**





# Introduction

Despite several actions the Baltic Sea is paying a high price for letting us use and exploit it every day. The number of sea activities and actors operating in the sea is increasing steadily at the same time as the risk of a severe oil accident comes closer and closer. Along with these factors a degeneration of the marine life and damage of the landscape are taking place and several marine organisms and birds are being threatened to extinction. We should remember that Baltic is unique and very sensitive area which needs extra protection.

These processes are not proceeding by themselves nor are they bound to go on forever. They are mostly driven by human activities and human activity is also the only way of changing them.

The most recent tool for improving the maritime safety in the Baltic Sea is the designation of the Baltic Sea as a Particularly Sensitive Area –PSSA. Raising the awareness of this tool and using it fully shall help to improve maritime safety in the Baltic Sea substantially and approach our vision of a safer and cleaner sea.

A vision is about if we should go with the flow and let the future become what it becomes or if we should form our own **future**. It is time to act before it is too late.

**What will the maritime safety situation in the Baltic Sea look like in 2020? How would you like to see it? Can we affect it? How? Answers to these questions create Vision of PSSA 2020.**



## What is PSSA?

A PSSA is an area that needs special protection through action by The United Nations International Maritime Organisation – IMO - because of its significance for recognized ecological, socio-economic or scientific attributes where such attributes may be vulnerable to damage by international shipping activities.

When a state/states submit their PSSA proposal to the IMO it must be accompanied by suggestions for Associated Protective Measures – APM. The proponent state/states have to show how the proposed measures will provide the needed protection from the threats of damage posed by international shipping in a given area. Accordingly, there is no automatic set of measures applicable to all PSSA areas but measures for each PSSA have to be justified and measured against the demonstrated need

When an area has been designated as a PSSA area further APMs can be forwarded to the IMO by the states bordering the PSSA area.



## Baltic Sea as the PSSA

In 2003 the governments of Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden put forward a joint proposal to the IMO to designate the Baltic Sea as a PSSA area which finally did not include Russian waters. In order to empower the PSSA framework the Baltic Sea countries should recommend Associated Protective Measures – APM – with the aim of preventing, reducing or eliminating the threat or identified vulnerability of a PSSA area. In the proposal to designate the Baltic Sea as a PSSA the Baltic Sea states suggested four APMs to be considered namely; two new Traffic Separation Schemes (TSS) one north of the German island Rügen and another in the Bornholmsgat , amendments to the traffic separation schemes south of Gedser and off Gotland Island, a new deep-water route in the eastern Baltic Sea and two new areas to be avoided at Hoburgs Bank and Norra Midsjöbankarna in Sweden.

IMO approved the proposal of two new traffic separation schemes but did not agree on classifying Hoburgs Bank and Norra Midsjöbankarna as mandatory areas to be avoided. They are so far only classified as recommended areas to be avoided.

Provided that further associated protective measures are being proposed by the Baltic Sea states and adopted by the IMO, the PSSA classification is a very useful tool to increase maritime safety and protect the marine environment. However to be able to suggest new APMs close cooperation between the Baltic Sea states, on all levels, is necessary since new proposals only can be forwarded as a joint proposal, agreed on by all involved states.

The PSSA classification can be a very effective tool when Associated Protective Measures are suggested and implemented. What is also important, it also gives the Baltic Sea an international recognition. In the world today there are only eleven areas that have been designated as PSSA areas. Apart from the Baltic Sea world known areas such as Florida Keys in the USA and Great Barrier Reef in Australia have the same status.



## Measures to be taken

The Baltic Sea is a very sensitive sea which is shown through the classification of the areas as a PSSA area by the IMO. The need to take more proactive measures to ensure the safety at sea and to protect its surroundings becomes more urgent every day due to the increased maritime traffic and transports of oil. Increased maritime traffic and offshore activities poses a potential risk not only to the environment but also to the quality of life along the coastal zones around the Baltic Sea, which needs to be taken into account.

The first step towards a safer Baltic Sea was taken in 2005 when the area was classified as a PSSA area. However, without new and specially designed associated protective measures (APM) for the Baltic Sea the idea of PSSA across the Baltic Sea area has no sense and will be only the next extra form of marine protection in absence of real practice. Thus, the PSSA framework need to be filled with APM:s in order to be empowered and fully utilized.

Baltic Master has analysed the need for further associated protective measures in the Baltic Sea and investigated which areas should be addressed.



## Raised awareness

Although the concept of PSSA dates back to the late 1970:s and the first designated PSSA area in the world was established already in 1990 the concept is still a fairly new idea to many actors in the Baltic sea. To the actors who actively participated in the classification of the Baltic Sea as a PSSA area the concept might be well known but through studies conducted in the Baltic Master project it has become evident that the knowledge about PSSA among politicians and civil servants in the Baltic Sea area today is somewhat limited.

A first fundamental step in order to fully benefit from the PSSA classification and to be able to work actively with it would therefore be to raise the awareness about PSSA among all actors in the maritime field in general and among local, regional and national decision makers in particular. It will also be very difficult to see the advantages and strength that this framework can provide without a good knowledge about what lies in the PSSA concept and how it can be utilized



## Sustainable development

Marine ecosystems and resources are fundamental to the sustainable development of the coastal states and needs to be protected from exploitation and over usage. The classification of the Baltic Sea as a PSSA area and the possibility of suggesting further APMs are parts of a sustainable development in the Baltic Sea.

The Baltic Sea PSSA designation allows us to take proactive measures in order to achieve more sustainable shipping. Examples of such measures could be to designate more areas as so called Areas to be avoided. This prohibits shipping activities from taking place in the restricted area and will thus protect the marine environment from potential threats. There are already a few areas in the Baltic Sea with the classification *recommended areas to be avoided*. By raising their status to become *compulsory areas to be avoided* as well as designating new areas to be avoided many sensitive marine areas could be protected in an effective way from the threats caused by international shipping.

Other measures that significantly could increase maritime safety in the Baltic Sea and prevent the ongoing environmental degradation includes improved ships' routing measures, ballast waters handling, port waste management and discharge restrictions. It is estimated that around 300 illegal oil discharges are annually released into the Baltic Sea. This has a significant negative affect not only on the affected marine species but also for the coastal zones polluted by oil spills.



# Common monitoring system for the Baltic Sea

Vessel traffic and transport by sea are increasing at the fast rate due to the favourable economical conditions in Baltic Sea states.

Most of the coastal countries have invested in Vessel Traffic Services (VTS) within Traffic Separation Schemes and on the approaches to their ports.

VTS provides services for vessels participating on the obligatory and/or voluntary basis. Good example of joint services is performed in the Gulf of Finland.

Through surveys conducted in the Baltic Master project it has been pointed out that a common surveillance and information system for the entire Baltic Sea might be an appropriate tool to avoid accidents at sea and to control shipping activities. Similar systems to the present solution in the Gulf of Finland could be a useful alternative if expanded to other parts of the Baltic Sea where the traffic is particularly dense or, preferably, to the entire Baltic Sea.

Another solution to be considered is the creation of the Regional Traffic Monitoring Centres. Those centres would serve as “area control” which could realize such tasks in area of responsibility (Baltic, Southern Baltic) as:

- Information service for vessels in the area
- Detection, prevention and reporting on developing dangerous situations
- Traffic organization with assignment of routes
- Assignment of traffic priorities on the designated routes and in co-operation with local VTS
- Support of passage planning on board
- Detection and early warning on Single Hull Tankers, sub-standard or banned vessels
- Co-ordination of salvage operations
- Monitoring of environmental conditions
- Early warning on extreme weather conditions at sea
- Coordination of Place of Refuge activities
- Co-operation with SAR services and security forces
- Monitoring of waste production on board
- Protection of sensitive areas – control of anchorage prohibited areas



## Improved training standards

Besides the essential requirements for more harmonized education for the seafarers, there is also the strong need for training of dangerous/potentially dangerous situations which should be done in simulators or as practical exercises/workshops.

Examples of new training needs are:

- Training vessel officers in emergency maneuvering of a vessel (now not made mandatory).
- Training vessels staff in handling an emergency lightering operation which not a part of today's normal training.
- Training vessel staff in handling minor spills of oil or chemicals, resulting from technical or operational failures.
- Joint training for all parties that may have to work together after an accident- vessel staff, coastguard, VTS-operators etc.
- Joint simulator and decision making training for all parties that may be involved in taking care of the consequences of an accident with a tanker involved including coastguard, rescue services, national and regional authorities.
- Fundamental training in ice-navigation for all officers
- There are also needs for training of the persons working ashore at shipping companies, crisis management etc.

Problems of vessels' crew fatigue, manning rules and working hours should also be taken into consideration as very important issues since it can influence maritime safety.

The need to learn/know English as an additional language to the Ships' Working Language or the language understood by the crew is essential.

Common research base including authorities, universities and R&D institutions has to be created to solve these issues and also further work on solutions concerning Places of Refuge, ballast water handling, maritime risk assessment and future of PSSA.



## Increased cooperation and regional consultation

A prerequisite for implementing further protective measures is that the Baltic Sea states increase their cooperation around maritime safety. Through work in the Baltic Master project it has shown that there is already a good cooperation between many actors in the Baltic Sea. However many of these actors also believe that the cooperation could be further approved and wish to see an even closer cooperation on all levels.

Cooperation between Baltic Sea states is fundamental for the survival and usage of PSSA, not only on local and regional level but also on national level.

Regional and local actors are the ones who best know the situation in their adjacent coastal zone and who best can assess the need for which kind of protective measures that needs to be taken. National authorities on the other hand are the only actors who could propose new APM:s to the IMO. Thus, the need for increased cooperation both between regional/national level as well as internationally is of most importance. National authorities should also consult regions and municipality to a larger extent before deciding on which protective measures should be taken.

Furthermore, the Baltic Sea PSSA depends very much on cooperation and marine solidarity and joint actions is everybody's responsibility in order to protect the marine environment. Russia is the only Baltic Sea state that did not support the application to the IMO for designating the Baltic Sea as a PSSA area. Thus the Russian territorial sea is not included in the PSSA classification.

Through effective cooperation we can achieve a sustainable development both of the marine environment and shipping activities. It is also important to see the increased maritime traffic and activities in relation to the quality of life in the coastal zones around the Baltic Sea. Accidents at sea will not limit its damage to the sea only but also affect the adjacent coastal areas. Increased offshore activities therefore also pose a risk to the quality of life in the coastal regions unless they are developed in a sustainable manner.



## Vision of PSSA 2020

In the year 2020 the Baltic Sea is a forerunner on maritime safety and serves as a good example to other states how PSSA can help to increase maritime safety. Despite the dramatic increase in maritime traffic and offshore activities during the last ten years these activities do no longer pose the same threat to marine environment, coastal zones and its inhabitants as they did in 2007. This is largely due to the precautionary safety measures taken and enabled through the PSSA framework.

The successful work with PSSA has been developed through an increased cooperation between the Baltic Sea states on maritime safety. Russia is today also actively participating in the PSSA work after having agreed on the act of recognizing the Baltic Sea as a PSSA area some years ago. The raised level of awareness among decision makers and civil servants about the PSSA concept has not only facilitated cooperation but it has also made the public more aware of the sensitivity of the Baltic Sea.

Part of the successful work also derives from the fact that local and regional authorities now are being consulted to a larger extent than before when it comes to assessing the needs for protective measure.

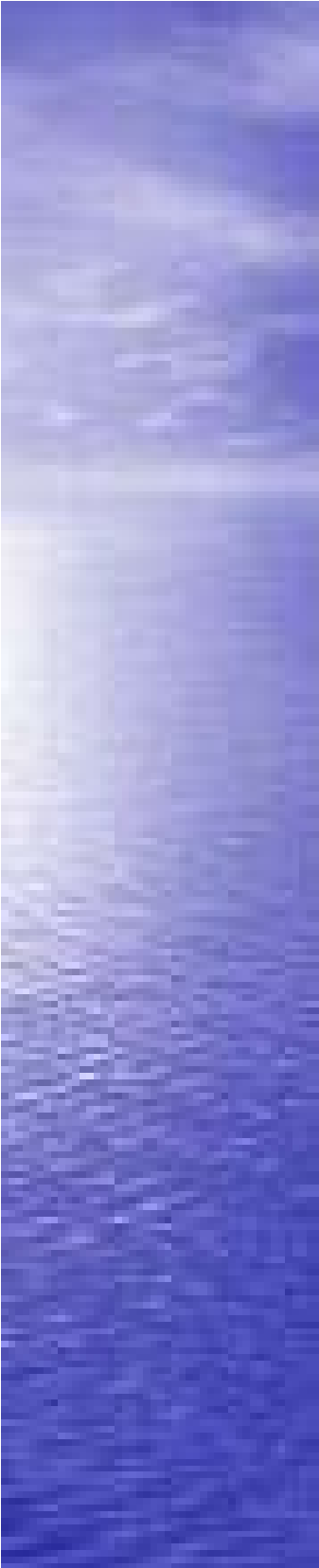
Active work with PSSA from all Baltic Sea countries has also contributed to a sustainable development of transports at sea and usage of the marine areas and coastal zones. More sensitive areas have been designated as compulsory Areas to be avoided and thereby created sanctuaries for several birds and marine species. The surveillance and monitoring capacity has been extended and now covers the entire Baltic Sea. This has led to a decrease in illegal activities such as oil discharges but also improved safety through better information systems.

Due to the implementation of new APM:s the PSSA framework is now being utilized in a more effective way than before. Further safety measures must still be taken and developed according to changes in shipping and offshore activities but so far the Baltic Sea PSSA classification has substantially helped to improve the maritime safety in the Baltic Sea.



## **Vision of PSSA 2020- how to proceed:**

- Raise the awareness about the PSSA framework.
- Increase international cooperation on maritime safety in general and on PSSA in particular
- Convince Russia to join PSSA.
- Consult regional and local authorities in order to get an assessment of threats and vulnerability.
- Improve and extend common monitoring, navigational and vessels equipment solutions for the whole Baltic Sea area.
- Raise training standards for seafarers and coastal communities.
- Increase interregional cooperation; develop adequate solutions to the threats within the possibilities given from the PSSA framework.
- Forward proposals of new APM:s to the IMO within 3 years.



*Baltic Master Work Package 2 Report created jointly by Maritime Institute in Gdansk and Region Blekinge with contribution of other Project Partners particularly including Maritime Office in Gdynia and Kalmar Maritime Academy.*

  
**BalticMaster**  
maritime safety across borders

 Project part-financed  
by the European Union