Maritime Policy for Israel’s Mediterranean Waters

A platform for policy formulation - background and work process

December 2018
Table of Content

1. Introduction
   Page 9-12

2. The Vision
   Page 13-18

3. Work Process
   Page 19-24

4. Summary of Current Situation Analysis
   Page 25-32

5. Themes raised from Current Situation Analysis
   Page 33-44

6. Future progress
   Page 45-48
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Introduction
The prosperity and security of many nation states are related to the maritime space in their region. For several decades, marine spaces have been undergoing a significant process of geopolitical and environmental change. Demographic growth and rising standard of living increase the pressure on the seabed to generate resources, and facilitate a shift away from terrestrial resources to search for new resources away from land.

The discovery of new resources and the technological development that enables their production, intensify the economic importance of exclusive economic zones. In recent years, utilizations of maritime space have escalated for various purposes. This is due both to greater and growing demand for the uses and activities that have historically existed in the area, such as sports and recreation along with fishing and shipping, and as a result of the entrance of new key players on the scene; primarily the discovery of natural gas and the subsequent activities involved in gas production and treatment.

The increased pressures on maritime space and exploitation of its resources, consequently increase the burden on the marine ecosystem. The maritime ecosystem provides critical services and functions as the basis for many maritime human activities. It hosts the habitats of various marine species and provides Ecosystem services such as: marine food stocks for fisheries and water for desalination, as well as, regulating services such as the recycling of fertilizers and the absorption of CO₂.

In the near future, it is expected that the State of Israel will be required to expand its human activities in maritime space across a wide range of fields: energy; infrastructure; research; education and marine sports; innovation; conservation of the marine environment; development of new economic sectors. Shipping, security needs and gas and oil resources will continue to constitute the significant human pursuits at sea and serve as pillars in the planning of maritime space. Appropriate planning and management will enable to maximize the economic potential of maritime space while preserving the ecosystem and marine resources.

As the health of the natural marine environment has great relevance to man and to maritime economic activity, developing economic activity must be implemented under effective environmental monitoring and auditing; based on spatial and strategic approaches and on environmental policy for every sector operating at sea. This state of circumstances in Israel, as in many other developed countries, has brought forth the necessity to formulate a policy for planning and management of maritime space.

The Planning Administration, responsible for determining the national planning policy, identified the need to formulate an integrated policy for the preservation and development of the maritime space. The Planning Administration was also chosen to be the official representative of the State of Israel in leading this policy, both internationally, in cooperation with the European Union and in dialogue with the neighboring Mediterranean nations. The Planning Administration is active in initiating and formulating national policy, in preparing the policy document, and in cooperation with government ministries and interested parties.

This summary includes:
A. A platform for policy formulation - background and work process.
B. Themes raised from current situation analysis.

In the next stages, the formulation of the policy principles will be completed and a comprehensive outline will be proposed for the planning and management of the marine space.
The Vision
The Vision

THE VISION STATEMENT FOR MARITIME SPACE OF ISRAEL:

Management and planning of Israel’s maritime space as a dynamic and balanced environment, in a manner that will ensure effective coordination of the various uses and the realization of the economic and social potential alongside the preservation and protection of natural values, landscapes and heritage values.

THE GOALS OF THE MARITIME SPACE POLICY:

- Create mechanisms to manage the maritime space under uncertain and changing environment
- Reduce conflict between the various uses in the maritime space (existing and future)
- Encourage sustainable economic development in the maritime space
- Relate to land and sea through a comprehensive approach to planning and management, and ensure a healthy and functioning ecosystem whilst preserving species, natural values and heritage
- Maintain Israel's internal and external security interests
- Strengthen international relations and cooperation in the maritime space to ensure regional stability and promote common regional interests
- Define the interfaces between different uses
THE OBJECTIVE OF THE POLICY DOCUMENT:

The policy document for Israel’s maritime space is based on the shared vision as described above. It constitutes a fundamental component in the formulation of a maritime strategy for Israel; in addition to other tools that complement the framework for the regulation of Israel’s maritime space.

The policy document outlines measures for action in multiple fields, in order to regulate and manage the maritime space in an intelligent, efficient and sustainable manner. The document details the means for cementing the policy and its implementation. In the interim, after the policy document is approved and the recommendations are implemented, the management of the maritime space will be carried out in accordance with the principles outlined in the document.

The aim of the policy document for Israel’s maritime space is to create a comprehensive administrative and planning framework for Israel’s maritime space in the Mediterranean Sea, taking into consideration the dynamics of the marine environment and to enable the realization of the economic potential whilst protecting and conserving its natural value and intrinsic heritage.

With the increasing number of maritime service users compounded with rise in the demand for additional maritime space, conflicts between the various uses as well as between human activities and the marine ecosystems are increasing. The necessity to prepare a policy document for Israel’s maritime space stems from the multiplicity of users and the rise in the volume of their activities, which leads to an increase in the quantity and intensity of conflicts. These can be broadly divided into two groups:

- **Conflict between users** - between the diverse human activities within the maritime space
- **Conflict with the environment** - between human activity and the environment combined with the intensified pressure on ecosystems.

Israel’s Maritime Policy IMP (integrated maritime policy) defines a national framework and the guidelines for identifying the conditions required for the development of blue growth of marine industries, while ensuring environmental monitoring and auditing and maintaining the health of the marine natural system.

The implementation of the policy document is expected to promote development and innovation at sea and to increase the certainty of investments in maritime space. This is accomplished through: defining regulations for activities, improving coordination, reducing spatial conflicts, and establishing a clear and professional management structure. Combined, these objectives create the conditions for the development of existing industries and of new enterprises.

“The Maritime Policy for Israel’s Mediterranean Waters project” was conducted under the leadership of the Planning Administration, in cooperation with other government ministries and a wide range of additional stakeholders. The preparation of the Israeli policy document for maritime space is aligned with the global campaign for each country to formulate planning and management policies and plans of the marine space within its boundaries.

In the Israeli context, the marine space project is a direct continuation of the current planning policy, which was formulated in a number of stages: the process was launched with the approval of the National Outline Plan (NOP 13) in the 1980s and continued with the policy document for coastal waters (1999); outlining both a general comprehensive policy and specific policy measures (by field), while determining intervention levels by regions. In 2004, the Law for the Protection of the Coastal Environment defined the areas of the coastal environment, its importance and the principles for preserving it. In addition, it established the Committee for the Protection of the Coastal Environment. These plans primarily focused on the coastal environment and the interface between the sea and the coast; and did not extend to integrate the areas of Israel’s sovereign territorial waters within the Mediterranean Sea.
Currently, the Knesset* is promoting a draft of the Marine Areas Law; comprised of charters that incorporate existing international practice and international law with stipulated detailed arrangements regarding the rights and powers of the countries over adjoining marine areas worldwide. The statutes of international law on which the proposed law is established, are cemented in several multilateral international treaties on the subject, of which several charters have the force of customary law. Some of the charters are signed by the State of Israel and some have been ratified by it.

In the international context, cooperation between Mediterranean countries began in 1975; upon the adoption of the Mediterranean Action Plan in Barcelona, to which the State of Israel is an active partner. In 1978, Israel signed and ratified the Barcelona Convention for the Protection of the Coastal Environment in the Mediterranean, a regional convention for the protection of the marine environment; and further adopted the amendments that expanded its application to the coastal environment in 2005.

Planning and management of the Mediterranean Sea is implemented by a team of experts from the Integrated Maritime Policy in the Mediterranean (IMP-MED) project of the European Union. IMP-MED aspires to construct an integrated Mediterranean policy in order to support a process of dialogue and partnership between neighboring countries along the Mediterranean Sea.

Prior to the preparation of the Israeli policy document, a vision statement and policy goals were composed for maritime space. The process is spearheaded by the National Planning Division of the Planning Administration and was attended by multiple stakeholder involved in Israel’s maritime space. The vision and goals were fully adopted in the policy document.

*The Legislative Authority of Israel
Work Process

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This map is published for the purpose of illustration only and is not an official document of the state of Israel, nor does it detract from any claims made by any of the parties and any boundaries displayed are subject to future negotiations.
The process of preparing the policy document

The preparation of the policy document consisted of two main stages:

- **Stage 1** – a multidisciplinary analysis of the current status and a comparative international survey were conducted
- **Stage 2** - defining the policy principles for regulation, planning and management

**IN THE FRAMEWORK OF STAGE 1** extensive and detailed information regarding Israel's maritime space was collected. This information was gathered and stored in a GIS database, the first of its kind. Concurrently, the "Atlas of the Maritime Space" was created. These sources constituted the basis for spatial analysis of the various interactions, conflicts and opportunities between the existing and planned uses and activities in the maritime space. Based on the spatial analysis, the main policy areas that comprise the policy document were identified.

- **15 fields of thematic mapping**
- **4 Scale**
- **200 Maps**

- **Multi-layered database and GIS data**
- **link to the virtual information center for maritime space**

Atlas of maritime space
AS PART OF THE SECOND STAGE a strategy was formulated regarding a number of broad themes, including management, planning and blue growth. The strategy was formulated for each area independently, and for the maritime space as a whole. The policy document combines the utilization of two complementary mechanisms: spatial instruments, management tools and policy. In most areas, a mix of spatial and management tools is proposed, defined in accordance with the area’s unique characteristics and needs. In areas which lack spatial characteristics, only management tools are offered.

The preparation of the document and the formulation of the policy were accompanied by a long and in-depth process involving stakeholders and the general public. From the onset of the work process, “stakeholders” in the maritime space were identified to include: officials from ministries, government agencies, private sector entities, members of academia, associations and organizations dealing with the environment and society (NGO’s), education, sports, culture and heritage, municipal authorities and the general public.

The process of public participation included numerous intensive days devoted to consulting with various stakeholders of marine areas. The consultation meetings were characterized by candid openness with emphasis placed on hearing all the speakers and covering all the topics. The purpose of the meetings was to compose a complete and comprehensive account of the themes related to maritime space. Significant information was collected during these sessions on key topics related to planning, challenges, opportunities and major conflicts in the maritime space.

Upon the completion of the current status review and its analysis, an open conference was held for the general public, in which the theme, international practices and core issues in the field of planning were presented. During the formulation process of the policy for Israel’s maritime space, two multi-participant conferences were held. The first, was held for the participation of professionals involved in the maritime space including government ministries, social organizations and academic institutions that are members of the broad steering committee that guides the planning team. The second session was arranged for the participation of the general public - people who strongly value the sea and its shores, including: students, fishermen, scientists, environmentalists, sailors, divers and more.

During this time, the process was also presented at a number of professional conferences in Israel and abroad. In addition, the planning information and explanatory notes on the progress of the plan are presented in a sub-site that was opened on Planning Administration website2.

The Planning Administration, in cooperation with the Ministry of Energy and the Ministry of Environmental Protection, has also established a virtual information center for maritime space; which coordinates and organizes the information regarding maritime space in all existing fields of knowledge. The website creates an accessible, up-to-date and multidisciplinary joint platform for information on the marine space in Israel and the Mediterranean Sea for various actors operating in the marine environment3. The Planning Administration works in cooperation with the European Union, and the website provides a great deal of information on the latest developments regarding various aspects related to research, conservation and development in the Mediterranean Sea.

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2 The sub-site on the Planning Administration website that displays the information on the policy document - http://www.iplan.gov.il/Pages/Maritime_space/policy.aspx
3 The virtual information center for maritime space - http://maritime.gov.il/Pages/HomePage.aspx
Summary of Current Situation Analysis
The study and analysis of the existing situation in the maritime area included extensive information in many areas. Naturally, there are many interactions and reciprocal influences between the different fields.

To contend with these relationships and the vast scope of information, the planning processes were divided into four main areas: the physical and environmental infrastructure, uses and users of the sea, cross-sectoral themes and non-statutory documents. These fields relate both to the existing infrastructure and to human activity in maritime space for creating a basis for making future decisions.

Documentation of the existing situation focuses on the activities and facilities in Israel's maritime space and along its coastline. It should be noted that although the subject of the work is maritime space (which until recently has not been independently planned), the analysis of the existing situation also included a detailed description of the coastline in relation to: environmental aspects and infrastructure; conservation areas; habitats; components of development; sedimentation; coastal structures; and coastal infrastructure installations connected to the sea. The documentation also included a comprehensive statutory review of the coastline, drains, outlets, river effluents, tourism, sports and recreation, marine education and more. Statutory approved facilities that have not yet been established, plans and policy documents that propose the development in various areas, were also presented. The analysis of the facilities includes references to all the existing marine structures, whether they were established within the framework of a statutory plan or by virtue of other legislation and regulations.

To ease the analysis of the large body of gathered information, the summary of Stage 1 was divided into four volumes:

**Volume A** - Summary volume, which presents the main points of the current situation analysis and includes four sections:

**A) Introduction** - Background, methodology, the work process, planning and management approaches, and international review. This section extensively reviews aspects related to international trends and practices with regard to themes related to maritime space, such as approaches to planning and management in maritime space and examples of parallel maritime planning processes (MSP) from around the world.

**B) First Chapter: The Physical And Environmental Foundations** - This section presents the physical aspects, including the geographical-physical structure and the description of the natural marine environment in Israel's maritime space. It also describes the processes occurring in the marine space, including: marine meteorology; physical oceanography; hydrodynamics; morphology; sedimentology, geology; natural hazards; major species and their distribution in space and time; rare and endangered species; threats and risks; knowledge and monitoring.

This chapter also deals with the human impact on the physical environment, and constitutes an essential basis for informed planning of all the human activities occurring in this area.

**C) Second Chapter: Uses and Users of the Sea** - aspects related to human uses and activities in the maritime space, such as: infrastructure; transportation and marine shipping; fishing and marine agriculture; security; sports and recreation; tourism; education; labor and marine training; Archeology and heritage.

**D) Third Chapter: cross-sectoral themes** - general aspects that have an impact on all services and users of maritime space, such as: geo-strategy; law and regulation; statutory analysis of coastline and sea; economics; environmental impacts; emergency preparedness; and management of the offshore sediment resource.
E) Fourth Chapter: Non-Statutory Documents - all past and present documents formulated on themes related to the maritime space.

**Volume B** - Atlas of Maps of The Maritime Space, contains a series of thematic maps at different resolutions, ranging from a scale of 1: 250,000 to a scale of 1: 10,000. The mapping is based on the extensive geographic data that was compiled during the Stage 1. This information relates to the various marine activities and values and is critically important for understanding the current and future situation, for identifying the various conflicts, and for recognizing the range of possible solutions.

**Volume C** - A complete analysis of the existing situation, detailing all the themes outlined in Volume A and incorporating aspects that emerged from in depth current situation analysis. This volume is also divided into four chapters in identical format as the abridged volume A.

**Volume D** - Analysis of the interactions in the maritime space, the vision and the options. The volume includes five chapters:

- In depth review of world literature on themes relevant to policy formulation, such as how to analyze the spatial aspects of plans for the maritime space in selected countries, the types of options, and strategies and measures to for policy administration and implementation. This review also served as a basis for defining the basic principles in the planning and management of the marine space and for analyzing the spatial interaction between existing and proposed uses.

- A defined vision of maritime space based on the vision and the overarching goals jointly outlined by the various stakeholders in workshops held by the Planning Administration at a prior stage to the preparation of the policy document; and in accordance with the basic principles defined at this stage.

- Spatial analysis of interactions, conflicts and opportunities between existing and planned uses and activities in the maritime space. The objective of the analysis is to define and identify the main themes that will be examined in the policy document. The aim of spatial mapping is to identify opportunities and conflicts at the spatial level by cross-referencing different uses with each other, and cross-referencing different uses with the marine ecosystem. The interaction analysis was based on a primary analysis carried out by the planning team members, using two main tools: The first is the relationship matrix between marine users outlined in four types of interaction (opportunity, matching, conditional matching, and conflict). The second, a spatial analysis of these interactions in a series of maps, examining the interrelationships for each subject matter separately.

- Identification of the main themes that must be dealt with in the formulation of the spatial policy, in accordance with both the insights made evident in the current situation analysis and with the defined vision and the goals of the policy document.

- Formulation of conceptual alternative policy options based on literature review, definition of the vision and overarching goals of the policy document, as well as, the spatial analysis of interactions and the policy themes. Alternative options are proposed on two complimentary yet different levels: spatial options to development and conservation, and policy measure options adaptive to each of the spatial option. Upon the completion of the examination of the factors detailed above, it was found that the policy should be adapted to the existing variability in the maritime space. Accordingly, the policy document determines a level of detail and various policy tools for each topic. This difference is expressed both on the spatial level (between different areas in the sea), in relation to the various topics, and in relation to the time dimensions (short / intermediate / long term).

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4 The interaction between the existing uses and components or those approved in detailed plans or proposed under thematic master plans (marine reserves and marine agriculture) was examined.
Formulation of conceptual alternatives
The proposed policy combines chosen options in each topic

Space vs Management tools
- Differential Policy
- Policy Tools
- Spatial Policy

Resolution
- Detailed / General
- Perspective
- Uniform

Time range and flexibility
- Closed
- Partially Open
- Open and Updated

Maritime policy Management
- Combined
- Marine Space Management
- Kiss and ride

Cementing a policy
- Differential Integration
- Administration
- Without Anchor
- Statutory Anchoring

Development approaches
- Balanced
- Business as Usual
- Preferential
- Address All

Full reports are available for review on the website of the Planning Administration\(^5\). It should be noted, that the spatial information presented in the map atlas and the mapping of the interactions are correct to the point at which they were made, and have not been updated with regard to the changes that occurred in the maritime space following the preparation of the various maps. In general, all documents of Phase 1 are working documents and have undergone various alterations resulting from developments and changes that have occurred after their written date and in light of new insights emerging during the work process.

\(^5\) http://www.iplan.gov.il/Pages/Maritime_space/policy.aspx
The following are some examples of the outcomes of the spatial analysis of interactions. The interactions were divided into several categories:

- The two examined overlapping uses did not show any apparent interactions

- **No match - conflict:** the two uses cannot coexist in the same space.

- **Conditional matching / Limitations:** The two uses can coexist, with limitations on the manner of use, time of use or location

- **A match** between the two examined uses thus can coexist without setting conditions or limitations

- **Opportunity:** The overlap between the two uses creates potential for one of them

- **Pollution Potential:** The use tested can result in possible impact on the marine ecosystem in the water column. Has been marked within the limits of the tested use because there is insufficient information to assess the range of impact

The spatial mapping was followed by a written analysis describing the interaction.
The area of the lease does not represent the actual size of the area. The information presented is correct as of the time the map was prepared, and is not updated with regard to changes that occurred in the maritime space after the map was drawn up.

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Themes raised from current situation analysis

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An analysis of the existing situation and of the interactions has raised a number of issues, which the proposed policy address

1. The need for a comprehensive national view of the maritime space:

A. The maritime space, is multidimensional and dynamic, and therefore, the policy must be adapted to its unique character.

B. The maritime space is characterized by weak governance, in the absence of adequate coordination in the aspects of planning and implementation, and in the absence of coordination and pooling of resources in enforcement. Also, in a series of areas, there is a lack of an overarching vision and setting of priorities at the national-strategic level. This situation makes it difficult to realize the existing economic potential in the marine area and jeopardizes the functioning and health of the ecosystem.

C. The marine space lacks a comprehensive marine monitoring system in a variety of parameters. A monitoring system can provide reliable and accessible data. Such system is a necessary condition for developing various sectors of activity at sea and understanding the marine ecosystem and the changes occurring in it. The extent of the contribution and effectiveness of the monitoring to the different needs depends on the formulation of an overarching vision and on the monitoring system policy. These will be based on the needs identified by defined priorities regarding the type of space, time and monitoring. The monitoring system should also provide the data required to support detailed national policy formulation and the implementation of regulations on various issues at sea.

D. The collection, transparency and integration of various types of data about the maritime space is essential for advancing development and research and for formulating an effective policy for the management of this area. Currently, information is collected by various bodies, and much of it is inaccessible to the general public, researchers and development factors.

E. Shortage of marine sediment, in relation to the needs of the economy, is expected to develop a national problem later in the 21st century, given the expected increase in consumption of this vital resource. Marine sediment is a scarce resource and currently is not managed based on a comprehensive and long-term vision that can make the most of this resource while preserving marine and coastal environment.

G. An adequate infrastructure is required for training personnel in the maritime professions of technological, engineering and marine environmental sciences. This framework is lacking, even though it is an essential component in encouraging Israel’s "blue growth". Its absence may become an obstacle for further development of the economic potential of the sea.
2. The need for planning and defining the system of rules for development and activity, with regard to all users of the maritime space:

A. The definition of an agreed set of rules for all users at sea is a central component of maritime policy. It can be formulated using policy and spatial tools.

B. From the mapping of all currently existing and approved uses\(^8\), we can learn about the present-day density in the marine area, especially in territorial waters. This raises the need for regulating maritime space. It should be noted that although human activities have a greater impact on the shallow marine ecosystem along the shorelines, in recent years, human activity has further expanded outward, potentially impacting the open deep sea.

C. Whenever interaction between stakeholders includes conflicts between users, the ability of the state to economically exploit marine resources is impaired. Such cases may endanger vital national infrastructures such as: ports; desalination; marine transportation; internet communications; energy production; etc. This reinforces the need to regulate maritime space and to formulate codes for user interactions. Since all marine resources cannot be expressed in precise economic terms, a “free market” mechanism cannot provide the solution to the required balance and therefore policy and regulation are needed for the maritime space.

D. Alongside human activity, nature conservation has been identified as a central factor, requiring regulations for the interaction that nature conservation may have with other activities and uses at sea.

\(^8\)The mapping of the requests and requirements of the various users of the marine area in their entirety reveals that in the erasing of overlapping areas (used by different users) the total demand for sovereign waters area is 3,240 square kilometers (81% of the area). The significance of the data is that in the event that the policy document anchors the entire range of desires and plans of the various stakeholders and interests at sea, without examining the degree of suitability or necessity, the space is insufficient.
3. A comprehensive and unified framework providing the varied responses required to all activities and uses of the marine area:

A. The maritime space is characterized by a multitude of uses and activities of various types, which operate for different periods of time and at different times, under different regulatory frameworks. These uses have a different effect on their environment. In light of this, there is a need to define a comprehensive framework for the various activities and uses.

B. Some of the uses at sea already have relatively comprehensive and detailed regulations, such as the planning for natural gas reception facilities and the laying of the associated piping or the regulations relating to the construction and operation of desalination plants. On the other hand, there are areas where regulation is lacking or does not exist at all.

4. The need for a policy that prioritizes areas constituting the basic components of the national strategy for the maritime space:

A. Geopolitically, the State of Israel "is an island nation" whose economic dependence on maritime trade is crucial. Approximately 99% of the volume of trade in Israel is carried out by sea. Israel's ports are within a day of sailing from the Suez Canal; a fact that expresses the potential for the expansion of docking activity in Israeli ports and their functioning as cargo ports.

B. Hydro-carbon production is economically and strategically important to the State of Israel and has benefits in ensuring energy independence and in the environmental benefits of reducing air pollution.

C. Security and protection of maritime space from threats to maritime infrastructures and to different sectors of activity, allows economic activity in the maritime space. Israel's dependence on shipping as the only gateway to the import and export of goods and fuels, together with dependence on natural gas as a major energy source, emphasizes the importance of maritime security and protection.

D. Given the importance of shipping, hydrocarbon production, and security, and the need to ensure their future optimal functioning, these sectors are a dominant component of the policy document.
5. The need to protect natural resources and heritage:

A. The natural environment of the marine environment includes all the dimensions of the sea space (the seabed, the water column and the sea) and therefore interacts with all the marine users and activity, in at least one dimension.

B. Some of the interactions with the natural environment have potential for regulation (by rules of action and by implementing considerate and sensitive planning to the environment); of which some are systemic and spatial, and others local or site specific in character and influence.

C. Pollution of sea water poses a threat to desalination capacity, fishing and aquaculture, and the existence of tourism, sports and recreation activities at sea and seashores. The consequences of pollution are particularly severe given the geographical structure of the Mediterranean Sea and its ecological sensitivity, as an enclosed sea; hence the commitment to reduce the pollution loads entering it. Maintaining the quality of sea water and preventing pollution from various sources is a fundamental principle in maritime space planning worldwide.

D. The State of Israel does not have an overall policy for the preservation of the natural values of the marine environment, and the gap between the protection of natural resources in the marine environment and those on land is prominent.

E. In the area of offshore activity, such as fishing, a policy is needed that signifies a shift from the traditional short-term approach of developing the fishing industry to maximize fish landings, to a long-term approach of restricted fishing to conserve marine fish stock and the natural environment.

F. The antiquities and maritime heritage of Israel are considered cultural treasures of mankind and the State of Israel. They are of cultural, scientific, economic and touristic value. The findings of archaeological surveys show that the spatial distribution of important archaeological discoveries is not limited to land and shallow waters. Notwithstanding the aforementioned, and even though most of the ancient sites at the land and sea are known and recognized, only their terrestrial segments were secured in planning, while most of the maritime areas which contain antiquity, were left unprotected.
The increasing density on land, together with the growing exploitation of sea resources and the continuous improvement of engineering and marine environment technologies, will in the next decade increase the relevance of establishing marine platforms for infrastructure facilities in Israel. The establishment of offshore platforms for infrastructure installations at sea will reduce conflicts between national infrastructures and urban development in coastal population centers.

6. The need to strengthen the connection to the sea:

A. The maritime space is the only open border of the State of Israel, and it provides a variety of possibilities for recreation and leisure in a large open space, in a crowded country.

B. It is possible to greatly benefit from activities that create an interface between the general public and the maritime space and increasing demand for them. Therefore, there is a cultural and public importance for creating the conditions for strengthening and expanding these activities. These activities include sports and marine education, leisure and recreation activities, public activities for nature conservation, research, and conservation of heritage and archeology treasures, etc.

C. Increasing awareness of the sea, with its various components, reinforces the attractiveness of marine studies and the training of professional personnel in the maritime professions, in the technological and engineering fields, in the shipping industry and in the field of marine environmental sciences. All of which, constitute an essential component of the blue growth process in Israel’s maritime space.

D. Interest in marine education and sport is steadily rising. Nevertheless, the issue is not entirely managed at the national level, as some activities are handled at the local municipal level. It appears that in the absence of national management and promotion of these areas the utilization of marine resource for public welfare is not optimal.

7. Response to terrestrial uses potentially hazardous or imposing restrictions on their environment:

The increasing density on land, together with the growing exploitation of sea resources and the continuous improvement of engineering and marine environment technologies, will in the next decade increase the relevance of establishing marine platforms for infrastructure facilities in Israel. The establishment of offshore platforms for infrastructure installations at sea will reduce conflicts between national infrastructures and urban development in coastal population centers.
BASIC PRINCIPLES OF THE POLICY RELATING TO THE MARITIME SPACE

The policy is based on accepted current worldwide approaches to marine planning and management. These approaches are divided into policy and management approaches and conceptual approaches. These are not conflicting or competing approaches, but are complementary to the three necessary elements for planning and managing the maritime space: society, economics and the environment. These three elements of sustainable development and sustainable planning of the maritime space will ensure the coexisting of all interests through mutual empowerment.

Included among the policy approaches are the integrated Marine Policy (IMP) approach, the Marine Spatial Planning (MSP) approach and the Integrated Coastal Zone Management (ICZM) approach. Perceptual approaches include the Ecosystem-Based Management approach (EBM) integrated with IMP and MSP approaches, the Ecosystem Services Approach, and the Blue Growth approach.

The main principle on which the proposed policy is based is the creation of proper spatial and thematic balance between the various uses of the sea in a manner that will enable their optimal functioning alongside with the preservation of the ecological values of the marine environment. For this purpose, the policy should be based on interdisciplinary planning that integrates different fields of knowledge, while identifying the connections between them.

Underlying this concept is the recognition that effective use of the marine resource, of natural and economic values, requires the implementation of a comprehensive vision for maritime space, through a policy plan and management mechanisms that balance the diverse interests of the various stakeholders.

Another key principle is the cooperation of stakeholders in the maritime area, through adhering to their mode of operation in time and space, identifying their limitations, and understanding existing trends in their field. Maritime space, having a dynamic character, experiences many changes, including frequent changes in needs and demand for its resources; requiring the update of the management mechanism, monitor and control. Accordingly, the resulting plan will not be a closed policy plan but an interactive, living document that revises and amends itself in accordance with the amassed knowledge and experience from the management, control and monitoring mechanisms. The program will be updated according to technological changes, new knowledge, events and changes in national priorities.

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9 The EU’s “Blue Growth” initiative is a strategy for maximizing the economic potential of the sea. It is designed to support sustainable growth in the maritime space and marine sectors as a whole by investing in innovation and development; long-term planning; monitoring and evaluation; and sustainable resource utilization.
The basic principles in the planning and management of maritime space are:

**A. Multiple use of space**
Maritime space is a unique, multidimensional environment characterized by multiple values, resources and uses; requiring to contend with many challenges and changing conditions of uncertainty. Development pressure, intensifying use density and a steady rise in conflicts raised the need to formulate a broad and integrative view of the maritime space, and emphasized the need for intelligent planning of this space and its balanced management. In accordance with this principle, effective utilization of the sea areas should be ensured, as far as possible. This can be done by utilizing a multi-purpose use of the space and overlap users. The principle will be implemented using the multi-dimensionality of the sea-floor, water column and water surface. Another tool that enables overlapping at sea is a multi-purpose time line. The multi-purpose use of the marine areas will indicate preferred uses of special importance.

**B. Precautionary Principle**
The precautionary principle states that when there is a reasonable concern that human actions will cause serious long-term harm to human health or the integrity of the entire ecosystem in the long run, steps should be taken to prevent or reduce activity even when the information gaps do not allow for an accurate assessment of the extent of the damage. Since the effects of human activity on the marine environment are not fully known to us, and since the marine environment is dynamic, and therefore very vulnerable, the precautionary principle is particularly important to the sea. Its objective is to utilize the marine environment in a cautious manner and with the best possible means to prevent damage to the environment. The implementation of this principle cannot prevent the development of human activity due to the scientific uncertainty regarding its implications. Its purpose is to examine the expected effects and, to the extent that significant impacts are expected on the environment, try to prevent or reduce their damage.

**C. Sustainable Economic Development**
The sea is an important source of steadily growing varied economic activity. The sea and its economic resources are a broad platform for economic development, innovative in parts. Planning and managing the space in accordance with the "Blue Growth" approach will ensure continued economic development in the future, including by considering the range of resources and uses and ensuring the optimal location for each of them, while preventing negative effects on other uses.

**D. "Marine sustainability", planning and management based on the needs of ecosystems**
Natural marine systems are irreplaceable and must be protected in both the national and international contexts. Since the early 1990s, this principle has been established in international conventions, policy documents for marine areas of many countries, and in some countries also by legislation. Most human economic activity in the sea is based on the functioning of the marine ecosystem, and in order to support the realization of the economic benefits embodied in the sea, the marine ecosystem must be protected and adverse effects on the marine environment minimized. It should be noted that harm to the health and stability of the marine environment means damage to the marine-related economic sectors. The guiding principle of Ecosystem Based Management (EBM) is that the needs of ecosystems to remain healthy, productive and offer sustainable services dictate the management of human activity. This approach is not limited to the stabilization and preservation of ecosystems only. The approach is characterized by a broad view that incorporates all uses of marine resources and seeks to manage them collectively and in parallel to optimize their current and future utilization. An informed EBM approach requires multi-parameter monitoring to enable the understanding of the nature-based changes in the same context monitor man made changes.
E. Building with Nature
This principle is based on the awareness that avoiding damaging marine areas of high environmental value and protecting reserve areas is not sufficient. According to this approach practical activities must also be taken in order to create a healthy and stable marine system. As such, the principle of "building with nature" promotes the utilization of development activities at sea as a ‘lever’ to improve and enhance the marine ecosystem by creating new or rehabilitating disturbed habitats.

F. Maritime Safety - Safety and prevention of risks in maritime space
The range and interaction of human and ecosystem-based activities taking place at sea create various risks for both man and the environment. Prevention, or at least a reduction, of these risks is a guiding principle of Maritime Safety planning and management of maritime space and it is expressed the following aspects:

- Navigational safety aspects
- Preparing for emergencies - both resulting from natural disasters (tsunamis) and marine pollution events
- Protection from pollution to maintain high quality of sea water
- Protection of coastal cliffs and beaches
- Protecting the security of the country in general and of essential infrastructures in the sea in particular
- Protection of natural values from pollution, destruction and damage

G. Raising awareness of the sea
Raising awareness and deepening knowledge of the sea, developing marine professions, and familiarity with areas related to its planning and management are important elements in achieving all planning objectives; including the utilization of the sea based economic resources while maintaining nature conservation goals. Tourism and leisure activities are additional means of strengthening the connection between the general public and the sea.

H. The sea as a public space and asset
The sea provides cultural and other services, such as recreation and leisure in nature; aesthetic, religious and spiritual values; educational activities; and scientific research. This principle includes the physical area itself, as well as the physical access to the sea and its shores and the open view of them. These are established in the Law for the Protection of the Coastal Environment, in NOP 13, in the National Outline Plan for Coast and more.

I. Resilience, initiative and ongoing study as a response to planning under uncertainty
Maritime space is characterized by great uncertainty, and many parts of it are still within the realm of the unknown. Alongside the uncertainty and the information gaps regarding the environmental and physical conditions of the marine space, the rate of utilization of sea resources is increasing, and is expected to escalate as a result of the land shortage, gas discoveries in the sea and other potential undiscovered natural marine resources. In order to formulate a policy under these conditions, a living document is needed to meet changing human needs while preserving natural marine resources in a manner that will ensure sustainable development; that is a policy that requires resilience and initiative.
Multiple use of space

Precautionary Principle

"Marine sustainability", planning and management based on the needs of ecosystems

Building with Nature

Maritime Safety - safety and prevention of risks in maritime space

Raising awareness of the sea

The sea as a public space and asset

Resilience, initiative and ongoing study as a response to planning under uncertainty
Future progress
STRUCTURE OF THE POLICY DOCUMENT FOR MARITIME SPACE

Currently, the formulation of the policy principles for all the sectors and for the planning and management of the maritime space is being finalized for approval by the planning institutions. The outline proposes the establishment of a management body and a designated planning institution. These issues will be specified and published upon the approval of the policy document.

A. The first chapter - policy principles for management of the maritime space
Includes facets that allow the Israeli economy to maximize the benefits derived from this area, while maintaining the marine environment. This chapter relates to the following components: the management of marine space; marine planning; national monitoring; management and information accessibility; professional training; and blue growth.

B. The second chapter - policy principles for activity in maritime space
Including policies and spatial uses and activities taking place in large areas without fixed component of development. This chapter refers to the following activities and uses: security; shipping and commerce; leisure and recreation, education, marine sports; and fishing.

C. The third chapter - policy principles for development of marine space
Including policies and spatial uses and activities that require a fixed area and establishing infrastructure and facilities for operational purposes. This refers to following uses and activities: infrastructure; marine and coastal structures; aquaculture; and hydro-carbon production.

D. The fourth chapter - policy principles for protection of environment and natural resources
Includes policies and spatial aspects aimed at preserving the natural marine environment and its heritage values. This chapter relates to the following components: nature conservation; national reserves; antiquities and heritage; Sediment resources; and contending with sea pollution and its prevention.

E. The fifth chapter - a comprehensive spatial policy map
Including a detailed compilation of all uses, search areas, limitations, and additional spatial components in the existing and planned maritime areas. This chapter also includes thematic maps in accordance with the policies contained in the document.

<table>
<thead>
<tr>
<th>1ST CHAPTER</th>
<th>Management of the maritime space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management and planning</td>
<td></td>
</tr>
<tr>
<td>Vocational training</td>
<td></td>
</tr>
<tr>
<td>Blue Growth</td>
<td></td>
</tr>
<tr>
<td>National Monitoring and information accessibility</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2ND CHAPTER</th>
<th>Uses and activities without a permanent area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping and maritime trade</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td></td>
</tr>
<tr>
<td>Leisure and recreation, education and sports</td>
<td></td>
</tr>
<tr>
<td>Fishing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3RD CHAPTER</th>
<th>Uses and activities requiring a fixed area, infrastructure and facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbon production</td>
<td></td>
</tr>
<tr>
<td>Linear infrastructure</td>
<td></td>
</tr>
<tr>
<td>Marine and coastal structures</td>
<td></td>
</tr>
<tr>
<td>Aquaculture</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4TH CHAPTER</th>
<th>Protection of natural resources and heritage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature conservation</td>
<td></td>
</tr>
<tr>
<td>National Parks</td>
<td></td>
</tr>
<tr>
<td>Antiquities and heritage</td>
<td></td>
</tr>
<tr>
<td>Sediment resources</td>
<td></td>
</tr>
<tr>
<td>Pollution</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5TH CHAPTER</th>
<th>Compilation and thematic maps</th>
</tr>
</thead>
</table>