Contribution by the Republic of Turkey

to the preparation of the concept papers on the Themes of (2) and (4) for the 2022 UN Ocean Conference

(2) Managing, protecting, conserving and restoring marine and coastal ecosystems

The change in the functioning of the global economy and the increase in the use of natural resources in parallel with the increase in overpopulation threaten natural ecosystems, create severe problems for living species and create global problems such as climate change. Correspondingly, the unplanned use of marine and ocean resources and climate change negatively affects the marine ecosystem.

It needs to be managed in an integrated and sustainable way that examines the social, environmental, demographic, and economic trends affecting the oceans and seas. When viewed from this aspect, sustainability in coastal areas means the reflections of sustainable development policies in the urban area, as ensuring a balance and integration between economic, social, and environmental policies positively affects the quality of life of coastal residents. This means improving the quality of life of coastal residents and demonstrating that the coastal ecosystem is healthy.

Climate-informed Marine Spatial Planning (MSP) is a participatory process that considers current and future climate risks and opportunities during design, planning, and implementation. Climate considerations in MSP harness the economic opportunities of the decarbonization pathway while responding to the growing challenges of climate change through adaptive and integrated ocean management. In this context, coastal and marine areas planning will ensure that marine resources are carried out sustainably. It will also contribute to the preparedness of coastal cities for the adaptation process to climate change. It is crucial to take sustainable measures to reduce the adverse effects of risks and natural events that threaten coastal areas due to climate change and are likely to sea-level rise. In this, it is necessary to cooperate to develop appropriate and integrated plans for the management of coastal areas.

Climate change is affecting the marine ecosystem more and more every day. Herewith, National adaptation strategy and action plans play an essential role in the fight against climate change. These plans should evaluate the sectors together, including water resources management, agriculture, food security, ecosystem services, biodiversity and forestry, natural disaster risk management, energy, transportation, industry, urban, social development, and tourism sectors. During the planning phase, sectoral vulnerability and risks related to climate should be evaluated, and guidelines should be developed for the management of these risks, prioritization studies, and the implementation of these studies.

Marine ecosystems are already experiencing the redistribution of species and habitats due to the effects of climate change, as in particular, sea water warming. Decrease of species with affinity to lower temperatures and increase of thermophilic ones are expected. The shift in marine species distribution can also be exacerbated by the spread of non-indigenous species favored by changed oceanographic conditions. In this context, continuous monitoring of the water quality of the marine environment provides a better understanding of the changes. Furthermore, it contributes to taking the necessary measures to alleviate or reduce the effects

of pressures on the sea and ocean. It is substantial to monitor and generate data to protect, maintain, and restore the clean, healthy, and productive biodiversity features in the marine environment and our seas. Integrated monitoring and evaluation, monitoring of ecosystem components and the pressures and effects on them by the determined rational (simple, target-oriented, and regional) indicators on time scales, and evaluating the good environmental condition in the evaluation units are essential for the protection of the marine ecosystem.

Zero Waste – Blue Project has launched to protect the marine environment and support cleaning activities throughout Turkey during the tourism season. All citizens, non-governmental organizations, relevant institutions, and the media were invited to protect the marine environment and support awareness-raising activities. As a result, Ministry of Environment, Urbanization and Climate Change issued a legislation called "Circular on the Preparation and Implementation of Marine Litter Provincial Action Plans".

With this new legislation, the following actions are taken (in coordination with relevant institutions/organizations at the regional and national level) to tackle marine litter effectively; Preventing the formation of marine litter by taking special and locally taken precautions at the source Integrated and planned works for the disposal of existing marine litter and dissemination of training and awareness-raising activities at the national level.

Consequently, strategies and actions are needed at the local, national and international levels. Integration in ecosystems and other policy areas such as water management, disaster risk reduction, coastal zone management, agriculture and rural development, health care, urban planning, and regional development is vital. Actions should include technological measures, ecosystem-based measures, and measures to address changes. An integrated management strategy should be adopted that ensures the equitable, sustainable use and protection of land, water, and living resources.

Moreover, coastal areas are the most valuable natural resources while providing the uttermost economic value. Urbanization, industrialization, tourism and secondary housing represses the coastal characteristics, threating the coastal ecosystems.

While determining the ultimate principles of the planning systems, development of targets and strategies not only in the urban and rural planning areas, but also in the coastal zones should be given high priority among the development objectives. Integrated Coastal Zone Management (ICZM) and Planning is key to sustainable coastal zone management.

Turkey gives utmost importance to developing a new approach in the coastal zone planning and implementation, an integrated comprehensive strategy rather than separate and unrelated decisions, a strategic decision-making system intended to address the problems while including implementation and management stages of the physical planning, as well as to ensure protection-use balance for the coastal zones.

Turkey has been carrying out ICZM and Planning studies since 2007. ICZM Plans have been completed on 86.4% for the coasts of Turkey. By the end of 2022, the rate is expected to reach to 93.4%. These Plans aim to ensure effective, balanced use and protection of the coastal zones. The main difference in ICZM studies in Turkey is that these plans are more than an action plan, but rather have legal status and legal sanctions through Plan Decisions.

Expert evaluation reports such as Coastal Structures Report, Marine Transportation Report, Coastal Legislation Planning Report, Tourism, Fishery and Aquaculture Report, Bathymetry and Oceanography Report and Marine Ecosystem Report are prepared during the planning research period.

For example, in the Marine Ecosystem Report, for climate change adaptation and mitigation in coastal areas, policies, strategies and actions have been developed in order to address climatic events such as sea level rise, flood and flood potential, storm surge, river basin at the regional level. In this context, vulnerable areas are determined and classification of vulnerability to climate change has been done. Medium and long-term projections of areas exposed to disaster threats such as floods, overflow, and sea level rise are mapped by using Geographic Information System tools.

Life in marine environment produces third of the oxygen, supplies valuable protein and balances global climate change. Coastal ecosystems are special ecosystems, as they are the sudden transition zones (ecotone) where marine and land ecosystems intersect. In these Plans, we have the understanding that areas with high risk of eutrophication in coastal areas are also risky areas in terms of climate change. In those areas in terms of coastal projects, there should not be made any planning study.

In order to produce scientific data as a reference for plan decisions of the ICZM Plan and for location selection of coastal structures, statistical methods are used. The scientific data will help in restricting construction.

On the other hand, management of ecosystem-based fisheries should be considered for the protection of oceans and seas in order to ensure sustainable fisheries and to maintain marine resources.

(4) Making Fisheries sustainable and providing access for small scale artisanal fishers to marine resources and markets

In order make fisheries sustainable, Turkey is contributing to the implementation of the decisions adopted at international and regional fisheries management organizations (RFMOs) where she is a member, such as the International Commission for the Conservation of Atlantic Tunas (ICCAT) and the General Fisheries Commission for the Mediterranean (GFCM).

Turkey is also fighting against illegal, unregistered and unregulated fisheries on the basis of the FAO Code of Conduct for Responsible Fisheries.

In order to maintain and protect small-scale fisheries, since 2017, small-sized fishing vessel owners have been supported, provided that they do not increase their capacity and provide their methods and accurate, up-to-date and complete data for fishing.