Towards international cooperation in the development of Marine Spatial Plans for the North Pacific: economic, social, and environmental dimensions

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Outline:

Current Global Challenges

North Pacific Dimensions

What is Marine Spatial Planning (MSP)?

Basis for MSP in the Japan and Bering Seas

Expected result

Conclusion
**Current Global Challenges**

**Climate Change**

- Globally averaged combined land and ocean surface temperature anomaly

**Seismic activity**

**Disasters of the World**

Global environmental changes are closely connected with the resource security and political stability.

Political tension and environmental instability, failure of governance.

Need of formal mechanisms to control the World Ocean!

**Anthropocene**

anthropogenic impact on the nature

(V. Ryabinin, 2017)
North Pacific Dimensions

The Pacific Ring of Fire
A zone of high volcanic and seismic activity which covers 40,000 kilometres

90% of the world's earthquakes
over 450 volcanoes
75% of the world's active volcanoes

Japan Sea and Bering Sea are Large Marine Ecosystems influenced by natural forces, characterized by the Pacific Ring of Fire

Ecological problems of the trans boundary nature
- Decline of Biodiversity
- Increase of Pollution (nuclear, plastic and other)

- Political, ideological and economic differences of countries
- Overlapping claims

Socio-Economic
Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

MSP is a practical way to archive the sustainable use of marine space balancing ecological, economic & social interests.

A Step-by-Step Approach toward MSP, 2009
A step-by-Step Approach to Marine Spatial Planning

1. Identifying Need and Establishing Authority
2. Obtaining Financial Support
4. Organizing Stakeholder Participation

3. Organizing the Process through Pre-planning
   - Forming the Team and Developing a Work Plan
   - Defining Principles, Goals and Objectives
   - Specifying Boundaries and Time Frames

5. Defining and Analyzing Existing Conditions
   - Mapping Important Biological Ecological Areas
   - Identifying Spatial Conflicts Compatibilities
   - Mapping Existing Areas of Human Activities

6. Defining and Analyzing Future Conditions
   - Mapping Future Demands for Ocean Space
   - Identifying Alternative Spatial Scenarios
   - Selecting a Preferred Spatial Scenario

7. Preparing and Approving the Spatial Management Plan
   - Identifying Alternative Spatial Management
   - Developing & Evaluating the Spatial Management Plan
   - Approving the Spatial Management Plan

8. Implementing & Enforcing the Spatial Management Plan Measures
9. Monitoring and Evaluating Performance
10. Adapting the Spatial Management Process

Indicates Stakeholder Participation in Step

Ehler, Douvere, 2009
Main Elements of MSP:

- Zoning of marine area
- Development of system of indicators of sustained marine use
- Revealing the types of the sustained marine use
- Analyzing the basic problems of marine users
- Defining environmental stability and the levels of the impact of activities on the marine area

Adapted from Arzamastsev, Baklanov et al., 2010
Characteristics of MSP:

**Ecosystem-based**
balancing ecological, economic, and social goals and objectives toward sustainable development

**Integrated**
across sectors and agencies and among levels of government

**Area-based**
designed for particular region

**Adaptive**
capable of learning from experience

**Strategic and anticipatory**
focused on the long-term management

**Participatory**
stakeholders actively involved in the process

Main MSP implementing target:

to resolve conflicts between activities and protecting the environment
Milestones of the MSP usage

Globally increasing demands for the MSP

Note: Surface Area of the World’s EEZs is ≈140 million km²

(V. Ryabinin, 2017)
International cooperation in the development of Marine Spatial Plans for the Japan Sea and Bering Sea is very important for conserve biodiversity and sustainable use marine resources, for the development and preservation of safe environmental management and political stability in the regions in the changing nature conditions.
General marine initiatives and legislation create an international umbrella framework for developing coherent national marine environmental policies.

Environmental protected regime is insufficient and fragmented:

- Great competition and duplication of effort among agencies and programs dealing with oceans.
- Financial support has not reached the expected level to meet the present and projected needs.
- Insufficient knowledge and awareness.
- Emphasis on political differences.
- No well-coordinated cooperative baseline studies and coordination in emergencies.
- No integration of data across the region.
- No agreed upon scientific criteria to determine the such terms as “prevent, reduce and control.”

and other...
What is the situation up today?

No formal infrastructure to bring about the critical mass of international collaboration in monitoring and research activities.

Weakness of regional harmony and responsibility on prevention transnational pollution.

Lack of ability to see national prospects in a changing world.
Approach

Using

- Experience, existing legislation, outputs and outcome of the existing environmental programmes
- International collaboration
- Synthesizes existing research, scientific knowledge and region’s countries capabilities

to develop the MSPs for the Japan Sea and Bering Sea
Benefits of MSP for the Japan and Bering Seas

**Expected result**

- **MSP is the goal and unifying idea**
- the mechanism to promote the rational distribution of cooperative baseline studies, efforts and funds
- the focal point for rationalizing the various international organization initiatives
- the mechanism of define and agreed the scientific criteria to determine the precise meaning of terms “prevent, reduce and control” in the control marine pollution
- the mechanism for economic grows and reducing the international economic gap in each country
- one way of reducing tension in the region
- the mechanism to see national prospects in the key of a changing world
- the mechanism of mutual assistance in emergencies and building cooperative marine environmental protection regimes
- the political and economic mechanism for the long-term sustainability in the regions and stronger relationship with regions countries
Possible way to start:

1. One of the Organizations may take the initiative to start preparing for the MSP

2. To establish a working group from among members of the functioning environmental organizations dealing with the problems of the region. The establishment of the Central Secretariat for the MSP

3. To identify the key tasks planning

4. To distribute the responsibilities of the organizations and deadlines

5. To accumulate the financial resources

6. To start preparations to establish informational-analytical base for MSPs

   for Japan Sea and Bering Sea, respectively
In modern conditions, it is very important to see the significant and decisive role of the international scientific community in conducting a constructive international dialogue for this process.
Main Output

The creation of a harmonious international union(s) in cooperative use of the marine resources and environment to turn these Seas from a zone of conflicts and disasters into zone of peace and prosperity.
Thank you for attention