

The background features a stylized map of the North Pacific Ocean region, including parts of North America, Alaska, and the Japanese archipelago. Two research vessels are overlaid on the map: one in the upper right quadrant and another in the lower left quadrant. The text is centered over the map.

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

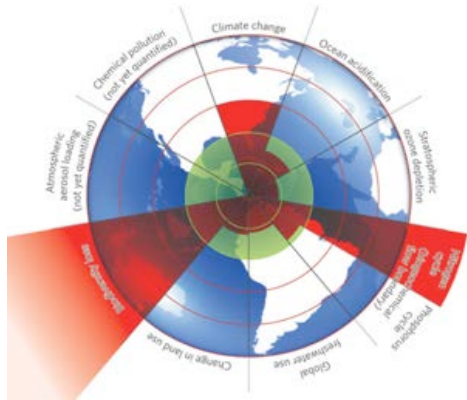
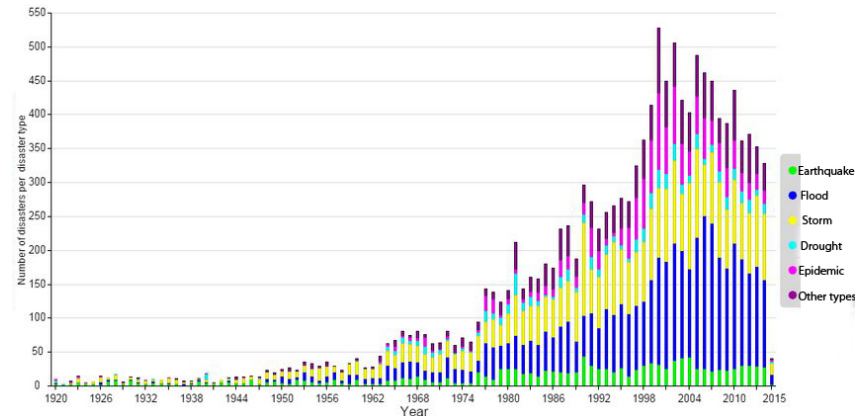
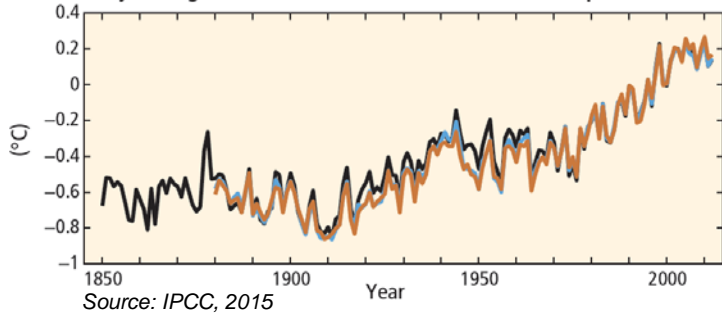
Current Global Challenges

Climate Change

Seismic activity

Disasters of the World

(a) Globally averaged combined land and ocean surface temperature anomaly



Anthropocene
anthropogenic impact on the nature

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!

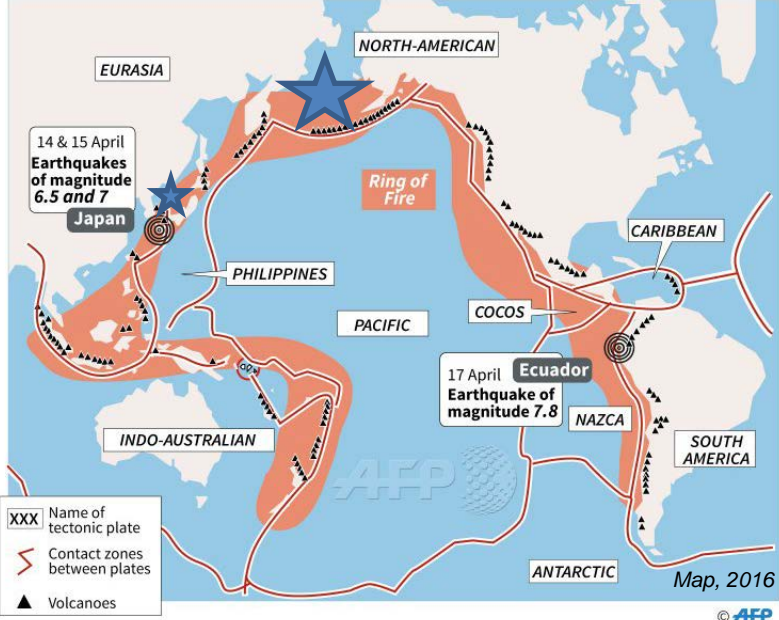
(V. Ryabinin, 2017)

North Pacific Dimensions

The Pacific Ring of Fire

coinciding with the edges of one of the world's main tectonic plates (the Pacific Plate)

A zone of high volcanic and seismic activity which covers 40,000 kilometres



90% of the world's earthquakes
over 450 volcanoes

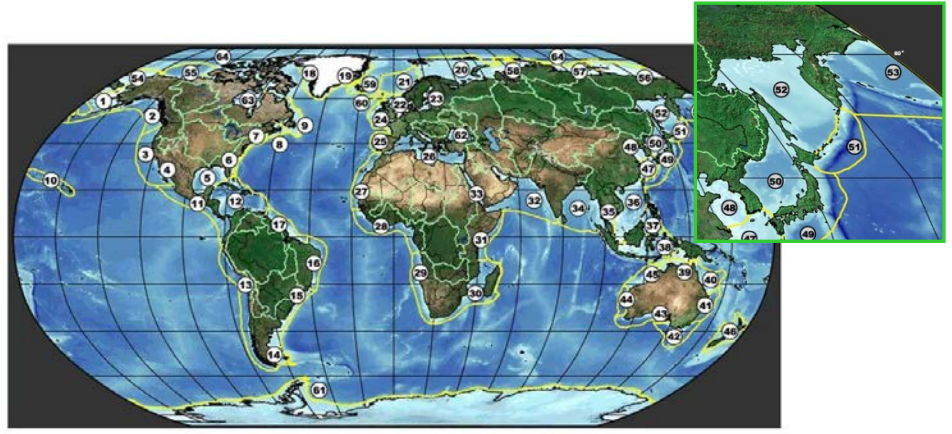
75% of the world's active volcanoes

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

Ecological **Socio-Economic**
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



- | | | | | |
|-------------------------------------|--------------------------|----------------------------|----------------------------|-----------------------|
| 1. East Bering Sea | 14. Patagonian Shelf | 27. Canary Current | 40. Northeast Australia | 53. West Bering Sea |
| 2. Gulf of Alaska | 15. South Brazil Shelf | 28. Guinea Current | 41. East-Central Australia | 54. Chukchi Sea |
| 3. California Current | 16. East Brazil Shelf | 29. Benguela Current | 42. Southeast Australia | 55. Beaufort Sea |
| 4. Gulf of California | 17. North Brazil Shelf | 30. Agulhas Current | 43. Southwest Australia | 56. East Siberian Sea |
| 5. Gulf of Mexico | 18. West Greenland Shelf | 31. Somali Coastal Current | 44. West-Central Australia | 57. Laptev Sea |
| 6. Southeast U.S. Continental Shelf | 19. East Greenland Shelf | 32. Arabian Sea | 45. Northwest Australia | 58. Kara Sea |
| 7. Northeast U.S. Continental Shelf | 20. Barents Sea | 33. Red Sea | 46. New Zealand Shelf | 59. Iceland Shelf |
| 8. Scotian Shelf | 21. Norwegian Sea | 34. Bay of Bengal | 47. East China Sea | 60. Feroe Plateau |
| 9. Newfoundland-Labrador Shelf | 22. North Sea | 35. Gulf of Thailand | 48. Yellow Sea | 61. Antarctic |
| 10. Insular Pacific-Hawaiian | 23. Baltic Sea | 36. South China Sea | 49. Kuroshio Current | 62. Black Sea |
| 11. Pacific Central-American | 24. Celtic-Biscay Shelf | 37. Sulu-Celebes Sea | 50. Sea of Japan | 63. Hudson Bay |
| 12. Caribbean Sea | 25. Iberian Coastal | 38. Indonesian Sea | 51. Oyashio Current | 64. Arctic Ocean |
| 13. Humboldt Current | 26. Mediterranean | 39. North Australia | 52. Sea of Okhotsk | |

Disaster Risk Reduction



United Nations Sustainable Development

United Nations Conference on Environment & Development
Rio de Janeiro, Brazil, 3 to 14 June 1992

AGENDA 21

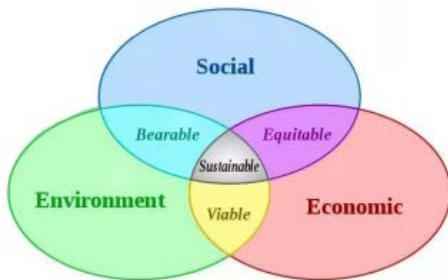
The 2030 Agenda for Sustainable Development

MSP

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

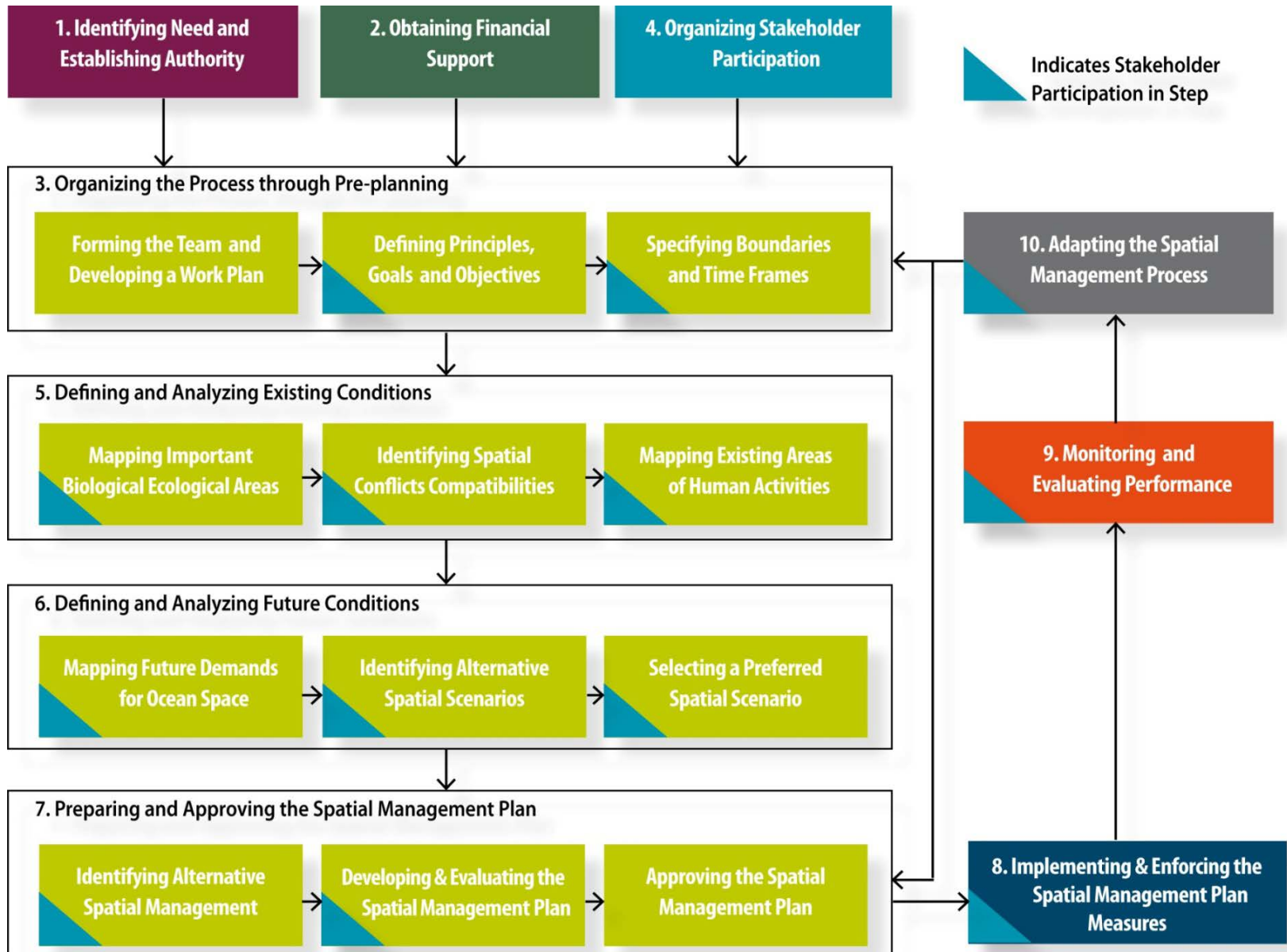


is a practical way to archive the sustainable use of marine space balancing ecological, economic & social interests



A Step-by-Step Approach toward MSP, 2009

A step-by-Step Approach to Marine Spatial Planning



Main Elements of MSP:

Zoning of marine area

Revealing the types
of the sustained
marine use

Development of system
of indicators of 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

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

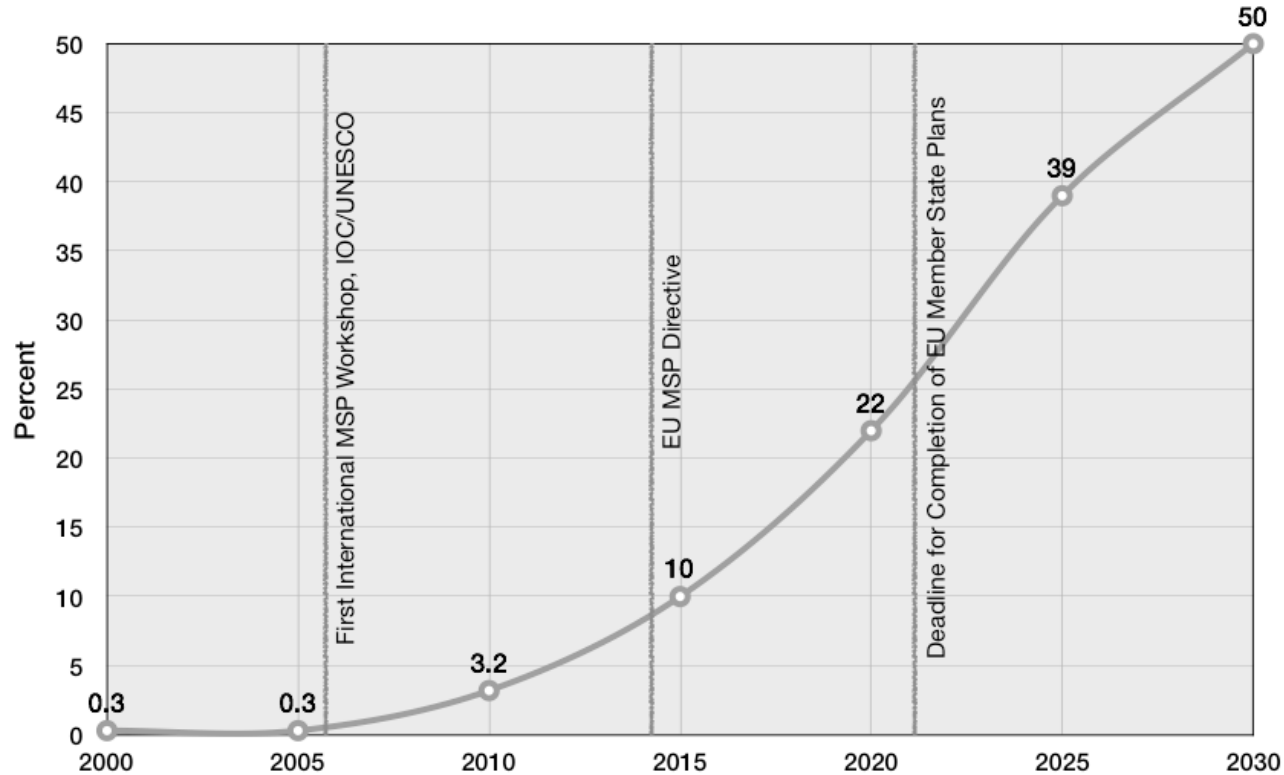
stakeholders actively involved in the process

Main MSP implementing target:

to resolve conflicts between activities and protecting the environment

Milestones of the MSP usage

Percent of Surface Area of World's Exclusive Economic Zones Covered by Approved Marine Spatial Plans



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

Globally increasing demands for the MSP

(V. Ryabinin, 2017)

2nd International
Conference on

**MARINE/
MARITIME
SPATIAL
PLANNING**

#MSP2017Paris

15-17 March 2017,
Paris, France

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 recourses, for the development and preservation of safe environmental management and political stability in the regions in the changing nature conditions



UNITED NATIONS



United Nations
Framework Convention on
Climate Change



THE LAW
OF THE SEA



Convention on
Biological Diversity

General marine initiatives and legislation create an international umbrella framework for developing coherent national marine environmental policies

Environmental protected regime is insufficient and fragmented



The Global Ocean
Observing System

➤ **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”**



GLOBAL CLIMATE OBSERVING SYSTEM



World Climate Research Programme



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

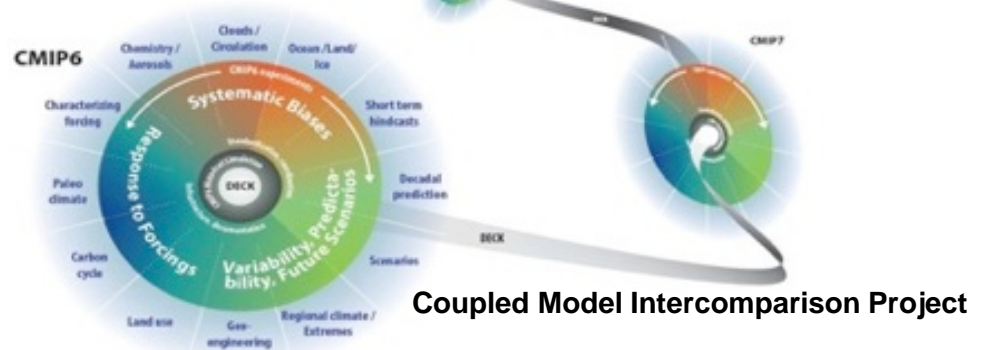
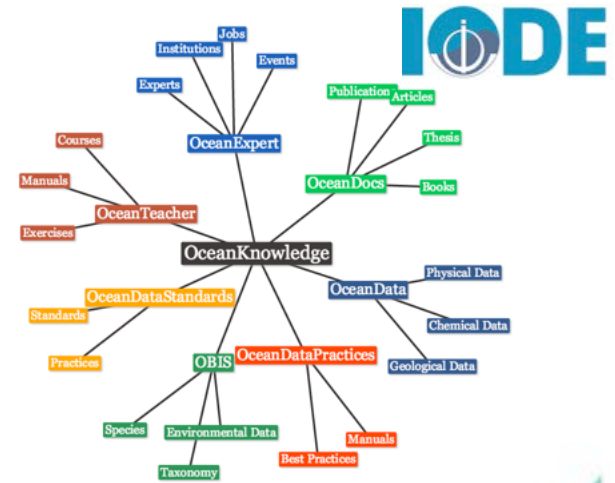
Approach

Using

- ❖ Experience, existing legislation, outputs and outcome of the existing environmental programmes

By

- ❖ 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

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