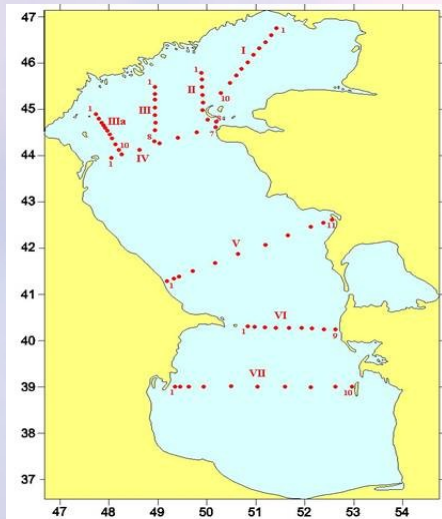


Organization of environmental monitoring in the
Caspian sea at national and international levels

Valeria Petrechenkova, Caspian Marine Scientific Research
Center,
Russia, Astrakhan

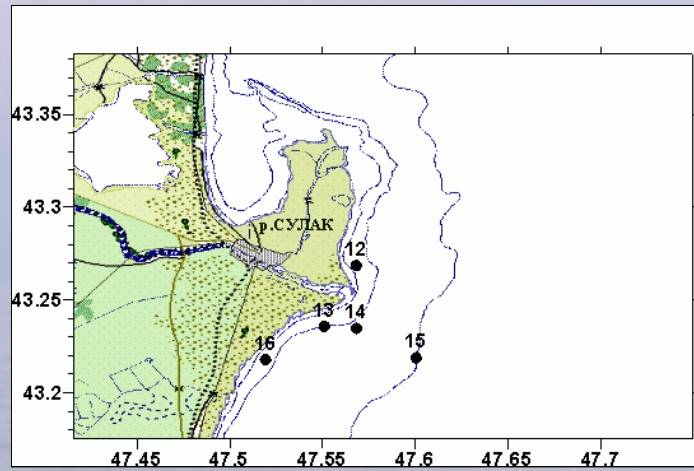
Elena Ostrovskaya, UNESCO -HE Institute for Water
Education,
Delft, the Netherlands



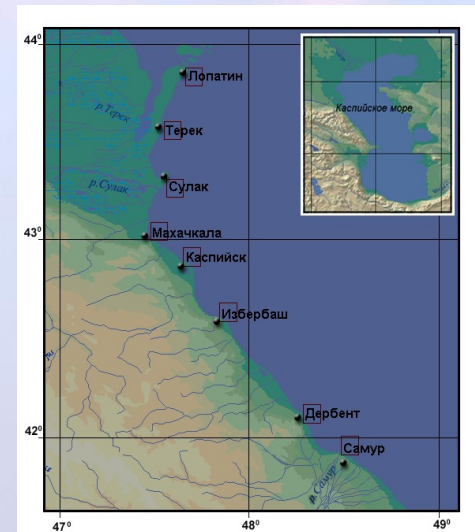


The location scheme of "century" sections on the Caspian seawater area

SULAK

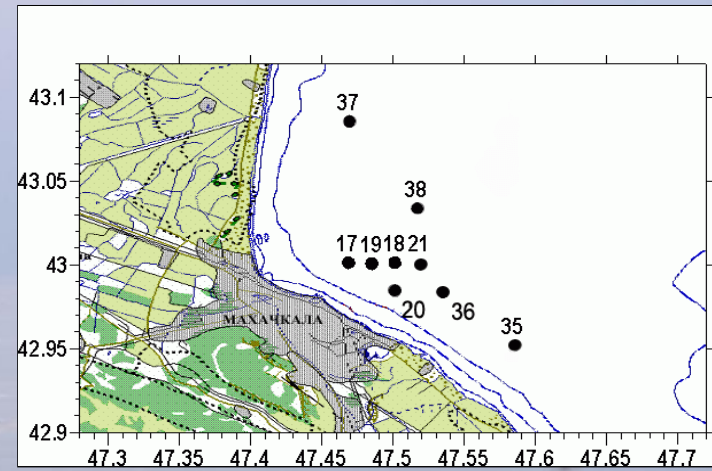


The location scheme of monitoring stations in the mouth coastal waters of the Sulak river and in the area of Makhachkala

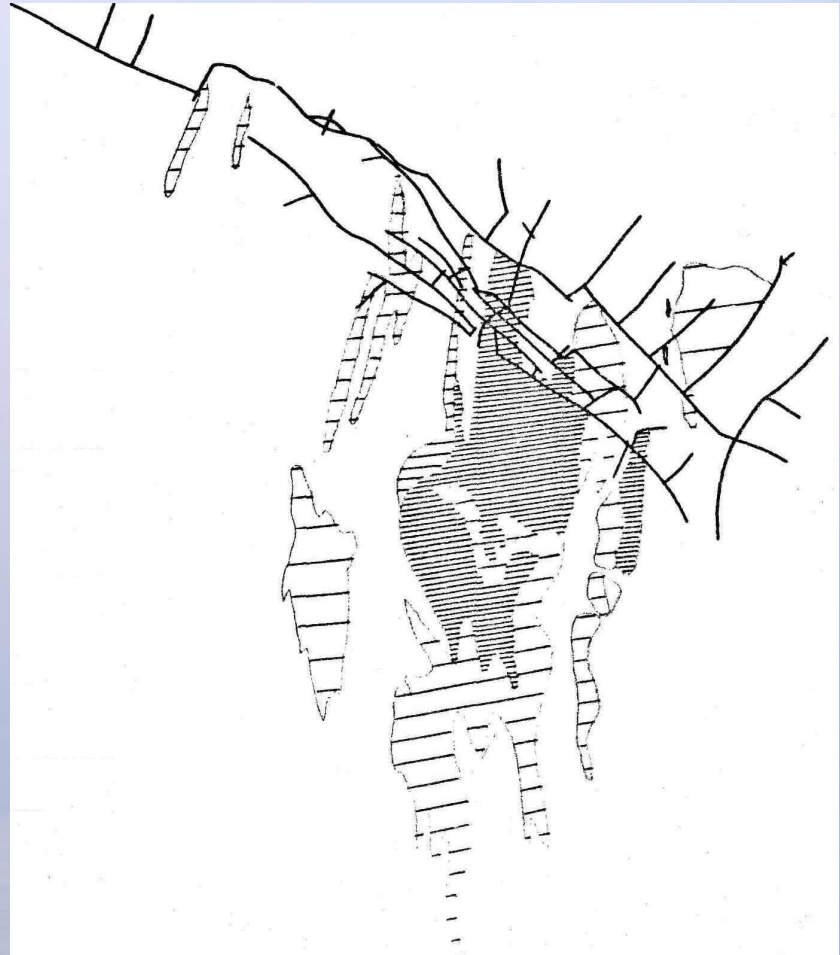


The location scheme of monitoring areas near the Russian coast of the Caspian Sea

МАХАЧКАЛА




Pollution of the sea surface with oil
products in the area of “Neftyanye
Kamni” deposit according to the
data of avia exploration dated
25.02.88

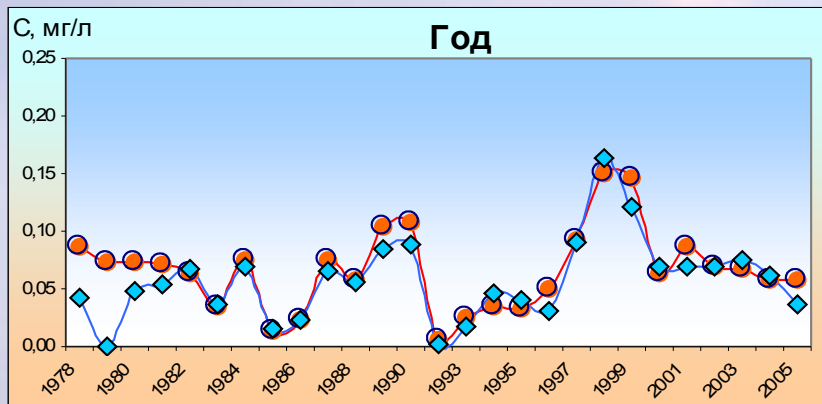


Maximum-permissible concentration (maximum concentration limit)
of some harmful substances
in the waters of the Caspian sea

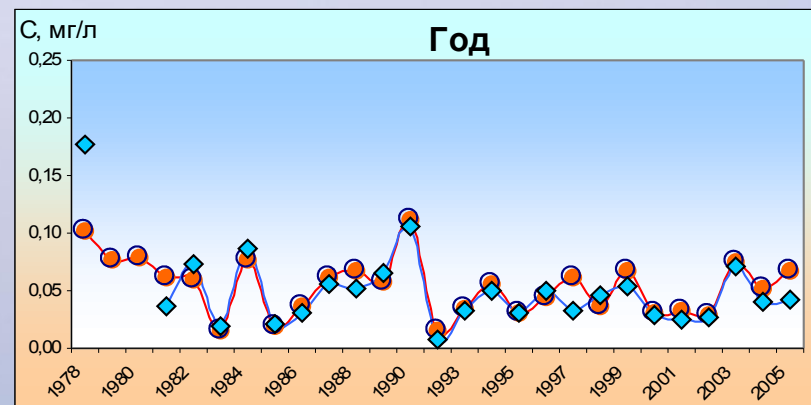
Substance	maximum concentration limit
Mineral oil, mg /l	0.05
Naphthalene, mkg /l	4.0
Benzapyrene, mcg/l	0.005
Copper, mkg /l	5.0
Lead, mkg /l	10.0
Mercury, mkg /l	0.1



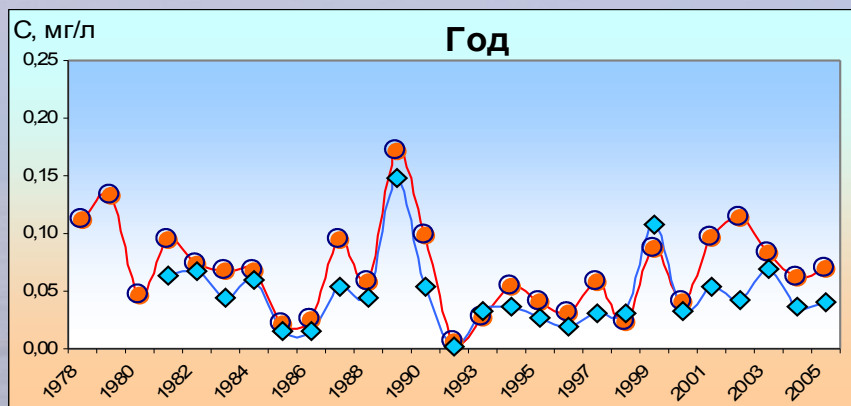
Stations located by the Russian coast of the Middle Caspian have long continuous series of observations of sea water pollution. The graphs show changes in average annual concentration of oil products in some coastal areas in Russia during the period of 1978-2005.



Terek



Mahachkala



Derbent

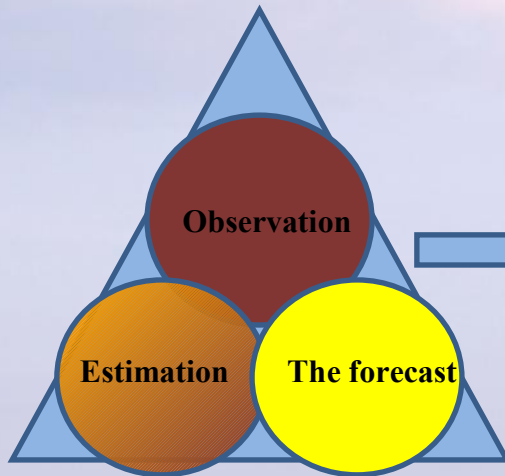


Framework Convention for the Protection of the Marine Environment of the Caspian Sea

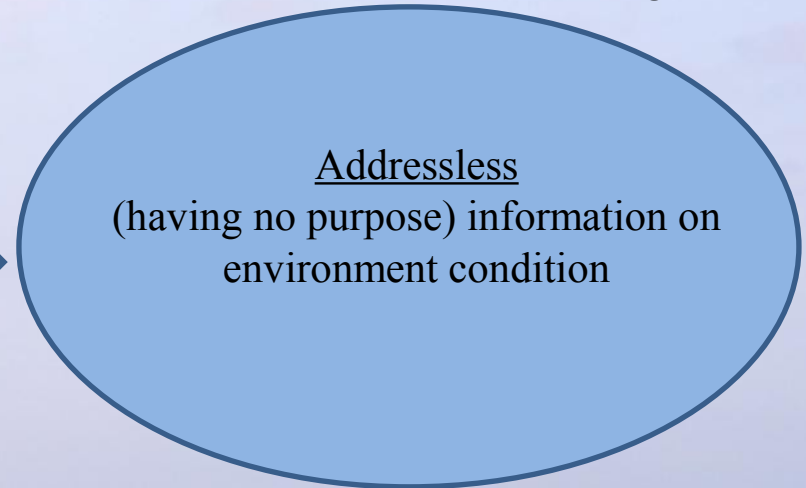
- Article 19. Monitoring
- The Contracting Parties shall endeavour to establish and implement individual and/or joint programmes for monitoring environmental conditions of the Caspian Sea.
- The Contracting Parties shall agree upon a list and parameters of pollutants which discharge into and concentration in the Caspian Sea shall be regularly monitored.
- The Contracting Parties shall, at regular intervals, carry out individual or joint assessments of the environmental conditions of the Caspian Sea and the effectiveness of measures taken for the prevention, control and reduction of pollution of the marine environment of the Caspian Sea.
- For these purposes, the Contracting Parties shall endeavour to harmonise rules for the setting up and operation of monitoring programmes, measurement systems, analytical techniques, data processing and evaluation procedures for data quality.
- The Contracting Parties shall develop a centralised database and information management system to function as a repository of all relevant data, serve as the basis for decision-making and as a general source of information and education for specialists, administrators and the general public.

Monitoring as a "transcendental object"

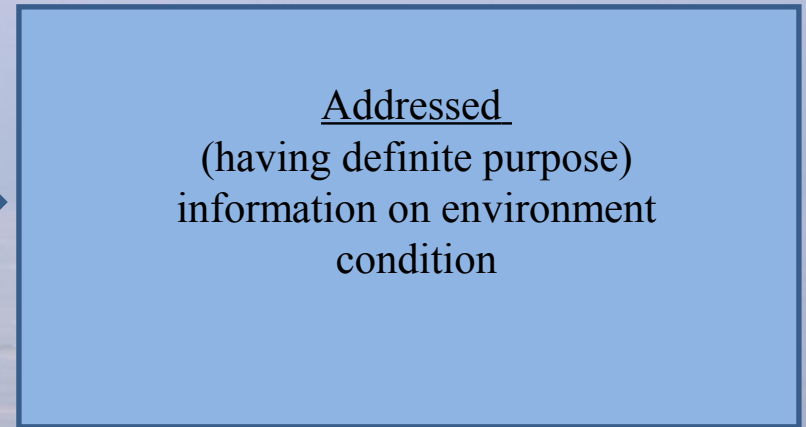
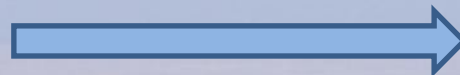
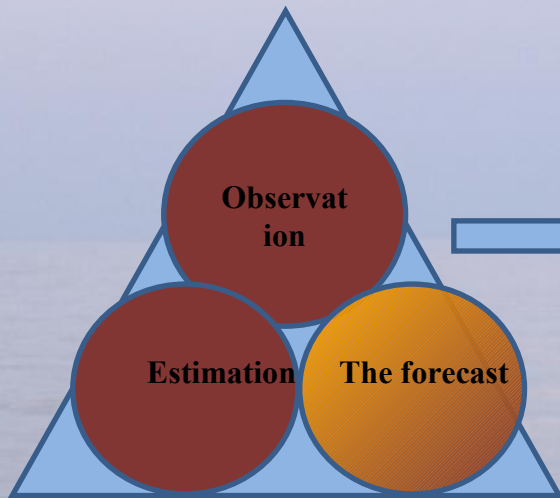
Condition of monitoring



Production of monitoring



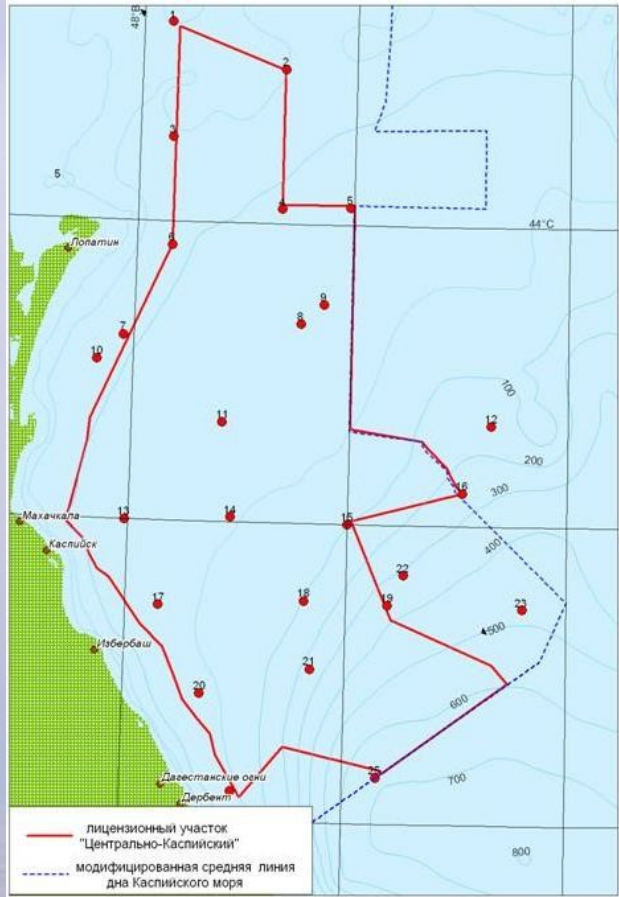
Monitoring as "the thing for all"



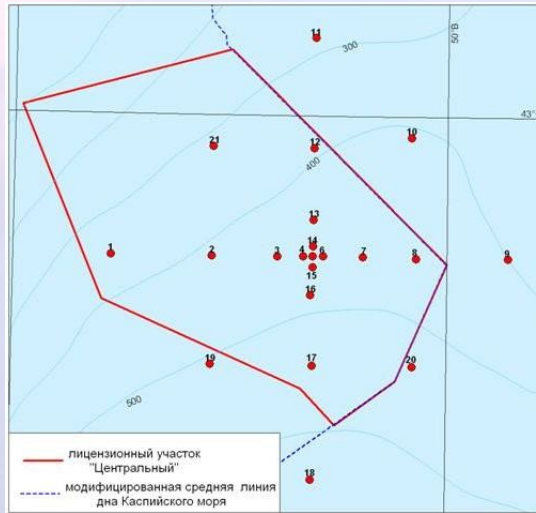
Monitoring of the Caspian sea water area, adjacent to Russia

Kinds of monitoring	The organizations carrying out monitoring	Measured parameters of environment	Water areas under observation
Monitoring of the sea environment	Federal service of hydrometeorology	Physical, chemical	All water area
Monitoring of bioresources	Federal agency on fishery	Biological	All water area
Industrial monitoring	Oil-and-gas company	Physical, chemical, biological	Separate areas

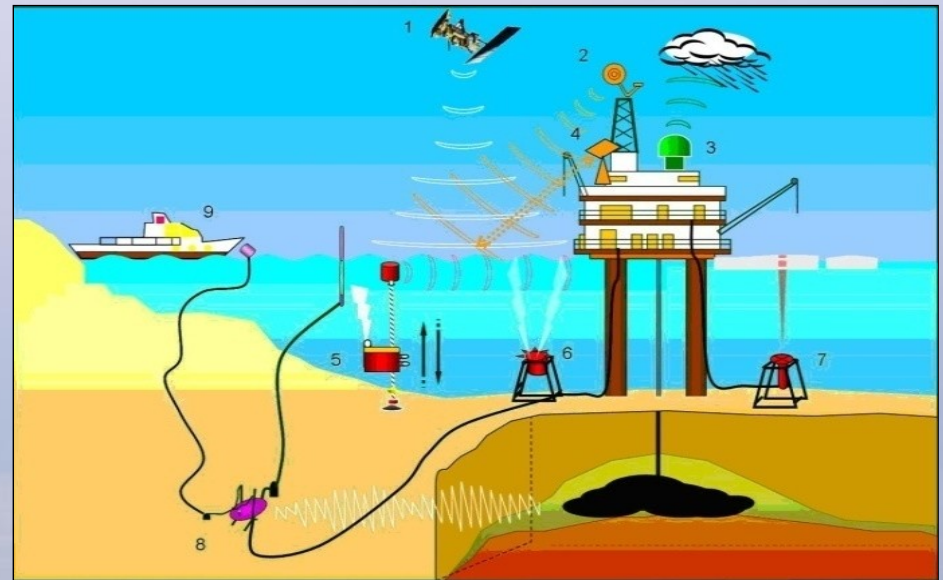




Location scheme of the stations on the licensed area "Central Caspian"

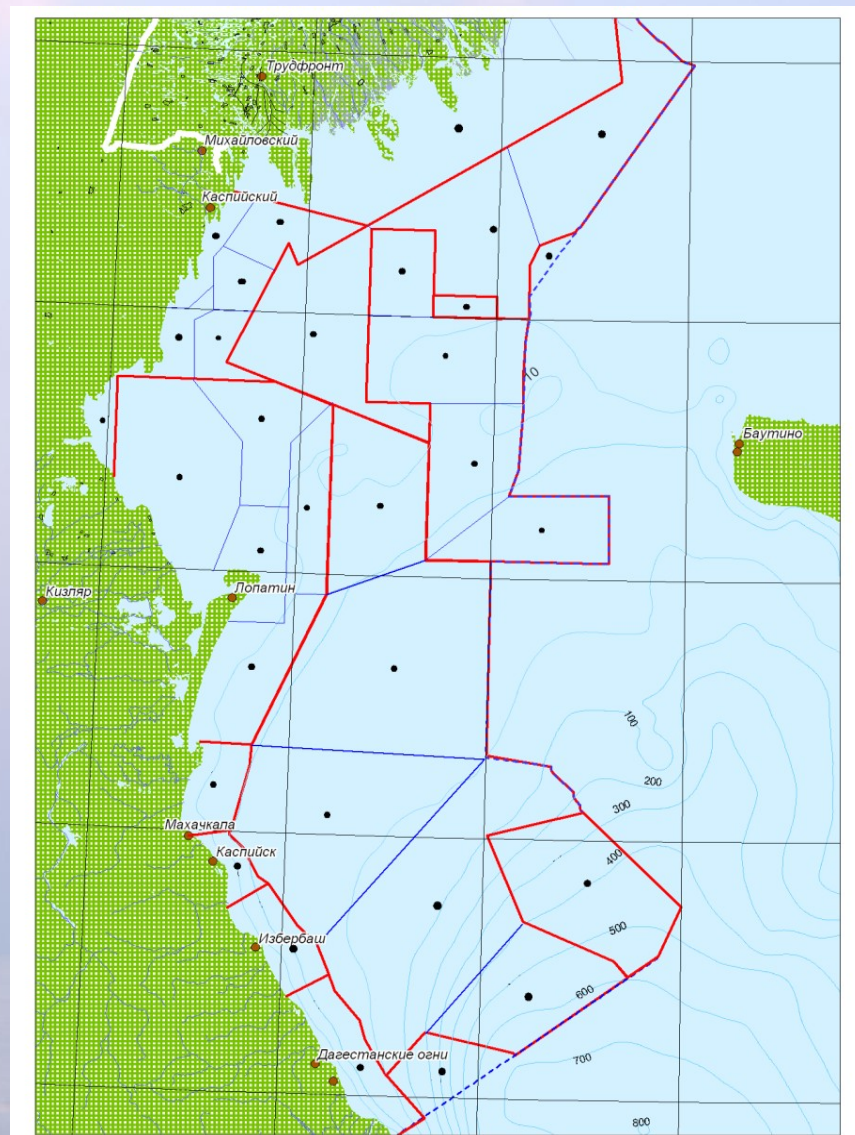


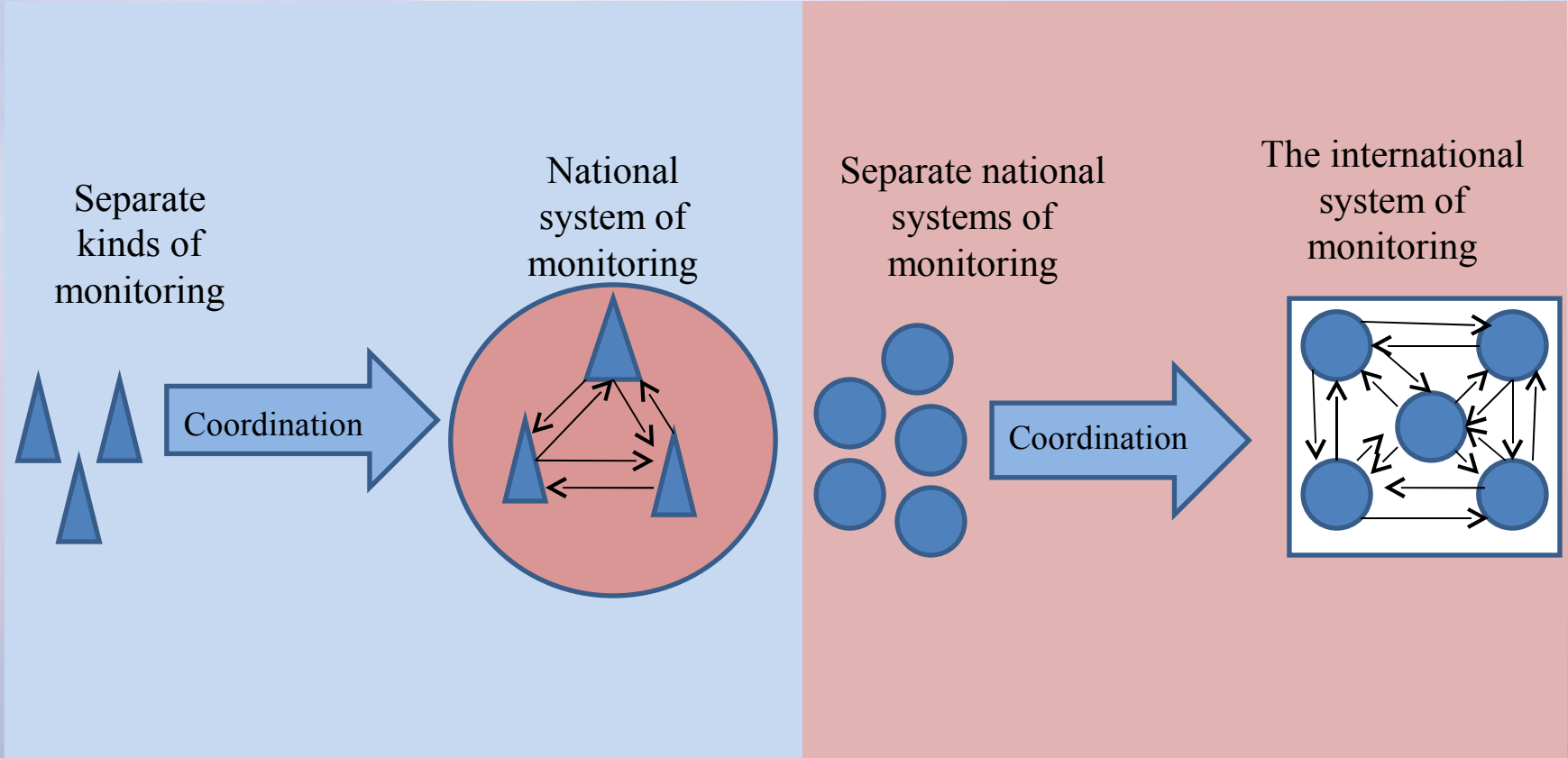
Location scheme of the stations on the licensed area "Central"



Use of marine oil and gas producing facilities as observation platforms for environmental monitoring

The suggested scheme of location of interdepartmental stations for monitoring of the Russian sector of the Caspian sea





Coordination of monitoring at the national level is the precondition of its coordination at the international level

Thank you for attention!

