

**MAMA MEDITERRANEAN NETWORK TO ASSESS AND UPGRADE
MONITORING AND FORECASTING ACTIVITY IN THE
REGIONOTOR(MAMA)**

FEDERAL REPUBLIC OF YUGOSLAVIA



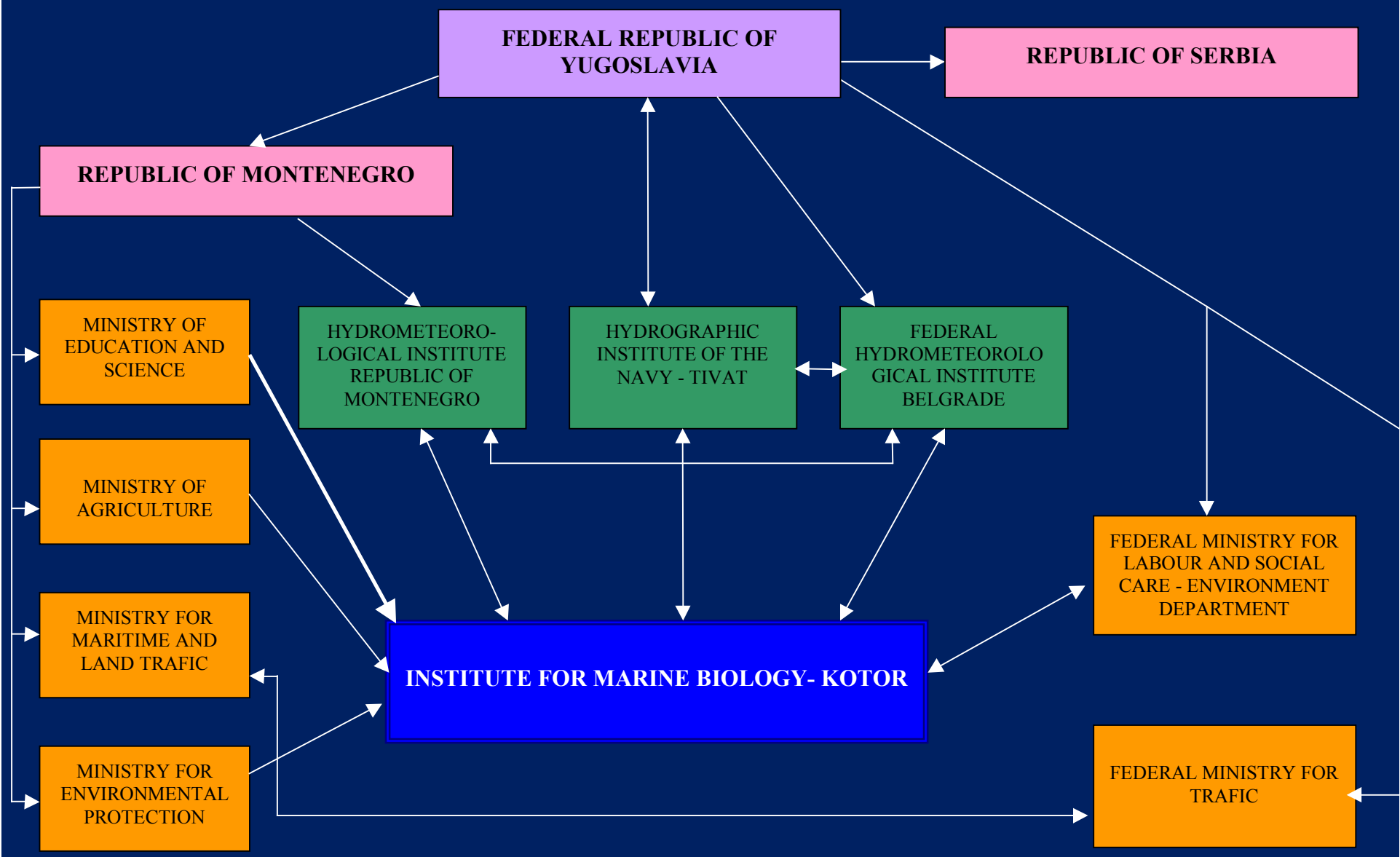
- basic data -

KOTOR, March 2002.

GENERAL

The Federal Republic of **Yugoslavia (FRY)** is a medium-sized European, Mediterranean and Danubian country. By its territory of 102.000 sq. km, population of 10,5 million, geostrategic position, substantial natural resources, developed industrial and agricultural potentials, important traffic and communication links it represents a respectable economic partner and market area. By its 280 km of coastline along the Adriatic Sea, 580 km of Danube river section, well-developed ports and free trade zones it plays an important role in connecting the Northern and Western Europe with the Black Sea, Middle and Far East countries, as well as with South Eastern European countries.

SCHEME ON THE MAIN GOVERNMENTS INSTITUTION OF THE FEDERAL REPUBLIC OF YUGOSLAVIA RELATED TO MARINE AFFAIRS.



THE FEDERAL MINISTRIES AND THE REPUBLIC MINISTERIES OF MONTENEGRO RELATED TO THE SEA

Federal Ministry for labor and social care, Sector- Environment department

- basic environmental protection, water air and sea pollution, responsibilities related to international conventions

Federal Ministry for traffic Sector- Maritime traffic

- deals with sea traffic security and with the internationally coastal zone regime

Ministry of environmental protection of Montenegro

- logistic linked to environmental protection and improvement, to the protection of nature and the protection of natural resources from pollution.

Ministry of maritime and land traffic of Montenegro Sector for maritime

- deals with maritime traffic security,
- deals with ecological sea-shore problems



INSTITUTE FOR MARINE BIOLOGY KOTOR

The recent scientific investigations

Nowdays, Institute of Marine Biology – Kotor (founded in 1961) is the only Yugoslav and Montenegrin institution for scientific investigation, explitation, control and protection of the sea.

Approach to the research has an ecological character, with special attention to the Southern Adriatic and Boka kotorska bay as a natural phenomom.



Organizational units of the Institute for Marine Biology

Laboratories

1. **Laboratory for general biology, mariculture and environmental protection.** Investigation of living resources (pelagic resources, benthic resources). Fisheries biology. Mariculture. Environmental protection. Sustainable development.
2. **International laboratory for brain research** (neurohistology, neurophysiology, neurochemistry, behavioral studies)
3. **Laboratory for chemistry, biochemistry and molecular biology** (sea – water chemistry, extraction and identification of bioactive compounds from marine organisms, particularly from endemic species).
4. **Laboratory for eco – physiology** (comparative electrophysiological investigation, temperature – dependent electro retinographic responses, effects of some alkaloids on fish electro – retinogram)

Other activities

- **Education** (lectures, summer schools, short courses, postgraduate studies, Ph. D. theses, studies of different commercial problems)
- **International scientific cooperation** (UNESCO, UNEP, FAO – GFCM, IOC, WHO, ISCEM, bilateral scientific cooperation with Italy, Russia, Germany, France, USA, Hungary, China, Norway, etc.)

Main equipment:

- boat, equipment for hydrological, biological and microbiological basic measurements, hardware in local network etc.

Scientific staff

21 scientists, 9 technicians, administration

HYDROGRAPHIC INSTITUTE OF THE NAVY

The activities of the Institute comprise the organization and accomplishment of hydrographic measurements, analysis and measurements of physical maritime parameters, drawing and publishing of maritime maps, plans, and publications dealing with sea traffic security. Besides, it is partial involved in scientific and operational exploration of the sea in the fields of hydrography, oceanography, maritime charting, geophysics etc.

It is located in Lepetane (Tivat), within the Boka Kotorska Bay.

It presently disposes of :

1. A building of satisfactory capacity
2. Two hydrographic ships, intentionally built for hydrographic and oceanographic measurements, with following characteristic - displacement 69 tones, length 22,5 m, depth 1,9 m , speed 8-10 knots, and homing capacity - 8 crew members plus 4 members of the scientific team
3. One hydrographic 9-meter boat which is very suitable for hydrographic measurements. The boat has installations for ultra-sound depth (sonar) measurement.
4. Other equipment: basic equipment for classical coastal hydrographic measurements, transportable ultra-sound depth meter, a meteorological station on Ljutica in the Dobra Luka Bay, communications with the mareographic station in Bar, basic hardware (Pentium 4 and printers), hydrologic software HYDRAS 3, Foreman's software for tide and tide current analysis and forecasting, Caldwell's software for analysis, forecasting, quality control and filtration of mareographic data.

FEDERAL HYDROMETEOROLOGICAL INSTITUTE

Hydrometeorological institute has following activities:

- planning and inspection of meteorological and hydrological observing system
- building, working and development of the center for hydrometeorological information system in FR Yugoslavia;
- building, working and development of the stock meteorological and hydrometeorological data;
- publishing hydrometeorological data and data about quality air, water and ground
- meteorological security for maritime and air traffic;
- building, working and development of the hydrometeorological observing system;
- working on implementations international obligation of FRY in field meteorology and hydrology.

HYDROMETEOROLOGICAL INSTITUTE - REPUBLIC OF MONTENEGRO

The Hydrometeorological institute has following activities :

- > measuring, observing and forecasting on the field meteorology and hydrology at republican level;
- building, working and development of the center for hydrometeorological information system in Montenegro;
- building, working and development of the stock meteorological and hydrological data;
- building, working and development of the hydrometeorological observing system at republican level;
- data collected on 150 meteorological station;



