INTERGOVERNMENTAL OCEANOGRAPHIC COMISSION
(of UNESCO)

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IODE NATIONAL REPORT FOR UKRAINE
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1. **Name of Data Centre:**
   Department of Marine Information Systems & Technologies (MIST Dept.) of the Marine Hydrophysical Institute (MHI) of the Ukrainian National Academy of Sciences

2. **National IODE Coordinator:**
   Name: Alexander Suvorov
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3. **Data Centre Address:**
   Same as above

4. **Data Centre URL:**
   http://www.mhi.iuf.net/DEPTS/mistdpt.html

5. **IODE Data Centre Designation Date:**
   DNA, 1993

6. **Data centre description**
   - Scientists – 12
   - Software engineers – 9
   - Post-graduate students – 3
   - Technician - 1

   **Main Data Holdings of MIST Dpt:**
   - All data of the cruises of MHI research vessels which were obtained in digital form or those which were digitized;
   - Oceanological data sets for Mediterranean Sea and for the coastal zone of the Republic Guinea and Guinea sector of Atlantic Ocean;
   - Oceanological data sets for Tropical Atlantic and for Caribbean Sea;
   - Oceanological data sets for Indian Ocean;
   - Black Sea database, which is compiled from different national and international sources and which is the most complete database for this region;
   - Copy of the oceanographic data set of the Soviet (Russian) NODC as for 1981;
   - Full set of the databases of the CoMSBlack and NATO TU Black Sea Program international surveys in the Black Sea (1991-1995);
   - Data on CD-ROM’s from US NODC, the MEDATLAS CONSORTIUM, MEDAR/MEDATLAS II Project, BODC, MARIS WOCE Programme, Science for Peace Programme of NATO and other sources.

7. **Brief History:**
   The Department of Marine Information Systems & Technologies (MIST Dept.) was created in the Marine Hydrophysical Institute of the Ukrainian National Academy of Sciences in 1993

8. **Roles and Responsibilities of the Data Centre:**
• Developing & creation the national system for compiling, transfer, storage, analysis and dissemination of oceanographic data and information;
• Developing & creation the multidisciplinary national marine geo-information system of the Ukraine;
• Developing the scientific basis, algorithms and software for the oceanographic data quality control, processing and database management systems;
• Creation, loading and maintenance of the regional special and multidisciplinary oceanographic database;
• Creation of computer knowledge and data-based systems, information and decision support systems for marine environmental management;
• Creation of computer marine atlas & reference book of the Black Sea and Sea of Azov and other regions of the World Ocean;
• Participating in international and national oceanographic data and information exchange;
• Investigations of the climatic variability of marine environment; modeling of marine systems.

9. Data Centre Projects and Activities during the Intersessional Period:

**National Projects:**
The MIST Dpt is the leading department of the MHI and in the Ukraine of the following national projects:
• Creation of national system for compiling, transfer, storage, analysis and dissemination of oceanographic data and information (project "National bank of oceanological data");
• Creation of Computer Marine Atlas & Reference book of the Black Sea and Sea of Azov and other regions of World Ocean (project "Computer marine atlas");
• Developing and creation of conception of national multidisciplinary national marine geo-information system of the Ukraine (State fund of fundamental Investigation of Ministry of Education and Science of Ukraine);
• Principles of developing and creation new marine information systems and technologies (Programme of National Academy of Sciences of Ukraine);
• Creation of global and regional marine environment control systems and information support of decision making for the sake of stable development of the marine economy complex (Programme of National Academy of Sciences of Ukraine);
• Creation of computer information-analytic system for assistance to engineering-oceanological works in regions of gas and oilfields of north-western part of Black Sea (Programme of National Academy of Sciences of Ukraine);
• Construction of maps for “Seas and their resources” section of the National Atlas of Ukraine

**International Projects:**
The MIST Dpt activities in the International Programmes and Projects:
• IOC International Oceanographic Data and Information Exchange (IODE);
• IOC Global Oceanographic Data Archaeology and Rescue Project (GODAR);
• MEDAR/ MEDATLAS II Mediterranean Data Archaeology and Rescue & Mediterranean Atlas;
• IOC Black Sea Regional Programme in Marine Sciences and Services;
• “Black Sea Ecosystem processes and Forecasting / Operational Database Management System” (The project NATO Science for Peace);
• Co-operative Marine Science Programme for the Black Sea.
• ONR № 00014-99-1-1025 "The Database on the bioluminescence bild of the World Ocean"
• The Darwin Initiative for the Survival of Species, Project 1628/251 "Plankton biodiversity and biovariability in the Indian and Atlantic Oceans"
• NATO Science Programme Cooperative Science & Technology Sub-Programme Collaborative Linkage Grant;
• CRDF Project # UP2-2424-SE-02;
• MIST Dept. of MHI and NOAA/Atlantic Oceanographic and Meteorological Laboratory joint CRDF Project # UG0-1270;
• Project "Sea-search, a Pan-European Network for Ocean and Marine Data and Information Management";
• Programme "Black Sea GOOS".

10. Data Centre Products and Services Developed and/or made available during the Intersessional Period:
• Catalogue of oceanographic data holdings in the Ukrainian Marine Centers for the Black Sea and Mediterranean Sea and other World Ocean regions;
• The Black Sea multidisciplinary Digital Atlas;
• Climatic Atlas of the Location of the Hydrogen Sulfide Contamination Zone Upper Boundary in the Black Sea;
• Information & Analytical System on the Black Sea Level Investigations;
• Database Management System for the Black Sea bibliography;
• Black Sea Information System;
• Oceanographic Database Management System;
• "Plankton biodiversity and biovariability in the Indian and Atlantic Oceans" CD-ROM was prepared jointly with Plymouth Marine Laboratory (UK), Institute of the Southern Seas of the Ukrainian National Academy of Sciences (Ukraine), Smithsonian Tropical Research Institute (Panama) and Kenyan Marine and Fisheries Research Institute (Kenya);
• Database and Mediterranean and Black Sea Atlas in the frame MEDAR/ MEDATLAS II Project (jointly with all other participant of MEDAR/ MEDATLAS II Consortium);
• The MIST Dpt took part in preparing chapter Data Management of the Strategy Science and Implementation Plans for the Black Sea Global Observing Oceanographic System;
• The MIST Dpt took part in preparing Black Sea Data Management Guide;

11. Comments:
• The report “Recent advances and perspectives of new marine information systems and technologies development of the Black Sea GOOS” by Eremeev V.N. and Suvorov A.M. was prepared and submitted for the international conference “Oceanography of the Eastern Mediterranean and Black Sea. Similarities and differences of two interconnected basins”.
• Representatives of Ukraine took part in work of two sessions of IOC UNESCO intergovernmental working group on policy of oceanographic observations exchange.
• A representative of Ukraine participated in the IODE Training Course in Ocean Data Management for the Caspian and Black Sea Region (October 2002, Teheran).