1. **Name of Data Center:**
   Centro Argentino de Datos Oceanográficos (CEADO)

2. **National IODE Co-ordinator:**
   Name: Ariel Hernán TROISI  
   Address: Av. Montes de Oca 2124  
   (1271) Buenos Aires  
   ARGENTINA  
   Tel: (54) 11 4303 2240  
   Fax: (54) 11 4303 2299  
   E-mail: ceado@hidro.gov.ar

3. **Data Centre URL:**
   http://www.conae.gov.ar/~ceado  
   http://www.hidro.gov.ar/ceado

4. **IODE Data Center Designation Date:**
   NODC March 1974  
   RNODC/SOC April 1987

5. **Data Center Description:**
   The CEADO is devoted to the acquisition, processing, quality control, inventory, archive and dissemination of oceanographic data and information. It has a permanent and active exchange both with national and international organizations and institutions, giving continuous support to the community.

6. **Brief History:**
   The Argentine Oceanographic Data Center (CEADO) was established in 1974 by agreement between the Argentine Navy Hydrographic Service and the National Council for Scientific and Technical Research. In 1987, it was credited by the IOC with the responsibility of becoming Responsible National Oceanographic Data Center for the Southern Oceans. Three years later it was commissioned by the IOC and WMO as Specialized Oceanographic Center
of the South Atlantic Ocean within the IGOSS program. In 1993, it was designated as National Depositary Center of the publications issued by the IOC. In June 1999, the Navy Hydrographic Office absorbed the CEADO.

7. Roles and Responsibilities of the Data Center:

National level:
CEADO is the national data and information center, and in this capacity gives support to research and development of sea sciences activities, providing data and information to the scientific community, universities, public and private organizations, and those users who require support.
The center keeps active exchange with 14 national institutes related to ocean research.

International (IODE) level:
The terms of reference for the operation as RNODC/SOC are:
• Receive the physical and chemical data collected by the international scientific community in cruises and research programs carried out in the Southern Oceans, control their quality, and store them in standard format, as well as distribute - upon request - the information stored in the files.
• Co-operate closely with the World Data Centers – Oceanography, by sending regular shipments (at least once a year) of complete sets of physical and chemical data, inventories, data summaries and other products related to the Southern Oceans.
• Assist the World Data Centres by sending copies of any ROSCOP forms submitted to the RNODC/SOC

Also, since 1981, CEADO has intermittently organized (with the support of the IOC) several training courses on oceanographic information and data management at a regional level.

8. Data Center Projects and Activities during the Intersessional Period

During the 1996-1999 period, the remittance of physical, chemical and bathythermographic data to World Data Centers A, B and D were continued. Files were increased with information belonging to 43 research cruises carried out by Japan, Germany, Australia and Chile within the RNODC/SOC area of responsibility, 220 cruises from Argentina, Germany and Brazil in the South Atlantic, and 211 Bathy /Tesac messages (IGOSS program).

Since the last IODE Report several projects were developed in order to migrate databanks from the former centralized system into the actual distributed system operating under Windows. These tasks demanded an update and improvement of the software used for validation, quality control and visualization purposes.

Efforts were made to continue recovering historical data, although a huge amount is still unavailable. As some Institutions devoted to fisheries or biological research use ‘almost raw’ physical data to support their activities, there is an accumulation of information without a comprehensive calibration and/or quality control (e.g. over 7000 CTD stations). On the other hand, there are long-term tidal records still in analogic format - including manuscript data - which must be recovered and preserved. The most usual inconveniences to perform these tasks are related to staff or budget constrains. Alternate ways are being sought at national and international levels to obtain the necessary funding to process this information.

The sets of data received from other National Centers throughout exchange mechanisms were of great value, for they allowed a complementation with existing information to answer requirements from researchers.
Several contacts were made with local companies and government offices - such as Hidrovia S.A., Aguas Argentinas and Dirección Provincial de Puertos de Santa Cruz - to coordinate the submission of the physical and environmental data they are currently acquiring, for their inclusion in our databases.

In order to support ocean research, an interactive meta-database (available via Internet) is currently under development and expected to be operational by the first quarter of year 2000. The outcome will be a community-oriented service showing the availability of information in the area of responsibility of CEADO, with links to those sites/researchers who produced the data.

9. **Data Center Products and Services Developed and/or Made Available during the Intersessional Period**

The ever-growing utilization of the Internet increased the efficiency and affectivity of data management, exchange and dissemination of products. This led to the development of a series of data and information products and services made available through the CEADO home page (www.hidro.gov.ar/ceado/ceado.htm).

In this way, users are provided with information regarding;

- Physical and chemical data of the South Atlantic and Southern Oceans,
- National oceanographic program
- Directory of National Organizations and Institutes related to sea sciences
- Oceanographic papers published by national researchers
- Onshore stations information (air and sea surface temperature, tides)
- IOC publications

thus having access, according to the case, to an overview of spatial data distribution, data inventories, maximum/minimum and mean values, or research cruises included in the NOP.

This product dissemination was addressed through a multicast system, allowing recipients requiring large-volume products to be served by one mechanism while less demanding requirements are served by other mechanisms, including on line information and data availability.