Project Summary:

The EUR-OCEANS Southern Ocean System and ICED (Integrating Climate and Ecosystem Dynamics; a new international science programme endorsed by EUR-OCEANS, GLOBEC and IMBER) have recognised the significance of the circumpolar perspective to improve understanding of climate and ecosystem interactions and have identified the need for the collation of existing circumpolar data resources. This activity aims to collate information on pelagic species distribution and abundance collected during a number of research expeditions to the Southern Ocean spanning a period of almost 60 years from 1925 to 1985. The information is of historic importance in the context of Southern Ocean ecosystems and will fill significant gaps in our existing knowledge enabling the production of a coherent database to be used in the generation and validation of circumpolar models. The project will initially target planktonic species with an early emphasis on krill; a key species in the Southern Ocean ecosystem for which a circumpolar dataset is most readily attainable.

Two major historical field initiatives will be included:

i) ***Discovery Committee Reports;*** *a series of historical reports to the Discovery Committee (the body overseeing oceanographic surveys of the Southern Ocean by the Royal Research Ships "Discovery", "William Scoresby" and "Discovery II" between 1925 and 1951).*

ii) ***Biological Investigations of Marine Antarctic Systems and Stocks (BIOMASS) Database;*** *files generated by an ORACLE database of data collected during the Biological Investigations of Marine Antarctic Systems and Stocks (BIOMASS) cruises between 1980 and 1985.*

It is envisaged that this project would be followed by a complementary initiative funded outside this or the subsequent call, to integrate data from the Commission for the Conservation of Marine Living Resources (CCAMLR) 2000 Synoptic Survey in collaboration with EUR-OCEANS, ICED and CCAMLR international partners, thus increasing the extent of this circumpolar data initiative by 15 years to span a 75 year period almost up to the present.