

Organizational Structure of Ice Services

Argentina

The **Argentine Ice Service** is part of the Argentine Naval Hydrographic Service.

- Ministry of Defense
 - Secretary of Science, Technology and Defense Production
 - Sub Secretary of Research, Development and Defense Production
 - Naval Hydrographic Service
 - Department of Meteorology
 - Division of Glaciology

Canada

The **Canadian Ice Service** is part of the Meteorological Service of Canada.

- Minister of Environment Canada
 - Assistant Deputy Minister, Meteorological Service of Canada
 - Director-General, Prediction Services Directorate
 - Director, Canadian Ice Service

Chile

The **Chilean Ice Service** is part of the Chilean Navy Weather Service.

- Ministry of National Defense
 - Chilean Navy
 - General Direction of the Maritime Territory and Merchant Marine (DIRECTEMAR)
 - Direction of Security and Maritime Operations
 - Chilean Navy Weather Service
 - Meteorological Maritime Center of Punta Arenas
 - Department of Glaciology

Denmark (Greenland)

The **Greenland Ice Service** is part of the Danish Meteorological Institute.

- Minister for Climate, Energy and Building
 - Director General for the Danish Meteorological Institute
 - Director, Collaboration & Innovation
 - Head of Ice Services

Finland

The **Finnish Ice Service** is part of the Finnish Meteorological Institute.

- Minister of Transport
 - Permanent Secretary, Ministry of Transport and Communications
 - Director General, Finnish Meteorological Institute
 - Director of Weather and Safety
 - Head of Unit, Weather and Safety Centre
 - Head of Group, Marine Services

Germany

The **Bundesamt für Seeschifffahrt und Hydrographie (BSH)** is a federal authority for maritime matters. It comes under the jurisdiction of the Federal Ministry of Transport and Digital Infrastructure (BMVI).

- Ministry of Transportation and digital infrastructure (BMVI)
 - Department WS (waterways and shipping)
 - BSH President
 - Department of Marine Science (Abteilung Meereskunde)
 - Department Forecasting Services (Referat Vorhersagedienste)
 - Ice Service (Sachgebiet Eisdienst und Wasserstandsdienst Ostsee)

Norway

The **Norwegian Ice Service** is part of the Norwegian Meteorological Institute.

- Minister of Education and Research (Kunnskapsdepartementet, KD))
 - Board of directors for Norwegian Meteorological Institute
 - Director-General for the Norwegian Meteorological Institute
 - Director of Weather Forecasting Centre
 - Leader of the Norwegian Ice Service

Poland

The **Polish Ice Service** is part of the Polish Marine Meteorological Service carried out by Instytut Meteorologii i Gospodarki Wodnej – PIB (IMGW-PiB) (Institute of Meteorology and Water Management – National Research Institute)

- Minister of Maritime Economy and Inland Navigation
 - Director General, Instytut Meteorologii i Gospodarki Wodnej – PIB
 - Director of Maritime Branch of Instytut Meteorologii i Gospodarki Wodnej – PIB, in Gdynia
 - Ice Service (Biuro Prognoz Hydrologicznych w Gdyni)

Russian Federation

The **Russian Ice Service** is coordinated and led by the Arctic and Antarctic Research Institute (AARI) with responsibilities shared with the State Research Center “Planeta” and Hydrometcenter Moscow, all three belonging to the Russian Federal Service for Hydrometeorology and Environmental Monitoring (Roshydromet).

- Minister of Natural Resources and Environment of the Russian Federation
 - Head of Federal Service for Hydrometeorology and Environmental Monitoring
 - Director of Arctic and Antarctic Research Institute
 - Head of Center of Ice and Hydrometeorological Information

United States

The **International Ice Patrol** operates under the International Convention for the Safety of Life at Sea (SOLAS) treaty which was created to provide safety for merchant ships. SOLAS directs the management of the North Atlantic Ice Patrol to the United States government. United States Code, Title 46, Sections 738, 738a through 738d, directs the Commandant of the United States Coast Guard to execute the North Atlantic Ice Patrol as the International Ice Patrol. The mission of the Ice Patrol is to monitor the iceberg danger in the North Atlantic Ocean and to provide relevant iceberg warning products to the maritime community.

- President of the United States
 - Secretary, Department of Homeland Security
 - Commandant, United States Coast Guard
 - Director, Marine Transportation Systems
 - Commander, International Ice Patrol

The **U.S. Naval/National Ice Center** operates under the authority of three departments of the U.S. government to provide ice information to both military and civilian users. One person is both the Commanding Officer of the Naval Ice Center and the Director of the National Ice Center.

NAVY (Department of Defense)

- United States Fleet Forces Command
 - Commander, Naval Information Dominance Forces (Administrative Control)
 - Commander, Naval Meteorology and Oceanography Command (Operational Control)
 - Naval Oceanographic Office
 - Commanding Officer, Naval Ice Center

NOAA (Department of Commerce)

- National Oceanographic and Atmospheric Administration
 - National Environmental Satellite, Data, and Information Services
 - Office of Satellite and Product Operations/Center for Satellite Applications and Research
 - Director, National Ice Center

COAST GUARD (Department of Homeland Security)

- Assistant Commandant for Prevention Policy
 - Director of Marine Transportation Systems
 - Office of Waterways and Ocean Policy
 - Mobility and Ice Operations Division
 - Director, National Ice Center