Appendix A

Implementation Framework for the National Strategy for the Arctic Region

March 2016

IMPLEMENTATION FRAMEWORK FOR THE NATIONAL STRATEGY FOR THE ARCTIC REGION

PREPARED BY THE:

Arctic Executive Steering Committee

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Introduction

Since the publication of the 2013 *National Strategy for the Arctic Region* (Strategy), the United States has demonstrated a commitment to leadership in adapting to changing Arctic conditions. Climate change is exerting diverse and accelerating impacts on the Arctic, on the people who live there, and on related societal, environmental, economic, and security issues. Accordingly, the U.S. Government must periodically review its actions to ensure they are appropriately prioritized to advance U.S. interests. This document supersedes the 2014 *Implementation Plan for the National Strategy for the Arctic Region* (Implementation Plan), putting forward an updated *Implementation Framework for the National Strategy for the Arctic Region* (Framework) to ensure that U.S. efforts successfully address all three lines of effort from the Strategy:

1. Advancing United States Security Interests,
2. Pursuing Responsible Arctic Region Stewardship, and
3. Strengthening International Cooperation.

These lines of effort are closely related. Pursuit of each reinforces the others. As in the 2014 Implementation Plan, implementation of each of these lines of effort is elaborated in the Framework through specific actions supported by programs overseen by Federal entities. The Framework updates the 2014 Implementation Plan by:

- Incorporating the Administration's new priorities into the existing lines of efforts, particularly placing greater importance on community sustainability and resilience;
- Removing those actions listed in the 2014 Implementation Plan that have been completed, or are no longer considered an actionable priority;
- Including factors to improve efficiency by reducing redundancies and closing interagency coordination gaps; and
- Increasing the importance of science by taking a new approach—incorporating the entire Interagency Arctic Research Policy Committee Arctic Research Plan by reference into Line of Effort (2).

The guiding principles outlined in the Strategy—*to safeguard peace and stability, make decisions using the best available information, pursue innovative arrangements, and to consult and coordinate with Alaska Natives*—continue to be reflected throughout the updated Framework.

Governance for Strategy Implementation

The Arctic Executive Steering Committee (AESC) was established by Executive Order 13689, *Enhancing Coordination of National Efforts in the Arctic*, in January 2015. As stated in the Executive Order, this Deputies–level governance body provides "guidance to executive departments and agencies" and enhances "coordination of Federal Arctic policies across agencies and offices, and, where applicable, with State, local, and Alaska Native tribal governments and similar Alaska Native organizations, academic and research institutions, and the private and nonprofit sectors." The AESC has been specifically charged with coordination of interagency work to implement the National Strategy for the Arctic Region.

To achieve interagency coordination across the three lines of effort, and to assist the AESC Executive Director to manage and oversee the advancement of national efforts through the new Implementation Framework, the AESC assigned an overall coordination lead for each line of effort as follows: Line of Effort 1, National Security Council Staff; Line of Effort 2, White House Office of Science and Technology Policy; and Line of Effort 3, Department of State.

Line of Effort 1: Advance U.S. Security Interests

Protecting the American people, our sovereign territory and rights, and the natural resources and other interests of the United States remains the highest priority of the Federal Government. The first line of effort focuses on activities intended to support these priorities: preparing for increased activity in the maritime domain; sustaining and supporting evolving aviation requirements; developing communication infrastructure; enhancing domain awareness; sustaining Federal capability to conduct maritime operations in ice–impacted waters; promoting freedom of navigation and overflight and other uses of the sea in accordance with international law; and developing renewable and non–renewable energy resources.

The National Security Council Staff is the overall coordination lead for this line of effort.

Evolve Arctic Infrastructure and Strategic Capabilities

1.1 Prepare for Increased Activity in the Maritime Domain

Objective: Guide Federal activities related to the construction, maintenance, and improvement of ports and other infrastructure needed to preserve the mobility and safe navigation of United States military and civilian vessels throughout the Arctic region.

Next Steps: Create a coordinated approach toward improving and maintaining infrastructure in support of Federal maritime Arctic activities prioritized in consideration of national security, navigation safety, and stewardship of national resources. This coordinated approach will include:

1.1.1 Deliver a 10–year prioritization framework to coordinate the phased development of Federal infrastructure identified through a Department and Agency validated needs assessment by the end of 2016. **Lead: Department of Transportation (as Chair of the Committee on the Marine Transportation System)**

1.1.2 Develop recommendations for pursuing Federal public–private partnerships in support of the needs assessment and identified prioritized activities by the end of 2017. **Lead: Department of Transportation (as Chair of the Committee on the Marine Transportation System)**

1.1.3 Evaluate the feasibility of deepening and extending harbor capabilities in Nome, Alaska, and if the evaluation determines that navigation improvements are appropriate, begin planning efforts, including developing a construction timeline by 2020. **Lead: Department of Defense (U.S. Army Corps of Engineers)**

Supporting Agencies: Member departments and agencies of the Committee on the Marine Transportation System

1.2 Sustain and Support Evolving Aviation Requirements

Objective: Advance the stability, safety, and security of the aviation environment in the U.S. Arctic region.

Next Steps: The following deliverables will be pursued in accordance with the Federal Aviation Administration's baseline schedules and capital investment plan and through partnering with the State of Alaska:

1.2.1 Complete Automatic Dependent Surveillance–Broadcast (ADS–B) ground station deployments by the end of 2016. **Lead: Department of Transportation (Federal Aviation Administration)**

1.2.2 Continue conducting Wide Area Augmentation System (WAAS) improvements, including scheduled geo–satellite updates. **Lead: Department of Transportation (Federal Aviation Administration)**

1.2.3 Continue to coordinate with the State of Alaska to assess existing infrastructure, maintenance requirements, and navigational systems, and to identify opportunities to enhance safety and security including in rural or remote areas. **Lead: Department of Transportation (Federal Aviation Administration)**

Supporting Agencies: Department of Agriculture (Animal and Plant Health Inspection Service), Department of Defense, Department of Homeland Security, and Department of the Interior

1.3 Develop Communication Infrastructure in the Arctic

Objective: Support improvement to the telecommunication infrastructure and the use of new technology to improve communications in the region, including in areas of sparse population to facilitate emergency response.

Next Steps: The following deliverables will be pursued in coordination with the State of Alaska and Tribal communities in support of the National Strategy for the Arctic Region:

1.3.1 Create comprehensive assessment of the current and near–term communications needs of each key user group in Arctic Alaska, including: local communities; science; maritime; oil and gas; aeronautical; surveillance (weather/seismic); search and rescue; and other public/government service by end of 2016. **Lead: Department of Commerce (National Telecommunications and Information Administration)**

1.3.2 Develop a framework that lists and prioritizes opportunities for investments in telecommunications capacity and capability, with a strong emphasis on innovative technologies with Federal, State, Tribal, and international public–private partnerships by the end of 2017 that meets expected communications needs of key user groups in Arctic Alaska. **Lead: Department of Commerce (National Telecommunications and Information Administration)**

Supporting Agencies: Denali Commission, Department of Agriculture, Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense, Department of Homeland Security (U.S. Coast Guard), Department of the Interior, Department of State, Department of Transportation, Federal Communications Commission, and National Science Foundation

Enhance Arctic Domain Awareness

1.4 Enhance Arctic Domain Awareness

Objective: Increase Arctic domain awareness, with specific emphasis on Arctic maritime domain awareness, by improving appropriate capabilities to collect and exchange information by leveraging partnerships with all entities operating in the Arctic, including Federal, State, local, tribal, research, academia, industry, and international entities.

Next Steps: The following deliverables will be pursued in support of increasing Arctic domain awareness through the leveraging of partnerships:

1.4.1 Work with academia and industry to evaluate the costs and benefits of Unmanned Systems in the Arctic to collect ship tracking, meteorological, oil spill, and hydrographic data. **Lead: Department of Homeland Security (U.S. Coast Guard)**

1.4.2 Evaluate the feasibility of using Unmanned Aircraft Systems (UAS) to improve observational ability in the Arctic in coordination with the Federal Aviation Administration's ongoing efforts to safely integrate UAS into the national airspace system by the end of 2017 as defined in the UAS Comprehensive Plan. **Lead: Department of Homeland Security (U.S. Coast Guard)**

1.4.3 Continue to work with international partners toward enhancing Long Range Identification and Tracking (LRIT) system capability, including for the Arctic region. Publish a report by the end of 2017 which assesses progress on the use of LRIT to support increased Arctic awareness and navigational safety. **Lead: Department of Homeland Security (U.S. Coast Guard)**

1.4.4 Leverage relationships with international partners to improve national capacity to communicate and collect environmental data by satellite. Publish an assessment of current partnerships and capabilities with recommendations by the end of 2016. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

1.4.5 Leverage the Maritime Information Sharing Environment, developed as part of the National Maritime Domain Awareness Architecture, to develop the capability to receive information from diverse sources, analyze the information, and disseminate it to stakeholders. Publish a plan to establish a mechanism for information sharing for the Arctic by the end of 2017. **Lead: Department of Homeland Security (U.S. Coast Guard)**

1.4.6 Develop a timeline to enhance shared situational awareness across Federal, State, local, tribal, industry, non–governmental organizations, and international partners through broadly accessible enterprise information services, standardized information formats, and common data standards by the end of 2016. **Lead: Department of Homeland Security (U.S. Coast Guard)**

1.4.7 Evaluate space–based observation capabilities through participation in scheduled and future pilot programs to evaluate the feasibility of using space–based data and publish results by the end of 2016. **Lead: Department of Defense (National Geospatial–Intelligence Agency)**

1.4.8 Enhance Automatic Identification System (AIS) capabilities, in alignment with current regulations, to facilitate identification and tracking of maritime assets across the Arctic region by the end of 2018. **Lead: Department of Homeland Security (U.S. Coast Guard)**

1.4.9 Participate in discussions focusing on Arctic information and data requirements through a variety of fora, including the navigation services community, to leverage multi–national and multi–agency capabilities. **Lead: Department of Homeland Security (U.S. Coast Guard)**

1.4.10 Increase understanding of potential threats to national security interests in the U.S. Arctic region and raise awareness of available safeguards through public–private partnerships, industry liaison platforms, and information sharing initiatives with Federal, state, local, and Tribal stakeholders. **Lead: Department of Justice (Federal Bureau of Investigation)**

1.4.11 Collaborate with industry, academia and government entities to identify vulnerable critical infrastructure, sensitive information and technologies, and to lead efforts to

prevent loss or exploitation. **Lead: Department of Justice (Federal Bureau of Investigation)**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense, Department of Homeland Security (U.S. Coast Guard), Department of State, Department of Transportation (Federal Aviation Administration), National Aeronautics and Space Administration, and National Maritime Intelligence–Integration Office

Preserve Arctic Region Freedom of the Seas

1.5 Sustain Federal Capability to Conduct Maritime Operations in Ice–Impacted Waters

Objective: Ensure the United States maintains ice–breaking ship capability with sufficient capacity to assure Arctic maritime access, support U.S. interests in the Polar Regions, and facilitate research that advances the fundamental understanding of the Arctic.

Next Steps: Develop long–term plans to sustain Federal capability to physically access the Arctic with sufficient capacity to support U.S. interests in the Arctic. Next steps include:

1.5.1 Finalize operational requirements and accelerate the acquisition production activities of a new U.S. Coast Guard heavy icebreaker to begin production activities in 2020. **Lead: Department of Homeland Security (U.S. Coast Guard)**

1.5.2 Continue planning for construction of additional icebreakers to achieve a capacity for year–round access in the Arctic**. Lead: Department of Homeland Security (U.S. Coast Guard)**

1.5.3 Submit funding plans for the icebreakers through the regular annual budget process. **Lead: Department of Homeland Security (U.S. Coast Guard)**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense, Department of State, Department of Transportation, and National Science Foundation

1.6 Promote International Law and Freedom of the Seas

Objective: The United States will continue to promote freedom of the seas and global mobility of maritime and aviation interests for all nations in accordance with international law. The United States will promote and conduct such activities in the Arctic region as appropriate.

Next Steps: The United States will exercise internationally recognized navigation and overflight rights, including transit passage through international straits, innocent passage through territorial seas, and the conduct of routine operations on, over, and under foreign exclusive economic zones, as reflected in the Law of the Sea Convention. Toward this end, the U.S. Government will, as appropriate:

1.6.1 Conduct routine Arctic maritime exercises, operations, and transits consistent with international law. **Lead: Department of Defense**

1.6.2 Document U.S. diplomatic communications in the *Digest of U.S. Practice in International Law* published by the Department of State. **Lead: Department of State**

1.6.3 Document the Department of Defense report on fiscal year freedom of navigation operations and other related activities conducted by U.S. Armed Forces. **Lead: Department of Defense**

1.6.4 Deliver strategic communications at appropriate opportunities to reflect U.S. objections to unlawful restrictions in the Arctic on the rights, freedoms, and uses of the sea and airspace recognized under international law; and to promote the global mobility of vessels and aircraft throughout the Arctic region consistent with international law. **Lead: Department of State**

Supporting Agencies: Department of Defense, Department of Homeland Security (U.S. Coast Guard), and Department of State

Provide for Future United States Energy Security

1.7 Pursue the Development of Renewable Energy Resources

Objective: Promote development and deployment of available renewable energy resources in the U.S. Arctic region, such as wind, wave, and solar energy, to support local and regional energy security for remote Alaska communities and Federal facilities through collaboration with local and regional stakeholders, leveraging private sector investments, and exploring potential public–private partnerships.

Next Steps: Explore and develop strategies to employ renewable energy resources to support energy development, energy security, and affordable energy reliability requirements of Federal, State, and Tribal entities through the following activities:

1.7.1 Advance development and improvement of energy systems, such as the Department of Energy Alaska Strategic Technical Assistance Response Team (START) Program and

the Department of the Interior Remote Community Renewable Energy Partnership, in remote Arctic communities by the end of 2018. **Lead: Department of Energy**

1.7.2 Accelerate efforts by remote Alaskan communities to adopt sustainable energy strategies through execution of *The Remote Alaskan Communities Energy Efficiency Competition* by the end of 2019. **Lead: Department of Energy**

1.7.3 Expand investment in climate solutions for remote Arctic communities through the Clean Energy Solutions for Remote Communities (CESRC) program by the end of 2016. **Lead: White House Office of Science and Technology Policy**

1.7.4 Promote deployment of clean energy and energy efficiency projects for the installation of facility and community–scale clean energy and energy efficiency projects**. Lead: Department of Energy**

1.7.5 Encourage private investment in renewable energy through facilitated workshops with community financing leaders, investors, and lending institutions (such as the 2015 Solarize Alaska Project) to examine technology advancements, financing models and methods to leverage private investment. **Leads: Department of Energy and Department of Agriculture**

1.7.6 Execute a Memorandum of Understanding with the Alaska Energy Authority to enhance new and existing energy systems in remote Alaska Native villages by the end of 2016. **Lead: Department of Energy**

1.7.7 Assist power providers in lowering energy costs for families and individuals within the Arctic region through programs like the competitive National Rural Utilities Service High Energy Cost grants and measuring results by the end of 2020. **Lead: Department of Agriculture**

1.7.8 Support the improvement of electric infrastructure in rural and remote villages in the Arctic Alaska through the issuing of loans and grants (such as the Department of Agriculture Rural Utilities Service High Energy Cost grants) and measuring results. **Leads: Department of Agriculture and Denali Commission**

1.7.9 Facilitate and monitor bulk fuel facilities in the Arctic through grants provided by the Denali Commission in conjunction with the Trans–Alaska Pipeline Liability Fund. **Lead: Denali Commission**

1.7.10 Conduct an analysis to evaluate the potential for net benefits of creating a National Arctic Energy policy to facilitate and advance National security, develop U.S. foreign policy, and meet regional and local energy needs. **Lead: Department of Energy**

Supporting Agencies: Department of Agriculture, Department of Homeland Security, Department of the Interior, and National Science Foundation

1.8 Ensure the Safe and Responsible Development of Non–Renewable Energy Resources

Objective: Ensure safe and responsible exploration and development of onshore and offshore Arctic non–renewable energy resources in an environmentally sound manner.

Next Steps: The development of all energy resources must be coupled with a coordinated responsible approach, domestically and internationally, which will be pursued through the following activities:

1.8.1 Plan and conduct exploratory deep–water baseline benthic assessments. **Lead: Department of the Interior (Bureau of Ocean Energy Management)**

1.8.2 Obtain and evaluate scientific and technical data to support the Targeted Leasing Approach for potential future offshore leasing. **Lead: Department of the Interior (Bureau of Ocean Energy Management)**

1.8.3 Continue to encourage the development and improvement of technology to capture hydrocarbons in response to an oil spill, including the loss of well control. **Lead: Department of the Interior (Bureau of Safety and Environmental Enforcement)**

1.8.4 Evaluate and promote spill prevention technology involved in the drilling process, wellbore integrity, production operations, and final well plugging and abandonment. **Lead: Department of the Interior**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), Department of Energy, Department of the Interior

Line of Effort 2: Pursue Responsible Arctic Region Stewardship

Rural Arctic communities face significant challenges. Current and projected impacts of climate change in the Arctic pose growing risks to food and energy security, human health, infrastructure, natural resource management, personal safety, and water and sanitation. A coordinated science–based effort is needed to support and strengthen the capacity of Arctic communities to adapt and respond to the new environmental challenges and diverse socio–economic stressors. There are many challenges to sustaining the unique Arctic environment. Success depends on responsible stewardship through active conservation of resources, balanced management, involving indigenous communities in decisions that affect them, increasing scientific research, and prioritizing nautical charting and topographical mapping. Departments and agencies will continue to coordinate to achieve successful implementation of the line of effort with all domestic and international partners.

The White House Office of Science and Technology Policy is the overall coordination lead for this line of effort.

Protect the Arctic Environment and Conserve Arctic Natural Resources

2.1. Conserve Arctic Ecosystems

Objective: Catalog baseline conditions, monitor changes in these conditions, and develop mechanisms for conserving Arctic ecosystems.

Next Steps: Conservation of Arctic ecosystems is a perpetual process which requires understanding how and why the system is changing and the development of steps necessary to protect the environment. To meet this goal, the United States will:

2.1.1 Identify sensitive Arctic areas to inform Chukchi and Beaufort leasing plans, Bering Strait Port–Access Route Study, Aleutian Islands Risk Assessment, and the Alaska Federal and State Preparedness Plan for Response to Oil and Hazardous Substance Discharges and Releases by the end of 2017. **Leads: Department of Commerce (National Oceanic and Atmospheric Administration) and Department of the Interior (Bureau of Ocean Energy Management)**

2.1.2 Conduct risk assessments of the impacts of climate warming, reduced permafrost, diminishing land/sea ice, and ocean acidification on Arctic Alaskan ecosystems for future planning and environmental review by the end of 2018. **Leads: Council on**

Environmental Quality, Department of Commerce (National Oceanic and Atmospheric Administration), and Department of the Interior

2.1. 3 Collect Arctic marine biodiversity data through the Arctic Marine Biodiversity Network's (AMBON's) 5–year demonstration project by the end of 2017. **Leads: Department of the Interior (Bureau of Ocean Energy Management) and Department of Commerce (National Oceanic and Atmospheric Administration)**

2.1.4 Develop and publicly release new operational Arctic sea–ice thickness satellite imagery by the end of 2016. **Lead**: **Department of Commerce (National Oceanic and Atmospheric Administration)**

2.1.5 Update and install instrumentation on the Arctic coast to monitor the effects of climate change including a permanent National Water Level Observing Network station to monitor sea level rise, and temporary water–level stations. **Lead**: **Department of Commerce (National Oceanic and Atmospheric Administration)**

2.1.6 Continue to conduct surveys and assessments of commercially important groundfish and shellfish species in the Bering Sea, and of marine mammal species throughout the Arctic. **Leads: Department of Commerce (National Oceanic and Atmospheric Administration) and Department of the Interior (Fish and Wildlife Service)**

Supporting Agencies: Department of Agriculture (U.S. Forest Service), Department of Defense, Department of Homeland Security (U.S. Coast Guard), Department of the Interior, Department of Transportation, and Environmental Protection Agency

2.2 Improve Hazardous Material Spill Prevention, Containment, and Response

Objective: Improve oil and other hazardous material spill prevention, containment, and response infrastructure, technology, damage assessment, and restoration strategies to protect and conserve the Arctic environment from the potentially damaging effects of offshore or inland oil spills, hazardous material spills, drilling operations, and shipping.

Next Steps: Federal agencies, in coordination with the State of Alaska, Alaska Native organizations, industry, academia, environmental groups, and other interested parties, will work to protect Arctic communities and ecosystems from potential spills and other pollution events, including:

2.2.1 Implement lessons learned from tabletop and full scale exercises including simulated oil spill demonstrations in the Arctic on an ongoing basis. **Leads**: **Department of Homeland Security (U.S. Coast Guard) and Environmental Protection Agency**

2.2.2 Conduct an equipment deployment exercise to continue to enhance preparedness and to identify logistical support needs for oil spills by the end of 2017. **Lead: Department of Homeland Security (U.S. Coast Guard)**

2.2.3 Evaluate the state of science on dispersants and dispersed oil in the Arctic pursuant to needs identified by the National Response Team by the end of 2016. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

2.2.4 Hold discussions with tribal groups within Arctic subarea committees to increase tribal, local, and other stakeholder participation in policy development, contingency planning, oil spill exercises, and pollution response under the Alaska Area Response Team. **Leads: Department of Homeland Security (U.S. Coast Guard) and Environmental Protection Agency**

Supporting Agencies: Member departments and agencies of the U.S. National Response Team

Use Integrated Arctic Management to Balance Economic Development, Environmental Protection, and Cultural Values

2.3 Use Integrated Arctic Management to Balance Economic Development, Environmental Protection, and Cultural Values

Objective: Implement Integrated Arctic Management (IAM) and employ management approaches, such as Ecosystem Based Management, to enhance governance to provide for sustainable economies in the region, ensure long–lasting benefits of balanced ecosystems, and preserve cultural activities of the people that depend on the Arctic environment.

Next Steps**:** The following deliverables will be pursued in support of using IAM to balance economic development, cultural values, and protection of the Arctic environment:

2.3.1 Develop an engagement plan to strengthen key partnerships with the State of Alaska, Alaska Native organizations, local governments, and other stakeholders for IAM by the end of 2016. **Lead**: **Department of the Interior**

2.3.2 Collaborate with the State of Alaska and Alaska Natives to finalize the interagency Memorandum of Understanding for the integration of IAM by the end of 2016. **Leads: Department of the Interior and Department of Commerce (National Oceanic and Atmospheric Administration)**

2.3.3 Document IAM best practices for collaboration among experts, practitioners, and stakeholders to improve efficiency, consistency, and transparency of management efforts

across agencies by the end of 2016. **Leads: Department of the Interior and Department of Commerce (National Oceanic and Atmospheric Administration)**

2.3.4 Continue to address the recommendations outlined in Chapter 4 of the *Managing for the Future in a Rapidly Changing Arctic* report and implement IAM pilot projects, documenting annual accomplishments through 2020. **Lead: Department of the Interior**

Supporting Agencies: Department of Agriculture, Department of Defense, Department of Homeland Security (U.S. Coast Guard), Department of Transportation (Maritime Administration), and Environmental Protection Agency

Involve the Arctic's Indigenous Communities in Decisions that Affect Them

2.4 Enhance Collaboration with Arctic Native Communities

Objective: Federal agencies will pursue innovative and traditional means of collaborating with Alaska Native communities on shared objectives.

Next Steps: Federal agencies, in partnership with academia, foundations and others, will continue efforts to promote new ways of collaborating with Alaska Native communities, including:

2.4.1 Publish guidance to assist tribes with requesting Federal assistance under the Stafford Act by the end of 2017. **Lead: Department of Homeland Security (Federal Emergency Management Agency)**

2.4.2 Promote and execute the "Youth Ambassador" program as a platform to bring together youth from Alaska urban and rural areas, including Alaskan Natives, to share perspectives and increase Arctic stewardship through the end of the U.S. chairmanship of the Arctic Council. **Lead: Department of the Interior (Fish and Wildlife Service)**

2.4.3 Increase understanding and collaboration amongst Native communities, conservation science, and promote natural resource management through establishment of short term Refuge Information Technicians and summer employment for Alaska Native Science and Engineering Program students with the Fish and Wildlife Service through at least 2017. **Lead: Department of the Interior (Fish and Wildlife Service)**

2.4.4 Work with the Alaska Native Tribal Health Consortium to finalize release of a Local Environmental Observer (LEO) Reporter mobile application for smartphones to

allow observers to share their real–time field observations by the end of 2016. **Lead: Environmental Protection Agency**

2.4.5 Work through the Arctic Council to establish a framework for expanding the Local Environmental Observer Network to North America and the Fenno–Scandinavia region by the end of the U.S. chairmanship of the Arctic Council. **Lead: Environmental Protection Agency**

2.4.6 Provide Federal support to improve mental health and suicide prevention in Alaska Native communities. **Lead: Department of Health and Human Services**

2.4.7 Assist community projects designed to grow local economies; strengthen Alaska Native families, including the preservation of Alaska Native cultures; and decrease challenges caused by the lack of community–based businesses, or socio–economic infrastructure in Alaska Native communities. **Leads: Department of Agriculture and Department of Health and Human Services**

2.4.8 Provide telehealth services to rural Arctic areas by connecting remote community clinics, multi–physician health centers, regional hospitals, and the Alaska Native Medical Center in Anchorage through the Alaska Federal Health Care Access Network. **Lead: Department of Health and Human Services**

2.4.9 Examine the potential to develop national guidance to inform agency consultations with Alaska Native corporations. **Lead: Department of Health and Human Services (as lead of the Arctic Executive Steering Committee Tribal Working Group)**

2.4.10 Work with the Arctic Council and other international entities to support a session on community–based observing at the March 2016 Arctic Observing Summit in Fairbanks, Alaska. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

2.4.11 Develop a protocol among Federal agencies, the State of Alaska, and Alaska Native organizations for the purpose of mitigating impacts of research vessels on Alaska Native subsistence hunts in the High Arctic. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

2.4.12 Provide rental assistance and supportive services to Alaska Native Veterans who are homeless or at the risk of homeless living on or near a reservation, Alaskan Native village, or other Indian areas where the Tribal Department of Housing and Urban Development (HUD)–Department of Veterans Affairs (VA) Supportive Housing program

is available. **Leads: Department of Housing and Urban Development and Department of Veterans Affairs**

Supporting Agencies: Denali Commission, Department of Agriculture, Department of the Interior, Department of State, National Science Foundation, and White House Office of Public Engagement

2.5 Promote Community Resilience and Sustainability

Objective: Partner with the State of Alaska and at–risk villages to develop plans and implementing solutions for addressing threats from climate change, such as coastal erosion, flooding, permafrost degradation, sea level rise and storms.

Next Steps: Federal agencies, in partnership with the State of Alaska, Alaska Native villages and other partners, will assist at–risk Arctic villages to develop solutions that address climate related threats. This effort will include:

2.5.1 The Denali Commission will coordinate Federal resources to assist high–risk Native communities and serve as a one–stop–shop for Federal information to villages on coastal resilience in Alaska through at least 2021. **Leads**: **Department of the Interior and Department of Housing and Urban Development (co–leads of the Coastal Erosion Working Group)**

2.5.2 Develop a set of agency principles for HUD to support climate–related relocation and managed retreat from high–risk areas in the United States by the end of 2016. **Lead: Department of Housing and Urban Development**

2.5.3 Establish indicator and observation protocols for identifying ecological changes to support community adaptation decision making as part of the "Resilient Alaska Native Coastal Communities" project by the end of 2016. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

2.5.4 Agencies will partner with the State of Alaska Division of Community and Regional Affairs to assist at–risk coastal communities develop plans to address coastal erosion impacts. **Leads: Department of the Interior and Department of Housing and Urban Development (as co–leads of the Coastal Erosion Working Group)**

2.5.5 Monitor improvements to drinking water and wastewater systems in the Alaska Native village communities that receive Federal construction grants to make improvements to these systems and capture lessons learned that can be used by other villages looking to make similar improvements. **Leads: Environmental Protection Agency and Department of Agriculture**

2.5.6 Collaborate with the Centers for Disease Control and Prevention, the Indian Health Service and the Arctic Research Commission through the Alaska Rural Water and Sanitation Working Group to research and implement improvements to water and sanitation services in rural villages. **Lead: Department of Health and Human Services**

2.5.7 Support the design and construction of health clinics and washeterias in rural Alaska. **Leads: Department of Health and Human Services (Indian Health Service) and Department of Agriculture**

2.5.8 Conduct assessments to better understand the risks and benefits of environmental change on community health. **Lead: Department of Health and Human Services**

2.5.9 Provide training to help communities plan for local environmental challenges and prepare for outbreaks or disasters, and support projects that demonstrate local innovations. **Lead: Department of Health and Human Services**

2.5.10 Foster international collaboration on health topics under the Arctic Council, including projects on suicide prevention (RISING SUN) and on innovations in water and sanitation services by the end of the U.S. chairmanship of the Arctic Council. **Lead: Department of Health and Human Services**

2.5.11 Advance a circumpolar One Health approach, aimed at attaining optimal health for the people, animals, plants, and ecosystems of the Arctic region. **Leads: Department of State and Department of Health and Human Services**

2.5.12 Continue to use Indian Community Development Block Grant funding to develop viable Alaska Native Communities by creating decent housing, more suitable living environments, and economic opportunities targeted toward those with low–and moderate–income. **Lead: Department of Housing and Urban Development**

2.5.13 Continue to implement the Bering Straits Agreement providing visa–free travel for native inhabitants of the designated areas of the Bering Straits region on both sides of the U.S. and Russian border. **Lead: Department of State**

Supporting Agencies: Denali Commission, Department of Agriculture, Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense (Army Corps of Engineers), Department of Health and Human Services, Department of Homeland Security (Federal Emergency Management Agency), Department of Housing and Urban Development, Department of the Interior, Department of State, Environmental Protection Agency, and U.S. Arctic Research Commission

Increase Understanding of the Arctic through Scientific Research and Traditional Knowledge

2.6 Advance Arctic Science through the Interagency Arctic Research Policy Committee

Objective: Promote Arctic science through, and enhance coordination with, the Interagency Arctic Research Policy Committee (IARPC). Additionally, increase the priority and inclusion of Federal Arctic research by incorporating the entire IARPC Arctic Research Plan (and any updates to this plan), into this implementation framework.

Next Steps: The following activities will be pursued in support of promoting Arctic science:

2.6.1 By the end of 2016 IARPC will develop a new 5–year Arctic research plan that draws from publicly available documents and strengthens linkages between the planned activities and agency missions to the needs of northern communities. **Lead: National Science Foundation (as lead of the Interagency Arctic Research Policy Committee)**

2.6.2 Evaluate mechanisms to increase government–wide awareness of single–agency Arctic research that is currently not being coordinated or reported through IARPC processes by the end of 2016. **Leads: U.S. Arctic Research Commission and National Science Foundation (as lead of the Interagency Arctic Research Policy Committee)**

2.6.3 Work with key interagency entities, such as IARPC, U.S. Global Change Research Program, and U.S. Group on Earth Operations, to enhance the effectiveness and efficiency of U.S. investments in observing the Arctic for research and operational needs, and publish recommendations by the end of 2018. **Lead: White House Office of Science and Technology Policy**

2.6.4 The IARPC Arctic Research Plan (and any updates) is incorporated by reference into this implementation framework. To prevent duplication in reporting, annual reporting on progress made to implement these milestones will be made through the existing IARPC reporting mechanisms. **Lead: White House Office of Science and Technology Policy**

2.6.5 Work with the National Invasive Species Council and the Aquatic Nuisance Species Task Force to determine if synergies could be gained by incorporating invasive species research into existing, or a new IARPC collaboration team by the end of 2017. **Leads: National Science Foundation (as lead of the Interagency Arctic Research Policy Committee) and Department of the Interior (as host of National Invasive Species Council Secretariat)**

Supporting Agencies: Interagency Arctic Research Policy Committee (member departments and agencies include the White House Office of Science and Technology Policy, Department of Commerce, Department of Defense, Department of Energy, Department of Health and Human Services, Department of Homeland Security, Department of the Interior, Department of State, Department of Transportation, Environmental Protection Agency, Marine Mammal Commission, National Aeronautics and Space Administration, National Science Foundation, Smithsonian Institution, and Department of Agriculture), and U.S. Arctic Research Commission

Chart the Arctic Region

2.7 Chart the Arctic Region

Objectives: Coordinate the surveying, mapping, and charting of U.S. Arctic waters, hydrography, shorelines, and topography to efficiently create and update products to facilitate safe and environmentally sound marine transportation. Assess opportunities to improve product utility for Arctic coastal community resilience, energy development, and science.

Next Steps: To meet this objective, the Federal Government will strive to:

2.7.1 Complete acquisition of U.S. Arctic elevation data for geoid model development by 2019. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

2.7.2 Increase the amount of hydrographic data acquired and linear nautical miles of shoreline mapped for safe marine operations using acoustic, lidar, satellite, and other acquisition technologies by the end of 2019. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

2.7.3 Continue mapping and charting efforts in the Bering, Chukchi, and Beaufort Seas, including surveys of transit routes through a portion of the Aleutians and the Bering Strait for potential International Maritime Organization routing measures and waterway operating rules though the end of 2019. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

2.7.4 Review whether the projected timeline to obtain hydrographic data for the highest priority U.S. regions of the Arctic will support long–term projected needs and if additional resources are needed to expedite the process by the end of 2016. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

2.7.5 Review whether additional sources of non–traditional charting data should be used to fill data gaps that would decrease Arctic maritime risks (such as leveraging other

Federal geospatial contracts and science grants to collect charting data) by the end of 2016. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

2.7.6 Increase the percentage of potential U.S. Arctic deep draft ports and harbors of refuge surveyed and charted by the end of 2019. **Lead**: **Department of Commerce (National Oceanic and Atmospheric Administration)**

2.7.7 Increase the percentage of the U.S. Arctic with interferometric synthetic aperture radar (IfSAR) elevation coverage and comprehensive topographic mapping products by the end of 2019. **Lead: Department of the Interior (U.S. Geological Survey)**

2.7.8 Build and distribute high–resolution, satellite–based elevation maps of Alaska and of the entire Arctic by the end of the U.S. chairmanship of the Arctic Council. **Lead: National Science Foundation**

2.7.9 Increase public access to existing Arctic mapping data sets. **Lead: Department of Commerce (National Oceanic and Atmospheric Administration)**

2.7.10 Collaborate with State of Alaska to advance satellite–based and airborne shoreline and near–shoreline coastal mapping to support climate change monitoring and coastal resilience. **Leads: Department of Commerce (National Oceanic and Atmospheric Administration) and Department of the Interior (U.S. Geological Survey)**

Supporting Agencies: Department of Agriculture (Natural Resources Conservation Service), Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense, Department of Homeland Security (U.S. Coast Guard), Department of the Interior (U.S. Geological Survey), Department of State, and Department of Transportation

Line of Effort 3: Strengthen International Cooperation

Implementation of all aspects of the Strategy is based on the recognition that international engagement and cooperation is critical for success. The United States will continue to work through bilateral relationships and multilateral bodies, such as the Arctic Council and the International Maritime Organization, to pursue collective interests and priorities to promote the prosperity of the region, protect the Arctic environment, and enhance national and regional security. This includes efforts to cooperatively address transboundary issues such as transport of black carbon and mercury pollution; seeking to prevent and respond to the introduction of invasive species; and promoting maritime safety and environmental stewardship. The Administration will continue to work within the Federal Government to influence domestic activities that have global impacts, including the United States becoming a party to the Convention on the Law of the Sea, ratifying the Stockholm Convention on Persistent Organic Pollutants, developing the U.S. claim to the Extended Continental Shelf, and implementing the provisions of the International Maritime Organization's Polar Code.

The Department of State is the overall coordination lead for this line of effort.

Pursue Arrangements that Promote Shared Arctic State Prosperity, Protect the Arctic Environment, and Enhance Security

3.1 Promote Arctic Oil Pollution Preparedness, Prevention, and Response Internationally

Objective: Implement international agreements consistent with domestic activities to reduce the risk of marine oil pollution while increasing global capabilities for preparedness and response to oil pollution incidents in the Arctic.

Next Steps: Next steps in this process include:

3.1.1 Conduct joint international training and related exercises, pursuant to the *Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic*, to strengthen the nation's ability to prevent and respond to oil spills by the end of the U.S. Arctic Council Chairmanship. **Lead: Department of Homeland Security (U.S. Coast Guard)**

3.1.2 Work with the Arctic Council to develop a pan–Arctic response equipment database and develop a circumpolar gap analysis by the end of the U.S. chairmanship of the Arctic Council. **Lead: Department of Homeland Security (U.S. Coast Guard)**

3.1.3 Strengthen bilateral and multilateral engagements with Arctic States such as Canada and Russia to implement strategies to prevent and respond to oil spills in the Beaufort, Bering and Chukchi Seas, including applicable Joint Contingency Plans and joint exercises by the end of 2017. **Lead: Department of Homeland Security (U.S. Coast Guard)**

3.1.4 Work with the Arctic Council to implement recommendations outlined in the *Framework Plan for Cooperation on Prevention of Oil Pollution from Petroleum and Maritime Activities in the Marine Areas of the Environment*. **Lead: Department of Homeland Security (U.S. Coast Guard)**

Supporting Agencies: Member departments and agencies of the U.S. National Response Team

3.2 Enhance Arctic Search and Rescue

Objective: Reduce risk, enhance international cooperation, and increase capacity with respect to Arctic search and rescue by implementing the *Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic.*

Next Steps: Continue to strengthen search and rescue (SAR) preparedness efforts and support international SAR agreements relevant to the Arctic region. Next steps include:

3.2.1 Lead an international Arctic SAR deployment exercise during the U.S. Arctic Council Chairmanship. **Leads: Department of Homeland Security (U.S. Coast Guard), Department of Defense, and Department of State**

3.2.2 Develop a comprehensive understanding of national, state, regional, and, through Arctic Council coordination, international SAR resources potentially available in the region by the end of 2017. **Lead: Department of Homeland Security (U.S. Coast Guard)**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense, Department of State, and Department of Transportation

3.3 Prevent Unregulated Arctic High Seas Fisheries

Objective: Coordinate internationally to ensure the long term sustainability of fish stocks within the Arctic Region by developing multilateral agreements and promoting cooperative scientific research relevant to future fisheries.

Next Steps: Build upon the efforts in the 2015 *Declaration Concerning the Prevention of Unregulated High Seas Fishing in the Central Arctic Ocean* signed by Canada, Denmark, Norway, Russia, and the United States. This will include:

3.3.1 Work with Arctic Nations and key non–Arctic countries to develop an international agreement and mechanism to restrict commercial fishing in the Arctic High Seas until such time that adequate scientific fisheries information is available. **Lead: Department of State**

3.3.2 Establish a joint international program for scientific research to improve the understanding of Arctic ecosystems and their influence on ensuring the long term sustainability of fish stocks in the Arctic Ocean by the end of 2018. **Leads: Department of State and Department of Commerce (National Oceanic and Atmospheric Administration)**

3.3.3 Include Illegal, Unreported, and Unregulated (IUU) fishing threat analysis and monitoring as a component of U.S. and international efforts to increase overall maritime domain awareness (MDA) and increase prevention of IUU fishing in the Arctic by 2017. **Lead: Department of Homeland Security (U.S. Coast Guard)**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense, and Department of Homeland Security (U.S. Coast Guard)

3.4 Reduce Transport of Contaminants

Objective: Reduce the emission and transport of hazardous and persistent contaminants both within and from outside the Arctic region, including persistent organic pollutants and mercury.

Next Steps: Through the leveraging of multilateral and bilateral platforms, the following actions will be pursued to support reducing the emission and transport of contaminants:

3.4.1 Continue to support the U.S. ratification of the *Stockholm Convention on Persistent Organic Pollutants*. **Leads: Environmental Protection Agency and Department of State**

3.4.2 Participate in Arctic Council projects and other international initiatives to reduce the releases and transport of persistent contaminants such as obsolete pesticides, dioxins, furans, and PCBs from sources in Russia to the Arctic. **Lead: Environmental Protection Agency**

3.4.3 Work with Parties to the Minamata Convention on Mercury seeking to effectively implement convention provisions to reduce global mercury emissions impacting the Arctic by 2016. **Leads: Environmental Protection Agency and Department of State**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), Department of Homeland Security (U.S. Coast Guard), Department of the Interior, Department of State, and National Science Foundation

3.5 Identify and Assess Invasive Species Risks and Impacts

Objective: Develop, implement, and maintain an international invasive species prevention and management plan.

Next Steps: Working with International Partners, the next steps in this process include:

3.5.1 Develop a strategy for the prevention and management of invasive species across the Arctic through Arctic Council working groups by the end of 2017. **Lead: Department of the Interior (as host for National Invasive Species Council Secretariat)**

3.5.2 Incorporate common protocols for early detection and reporting of non–native invasive species into the Arctic Council Circumpolar Biodiversity Monitoring Program by the end of 2019. **Lead: Department of the Interior**

3.5.3 Initiate implementation of invasive species prevention and management plans through extensive consultation with stakeholders by the end of 2019. **Lead: Department of the Interior**

Supporting Agencies: Member departments and agencies of the Aquatic Nuisance Species Task Force and the National Invasive Species Council

3.6 Promote Scientific Research and Monitoring

Objective: Promote scientific research and monitoring by facilitating cooperative international scientific efforts, access to Arctic regions, and by strengthening the means for sharing accurate and interoperable data in near real time.

Next Steps: The United States will promote international cooperation among scientists working in the Arctic, including through Arctic Council Working Groups and Task Forces, the International Arctic Science Committee, the Pacific Arctic Group and other emerging bilateral and multilateral opportunities. Next Steps include:

3.6.1 Work to complete the development of a legally–binding Arctic Council agreement on scientific cooperation to increase research capability and sharing of data through the Scientific Cooperation Task Force by the end of the U.S. Arctic Council Chairmanship. **Lead: National Science Foundation**

3.6.2 Align efforts with international partners at events, such as at the 2016 Arctic Science Summit Week, to fill spatial or topical gaps in existing science observing networks to improve coordination, collaboration and cooperation in all fields of Arctic science. **Lead: National Science Foundation**

3.6.3 Convene an "Arctic Science Ministerial Conference" to catalyze international cooperation and data–sharing in Arctic science by the end of 2016. **Lead: White House Office of Science and Technology Policy**

Supporting Agencies: Department of Agriculture, Department of Commerce (National Oceanic and Atmospheric Administration), Department of Energy, Department of Homeland Security (U.S. Coast Guard), Department of the Interior, Department of State, Environmental Protection Agency, National Aeronautics and Space Administration, National Science Foundation, and U.S. Arctic Research Commission

Work through the Arctic Council to Advance U.S. Interests in the Arctic Region

3.7 Lead and Support Domestic and International Priorities during the U.S. Chairmanship of the Arctic Council

Objective: Advance U.S. coordination of domestic and international Arctic priorities and strengthen the Arctic Council as a consensus building forum during and following the U.S. chairmanship (2015–2017).

Next Steps: Next steps in this process include:

3.7.1 Engage with Alaska Natives and the State of Alaska as appropriate on issues of international Arctic science and policy. **Lead: Department of State**

3.7.2 Lead and support international and domestic priorities that align with the theme of the U.S. chairmanship of the Arctic Council, "One Arctic: Shared Opportunities, Challenges and Responsibilities," through Arctic Council Working Groups, Expert Groups, and Task Forces. **Lead: Department of State**

3.7.3 Work with Finland to seamlessly transfer the Arctic Council Chairmanship at the U.S.–led Ministerial meeting in 2017. **Lead: Department of State**

3.7.4 Create a process to increase senior agency official awareness and input to Arctic Policy Group initiatives to generate greater support for international Arctic activities and to better integrate the Federal Government's international agenda with its domestic priorities by the end of 2017. **Lead: Department of State**

3.7.5 Develop a U.S. Arctic Council engagement strategy to define U.S. processes for coordinating, prioritizing, and funding Arctic Council activities by the end of 2017. **Lead: Department of State**

3.7.6 Establish a process of designating lead agencies to review and implement, as appropriate, Arctic Council recommendations by the end of 2018. **Lead: Department of State**

Supporting Agencies: Department of Agriculture, Department of Commerce, Department of Energy, Department of Homeland Security (U.S. Coast Guard), Department of the Interior, Environmental Protection Agency, National Science Foundation, other members of the Department of State–led Arctic Policy Group, and U.S. Arctic Research Commission

3.8 Reduce Black Carbon in the Arctic

Objective: Strengthen assessments of black carbon emissions that affect the Arctic and implement efforts to reduce harmful emissions.

Next Steps: Take action to improve the knowledge base and develop policies to reduce black carbon emissions, including:

3.8.1 Implement the Arctic Council's *Framework for Action on Enhanced Black Carbon and Methane Emissions,* including evaluating circumpolar emission trends and mitigation opportunities; establishing a collective baseline for black carbon emissions; and developing recommendations for voluntary action, by the end of the U.S. chairmanship of the Arctic Council. **Leads: Environmental Protection Agency and Department of State**

3.8.2 Conduct black carbon reduction demonstration projects and verification monitoring to confirm successful installation and maintenance of technologies that will reduce black carbon emissions by the end of 2017. **Lead: Environmental Protection Agency**

3.8.3 Update black carbon emissions estimates for the United States once the U.S. National Emissions Inventory is released in 2016, and help develop Russia's first national

black carbon inventory of diesel sources through the Arctic Council by 2017. **Lead: Environmental Protection Agency**

3.8.4 Work with the International Maritime Organization to evaluate black carbon test methods and assess black carbon emission levels, including mitigation techniques that could be used to reduce the impact on the Arctic from black carbon emissions from international shipping by 2019. **Lead: Environmental Protection Agency**

3.8.5 Help improve and expand black carbon inventories for the Parties to the *Long Range Transboundary Air Pollution* (LRTAP) Convention, with support from the Arctic Council Arctic Monitoring and Assessment Program and other international platforms by the conclusion of the U.S. chairmanship of the Arctic Council in 2017. **Lead: Environmental Protection Agency**

Supporting Agencies: Department of Agriculture, Department of Commerce (National Oceanic and Atmospheric Administration), Department of Energy, Department of Health and Human Services, Department of Homeland Security (U.S. Coast Guard), Department of the Interior, Department of State, Department of Transportation, National Science Foundation, and U.S. Arctic Research Commission

Accede to the Law of the Sea Convention and Related Affairs

3.9 Accede to the Law of the Sea Convention

Objective: Continue to seek the Senate's advice and consent to accede to the Law of the Sea Convention.

Next Step:

3.9.1 Pursue accession to the Law of the Sea Convention and continue to seek Senate advice and consent to accession as a top Administration priority. **Lead: Department of State**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense, Department of Homeland Security, Department of the Interior, and Department of Transportation

3.10 Delineate the Outer Limit of the U.S. Extended Continental Shelf

Objective: Develop the U.S. submission in support of delineating the outer limit of the U.S. Extended Continental Shelf in the Arctic.

Next Steps: Continue to conduct activities in support of determining the outer limits of the United States' Extended Continental Shelf in the Arctic, including:

3.10.1 Process, interpret and document the seismic data, refine the base of slope, and develop a geologic framework for the U.S. Extended Continental Shelf in the Arctic Ocean and Bering Sea through 2016. **Lead: Department of State**

3.10.2 Complete the analyses and documentation necessary to delineate the outer limits of the U.S. Extended Continental Shelf in the Arctic Ocean and Bering Sea through 2019. **Lead: Department of State**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense, Department of Homeland Security, and Department of the Interior (U.S. Geological Survey)

3.11 Resolve Beaufort Sea Maritime Boundary

Objective: Work toward a maritime boundary in the Beaufort Sea that is agreed to by the United States and Canada.

Next Steps: Assuming a willingness of the Canadian Government to pursue maritime boundary negotiations, next steps in this process include:

3.11.1 Undertake careful legal and technical review of issues relating to a potential boundary agreement (on–going). **Lead: Department of State**

3.11.2 Consult with State of Alaska and full range of other partners and stakeholders. **Lead: Department of State**

3.11.3 Undertake bilateral technical work with Canada that would underpin a potential boundary agreement. **Lead: Department of State**

3.11.4 Embark on negotiations with Canada on a potential boundary agreement. **Lead: Department of State**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), and Department of the Interior (U.S. Geological Survey)

Cooperate with Other Interested Parties

3.12 Ensure Adoption and U.S. Implementation of the International Maritime Organization (IMO) Polar Code

Objective: Coordinate adoption of the remaining IMO Polar Code provisions and develop regulatory provisions to enable the U.S. to comply with those provisions as outlined in the associated amendments to the International Convention for the Prevention of Pollution from Ships (MARPOL) and the International Convention for the Safety of Life at Sea (SOLAS). Similarly, work with international interested parties to ensure adoption and implementation of the amendments to the Standards for Training Certification and Watchkeeping Convention (STCW), in support of the Polar Code.

Next Steps: Next steps in this process include:

3.12.1 Work with the IMO to ensure adoption of the STCW Convention amendments to vessels operating in polar waters by the end of 2016. **Lead: Department of Homeland Security (U.S. Coast Guard)**

3.12.2 Develop U.S. policies and regulations as needed to ensure implementation of the Polar Code provisions by 2017. **Lead: Department of Homeland Security (U.S. Coast Guard)**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense, Department of State, Department of Transportation (Maritime Administration), Environmental Protection Agency, and National Science Foundation

3.13 Promote Arctic Waterways Management

Objective: Develop Arctic waterways management regimes, including traffic separation schemes, vessel tracking, and ship routing in cooperation with international partners to promote safe maritime transportation in the Arctic region.

Next Steps: To promote the safe, secure, efficient, and free flow of maritime traffic through waterways management, the Federal Government will:

3.13.1 Complete the Bering Strait Port Access Route Study by the end of 2016. **Lead: Department of Homeland Security (U.S. Coast Guard)**

3.13.2 Develop appropriate regulations and proposals for submission to the IMO. **Lead: Department of Homeland Security (U.S. Coast Guard)**

Supporting Agencies: Department of Commerce (National Oceanic and Atmospheric Administration), Department of Defense, Department of State, and Department of Transportation

Conclusion

Through this Implementation Framework, the United States continues to advance the priorities and guiding principles outlined in the *National Strategy for the Arctic Region*. Federal departments and agencies will continue to report on implementation progress through an annual report to the President and as requested by the Arctic Executive Steering Committee. This Implementation Framework will be revisited after 5 years to ensure it still meets the intent and priorities of the Nation. Because the Arctic is undergoing significant changes, the Arctic Executive Steering Committee may find the need to make minor adjustments to objectives and actions listed within this report before the 5–year timeline.