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[Report No. 108–171]

To develop a system that provides for ocean and coastal observations, to implement a research and development program to enhance security at United States ports, to implement a data and information system required by all components of an integrated ocean observing system and related research, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 14, 2003

Ms. SNOWE (for herself, Mr. KERRY, Mr. MCCAIN, Mr. HOLLINGS, Mr. INOUYE, Mr. BREAUX, Ms. COLLINS, Mr. LOTT, and Mrs. BOXER) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

OCTOBER 23, 2003

Reported by Mr. MCCAIN, with an amendment

[Strike all after the enacting clause and insert the part printed in italic]

A BILL

To develop a system that provides for ocean and coastal observations, to implement a research and development program to enhance security at United States ports, to implement a data and information system required by all components of an integrated ocean observing system and related research, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Ocean Observation and Coastal Systems Act''.

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds the following:

(1) The 95,000-mile coastline of the United States is vital to the Nation's homeland security, transportation, trade, environmental and human health, recreation and tourism, food production, scientific research and education, historical and cultural heritage, and energy production.

(2) More than half the Nation's population lives and works in coastal communities that together make up 11 percent of its land and its most ecologically and economically important regions, supporting approximately 190 sea ports, containing most of our largest cities, and providing access to coastal waters rich in natural resources.

(3) More than 95 percent of the Nation's trade moves by sea and nearly half of all goods, including energy products, carried in maritime commerce are hazardous materials.

(4) The rich biodiversity of marine organisms provides society with essential food resources, a promising source of marine products with commercial and medical potential, and an important contribution to the national economy.

(5) The oceans drive climate and weather factors causing severe weather events and threatening the health of coastal ecosystems and communities by creating or affecting both natural and man-made coastal hazards such as hurricanes, tsunamis, erosion, oil spills, harmful algal blooms, and pollution, which can pose threats to human health.

(6) Each year, the United States Coast Guard relies on ocean information to save 4,380 people, conducts over 65,000 rescue missions, and carries out more than 11,680 environmental cleanups and responses to pollution.

(7) Safeguarding homeland security requires improved monitoring of the Nation's ports and coastline, including the ability to track vessels and to provide rapid response teams with real-time environmental conditions necessary for their work.

(8) Advances in ocean technologies and scientific understanding have made possible long-term

and continuous observation from space and in situ of ocean characteristics and conditions.

(9) Many elements of an ocean and coastal observing system are in place, though in a patchwork manner that is fragmented, intermittent, incomplete, and not integrated.

(10) Important coastal uses, such as tourism, recreation, and fishing, require assurance of healthy coastal waters, and while the interagency National Coast Condition Report provides an annual assessment of the status and quality of coastal waters, substantial data gaps exist that could be reduced through measurement of coastal quality through a coordinated observing system that incorporates Federal, State, and local monitoring programs.

(11) National investment in a sustained and integrated ocean and coastal observing system and in coordinated programs of research would assist this Nation and the world in understanding the oceans and the global climate system, strengthen homeland security, improve weather and climate forecasts, strengthen management of marine resources, improve the safety and efficiency of maritime operations, and mitigate coastal hazards.

(b) PURPOSES.—The purposes of this Act are to provide for—

(1) development and maintenance of an integrated system that provides for sustained ocean and coastal observations from in situ, remote, and vessel platforms, and that promotes the national goals of assuring national security, advancing economic development, conserving living marine resources, protecting quality of life and the marine environment, and strengthening science education and communication through improved knowledge of the ocean;

(2) implementation of a research and development program to enhance security at United States ports and minimize security risks; and

(3) implementation of a data and information system required by all components of an integrated ocean and coastal observing system and related research.

SEC. 3. INTEGRATED OCEAN AND COASTAL OBSERVING SYSTEM.

(a) ESTABLISHMENT.—The President, through the National Ocean Research Leadership Council, established by section 7902(a) of title 10, United States Code, (hereinafter referred to as the ''Council''), shall establish and maintain an integrated system of marine monitoring, data

~~communication and management, data analysis, and research designed to provide data and information for the rapid and timely detection and prediction of changes occurring in the marine environment that impact the Nation's social, economic, and ecological systems. Such an integrated ocean and coastal observing system shall provide for long-term and continuous observations of the oceans and coasts for the following purposes:~~

~~(1) Strengthening homeland security.~~

~~(2) Improving weather forecasts and public warnings of natural disasters and coastal hazards and mitigating such disasters and hazards.~~

~~(3) Understanding, assessing, and responding to human-induced and natural processes of global change.~~

~~(4) Enhancing the safety and efficiency of marine operations.~~

~~(5) Supporting efforts to protect, maintain, and restore the health of and manage coastal and marine ecosystems and living resources.~~

~~(6) Enhancing public health.~~

~~(7) Monitoring and evaluating the effectiveness of ocean and coastal environmental policies.~~

(8) Conducting focused research to enhance the national understanding of coastal and global ocean systems.

(9) Providing information that contributes to public awareness of the condition and importance of the oceans.

(b) COUNCIL FUNCTIONS.—In carrying out responsibilities under this section, the Council shall—

(1) serve as the lead entity providing oversight of Federal ocean and coastal observing requirements and activities;

(2) adopt and maintain plans for the design, operation, and improvement of such system;

(3) establish an interagency planning office to carry out the duties described in subsection (c);

(4) coordinate and administer a program of research and development under the National Oceanographic Partnership Program (10 U.S.C. 7901) to support the operation of an integrated ocean and coastal observing system and advance the understanding of the oceans;

(5) establish a joint operations center to be maintained by the Administrator of the National Oceanic and Atmospheric Administration, in consultation with other Federal agencies; and

(6) provide, as appropriate, support for and representation on United States delegations to international meetings on ocean and coastal observing programs and in consultation with the Secretary of State to coordinate relevant Federal activities with those of other nations.

(c) INTERAGENCY PROGRAM OFFICE.—There is established under the Council an interagency planning office. It shall—

(1) promote collaboration among agencies;

(2) promote collaboration among regional coastal observing systems established pursuant to subsection (f);

(3) prepare annual and long-term plans for consideration by the Council for the design and implementation of an integrated ocean and coastal observing system, including the regional coastal observing systems and taking into account the science and technology advances considered ready for operational status;

(4) provide information for the development of agency budgets;

(5) identify requirements for a common set of measurements to be collected and distributed;

(6) establish standards and protocols for quality control and data management and communications, in consultation with the Joint Operations Center established pursuant to subsection (d);

(7) work with regional coastal observing entities, the National Sea Grant College Program, and other bodies as needed to assess user needs, develop data products, make effective use of existing capabilities, and incorporate new technologies, as appropriate; and

(8) coordinate program planning and implementation.

(d) JOINT OPERATIONS CENTER.—The Administrator of the National Oceanic and Atmospheric Administration, in consultation with the Oceanographer of the Navy, the Administrator of the National Aeronautics and Space Administration, the Director of the National Science Foundation, the Commandant of the Coast Guard, the Under Secretary for Science and Technology of the Department of Homeland Security, and any other member of the National Ocean Research Leadership Council as the Council may, by memorandum of agreement, select—

(1) shall report to the National Ocean Research Leadership Council;

(2) shall maintain a joint operations center that reports to the Council; and

(3) is authorized, without limitation—

(A) to acquire, integrate, and deploy required technologies and provide support for an ocean and coastal observing system based on annual long-term plans developed by the interagency planning office;

(B) to implement standards and protocols developed in consultation with the interagency planning office for—

(i) network operations and data access;

(ii) quality control and assessment of data and design;

(iii) data access and management, including data transfer protocols and archiving;

(iv) testing and employment of forecast models for ocean conditions; and

(v) system products;

(C) to migrate science and technology advancements from research and development to operational deployment based on the annual

and long-term plans of the interagency program office;

(D) to integrate and extend existing programs into an operating coastal and ocean and coastal observing system based on the annual and long-term plans of the interagency program office;

(E) to coordinate the data communication and management system;

(F) to provide products and services as specified by national, regional, and international users;

(G) to certify that regional coastal observing systems meet the standards established in subsection (f) and to ensure a periodic process for review and recertification of the regional coastal observing systems; and

(H) to implement standards to ensure compatibility and interoperability among existing and planned system components.

(c) SYSTEM ELEMENTS.—

(1) IN GENERAL.—The integrated ocean and coastal observing system shall consist of the following closely linked components:

(A) A global ocean system to make observations in all oceans (including chemical, physical, and biological observations) for the purpose of documenting, at a minimum, long-term trends in sea level change, ocean carbon sources and sinks, and heat uptake and release by the ocean; and to monitor ocean locations for signs of abrupt or long-term changes in ocean circulation leading to changes in climate.

(B) The national network of observations and data management that establishes reference and sentinel stations, links the global ocean system to local and regional observations, and provides data and information required by multiple regions.

(C) Regional coastal observing systems that provide information through the national network and detect and predict conditions and events on a regional scale through the measurement and dissemination of a common set of ocean and coastal observations and related products in a uniform manner and according to sound scientific practice using national standards and protocols.

(2) SUBSYSTEM LINKAGE.—The integrated ocean and coastal observing system shall link 3 subsystems for rapid access to data and information:

(A) An observing subsystem to measure, manage, and serve a common set of chemical, physical, geological, and biological variables required to achieve the purpose of this Act on time scales required by users of the system.

(B) An ocean data management and assimilation subsystem that provides for organization, cataloging, and dissemination of data and information to ensure full use and long term archival.

(C) A data analysis and applications subsystem to translate data into products and services in response to user needs and requirements.

(3) RESEARCH AND DEVELOPMENT.—A research and development program for the integrated ocean and coastal observing system shall be conducted under the National Oceanographic Partnership Program and shall consist of the following elements:

(A) Coastal, relocatable, and cabled sea floor observatories.

(B) Focused research projects to improve understanding of the relationship between the oceans and human activities.

(C) Applied research to develop new observing technologies and techniques, including data management and dissemination.

(D) Large scale computing resources and research to improve ocean processes modeling.

(E) Programs to improve public education and awareness of the marine environment and its goods and services.

(f) REGIONAL COASTAL OBSERVING SYSTEMS.—The Administrator of the National Oceanic and Atmospheric Administration, through the Joint Operations Center, shall work with representatives of entities in each region that provide ocean data and information to users to form regional associations. The regional associations shall be responsible for the development and operation of observing systems in the coastal regions extending to the seaward boundary of the United States Exclusive Economic Zone, including the Great Lakes. Participation in a regional association may consist of legal entities including, research institutions, institutions of higher learning, for-profit corporations, non-profit corporations, State, local, and re-

gional agencies, and consortia of 2 or more such institutions or organizations that—

(1) have demonstrated an organizational structure capable of supporting and integrating all aspects of a coastal ocean observing system within a region or subregion;

(2) have prepared an acceptable business plan including research components and gained documented acceptance of its intended regional or sub-regional jurisdiction by users and other parties of interest within the region or sub-region with the objectives of—

(A) delivering an integrated and sustained system that meets national goals;

(B) incorporating into the system existing and appropriate regional observations collected by Federal, State, regional, or local agencies;

(C) responding to the needs of the users, including the public, within the region;

(D) maintaining sustained, 24-hour-a-day operations and disseminating observations in a manner that is routine, predictable and, if necessary, in real-time or near real-time;

(E) providing services that include the collection and dissemination of data and data

management for timely access to data and information;

(F) creating appropriate products that are delivered in a timely fashion to the public and others who use, or are affected by, the oceans;

(G) providing free and open access to the data collected with financial assistance under this Act; and

(H) adhering to national standards and protocols to ensure that data and related products can be fully exchanged among all of the regional coastal systems and will be accessible to any user in any part of the nation.

(3) For purposes of determining the civil liability under section 2671 of title 28, United States Code, any regional observing system and any employee thereof that is designated part of a regional association under this subsection shall be deemed to be an instrumentality of the United States with respect to any act or omission committed by any such system or any employee thereof in fulfilling the purposes of this Act.

(g) PILOT PROJECTS.—

(1) IN GENERAL.—The Administrator, in consultation with the interagency planning office, shall

initiate pilot projects through the National Oceanographic Partnership Program. A pilot project is an organized, planned set of activities designed to provide an evaluation of technology, methods, or concepts within a defined schedule and having the goal of advancing the development of the sustained, integrated ocean observing system. The pilot projects will—

(A) develop protocols for coordinated implementation of the full system;

(B) design and implement regional coastal ocean observing systems;

(C) establish mechanisms for the exchange of data between and among regions and Federal agencies;

(D) specify products and services and related requirements for observations, data management, and analysis in collaboration with user groups; and

(E) develop and test new technologies and techniques to improve all three subsystems to more effectively meet the needs of users of the system.

(2) INFRASTRUCTURE CAPITAL PROJECTS.—The pilot projects shall include one or more projects

to capitalize the infrastructure for the collection, management, analysis, and distribution of data and one or more projects where the basic infrastructure and institutional mechanisms already exist for ongoing coastal observations, to fund the operations necessary for the collection of the common set of observations approved by the interagency planning office.

SEC. 4. INTERAGENCY FINANCING.

The departments and agencies represented on the Council are authorized to participate in interagency financing and share, transfer, receive and spend funds appropriated to any member of the Council for the purposes of carrying out any administrative or programmatic project or activity under this Act or under the National Oceanographic Partnership Program (10 U.S.C. 7901), including support for a common infrastructure and system integration for an ocean and coastal observing system. Funds may be transferred among such departments and agencies through an appropriate instrument that specifies the goods, services, or space being acquired from another Council member and the costs of the same.

SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

(a) OBSERVING SYSTEM AUTHORIZATION.—For development and implementation of an integrated ocean and coastal observing system under section 3, including finan-

cial assistance to regional coastal ocean observing systems and in addition to any amounts previously authorized, there are authorized to be appropriated to—

(1) the National Oceanic and Atmospheric Administration, $83,000,000 in fiscal year 2004, $87,250,000 in fiscal year 2005, $91,500,000 in fiscal year 2006, $96,000,000 in fiscal year 2007, and $100,000,000 in fiscal year 2008;

(2) the National Science Foundation, $25,000,000 in fiscal year 2004, $26,250,000 in fiscal year 2005, $27,500,000 in fiscal year 2006, $29,000,000 in fiscal year 2007, and $30,500,000 in fiscal year 2008;

(3) the National Aeronautics and Space Administration, $30,000,000 in fiscal year 2004, $31,500,000 in fiscal year 2005, $33,000,000 in fiscal year 2006, and $34,750,000 in each of fiscal years 2007 and 2008;

(4) the United States Coast Guard, $8,000,000 in fiscal year 2004, $8,400,000 in fiscal year 2005, $9,700,000 in fiscal year 2006, $9,500,000 in fiscal year 2007, and $9,750,000 in fiscal year 2008;

(5) the Office of Naval Research, $25,000,000 in fiscal year 2004, $26,250,000 in fiscal year 2005,

~~$27,500,000 in fiscal year 2006, $29,000,000 in fiscal year 2007, and $30,500,000 in fiscal year 2008;~~

~~(6) the Office of the Oceanographer of the Navy, $30,000,000 in fiscal year 2004, $31,500,000 in fiscal year 2005, $33,000,000 in fiscal year 2006, $34,750,000 in fiscal year 2007, and $36,500,000 in fiscal year 2008; and~~

~~(7) other Federal agencies with operational coastal or ocean monitoring systems or which provide funds to States for such systems, $15,000,000 in each of fiscal years 2004 through 2008.~~

~~(b) REGIONAL COASTAL OBSERVING SYSTEMS.—The Administrator of the National Oceanic and Atmospheric Administration shall make at least 51 percent of the funds appropriated pursuant to subsection (a)(1) available as grants for the development and implementation of the regional coastal observing systems based on the plans adopted by the Council and may be used to leverage non-Federal funds.~~

~~(c) AVAILABILITY.—Sums authorized to be appropriated by this section shall remain available until expended.~~

SECTION 1. SHORT TITLE.

This Act may be cited as the "Ocean and Coastal Observation Systems Act".

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds the following:

(1) The 95,000-mile coastline of the United States is vital to the Nation's homeland security, transportation, trade, environmental and human health, recreation and tourism, food production, scientific research and education, historical and cultural heritage, and energy production.

(2) More than half the Nation's population lives and works in coastal communities that together make up 11 percent of its land and its most ecologically and economically important regions, supporting approximately 190 sea ports, containing most of our largest cities, and providing access to coastal waters rich in natural resources.

(3) More than 95 percent of the Nation's trade moves by sea and nearly half of all goods, including energy products, carried in maritime commerce are hazardous materials.

(4) The rich biodiversity of marine organisms provides society with essential food resources, a promising source of marine products with commercial and medical potential, and an important contribution to the national economy.

(5) The oceans drive climate and weather factors causing severe weather events and threatening the

health of coastal ecosystems and communities by creating or affecting both natural and man-made coastal hazards such as hurricanes, tsunamis, erosion, oil spills, harmful algal blooms, hypoxia, and pollution, which can pose threats to human health.

(6) Each year, the United States Coast Guard relies on ocean information to save 4,380 people, conducts over 65,000 rescue missions, and carries out more than 11,680 environmental cleanups and responses to pollution.

(7) Safeguarding homeland security requires improved monitoring of the Nation's ports and coastline, including the ability to track vessels and to provide rapid response teams with real-time environmental conditions necessary for their work.

(8) Advances in ocean technologies and scientific understanding have made possible long-term and continuous observation from space and in situ of ocean characteristics and conditions.

(9) Many elements of an ocean and coastal observing system are in place, though in a patchwork manner that is fragmented, intermittent, incomplete, and not integrated.

(10) Important coastal uses, such as tourism, recreation, and fishing, require assurance of healthy

coastal waters, and while the interagency National Coast Condition Report provides an annual assessment of the status and quality of coastal waters, substantial data gaps exist that could be reduced through measurement of coastal quality through a coordinated observing system that incorporates Federal, State, and local monitoring programs.

(11) National investment in a sustained and integrated ocean and coastal observing system and in coordinated programs of research would assist this Nation and the world in understanding the oceans and the global climate system, strengthen homeland security, improve weather and climate forecasts, strengthen management of marine resources, improve the safety and efficiency of maritime operations, and mitigate coastal hazards.

(b) PURPOSES.—The purposes of this Act are to provide for—

(1) development and maintenance of an integrated system that provides for sustained ocean and coastal observations from in situ, remote, and vessel platforms, and that promotes the national goals of assuring national security, advancing economic development, conserving living marine resources, protecting quality of life and the marine environment, and

strengthening science education and communication through improved knowledge of the ocean;

(2) implementation of a research and development program to enhance security at United States ports and minimize security risks; and

(3) implementation of a data and information system required by all components of an integrated ocean and coastal observing system and related research.

SEC. 3. INTEGRATED OCEAN AND COASTAL OBSERVING SYSTEM.

(a) ESTABLISHMENT.—The President, through the National Ocean Research Leadership Council, established by section 7902(a) of title 10, United States Code, (hereinafter referred to as the "Council"), shall establish and maintain an integrated system of marine monitoring, data communication and management, data analysis, and research designed to provide data and information for the rapid and timely detection and prediction of changes occurring in the marine environment that impact the Nation's social, economic, and ecological systems. Such an integrated ocean and coastal observing system shall provide for long-term and continuous observations of the oceans and coasts for the following purposes:

(1) Strengthening homeland security.

(2) Improving weather forecasts and public warnings of natural disasters and coastal hazards and mitigating such disasters and hazards.

(3) Understanding, assessing, and responding to human-induced and natural processes of global change.

(4) Enhancing the safety and efficiency of marine operations.

(5) Supporting efforts to protect, maintain, and restore the health of and manage coastal and marine ecosystems and living resources.

(6) Enhancing public health.

(7) Monitoring and evaluating the effectiveness of ocean and coastal environmental policies.

(8) Conducting focused research to enhance the national understanding of coastal and global ocean systems.

(9) Providing information that contributes to public awareness of the condition and importance of the oceans.

(b) COUNCIL FUNCTIONS.—In carrying out responsibilities under this section, the Council shall—

(1) serve as the lead entity providing oversight of Federal ocean and coastal observing requirements and activities;

(2) adopt and maintain plans for the design, operation, and improvement of such system;

(3) establish an interagency planning office to carry out the duties described in subsection (c);

(4) coordinate and administer a program of research and development under the National Oceanographic Partnership Program (10 U.S.C. 7901) to support the operation of an integrated ocean and coastal observing system and advance the understanding of the oceans;

(5) establish a joint operations center to be maintained by the Administrator of the National Oceanic and Atmospheric Administration, in consultation with other Federal agencies; and

(6) provide, as appropriate, support for and representation on United States delegations to international meetings on ocean and coastal observing programs and in consultation with the Secretary of State to coordinate relevant Federal activities with those of other nations.

(c) INTERAGENCY PROGRAM OFFICE.—There is established under the Council an interagency planning office. It shall—

(1) promote collaboration among agencies;

(2) promote collaboration among regional coastal observing systems established pursuant to subsection (f);

(3) prepare annual and long-term plans for consideration by the Council for the design and implementation of an integrated ocean and coastal observing system, including the regional coastal observing systems and taking into account the science and technology advances considered ready for operational status;

(4) provide information for the development of agency budgets;

(5) identify requirements for a common set of measurements to be collected and distributed;

(6) establish standards and protocols for quality control and data management and communications, in consultation with the Joint Operations Center established pursuant to subsection (d);

(7) work with regional coastal observing entities, the National Sea Grant College Program, and other bodies as needed to assess user needs, develop data products, make effective use of existing capabilities, and incorporate new technologies, as appropriate; and

(8) coordinate program planning and implementation.

(d) JOINT OPERATIONS CENTER.—The Administrator of the National Oceanic and Atmospheric Administration, in consultation with the Oceanographer of the Navy, the Administrator of the National Aeronautics and Space Administration, the Director of the National Science Foundation, the Commandant of the Coast Guard, the Under Secretary for Science and Technology of the Department of Homeland Security, and any other member of the Council as the Council may, by memorandum of agreement, select—

(1) shall operate and maintain a joint operations center that reports to the Council; and

(2) is authorized—

(A) to acquire, integrate, and deploy required technologies and provide support for an ocean and coastal observing system based on annual long-term plans developed by the interagency planning office;

(B) to implement standards and protocols developed in consultation with the interagency planning office for—

(i) network operations and data access;

(ii) quality control and assessment of data and design;

(iii) data access and management, including data transfer protocols and archiving;

(iv) testing and employment of forecast models for ocean conditions; and

(v) system products;

(C) to migrate science and technology advancements from research and development to operational deployment based on the annual and long-term plans of the interagency program office;

(D) to integrate and extend existing programs into an operating ocean and coastal observing system based on the annual and long-term plans of the interagency program office;

(E) to coordinate the data communication and management system;

(F) to provide products and services as specified by national, regional, and international users;

(G) to certify that regional coastal observing systems meet the standards established in subsection (f) and to ensure a periodic process for review and recertification of the regional coastal observing systems; and

(H) to implement standards to ensure compatibility and interoperability among existing and planned system components.

(e) SYSTEM ELEMENTS.—

(1) IN GENERAL.—The integrated ocean and coastal observing system shall consist of the following closely linked components:

(A) A global ocean system to make observations in all oceans (including chemical, physical, and biological observations) for the purpose of documenting, at a minimum, long-term trends in sea level change, ocean carbon sources and sinks, and heat uptake and release by the ocean; and to monitor ocean locations for signs of abrupt or long-term changes in ocean circulation leading to changes in climate.

(B) The national network of observations and data management that establishes reference and sentinel stations, links the global ocean system to local and regional observations, and provides data and information required by multiple regions.

(C) Regional coastal observing systems that provide information through the national network and detect and predict conditions and

events on a regional scale through the measurement and dissemination of a common set of ocean and coastal observations and related products in a uniform manner and according to sound scientific practice using national standards and protocols.

(2) SUBSYSTEM LINKAGE.—The integrated ocean and coastal observing system shall link 3 subsystems for rapid access to data and information:

(A) An observing subsystem to measure, manage, and serve a common set of chemical, physical, geological, and biological variables required to achieve the purpose of this Act on time scales required by users of the system.

(B) An ocean and coastal data management and assimilation subsystem that provides for organization, cataloging, and dissemination of data and information to ensure full use and long term archival.

(C) A data analysis and applications subsystem to translate data into products and services in response to user needs and requirements.

(3) INTEGRATION OF EXISTING CENTERS.—The integrated ocean and coastal observing system shall integrate the capabilities of the Coast Services Center

and the National Coastal Data Development Center of the National Oceanic and Atmospheric Administration, and other appropriate centers.

(4) RESEARCH AND DEVELOPMENT.—A research and development program for the integrated ocean and coastal observing system shall be conducted under the National Oceanographic Partnership Program and shall consist of the following elements:

(A) Coastal, relocatable, and cabled sea floor observatories.

(B) Focused research projects to improve understanding of the relationship between the oceans and human activities.

(C) Applied research to develop new observing technologies and techniques, including data management and dissemination.

(D) Large scale computing resources and research to improve ocean processes modeling.

(E) Programs to improve public education and awareness of the marine environment and its goods and services.

(f) REGIONAL COASTAL OBSERVING SYSTEMS.—The Administrator of the National Oceanic and Atmospheric Administration, through the Joint Operations Center, shall work with representatives of entities in each region that

provide ocean data and information to users to form regional associations. The regional associations shall be responsible for the development and operation of observing systems in the coastal regions extending to the seaward boundary of the United States Exclusive Economic Zone, including the Great Lakes. Participation in a regional association may consist of legal entities including, research institutions, institutions of higher learning, for-profit corporations, non-profit corporations, State, local, and regional agencies, and consortia of 2 or more such institutions or organizations that—

(1) have demonstrated an organizational structure capable of supporting and integrating all aspects of a coastal ocean observing system within a region or subregion;

(2) have prepared an acceptable business plan including research components and gained documented acceptance of its intended regional or sub-regional jurisdiction by users and other parties of interest within the region or sub-region with the objectives of—

(A) delivering an integrated and sustained system that meets national goals;

(B) incorporating into the system existing and appropriate regional observations collected by Federal, State, regional, or local agencies;

(C) responding to the needs of the users, including the public, within the region;

(D) maintaining sustained, 24-hour-a-day operations and disseminating observations in a manner that is routine, predictable and, if necessary, in real-time or near real-time;

(E) providing services that include the collection and dissemination of data and data management for timely access to data and information;

(F) creating appropriate products that are delivered in a timely fashion to the public and others who use, or are affected by, the oceans;

(G) providing free and open access to the data collected with financial assistance under this Act; and

(H) adhering to national standards and protocols to ensure that data and related products can be fully exchanged among all of the regional coastal systems and will be accessible to any user in any part of the nation.

(3) For purposes of determining the civil liability under section 2671 of title 28, United States Code, any regional observing system and any employee thereof that is designated part of a regional association under this subsection shall be deemed to be an instrumentality of the United States with respect to any act or omission committed by any such system or any employee thereof in fulfilling the purposes of this Act.

(g) PILOT PROJECTS.—

(1) IN GENERAL.—The Administrator, in consultation with the interagency planning office, shall initiate pilot projects through the National Oceanographic Partnership Program. A pilot project is an organized, planned set of activities designed to provide an evaluation of technology, methods, or concepts within a defined schedule and having the goal of advancing the development of the sustained, integrated ocean observing system. The pilot projects will—

(A) develop protocols for coordinated implementation of the full system;

(B) design and implement regional coastal ocean observing systems;

(C) establish mechanisms for the exchange of data between and among regions and Federal agencies;

(D) specify products and services and related requirements for observations, data management, and analysis in collaboration with user groups; and

(E) develop and test new technologies and techniques to improve all three subsystems to more effectively meet the needs of users of the system.

(2) INFRASTRUCTURE CAPITAL PROJECTS.—The pilot projects shall include one or more projects to capitalize the infrastructure for the collection, management, analysis, and distribution of data and one or more projects where the basic infrastructure and institutional mechanisms already exist for ongoing coastal observations, to fund the operations necessary for the collection of the common set of observations approved by the interagency planning office.

SEC. 4. INTERAGENCY FINANCING.

The departments and agencies represented on the Council are authorized to participate in interagency financing and share, transfer, receive and spend funds appropriated to any member of the Council for the purposes of

carrying out any administrative or programmatic project or activity under this Act or under the National Oceanographic Partnership Program (10 U.S.C. 7901), including support for a common infrastructure and system integration for an ocean and coastal observing system. Funds may be transferred among such departments and agencies through an appropriate instrument that specifies the goods, services, or space being acquired from another Council member and the costs of the same.

SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

(a) OBSERVING SYSTEM AUTHORIZATION.—For development and implementation of an integrated ocean and coastal observing system under section 3, including financial assistance to regional coastal ocean observing systems and in addition to any amounts previously authorized, there are authorized to be appropriated to—

(1) the National Oceanic and Atmospheric Administration, $83,000,000 in fiscal year 2004, $87,250,000 in fiscal year 2005, $91,500,000 in fiscal year 2006, $96,000,000 in fiscal year 2007, and $100,000,000 in fiscal year 2008;

(2) the National Science Foundation, $25,000,000 in fiscal year 2004, $26,250,000 in fiscal year 2005, $27,500,000 in fiscal year 2006,

$29,000,000 in fiscal year 2007, and $30,500,000 in fiscal year 2008;

(3) the National Aeronautics and Space Administration, $30,000,000 in fiscal year 2004, $31,500,000 in fiscal year 2005, $33,000,000 in fiscal year 2006, and $34,750,000 in each of fiscal years 2007 and 2008;

(4) the United States Coast Guard, $8,000,000 in fiscal year 2004, $8,400,000 in fiscal year 2005, $9,700,000 in fiscal year 2006, $9,500,000 in fiscal year 2007, and $9,750,000 in fiscal year 2008;

(5) the Office of Naval Research, $25,000,000 in fiscal year 2004, $26,250,000 in fiscal year 2005, $27,500,000 in fiscal year 2006, $29,000,000 in fiscal year 2007, and $30,500,000 in fiscal year 2008;

(6) the Office of the Oceanographer of the Navy, $30,000,000 in fiscal year 2004, $31,500,000 in fiscal year 2005, $33,000,000 in fiscal year 2006, $34,750,000 in fiscal year 2007, and $36,500,000 in fiscal year 2008; and

(7) other Federal agencies with operational coastal or ocean monitoring systems or which provide funds to States for such systems, $15,000,000 in each of fiscal years 2004 through 2008.

(b) REGIONAL COASTAL OBSERVING SYSTEMS.—The Administrator of the National Oceanic and Atmospheric Administration shall make at least 51 percent of the funds appropriated pursuant to subsection (a)(1) available as grants for the development and implementation of the regional coastal observing systems based on the plans adopted by the Council and may be used to leverage non-Federal funds.

(c) HIGH-FREQUENCY SURFACE WAVE RADAR.—The Administrator of the National Oceanic and Atmospheric Administration may make available $3,000,000 of the funds appropriated pursuant to subsection (a)(1) for fiscal year 2004 to demonstrate the capabilities of shore-based high-frequency surface wave radar to measure real-time wave height, wave velocity, wave period, tidal velocity, and wind speed within and beyond the Exclusive Economic Zone of the United States.

(d) AVAILABILITY.—Sums authorized to be appropriated by this section shall remain available until expended.

Calendar No. 319

108TH CONGRESS
1ST SESSION

S. 1400

[Report No. 108–171]

A BILL

To develop a system that provides for ocean and coastal observations, to implement a research and development program to enhance security at United States ports, to implement a data and information system required by all components of an integrated ocean observing system and related research, and for other purposes.

OCTOBER 23, 2003

Reported with an amendment