(A) \$13,750,000 for the regional centers, of which 50 percent shall be for West Coast regional centers and 50 percent shall be for East Coast regional centers; and

(B) \$5,500,000 for the National Technology Institute;

(2) for fiscal year 2010—

(A) \$15,125,000 for the regional centers, of which 50 percent shall be for West Coast regional centers and 50 percent shall be for East Coast regional centers; and

(B) \$6,050,000 for the National Technology Institute;

(3) for fiscal year 2011—

(A) \$16,638,000 for the regional centers, of which 50 percent shall be for West Coast regional centers and 50 percent shall be for East Coast regional centers; and

(B) \$6,655,000 for the National Technology Institute;

(4) for fiscal year 2012—

(A) \$18,301,000 for the regional centers, of which 50 percent shall be for West Coast regional centers and 50 percent shall be for East Coast regional centers; and

(B) \$7,321,000 for the National Technology Institute;

(5) for fiscal year 2013-

(A) \$20,131,000 for the regional centers, of which 50 percent shall be for West Coast regional centers and 50 percent shall be for East Coast regional centers; and

(B) \$8,053,000 for the National Technology Institute;

(6) for fiscal year 2014—

(A) \$22,145,000 for the regional centers, of which 50 percent shall be for West Coast regional centers and 50 percent shall be for East Coast regional centers; and

(B) \$8,859,000 for the National Technology Institute;

and

(7) for fiscal year 2015—

(A) \$24,359,000 for the regional centers, of which 50 percent shall be for West Coast regional centers and 50 percent shall be for East Coast regional centers; and

(B) \$9,744,000 for the National Technology Institute.

Subtitle B—Ocean and Coastal Mapping Integration Act

Ocean and Coastal Mapping Integration Act.

SEC. 12201. SHORT TITLE.

This subtitle may be cited as the "Ocean and Coastal Mapping Integration Act".

SEC. 12202. ESTABLISHMENT OF PROGRAM.

33 USC 3501 note.

33 USC 3501. President.

(a) IN GENERAL.—The President, in coordination with the Interagency Committee on Ocean and Coastal Mapping and affected coastal states, shall establish a program to develop a coordinated and comprehensive Federal ocean and coastal mapping plan for the Great Lakes and coastal state waters, the territorial sea, the exclusive economic zone, and the continental shelf of the United States that enhances ecosystem approaches in decision-making for conservation and management of marine resources and habitats, establishes research and mapping priorities, supports the siting of research and other platforms, and advances ocean and coastal science.

(b) Membership.—The Committee shall be comprised of high-level representatives of the Department of Commerce, through the National Oceanic and Atmospheric Administration, the Department of the Interior, the National Science Foundation, the Department of Defense, the Environmental Protection Agency, the Department of Homeland Security, the National Aeronautics and Space Administration, and other appropriate Federal agencies involved in ocean and coastal mapping.

(c) PROGRAM PARAMETERS.—In developing such a program, the

President, through the Committee, shall—

(1) identify all Federal and federally-funded programs conducting shoreline delineation and ocean or coastal mapping, noting geographic coverage, frequency, spatial coverage, resolution, and subject matter focus of the data and location of data archives;

(2) facilitate cost-effective, cooperative mapping efforts that incorporate policies for contracting with non-governmental entities among all Federal agencies conducting ocean and coastal mapping, by increasing data sharing, developing appropriate data acquisition and metadata standards, and facilitating the interoperability of in situ data collection systems, data processing, archiving, and distribution of data products;

(3) facilitate the adaptation of existing technologies as well as foster expertise in new ocean and coastal mapping technologies, including through research, development, and training conducted among Federal agencies and in cooperation with

non-governmental entities;

(4) develop standards and protocols for testing innovative experimental mapping technologies and transferring new technologies between the Federal Government, coastal state, and non-governmental entities:

(5) provide for the archiving, management, and distribution of data sets through a national registry as well as provide mapping products and services to the general public in service

of statutory requirements;

- (6) develop data standards and protocols consistent with standards developed by the Federal Geographic Data Committee for use by Federal, coastal state, and other entities in mapping and otherwise documenting locations of federally permitted activities, living and nonliving coastal and marine resources, marine ecosystems, sensitive habitats, submerged cultural resources, undersea cables, offshore aquaculture projects, offshore energy projects, and any areas designated for purposes of environmental protection or conservation and management of living and nonliving coastal and marine resources;
- (7) identify the procedures to be used for coordinating the collection and integration of Federal ocean and coastal mapping data with coastal state and local government programs;
- (8) facilitate, to the extent practicable, the collection of real-time tide data and the development of hydrodynamic models for coastal areas to allow for the application of V-datum tools that will facilitate the seamless integration of onshore and offshore maps and charts;
- (9) establish a plan for the acquisition and collection of ocean and coastal mapping data; and

(10) set forth a timetable for completion and implementation of the plan.

SEC. 12203. INTERAGENCY COMMITTEE ON OCEAN AND COASTAL MAPPING.

00 CDC 0002.

(a) IN GENERAL.—The Administrator of the National Oceanic and Atmospheric Administration, within 30 days after the date of enactment of this Act, shall convene or utilize an existing interagency committee on ocean and coastal mapping to implement section 12202.

Deadline. Establishment.

(b) MEMBERSHIP.—The committee shall be comprised of senior representatives from Federal agencies with ocean and coastal mapping and surveying responsibilities. The representatives shall be high-ranking officials of their respective agencies or departments and, whenever possible, the head of the portion of the agency or department that is most relevant to the purposes of this subtitle. Membership shall include senior representatives from the National Oceanic and Atmospheric Administration, the Chief of Naval Operations, the United States Geological Survey, the Minerals Management Service, the National Science Foundation, the National Geospatial-Intelligence Agency, the United States Army Corps of Engineers, the Coast Guard, the Environmental Protection Agency, the Federal Emergency Management Agency, the National Aeronautics and Space Administration, and other appropriate Federal agencies involved in ocean and coastal mapping.

(c) CO-CHAIRMEN.—The Committee shall be co-chaired by the representative of the Department of Commerce and a representative

of the Department of the Interior.

(d) Subcommittee.—The co-chairmen shall establish a subcommittee to carry out the day-to-day work of the Committee, comprised of senior representatives of any member agency of the committee. Working groups may be formed by the full Committee to address issues of short duration. The subcommittee shall be chaired by the representative from the National Oceanic and Atmospheric Administration. The chairmen of the Committee may create such additional subcommittees and working groups as may be needed to carry out the work of Committee.

(e) MEETINGS.—The committee shall meet on a quarterly basis, but each subcommittee and each working group shall meet on an as-needed basis.

(f) COORDINATION.—The committee shall coordinate activities

when appropriate, with—

- (1) other Federal efforts, including the Digital Coast, Geospatial One-Stop, and the Federal Geographic Data Committee;
 - (2) international mapping activities;

(3) coastal states;

(4) user groups through workshops and other appropriate mechanisms; and

(5) representatives of nongovernmental entities.

(g) ADVISORY PANEL.—The Administrator may convene an ocean and coastal mapping advisory panel consisting of representatives from non-governmental entities to provide input regarding activities of the committee in consultation with the interagency committee.

SEC. 12204. BIENNIAL REPORTS.

33 USC 3503.

No later than 18 months after the date of enactment of this Act, and biennially thereafter, the co-chairmen of the Committee

shall transmit to the Committees on Commerce, Science, and Transportation and Energy and Natural Resources of the Senate and the Committee on Natural Resources of the House of Representatives a report detailing progress made in implementing this subtitle, including—

(1) an inventory of ocean and coastal mapping data within the territorial sea and the exclusive economic zone and throughout the Continental Shelf of the United States, noting the age and source of the survey and the spatial resolution (metadata) of the data;

(2) identification of priority areas in need of survey coverage

using present technologies;

(3) a resource plan that identifies when priority areas in need of modern ocean and coastal mapping surveys can be accomplished;

(4) the status of efforts to produce integrated digital maps

of ocean and coastal areas;

(5) a description of any products resulting from coordinated mapping efforts under this subtitle that improve public understanding of the coasts and oceans, or regulatory decisionmaking;

(6) documentation of minimum and desired standards for

data acquisition and integrated metadata;

(7) a statement of the status of Federal efforts to leverage mapping technologies, coordinate mapping activities, share expertise, and exchange data;

(8) a statement of resource requirements for organizations to meet the goals of the program, including technology needs for data acquisition, processing, and distribution systems;

(9) a statement of the status of efforts to declassify data gathered by the Navy, the National Geospatial-Intelligence Agency, and other agencies to the extent possible without jeopardizing national security, and make it available to partner agencies and the public;

(10) a resource plan for a digital coast integrated mapping

pilot project for the northern Gulf of Mexico that will—

(A) cover the area from the authorized coastal counties

through the territorial sea;

- (B) identify how such a pilot project will leverage public and private mapping data and resources, such as the United States Geological Survey National Map, to result in an operational coastal change assessment program for the subregion;
- (11) the status of efforts to coordinate Federal programs with coastal state and local government programs and leverage

those programs;

(12) a description of efforts of Federal agencies to increase

contracting with nongovernmental entities; and

(13) an inventory and description of any new Federal or federally funded programs conducting shoreline delineation and ocean or coastal mapping since the previous reporting cycle.

33 USC 3504.

SEC. 12205. PLAN.

Deadline.

(a) In General.—Not later than 6 months after the date of enactment of this Act, the Administrator, in consultation with the Committee, shall develop and submit to the Congress a plan for an integrated ocean and coastal mapping initiative within the National Oceanic and Atmospheric Administration.

(b) PLAN REQUIREMENTS.—The plan shall—

(1) identify and describe all ocean and coastal mapping programs within the agency, including those that conduct mapping or related activities in the course of existing missions, such as hydrographic surveys, ocean exploration projects, living marine resource conservation and management programs, coastal zone management projects, and ocean and coastal observations and science projects;

(2) establish priority mapping programs and establish and periodically update priorities for geographic areas in surveying and mapping across all missions of the National Oceanic and Atmospheric Administration, as well as minimum data acquisi-

tion and metadata standards for those programs;

(3) encourage the development of innovative ocean and coastal mapping technologies and applications, through research and development through cooperative or other agreements with joint or cooperative research institutes or centers and with other non-governmental entities;

(4) document available and developing technologies, best practices in data processing and distribution, and leveraging opportunities with other Federal agencies, coastal states, and

non-governmental entities;

(5) identify training, technology, and other resource requirements for enabling the National Oceanic and Atmospheric Administration's programs, vessels, and aircraft to support a

coordinated ocean and coastal mapping program;

(6) identify a centralized mechanism or office for coordinating data collection, processing, archiving, and dissemination activities of all such mapping programs within the National Oceanic and Atmospheric Administration that meets Federal mandates for data accuracy and accessibility and designate a repository that is responsible for archiving and managing the distribution of all ocean and coastal mapping data to simplify the provision of services to benefit Federal and coastal state programs; and

 $(\bar{7})$ set forth a timetable for implementation and completion of the plan, including a schedule for submission to the Congress of periodic progress reports and recommendations for integrating approaches developed under the initiative into the inter-

agency program.

- (c) NOÂA JOINT OCEAN AND COASTAL MAPPING CENTERS.— The Administrator may maintain and operate up to 3 joint ocean and coastal mapping centers, including a joint hydrographic center, which shall each be co-located with an institution of higher education. The centers shall serve as hydrographic centers of excellence and may conduct activities necessary to carry out the purposes of this subtitle, including—
 - (1) research and development of innovative ocean and coastal mapping technologies, equipment, and data products;
 - (2) mapping of the United States Outer Continental Shelf and other regions;

(3) data processing for nontraditional data and uses:

(4) advancing the use of remote sensing technologies, for related issues, including mapping and assessment of essential fish habitat and of coral resources, ocean observations, and ocean exploration; and

(5) providing graduate education and training in ocean and coastal mapping sciences for members of the National Oceanic and Atmospheric Administration Commissioned Officer Corps, personnel of other agencies with ocean and coastal map-

ping programs, and civilian personnel.
(d) NOAA REPORT.—The Administrator shall continue developing a strategy for expanding contracting with non-governmental entities to minimize duplication and take maximum advantage of nongovernmental capabilities in fulfilling the Administration's mapping and charting responsibilities. Within 120 days after the date of enactment of this Act, the Administrator shall transmit a report describing the strategy developed under this subsection to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Natural Resources of the House of Representatives.

33 USC 3505.

SEC. 12206. EFFECT ON OTHER LAWS.

Nothing in this subtitle shall be construed to supersede or alter the existing authorities of any Federal agency with respect to ocean and coastal mapping.

33 USC 3506.

SEC. 12207. AUTHORIZATION OF APPROPRIATIONS.

- (a) IN GENERAL.—In addition to the amounts authorized by section 306 of the Hydrographic Services Improvement Act of 1998 (33 U.S.C. 892d), there are authorized to be appropriated to the Administrator to carry out this subtitle— (1) \$26,000,000 for fiscal year 2009;
 - (2) \$32,000,000 for fiscal year 2010;

(3) \$38,000,000 for fiscal year 2011; and

- (4) \$45,000,000 for each of fiscal years 2012 through 2015.
- (b) JOINT OCEAN AND COASTAL MAPPING CENTERS.—Of the amounts appropriated pursuant to subsection (a), the following amounts shall be used to carry out section 12205(c) of this subtitle:
 - (1) \$11,000,000 for fiscal year 2009.
 - (2) \$12,000,000 for fiscal year 2010. (3) \$13,000,000 for fiscal year 2011.
 - (4) \$15,000,000 for each of fiscal years 2012 through 2015.
- (c) Cooperative Agreements.—To carry out interagency activities under section 12203 of this subtitle, the head of any department or agency may execute a cooperative agreement with the Administrator, including those authorized by section 5 of the Act of August 6, 1947 (33 U.S.C. 883e).

33 USC 3507.

SEC. 12208. DEFINITIONS.

In this subtitle:

- (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the National Oceanic and Atmospheric Administration.
- (2) Coastal state" has the meaning given that term by section 304(4) of the Coastal Zone Management Act of 1972 (16 U.S.C. 1453(4).
- (3) COMMITTEE.—The term "Committee" means the Interagency Ocean and Coastal Mapping Committee established by section 12203.
- (4) Exclusive economic zone.—The term "exclusive economic zone" means the exclusive economic zone of the United States established by Presidential Proclamation No. 5030, of March 10, 1983.

(5) OCEAN AND COASTAL MAPPING.—The term "ocean and coastal mapping" means the acquisition, processing, and management of physical, biological, geological, chemical, and archaeological characteristics and boundaries of ocean and coastal areas, resources, and sea beds through the use of acoustics, satellites, aerial photogrammetry, light and imaging, direct sampling, and other mapping technologies.

(6) Territorial sea" means the belt of sea measured from the baseline of the United States determined in accordance with international law, as set forth in Presidential Proclamation Number 5928, dated December

27, 1988.

(7) Nongovernmental entities" includes nongovernmental organizations, members of the academic community, and private sector organizations that provide products and services associated with measuring, locating, and preparing maps, charts, surveys, aerial photographs, satellite imagines, or other graphical or digital presentations depicting natural or manmade physical features, phenomena, and legal boundaries of the Earth.

(8) OUTER CONTINENTAL SHELF.—The term "Outer Continental Shelf" means all submerged lands lying seaward and outside of lands beneath navigable waters (as that term is defined in section 2 of the Submerged Lands Act (43 U.S.C. 1301)), and of which the subsoil and seabed appertain to the United States and are subject to its jurisdiction and control.

Subtitle C—Integrated Coastal and Ocean Observation System Act of 2009

SEC. 12301. SHORT TITLE.

This subtitle may be cited as the "Integrated Coastal and Ocean Observation System Act of 2009".

SEC. 12302. PURPOSES.

The purposes of this subtitle are to—

(1) establish a national integrated System of ocean, coastal, and Great Lakes observing systems, comprised of Federal and non-Federal components coordinated at the national level by the National Ocean Research Leadership Council and at the regional level by a network of regional information coordination entities, and that includes in situ, remote, and other coastal and ocean observation, technologies, and data management and communication systems, and is designed to address regional and national needs for ocean information, to gather specific data on key coastal, ocean, and Great Lakes variables, and to ensure timely and sustained dissemination and availability of these data to—

(A) support national defense, marine commerce, navigation safety, weather, climate, and marine forecasting, energy siting and production, economic development, ecosystem-based marine, coastal, and Great Lakes resource management, public safety, and public outreach training and education;

Integrated Coastal and Ocean Observation System Act of 2009. 33 USC 3601 note.

33 USC 3601.