

海洋基本計画  
Basic Plan on Ocean Policy

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## 総論 / General Remarks

### 1 海洋立国日本の目指すべき姿 / Vision of Japan as an Oceanic State

(1) 海洋基本法(平成19年法律第33号)において、「四方を海に囲まれた我が国にとって、海洋の開発・利用は我が国の経済社会の基盤であるとともに、海洋の生物の多様性が確保されること等の海洋環境の保全は、人類の存続の基盤である」とされている。

(1) The Basic Act on Ocean Policy (Act No. 33 of 2007) states that, since Japan is surrounded by the sea, “the development and use of the oceans are the basis of existence for the economy and society of our State, and ... securing the marine biological diversity and conserving other better marine environment are the basis of the existence of mankind.”

我が国は、伝統的に、水産業、海運・造船業等を通して、社会経済基盤の構築を図る一方、津波・高潮等の海の脅威への備えに努めてきた。また、海洋エネルギー・鉱物資源、海洋再生可能エネルギー、深海生物資源、海洋レジャー等の新たな海の価値の創出・活用に取り組んできた。さらに、人類を始めとする生物の生命を維持する上で不可欠な要素であり、地球環境を保全する観点から、海洋の生物多様性の保全や地球温暖化、海洋酸性化等への対策に取り組んできた。

Japan has traditionally developed the foundations of its society and economy through fisheries, shipping, shipbuilding and other industries. At the same time, our country has strived to prepare for threats from the sea such as tsunamis and storm surges. Japan has been taking initiatives to create and use new value provided by the sea, such as marine energy and mineral resources, marine renewable energy, deep-sea living resources and marine leisure activities. Our country has also been addressing issues such as conservation of marine biodiversity, global warming and ocean acidification, in consideration of the sea as an indispensable factor for maintaining the lives of living creatures, including humankind, and from the viewpoint of protecting the global environment.

近年、アジア太平洋地域においては、関係国との国際協調の下、法に基づく海洋の秩序の確立が求められている。また、東日本大震災を踏まえたエネルギー戦略の見直し、海洋エネルギー・鉱物資源開発への期待の高まり等の海洋をめぐる社会情勢の変化を考えると、更には我が国の成長戦略を推進する観点からも、海洋の積極的な開発・利用に対する期待はかつてなく高まっている。さらに、海洋は常に無限の可能性を秘めたフロンティアであり、深海底及び海底下に存在する生物圏など、新たな発見や理解を求めた挑戦が期待されている。

In recent years, in the Asia-Pacific region, the establishment of the order of the sea based on laws under international cooperation with related countries is needed. Expectations for active development and use of the sea have reached new highs given the changes in social circumstances surrounding the sea, such as the revision of energy strategy in response to the Great East Japan Earthquake and mounting expectations for the development of marine energy and mineral resources, and from the viewpoint of promoting our country's growth strategy. The sea is also a frontier with unlimited

potential, so there have been expectations for challenges for new discoveries and understanding, such as those of biospheres existing in the deep sea floor and under the seabed.

(2) さらに、海洋基本法において、「国連海洋法条約その他の国際約束等に基づき、国際的協調の下に、海洋の平和的かつ積極的な開発・利用と海洋環境の保全との調和を図る新たな海洋国家の実現を目指す」こととされている。

これを踏まえ、新たな海洋基本計画（以下「本計画」という）の策定に当たっては、以下のような取組姿勢と目指すべき方向性を基本とすることとした。

(2) The Basic Act on Ocean Policy also states that it is important to aim to “realize a new oceanic State in harmonization of the peaceful and positive development and use of the oceans with the conservation of the marine environment, under the international cooperation based on the United Nations Convention on the Law of the Sea and other international agreements.”

In light of this, the government has decided to set the following as its basic stance and approach to be adopted to the development of the new Basic Plan on Ocean Policy (the “Plan”).

(国際協調と国際社会への貢献) / International cooperation and contribution to international community

海洋を通じて我が国と関係するアジア太平洋を始めとする諸国との様々なレベルでの国際的な連携を強化する。また、国連憲章、国連海洋法条約等の関連国際法規を遵守し、法の支配に基づく国際海洋秩序の確立を目指す。さらに、そうした海洋秩序の確立を目指すべきとの理念の国際社会での共有に向けて主導的役割を発揮し、世界の発展や平和に大きく寄与する。

The government should strengthen international ties at various levels with Asia-Pacific and other countries that are related to our country via the sea. The government should also observe relevant international law and regulations, such as the Charter of the United Nations and UNCLOS, and aim to establish the international order of the sea based on the rule of law. Japan should substantially contribute to global development and world peace by taking leading role within the international society to share the principles that we should aim to establish such order of the sea.

(海洋の開発・利用による富と繁栄) / Wealth and prosperity through ocean development and utilization of the sea

我が国に富と繁栄をもたらすために、海洋の有する潜在力を最大限引き出すことを目指す。海洋環境の保全との調和を図りながら、我が国周辺海域の水産資源、エネルギー・鉱物資源等の海洋資源の開発等を進めるとともに、これらに関わる水産業や資源関連産業等も含む海洋産業の振興と創出や国際展開を図ることは、将来の我が国の成長による富の創出に大きく寄与する。

The government should aim to elicit the potential of the sea to the maximum extent in order to bring wealth and prosperity to our country. It will contribute greatly in creating wealth for our country,

through its future growth, to promote marine resources development, such as fishery resources and marine energy and mineral resources, in the marine zones surrounding our country, and aim for promotion, creation and international expansion of marine industries including fishery industries and resources-related industries related to the above marine resources, while seeking to harmonize the development and use of the oceans with conservation of the marine environment.

(「海に守られた国」から「海を守る国」へ) / From a country protected by the sea to a country that protects the sea

交易の道としての海洋において、安全で、効率的かつ安定的な海上輸送ルートを確保するとともに、海洋由来の災害に対する備えを徹底し、災害に強い国となることを目指す。さらに、領海、排他的経済水域等を守り抜くとともに、海洋を法の支配が貫徹する世界人類の公共財（グローバルコモンズ）として保ち続けるために積極的に努めていく。これにより、国民の生命・身体・財産を守り、国民生活や経済活動の維持・発展に大きく寄与する。

The government should aim to secure safe, efficient and stable maritime transport routes in the sea, which provides for trade routes, and to thoroughly prepare for marine-derived natural disasters to make Japan a disaster-resistant country. The government should defend our territorial seas and the Exclusive Economic Zone (EEZ) and other maritime zones and positively work to maintain the ocean as part of the global commons for which rule of law persists. Through these measures, the government should protect life, body and property of the people and contribute greatly to maintaining or developing their lives of the citizenry and economic activities.

(未踏のフロンティアへの挑戦) / Venturing into the unexplored frontier

我が国が有する科学技術を最大限活用して、深海底を始め、海洋の未知なる領域の研究等による人類の知的資産の創造や、海洋環境や気候変動等の全地球的課題の解決に取り組む。これにより、海洋を通じて世界を主導し、また世界に貢献することを目指す。

By maximizing use of Japan's science and technologies, the government should implement research, etc. on unknown domains of the sea, including the deep seabed, to contribute to creation of intellectual assets of humankind and endeavor to resolve global issues such as changes in the ocean environment and climate change. Through these efforts, the government should aim to lead and contribute to the world with ocean policy.

## 2 海洋基本計画策定の意義 / Significance of Establishing the Basic Plan on Ocean Policy

海洋に関する施策には、幅広い分野に及ぶ多種多様な個別の施策が含まれる一方で、海洋という共通の「場」に関わることから、個別の施策を相互に連携・調整しながら進めて



いくことが必要となる。また、政府全体で総合的に調整しながら進めていくことが必要となる施策も多い。こうした中、海洋に関する施策を総合的かつ計画的に推進すること等を目的に、平成19年7月に海洋基本法が施行され、同法に基づき、平成20年3月に海洋基本計画を閣議決定した。

While measures with regard to the oceans include diverse individual measures in a wide range of fields, all such measures are related to the sea as a place that is common to them. Therefore, it is necessary to coordinate among those individual measures in promoting the ocean measures. In addition, many of those measures need to be coordinated comprehensively by the entire government as they are promoted. Under such circumstances, the Basic Act on Ocean Policy was put into force in July 2007 for the purpose of comprehensively and systematically promoting ocean measures. Based on this law, the Basic Plan on Ocean Policy was approved in a Cabinet meeting in March 2008.

これまで当該計画に基づき、所要の施策を実施してきたところであるが、計画策定後5年を経過し、その間の海洋をめぐる情勢の変化等も踏まえつつ、海洋立国を目指すための新たな段階に移行することが適当である。このため、平成25年度からおおむね5年間を見通した本計画を策定することとした。本計画は、平成20年3月に策定した海洋基本計画に続いて、我が国が取り組むべき海洋に関する施策の具体像を国民に示すことにより、今後、関係者が一層連携・協力しながら海洋に関する施策に取り組み、新たな海洋立国を実現することを目指すものである。なお、本計画の策定後は、国民が本計画及びこれに関連する施策に係る情報を容易かつ簡便に入手できるようにするため、例えば本計画から具体的な施策を容易に参照できるようにする等の措置を講ずる。

Since then, the government has implemented required measures under the above Plan. However, five years after the Plan was established, it is deemed appropriate to move the efforts to be an oceanic state into a new phase while also considering changes in circumstances surrounding the sea that took place during the five years. It was therefore decided that the Plan should be established based on the projection for the period of about five years from FY2013. Following the Basic Plan on Ocean Policy established in March 2008, the Plan offers specifics of ocean measures that our country should implement so that related parties will further collaborate and cooperate as they work on the ocean measures and make Japan a new type of oceanic state. After the Plan is established, measures will be taken to allow people to easily and simply obtain information about the Plan and related measures. For example, a measure will be taken to allow people to easily refer to specific measures from the Plan.

本計画は、第1部において、現状と課題を整理した上で、社会情勢の変化等を踏まえ、今後おおむね5年間に重点的に推進する取組を定めるとともに、海洋基本法に規定する基本理念に沿った7つの施策ごとに、中長期的視点も視野に入れながら、各施策の方向性を定めるなど、今後実施すべき施策の基本的な方針について定める。

In Chapter 1 of the Plan, current conditions and issues are sorted out before measures to be intensively promoted in the coming roughly five years are stipulated in consideration of changes in social circumstances and other factors. The basic policy of the measures to be implemented in the coming years will also be stipulated in Chapter 1. For example, the direction of each of the seven measures in line with the basic principles stipulated in the Basic Act on Ocean Policy will be

stipulated, with medium- and long-term perspectives occasionally taken.

また、第2部において、第1部の基本的な方針を踏まえ、海洋基本法に規定する12の基本的施策ごとに、今後おおむね5年間に、集中的に実施すべき施策、関係機関の緊密な連携の下で実施すべき施策等、総合的・計画的推進が必要な海洋施策を具体的に定める。

In Chapter 2, based on the basic policy shown in Chapter 1, specific ocean measures that need to be comprehensively and systematically promoted in the coming five years, including measures to be taken in a focused manner and to be taken under close cooperation among related agencies, are stipulated for each of the twelve basic measures set forth in the Basic Act on Ocean Policy.

さらに、第3部において、総合海洋政策本部の見直し、地方公共団体や民間が担うべき役割、情報の積極的な公表など、海洋に関する施策を総合的かつ計画的に推進するために必要な事項を定める。

In Chapter 3, matters necessary for comprehensively and systematically promoting ocean measures, such as review of the Headquarters for Ocean Policy, roles to be assumed by local governments and the private sector, and active publication of information, are stipulated.

# 第1部 海洋に関する施策についての基本的な方針

## Chapter 1. Basic Policy of Measures with Regard to the Oceans

### 1 海洋政策をめぐる現状と課題 / Current Conditions and Issues of Measures with Regard to the Oceans

#### (1) 海洋基本計画の実施状況 / Implementation status of the Basic Plan on Ocean Policy

##### ア これまでに実施した主な施策 / Key measures implemented thus far

平成19年7月に海洋基本法が施行され、さらに、総合海洋政策本部令（平成19年政令第202号）に基づき、総合海洋政策本部に参与会議が設置された。また、同月、第1回の総合海洋政策本部会合が開催され、幹事会の設置が決定された。

In July 2007, the Basic Act on Ocean Policy was put into effect and the Councilors' Meeting was established in the Headquarters for Ocean Policy in accordance with the Order on the Headquarters for Ocean Policy (Cabinet Order No. 202 of 2007). In the same month, the first meeting of the Headquarters for Ocean Policy was held and the meeting decided to establish the Executive Board.

平成20年3月には海洋基本計画を策定し、以降各府省において、同計画に基づき着実に海洋に関する施策を講じてきた。また、政府全体での取組が必要とされた以下のような施策については、総合海洋政策本部の総合調整の下で、その推進を図ってきた。

In March 2008, the Basic Plan on Ocean Policy was established, and since then ocean measures have been implemented steadily based on the said Plan at each ministry. The following measures, for which efforts by the entire government were deemed necessary, have been promoted under the general coordination of the Headquarters for Ocean Policy.

- 平成20年度は、11月に我が国の大陸棚の延長に関する申請を大陸棚限界委員会に提出するとともに、平成21年3月には「海洋エネルギー・鉱物資源開発計画」を総合海洋政策本部会合において了承した。
- In FY2008, Japan submitted information on the extension of its continental shelf to the Commission on the Limits of the Continental Shelf in November. In March 2009, the Plan for the Development of Marine Energy and Mineral Resources was approved at a meeting of the Headquarters for Ocean Policy.
- 平成21年度は、6月に「海賊行為の処罰及び海賊行為への対処に関する法律（海賊対処法）」（平成21年法律第55号）が成立した。また12月には「海洋管理のための離島の保全・管理のあり方に関する基本方針」を策定するとともに、平成22年3月には「海洋情報クリアリングハウス」の運用を開始した。

- In FY2009, Punishment of and Measures against Acts Piracy (the Anti-piracy Act) was established in June (Act No. 55 of 2009). In December, the Basic Policy concerning Preservation and Management of Islands for Management of the Sea was established. In March 2010, the Marine-related information Clearing House was commenced.
- 平成 22 年度は、5 月に「排他的経済水域及び大陸棚の保全及び利用の促進のための低潮線の保全及び拠点施設の整備等に関する法律（低潮線保全法）」（平成 22 年法律第 41 号）が成立し、7 月には同法律に基づく「低潮線保全基本計画」を策定した。また、平成 23 年 3 月には、我が国の排他的経済水域等における鉱物の探査及び科学的調査について主権的権利等を適切に行使していくための「排他的経済水域等における鉱物の探査及び科学的調査に関する今後の対応方針」を総合海洋政策本部会合において決定した。
- In FY2010, Law on the Development of Base Facilities and Preservation of the Low-Tide Line for the Promotion of Use and Conservation of the EEZ and Continental Shelf (Low-Tide Line Preservation Act) (Act No. 41 of 2010) was established in May. In July, the Basic Low-water Line Protection Plan was established based on the law. In March 2011, the Future Policy on Exploration of Minerals and Scientific Surveys in the EEZ, etc. of Japan, which is aimed at appropriately exercising sovereign rights concerning exploration of minerals and scientific surveys in the EEZ, etc. of Japan, was approved at a meeting of the Headquarters for Ocean Policy.
- 平成 23 年度は、5 月に海洋保護区に関する我が国の考え方を整理した「我が国における海洋保護区の設定のあり方」を総合海洋政策本部会合において了承した。また、7 月には鉱物の探査を許可制とする等の改正「鉱業法の一部を改正する等の法律」（平成 23 年法律第 84 号）が成立し、平成 24 年 1 月に施行した。
- In FY2011, How to Establish Marine Protected Areas in Japan, in which our country's stance to marine protected areas is summarized, was approved at a meeting of the Headquarters for Ocean Policy in May. The Act on Partial Revision, Etc. of the Mining Act (Act No. 84 of 2011), which includes revisions such as introduction of a license system for exploration of minerals, was established in July and put into effect in January 2012.
- 平成 24 年度は、4 月に大陸棚限界委員会から日本が申請した 7 海域のうち 6 海域についての勧告を受領した。また、5 月には「海洋再生可能エネルギー利用促進に関する今後の取組方針」を総合海洋政策本部会合において決定した。
- In FY2012, the Commission on the Limits of the Continental Shelf (CLCS) agreed in April to extensions of the continental shelf in six of the seven sea regions concerning which Japan had requested such extensions. In May, the Future Policy on Promotion of Use of Marine Renewable Energy was determined at a meeting of the Headquarters for Ocean Policy.

#### イ 今後の主な課題 / Main future tasks

これまで海洋基本計画に基づきおおむね着実に海洋に関する施策を実施してきたところであるが、これに引き続き、海洋立国を目指すための次の段階においては、各施策の更なる充実・強化や重点化・効率化を図ることが重要となる。また、これまでの対応が

必ずしも十分でなかった施策に対する取組を検証し、見直すことも必要である。

Ocean measures have been implemented at a nearly steady rate in accordance with the Basic Plan on Ocean Policy. In the next phase toward being an oceanic state, it will be important to enhance, strengthen, and intensify individual measures and improve their efficiency. It is also necessary to examine and improve activities for measures that have not necessarily been implemented adequately.

このような考え方にに基づき、本計画においては、「海洋をめぐる社会情勢等の変化」等を踏まえて、「本計画において重点的に推進すべき取組」を明らかにするとともに、海洋基本法で規定する基本理念等に則して「本計画における施策の方向性」を定める。

Based on these ideas, in the Plan, the Measures to be Promoted Intensively under the Plan will be clarified in consideration of the changes in social circumstances surrounding the sea, and other factors, and the Direction of the Measures under the Plan will be stipulated in accordance with the basic principle, etc. prescribed in the Basic Act on Ocean Policy.

## (2) 海洋をめぐる社会情勢等の変化 / Changes in social circumstances surrounding the sea

### ア 東日本大震災等を踏まえたエネルギー戦略の見直しや防災対策強化の動き / Review of Energy Strategy and Disaster-Prevention Countermeasures after the Great East Japan Earthquake

東日本大震災に伴う東京電力福島第一原子力発電所の事故により、我が国はエネルギー政策の変換を迫られることとなった。エネルギーの安定供給、エネルギーコスト低減の観点も含め、責任あるエネルギー政策の構築に向け、検討を進めていくこととしている。特に、海洋再生可能エネルギーは、例えば洋上風力については採算性を考慮しなければ、我が国領海及び排他的経済水域に約 1,500GW に相当する発電設備の設置が理論的には可能との試算もあり、潜在力があると期待されている。

As a result of the accident at the Fukushima Daiichi Nuclear Power Station following the Great East Japan Earthquake, Japan has been urged to revise its energy policies. The government has decided to conduct deliberations toward developing responsible energy policies including viewpoints of stable energy supply and energy cost reduction. Above all, marine renewable energy is expected to have potential. For example, with regard to offshore wind power, one estimate shows that it is theoretically possible to install power generation facilities with a total capacity of approximately 1,500 GW in our territorial seas and the EEZ if profitability is not taken into account.

また、東日本大震災では、従来、我が国が想定してきたものをはるかに上回る巨大津波が発生し、甚大な被害をもたらした。現在、我が国は全力を挙げて復興に取り組むとともに、津波等防災対策の強化に取り組んでいる。

The Great East Japan Earthquake caused a giant tsunami that far exceeded what had been expected in Japan, resulting in devastating damage. Currently, our country is making every possible effort for the reconstruction and strengthening disaster-prevention counter measures,

including tsunamis.

#### イ 海洋の開発・利用への期待の高まり / Mounting expectations for development and use of the sea

これまでに、海洋エネルギー・鉱物資源の開発を進めるため、「海洋エネルギー・鉱物資源開発計画」の策定、鉱業法の改正などに取り組んできた。しかしながら、近年、我が国へのレアアースの供給が不安定化する事態が生じるとともに、多くの原子力発電所が停止し、価格の高い天然ガスの需要が増大するなど、石油・天然ガスやレアメタルを始めとするエネルギー・鉱物資源の安定供給を確保することがますます重要となってきた。一方で、我が国周辺海域においては、石油・天然ガスに加え、メタンハイドレートや海底熱水鉱床等の資源の開発に関する調査・研究等が進むとともに、レアアースを含む海底堆積物が発見されるなど、我が国に「新たな可能性」をもたらすイノベーションを推進する観点からも、今後の資源開発の進展が期待されている。また、新興国等のエネルギー需要の高まりに伴い、世界の海洋資源開発市場は急成長しており、これらの需要を取り込むことによる我が国海洋産業の成長も期待されている。

To promote development of marine energy and mineral resources, Japan has taken measures such as establishment of the Plan for the Development of Marine Energy and Mineral Resources and revision of the Mining Act. However, importance has been growing in recent years to ensure stable supply of petroleum, natural gas, rare metals and other energy and mineral resources, given factors such as the rare metal supply to Japan that became instable, shutdown of many nuclear power plants, and increase of demand for natural gas, whose price is high. On the other hand, in the sea zones surrounding Japan, research on development of resources such as methane hydrate and polymetallic sulphides, as well as petroleum and natural gas, continues and seabed sediments which contain rare earth elements have been discovered. From the viewpoint of promoting such innovations that will provide Japan with new possibilities, future progress of resource development is expected. The global market of marine resources development has been growing rapidly due to growing demand for energy mainly in emerging countries. Japan's marine industries are expected to achieve growth by taking advantage of the demand.

#### ウ 海洋権益保全等をめぐる国際情勢の変化 / Changes in international circumstances surrounding conservation of marine interests

近年、我が国周辺海域において、近隣諸外国の海洋安全保障や海洋権益をめぐり主張や活動が活発化しており、さらに、我が国領海及び排他的経済水域内の外国漁船による違法操業や、我が国の同意を得ない外国船舶による海洋調査等の事案も発生している。また、ソマリア沖・アデン湾における海賊被害も続いており、海洋における秩序維持、シーレーンの安全の確保の観点からの取組の促進が必要である。

In recent years, claims and activities by neighboring countries over maritime security and marine interests have intensified in the sea zones surrounding Japan. Moreover, there have also been cases of illegal operations by foreign fishing boats, and of marine surveys by foreign vessels in Japan's territorial seas and the EEZ which were conducted without Japan's consent. In addition,

pirate attacks continue off the coast of Somalia and in the Gulf of Aden, making it necessary to promote measures from the viewpoint of maintenance of the order of the sea and securing safety of sea lanes.

エ その他社会情勢等の変化 / d. Other changes in social circumstances, etc.

海氷域面積の減少など、気候変動がもたらす北極海における変化を受け、全地球的な気候システムへの影響や北極海航路の利用の可能性等についての世界的な関心が高まってきている。我が国においても、北極に関する研究・調査活動の推進や、輸送コストの削減等による海上輸送の変革等が期待されている。このほか、地球温暖化や海洋酸性化等に伴う海洋環境の変化、世界的に水産物の需要が高まる中で我が国の消費者の急速な魚離れ、東アジア諸国の著しい経済発展に伴う海上物流の増大・変化等の動向も生じている。

Given changes in the Arctic Ocean caused by climate change, including the decline of sea ice extent, global concern has been mounting over the impact of such changes on the global climate system and potential for use of Arctic Sea Route. In Japan, there have been expectations for promotion of research and survey activities with regard to the Arctic and reform in maritime transport by reduction of transportation costs. Other trends are observed as well such as changes in the ocean environment attributed in part to global warming and ocean acidification, rapid shift of Japanese consumers from fish amid growing demand for fishery products in the rest of the world, and increase and changes in the distribution of goods via the oceans associated with the remarkable economic development of East Asian countries.

## 2 本計画において重点的に推進すべき取組 / Measures to be Intensively Promoted Under the Plan

これまでの施策の実施状況、社会情勢等の変化等を踏まえ、今後おおむね5年間においては、特に以下の取組について重点的に推進する。

Given the implementation status of measures, changes in social circumstances, and other factors, the following measures will be intensively promoted in the coming five-year period.

### (1) 海洋産業の振興と創出 / Promotion and creation of marine industries

日本経済を再生し、我が国の成長による富の創出を図ることは喫緊の政策課題である。こうした中、海洋には資源を含めて無限の潜在力があり、またこれまでの取組等を通じ海洋資源の開発等が現実的になりつつあることから、今後、海洋の開発・利用を進め、海洋分野のイノベーションを推進するとともに、海洋産業の振興と創出を図ることは、我が国の成長戦略の鍵となり得るものと期待される。

Revival of the Japanese economy and creation of wealth through growth of our country are urgent policy issues. Under such circumstances, promotion of development and use of the sea and of

innovations in fields related to the sea, and promotion and creation of marine industries, are expected to be the key for Japan's growth strategies since the sea has unlimited potential including resources, and marine resources development is about to become reality as a result of past measures, etc.

こうした観点から、海洋エネルギー・鉱物資源の開発及び海洋再生可能エネルギーの利用促進を図るべく、これまでの進ちよく状況を踏まえ、産業化や海外における各種のプロジェクトへの参画を念頭に官民を挙げた開発体制の整備等に取り組む。また、海運・造船や水産等の分野における戦略的な施策や我が国の海洋産業の国際競争力を強化するための施策の推進に取り組む。なお、造船産業については、当該産業が艦艇の建造基盤の維持の観点からも重要であることを留意すべきである。さらに、海洋産業を支えるための基盤整備を図るため、技術開発の推進、人材育成や官民の連携強化等に取り組む。

From this viewpoint, to promote the development of marine energy and mineral resources and use of marine renewable energy, the government should take measures including joint efforts of the public and private sectors to improve frameworks for such developments, with its eye on industrialization and participation in various overseas projects, in consideration of the progress that has been made thus far. Efforts should also be made to promote strategic measures in maritime transport, shipbuilding, fisheries and other fields and measures for increasing the international competitiveness of Japan's marine industries. With regard to the shipbuilding industry, it should be kept in mind that the industry is also important from the standpoint of maintaining a foundation for building ships. Efforts such as implement technological development, human training resources and strengthening of collaboration between the governmental and private sectors should be made to build a foundation for supporting marine industries.

また、海洋の開発・利用・保全等を担う新たな海洋産業の創出を促すため、産学官連携の下、産業の状況等に応じた政策支援措置や事業創出の環境整備、国際競争力の強化、人材育成等の方策を盛り込んだ総合戦略策定等について検討する。

To promote creation of new marine industries that will be responsible for developing, using and preserving the sea, under coordination between the industrial , academic and governmental sectors, the government should deliberate on establishment of a comprehensive strategies including policy support measures in accordance with the state of industry and development of an environment for creating businesses, improvement of international competitiveness, and human training resources measures.

## (2) 海洋の安全の確保 / Securing safety and security on the oceans

海洋権益等をめぐる国際情勢が大きく変動してきており、これを踏まえて、海洋の安全の確保に関する取組を一層強化することが重要となっている。このため、我が国の領海及び排他的経済水域等の安全の確保を図るべく、海上保安庁及び海上自衛隊の体制強化や能力向上及び関係省庁間の連携強化に取り組む。また、国境離島の保全、管理及び振興に取り組むとともに、法の支配に基づく国際海洋秩序の確立に向けた取組を推進する。

International circumstances surrounding marine interests have been changing greatly. Given this, it has become important to further enhance measures for ensuring safety and security on the oceans.



Measures should therefore be taken to strengthen the systems, improve the abilities of the Maritime Self-Defense Forces and the Japan Coast Guard, and heighten coordination among related ministries in order to ensure safety of our country's territorial seas and the EEZ. Measures should also be promoted for protecting, managing and promoting islands near national borders and establishing the international order of the sea based on the rule of law.

(3) 海洋調査の推進、海洋情報の一元化と公開 / Promotion of marine surveys and integration and disclosure of marine-related information

海洋資源の開発・利用、海洋の総合的管理、海洋権益保全等の海洋政策を着実かつ円滑に進めていくためには、必要な海洋情報を取得し、かつ、当該情報を共有する基盤を構築することが不可欠である。このため、海洋調査及び海洋モニタリングを戦略的に推進し、衛星から得られる情報の利用を含めて情報内容の充実を図る。また、国等の有する海洋情報の一元化を進めるとともに、適切に公開し、利便性の向上に取り組む。

For steady and smooth implementation of ocean policy such as the development and use of marine resources, comprehensive management of the sea, and preservation of marine interests, it is essential to collect necessary marine-related information and build an infrastructure for sharing such information. Marine surveys including continuous oceanographic observations should therefore be carried out strategically, and the surveyed information as well as the marine-related information derived by satellites should be compiled to enrich the contents of comprehensive information. Comprehensive collection and integrate of marine-related information independently controlled by governmental agencies should be promoted and such information should be disclosed appropriately to increase the convenience for users to access and handle such information.

(4) 人材の育成と技術力の強化 / Developing human resources and improving technological ability

海洋立国を実現していくためには、その前提として、海洋に関わる人材の育成と技術力の強化を図っていくことが重要となる。このため、小学校、中学校及び高等学校における海洋に関する教育を充実する。また、大学等における学際的な教育や専門的な教育の推進、基礎的・先端的研究開発の強化、産学官連携の推進等を通じて、海洋立国を支える多様な人材の育成と基盤的な技術力の強化に取り組む。

As a prerequisite to being an oceanic state, it is important to develop human resources related to the sea and improve relevant technological abilities. Measures should therefore be taken to improve marine-related education at elementary schools, junior high schools and high schools. Efforts should also be made to develop diverse human resources who will support efforts to realize an oceanic state and improve basic technologies, in ways such as by promoting interdisciplinary and specialized education at universities and other institutions, strengthening basic and advanced research and development, and promoting industry-academia-government collaborations.

(5) 海域の総合的管理と計画策定 / Comprehensive management of sea areas and formulation of plans

我が国の沿岸域は、経済社会活動の拠点として利用が輻輳(ふくそう)していることに加え、環境保全等においても様々な課題を抱えているため、沿岸域の再活性化、海洋環境の保全・再生、自然災害への対策、地域住民の利便性向上等を図る観点から、陸域と海域を一体的かつ総合的に管理する取組を推進する。また、排他的経済水域や大陸棚は、今後、その開発・利用を進めていくことによる海洋産業の振興と創出等が期待されるため、利用調整を含めた海域の適切な管理を図るための取組を推進する。

As bases of economic and social activities, coastal regions of Japan are congested with multiple users. Such areas also face diverse issues in areas such as environmental conservation. Therefore, measures should be promoted to manage land areas and sea areas in an integrated, comprehensive manner from the standpoint of, for instance, revitalizing the coastal regions, preserving and reclaiming the marine environment, taking countermeasures against natural disasters, and improving convenience for local residents. With regard to the EEZ and continental shelf, promotion of their development and use is expected to promote and create marine industries. Measures should therefore be promoted to ensure appropriate management of sea areas, including coordination of use of such areas.

(6) その他重点的に推進すべき取組 / Other important measures to be promoted intensively

ア 東日本大震災を踏まえた防災・環境対策 / Disaster control and environmental measures after the Great East Japan Earthquake

東日本大震災を踏まえた海洋に関する防災・環境対策の強化に取り組む。また、東日本大震災に伴って発生した大量の洋上漂流物への適切な対応、海洋の有害物質や放射性物質のモニタリングの実施等に取り組む。

Disaster control and environmental measures with regard to the sea should be strengthened based on the experience of the Great East Japan Earthquake. Efforts should also be made to, for instance, appropriately handle the large amount of drifting matters generated as a result of the Great East Japan Earthquake and to monitor harmful substances and radioactive substances in the ocean.

イ 気候変動がもたらす北極海の変化に対する取組 / Measures responding to changes in the Arctic Ocean caused by climate change

気候変動がもたらす北極海の状態の変化等を受けて、我が国としても、海上輸送の確保や海上交通の安全確保、研究・調査活動の推進、環境の保全、国際的な連携や協力の推進等、検討・対応すべき多岐にわたる課題が生じている。このため、今後、これら諸課題について、総合的かつ戦略的な取組を進める。

Given the changes in the Arctic Ocean caused by climate change, Japan has been facing diverse

issues to study and address, such as securing maritime transport, securing the safety navigation, promotion of research and survey activities, conservation of environment, and promotion of international coordination and cooperation. Comprehensive and strategic measures should therefore be promoted to tackle these issues.

### 3 本計画における施策の方向性 / Direction of the Measures Under the Plan

#### (1) 海洋の開発及び利用と海洋環境の保全との調和 / Harmonization of development and use of the oceans with conservation of the marine environment

海洋エネルギー・鉱物資源の開発については、調査・研究を継続しつつ、事業化のための開発・研究を強化する段階に至ったと位置付け、①我が国周辺海域の資源ポテンシャルを把握するための技術開発と広域科学調査・資源探査の継続的な実施及び②生産に向けた技術開発を集中的に実施する。また、開発に際しての環境影響評価手法も併せて検討を継続・推進する。さらに、開発等のための活動拠点については、遠隔離島（南鳥島及び沖ノ鳥島）を含め、整備を推進するとともに、これらを利用した海洋調査、経済活動等について検討する。なお、資源に係る情報については、科学情報公開の原則とのバランスを考慮しつつ、必要なものについては厳格に管理する。

The development of marine energy and mineral resources should be deemed to have moved to the phase of intensified research and development for commercialization while continuing surveys and studies, (1) technological development and broad-based scientific surveys and resource exploration for identifying the resource potential of marine zones surrounding Japan should be successively implemented and (2) intensive technological development for production should be implemented. Deliberations on environmental impact assessment methods for the development should also be continued and promoted. Concerning Action bases for the development and other purposes, construction will also be promoted in areas including remote islands, specifically Minami-Tori Shima Island and Okino-Tori Shima Island, and marine surveys, economic activities and other activities made by using such bases should be discussed. Information related to resources should be controlled rigidly as necessary while consideration should be given to balance with the principle of publication of scientific information.

海洋再生可能エネルギーの利用促進については、平成24年5月に総合海洋政策本部で決定した「海洋再生可能エネルギー利用促進に関する今後の取組方針」に基づき、引き続き総合海洋政策本部が中心となり、様々な分野の関係者が相互に連携・協力して、実用化に向けた技術開発の加速や事業化を促進させるための施策を推進する。特に、既に管理者が明確な港湾区域等の海域においては、先導的な取組として連携体制を整えて推進する。海洋再生可能エネルギーの買取価格については、実用化の見通しが立ち、費用の検証が可能になった段階において国民負担にも配慮しつつ検討・決定する。また、地域協調・漁業協調を基本とした社会的受容性向上に向けた取組を推進する。さらに、管理者不在の海面を含む海域利用に関し、法整備を含めた協調・調整の枠組みを検討するなどの環境整備を行

うほか、必要なインフラ等の基盤整備を実施する。また、「取組方針」の次の段階として、今後、導入目標や時間軸の設定も念頭に置きつつ、洋上風力発電の大規模導入や関連産業創出等を戦略的に進めていく方策についても検討する。

With regard to promotion of use of marine renewable energy, related parties in various fields, with the Headquarters for Ocean Policy as its core, should collaborate and cooperate with each other in advancing measures for speeding up technological development for practical application and promoting their commercialization, based on the Future Policy on Promotion of Use of Marine Renewable Energy determined by the Headquarters for Ocean Policy in May 2012. Above all, in sea areas with administrators already clarified, such as port areas, a coordination system should be developed and promoted as a pioneering attempt. Purchase prices of marine renewable energy should be discussed and determined in consideration of the burdens on the general public at the stage where commercialization is certain and where it is possible to review the costs. Measures for improving social acceptability should also be promoted based on local area coordination and coordination with fisheries. With regard to use of sea areas without administrators, including the sea surface, efforts to develop the environment such as studies of frameworks for cooperation and coordination, including development of laws, should be made and bases including necessary infrastructure should be established. As the next step of the Policy, measures for strategically promoting large-scale introduction of offshore wind turbines and creation of related industries, etc. should be discussed, with determination of goals of the introduction and time schedules taken into account.

水産資源の開発及び利用については、水産資源の持続的な利用を確保するため、我が国の排他的経済水域における水産資源管理や国際的な水産資源管理を推進するとともに、持続的な活用のための研究開発や関連する施策を検討・推進し、環境負荷の少ない持続的な養殖業を確立するなど、水産基本計画等に従って取組を推進する。

Concerning development and use of marine resources, fishery resource management in the EEZ of Japan and international fishery resource management should be promoted to ensure sustainable use of fishery resources. At the same time, research and development for sustainable use of the resources and relevant measures should be discussed and promoted to establish sustainable aquaculture industries with less environmental impact. Thus, measures should be promoted in accordance with the Basic Fisheries Plan, etc.

海洋は地球環境に大きく関連しており、海洋環境の保全に際しては、国際協調を図りつつ、各種取組を推進することが重要となる。海洋生物多様性の保全については、海洋生物多様性保全戦略及び生物多様性国家戦略に従い、着実にこれを推進する。また、気候変動、海洋酸性化対策といった地球規模の環境問題への対応として、我が国が世界の主導的立場を取るべく調査・研究を推進するとともに、引き続き長期モニタリングに取り組む。

The sea has significant connection with the global environment, and it is important to promote measures for conserving the marine environment by seeking international cooperation. Measures for conserving marine biodiversity should be steadily promoted in accordance with the Marine Biodiversity Conservation Strategy and the National Biodiversity Strategy. As countermeasures against environmental problems on the global scale, such as climate change and ocean acidification, surveys and research should also be promoted in ways that will allow Japan to take the leading

position in the world. At the same time, long-term monitoring should continue to be undertaken.

海洋の開発・利用と環境保全との調和を図るため、開発・利用と環境保全が二律背反であるかのような考え方を払拭し、環境に配慮した開発技術の確立に取り組む。また、適切な資源管理のための方策を具体的に検討し、推進する。

To ensure harmonization of the development and use of the oceans with conservation of the marine environment, the government should make efforts to establish environmentally friendly development technologies by dispelling the idea that development or use of the sea and environmental conservation are contradictory and incompatible. Measures for appropriate resource management should also be studied specifically and promoted.

東日本大震災に伴って発生した洋上漂流物が米国等に漂着しており、引き続き漂着する可能性も指摘されているため、その現状把握や漂流予測を実施するとともに関係国との情報共有を図る等、政府一体となった対策に取り組む。

Drifting marine debris generated as a result of the Great East Japan Earthquake has washed ashore in countries including the United States, and it is pointed out that still more such marine debris may follow. The Government of Japan should therefore make concerted efforts to address this issue by comprehending the current situation and predicting drift patterns while sharing information with relevant countries.

## (2) 海洋の安全の確保 / Securing safety and security on the oceans

我が国周辺海域及びシーレーンや離島の安全を確保するため、関係諸国との協力及び関係省庁間の連携を強化するとともに、必要な体制の強化を含む取組を推進する。

To secure safety of sea zones surrounding Japan, sea lanes and remote islands, the government should strengthen cooperative relationships with related countries and coordination among related ministries, and promote measures including strengthening of necessary systems.

また、国際公共財（グローバルコモンズ）としての海洋の維持・強化のための取組を推進する。

Measures for maintaining and strengthening the ocean as part of the global commons should also be promoted.

海上における治安の維持や領海警備に万全を期すとともに、海上交通の安全の確保、海難救助等を適切に実施するため、海上保安体制の強化や海難防止対策を推進する。

The government should make every possible effort to maintain security and guard our territorial seas and should promote measures for strengthening the maritime security structure and marine accident prevention measures in order to secure maritime transport safety and ensure accurate maritime search and rescue.

海賊対策については、関係国等とも連携しつつ、ソマリア沖・アデン湾及び東南アジアにおける取組を継続するとともに、特にソマリア沖海賊から日本関係船舶の安全を確保するための取組を推進する。

For addressing the problem of pirates, the government should continue to implement measures off the coast of Somalia and in the Gulf of Aden and Southeast Asia by cooperating with related

countries and other parties. Above all, measures to protect ships related to Japan from pirates off the coast of Somalia should be promoted.

海洋由来の自然災害への対策については、津波災害対策編が追加された現行防災基本計画に従って総合的かつ計画的に取り組む。特に津波災害対策については、過去の地質記録等を踏まえ、あらゆる可能性を考慮した最大クラスの巨大な地震・津波を検討することとし、①発生頻度は極めて低いものの、発生すれば甚大な被害をもたらす最大クラスの津波及び②最大クラスの津波に比べて発生頻度は高く、津波高は低いものの大きな被害をもたらす津波を想定津波とする。その上で、最大クラスの津波に対しては、住民等の生命を守ることを最優先としてハード・ソフトの施策を柔軟に組み合わせて総動員する「多重防御」による地域づくりを、比較的発生頻度の高い一定程度の津波に対しては、人命、住民財産の保護、地域経済活動の安定化、効率的な生産拠点の確保の観点から、海岸保全施設等の整備を推進する。

The government should take countermeasures against marine-derived natural disasters comprehensively and in a planned manner by following the current basic disaster prevention plan, to which measures against tsunami disasters have been added. Above all, with regard to these measures, the government should study the largest earthquakes and tsunamis in consideration of every possibility based on geological records and other information and assume: (1) the largest tsunamis, whose frequency of occurrence is extremely low but would cause devastating damage once they occur, and (2) tsunamis whose frequency of occurrence is higher than that of the largest tsunamis and would cause great damage despite lower height. Based on this, as measures against the largest tsunamis, the government should create communities with multiple forms of protection, in which tangible and intangible measures are flexibly combined, by giving top priority to protecting the lives of residents, etc. For certain levels of tsunamis whose frequency of occurrence is relatively high, the government should promote development of coastal protection facilities, etc. from the standpoint of protecting people's lives and property, stabilizing the local economy and securing efficient production bases.

また、南海トラフにおける海溝型地震、首都直下地震を始めとして、我が国どこでも地震が発生し得るものとして、地震・津波への対策を推進する。

The government should also promote measures against earthquakes and tsunamis based on the assumption that earthquakes can occur anywhere in Japan, with examples including subduction-zone earthquakes in the Nankai Trough and earthquakes occurring directly beneath the Tokyo Metropolitan Area.

さらに、地球温暖化への適応対策として、地球温暖化に伴う海面上昇を踏まえた高潮対策等に取り組む。

As adaptation measures for global warming, the government should take measures against storm charges in consideration of sea-level rise caused by global warming and other disasters.

### (3) 科学的知見の充実 / Improvement of Scientific Knowledge of the Oceans

海洋科学技術に関する研究開発については、科学技術基本計画や科学技術・学術審議会

海洋開発分科会の検討等も踏まえ、特に、①地球温暖化と気候変動予測・適応、②海洋エネルギー・鉱物資源の開発、③海洋生態系の保全・生物資源の持続的利用、④海洋再生可能エネルギーの開発及び⑤自然災害対応の5つの政策ニーズに対応した研究開発を重点的に推進する。

With regard to research and development of marine science and technology, in consideration of the Science and Technology Basic Plan and deliberations of the Subdivision on Ocean Development of the Council for Science and Technology, the government should intensively promote research and development for the five policy needs: (1) projection of and adaptation to global warming and climate change, (2) development of marine energy and mineral resources, (3) conservation of marine ecosystems and sustainable use of living resources, (4) development of marine renewable energy and (5) response to natural disasters.

また、海洋に関する基礎研究や中長期的な視点に立って実施すべき研究開発を推進するとともに、国家存立基盤に関わる技術や広大な海洋空間の総合的な理解に必要な技術など、世界をリードする基盤的な技術の研究開発を推進する。

The government should also promote basic research related to the sea and research and development that should be carried out from medium- and long-term perspectives. At the same time, the government should promote research and development of world-leading fundamental technologies, such as those related to the basis of the nation's existence and those necessary for comprehensively understanding the vast marine space.

さらに、船舶等の計画的な整備、研究機関や大学等の船舶の共同利用、小型で高性能な無人探査機など調査効率化のための技術開発等を推進する。海洋政策の推進における衛星情報のより一層の活用について、宇宙政策とも十分に連携しつつ、今後の国内外の衛星インフラの整備状況等も踏まえて検討する。北極域及び南極域等の観測並びに調査研究は、地球規模の気候変動や将来予測、地球温暖化や日本周辺の気象等への影響評価に重要であり、特に北極域においては将来の北極海航路の利用可能性評価にもつながるため、これを継続・推進する。

Japan should promote systematic development of ships, shared use of ships by research institutes, universities, etc., and technological development, etc. for improving the efficiency of surveys, such as compact, high-performance unmanned probes. Increased use of satellite information for promoting ocean policy should be considered in light of the future development of satellite infrastructure in Japan and overseas, through coordination with space policy. Observations, surveys and research of the Arctic, Antarctic and other areas are important for assessing the impacts on climate change and future projections on the global scale and in Japan and areas around it. Above all, observations, surveys and research of the Arctic will lead to assessment of the potential for future use of Arctic Sea Route, so the government should continue and promote such activities.

海洋資源の利用、海洋環境の保全、海洋権益の保全や気候変動等の全地球的課題への対応など、海洋政策の基盤となる海洋調査やモニタリングについて、調査船、衛星観測、観測ブイ、一般船舶による観測、陸上観測等を組み合わせて、これを戦略的に推進する。

Marine surveys and monitoring that will be the foundation of marine policy including use of marine resources, conservation of the marine environment, conservation of marine interests and

measures against global issues such as climate change, should be strategically promoted by combining observations via survey vessels, satellites, research buoys and general vessels, observations on land, etc.

海洋情報の一元化と公開については、「海洋情報クリアリングハウス」や「海洋台帳」の充実・強化、データを解析し可視化するシステムの整備等に取り組み、更なる海洋情報の活用を図る。また、海洋情報の収集・管理・公開に関する共通ルールを策定し、海洋情報の幅広い利用を促進する。

With regard to integration and disclosure of marine-related information, the government should take measures including improvement and strengthening of the Marine-related information Clearing House and the Marine Cadastre and development of systems for analyzing and visualizing data in order to further increase use of marine-related information. Common rules on collection, management and publication of marine-related information should be also established to widely promote use of marine-related information.

#### (4) 海洋産業の健全な発展 / Sound development of marine industries

海上輸送の確保については、造船、港湾整備、海上交通路の整備及び船員の確保・育成に総合的に取り組む。特に、海運については、我が国の成長戦略と経済安全保障への積極的な社会的貢献を果たしていくことを念頭に、グローバルな環境変化を踏まえた外航海運の戦略的対応の推進及び国際的な競争条件の均衡化のための継続的な取組を進めるとともに、国際交渉を通じた秩序ある競争環境を整備する。また、低炭素・循環型社会に貢献する海上輸送体系を確保することにより、我が国海運業の競争力・経営基盤の強化を図るとともに、環境性能の高い船舶の技術開発の促進等による受注力の強化、新市場・新事業への展開及び業界再編の促進に取り組むことにより、我が国造船業の競争力の強化を図る。さらに、将来の北極海航路の利用に向けた各種取組を加速化させる。

To secure maritime transport, the government should work comprehensively on shipbuilding, development of ports, development of maritime transport routes and securing and raising of seafarers. Above all, with regard to shipping, the government should promote strategic efforts in the international shipping industry based on global environmental changes and successive measures for equating the conditions for international competition, and at the same time develop an orderly competitive environment through international negotiations by being mindful that the industry would actively make social contributions for Japan's economic strategies and economic security. The government should also strengthen the competitiveness and management base of Japan's shipping industry by securing a maritime transport system that contributes to a low-carbon, recycling-oriented society. At the same time, the government should strengthen the competitiveness of Japan's shipbuilding industry by promoting technological development for ships with high environmental-related performance and taking other measures for improving the ability to win orders and by promoting its expansion to new markets and businesses, as well as promoting reorganization of the industry. Measures aimed at future use of Arctic Sea Route should also be accelerated.

水産業の振興については、魚食に関する消費者への情報提供を積極的に行い魚食の普及



を図るとともに、適切な資源管理を行いつつ、漁業経営の安定化を推進し、国際競争力のある経営体の育成に向けた漁業経営の体質強化を促進するなど、水産基本計画に従って推進する。

With regard to promotion of the fisheries industry, the government should promote measures in accordance with the Basic Fisheries Plan. For example, the government should popularize fish-consuming habits by providing consumers with relevant information and promote stabilization of fishery management, while managing resources appropriately, to speed up efforts to improve the management culture for fostering management entities with international competitiveness.

新たな海洋産業の創出を図る観点から、海洋再生可能エネルギー利用に係る発電事業の産業化や、今後世界的な拡大が見込まれる海洋エネルギー・鉱物資源開発、海洋構造物・プラントに関する産業等の創出に向けた取組を推進する。また、海洋情報を活用した産業、未利用バイオマスやユニークな機能を活用した海洋バイオなどについても、産業化に向けた研究開発及び技術開発を推進する。さらに、我が国の海洋産業が更なる発展を図り、我が国の経済再生に寄与していくためには、海洋再生可能エネルギーや海洋エネルギー・鉱物資源産業等のグローバルなマーケットに進出し、増大する世界の海洋開発の需要を取り込むことが重要であり、世界でのシェアを拡大していく観点から、我が国の海洋産業の国際競争力を強化するために、官民一体となって、海外の海洋開発プロジェクトに日本企業が参画するための政策支援や環境整備に取り組む。

From the standpoint of creating new marine industries, the government should promote commercialization of power generation businesses related to use of marine renewable energy and creation of industries, related to the development of marine energy and mineral resources and marine structures and plants, which are expected to expand globally. Also, research and technological development aimed at industrialization should also be promoted with regard to, for example, industries that use marine-related information and marine biomasses that have not been utilized yet and/or have unique functions. For further developing Japan's marine industries and contributing to our country's economic revival it is also important to enter the global markets of marine renewable energy, marine energy and mineral resource industries, etc. in order to take advantage of growing demand for marine development in the world. From the standpoint of increasing market shares around the world, policy support and environmental development aimed at allowing Japanese companies to participate in overseas ocean development projects should be promoted through joint efforts of the public and private sectors to increase the international competitiveness of Japan's marine industries.

クルーズ、マリンレジャーなど、観光資源や憩いの場としての海洋を活用した観光産業の振興、発展を促す海洋観光等の取組を推進する。

Measures for marine tourism, etc. should be promoted for speeding up the promotion and development of tourism that uses the sea as tourist resources and a recreation area, such as cruising and marine leisure activities.

また、東日本大震災の巨大津波によって甚大な被害を受けた東北地方太平洋沿岸域においては、海洋産業復興の実現に向けた各種施策を着実に実施する。

In the areas on the Pacific coast of the Tohoku district that were severely damaged by the giant

tsunami triggered by the Great East Japan Earthquake, the government should steadily implement measures aimed at reviving marine industries.

#### (5) 海洋の総合的管理 / Comprehensive management of the sea

領海及び排他的経済水域等の管理については、国際法上、我が国が行使し得る権利がこれらの海域では異なることから、それぞれの特性を踏まえた管理の枠組みについて、必要に応じ法整備も含め、検討する。検討に当たっては、海域を利用する際に様々な関係者が効率的かつ効果的に利用できるよう、海域利用調整の枠組みを構築する。

According to the relevant international laws, the rights of the coastal states differ among each maritime zone such as the territorial sea, the EEZ, and the continental shelf. The Government should examine an appropriate management framework for these maritime zones, which includes the establishment of relevant laws and regulations if needed, in full reference to the coastal-states' rights as defined differently in each maritime zone. The Government should also consider building a coordination mechanism for efficient and effective utilization by all stakeholders in each maritime zone.

200海里を超える大陸棚については、平成24年4月に大陸棚限界委員会から勧告を受領したところである。当該委員会の勧告内容を踏まえ、勧告が先送りされた海域について早期に勧告が行われるよう引き続き努力するなど、大陸棚の限界の設定に向けた対応を適切に推進する。

Concerning the continental shelf beyond 200 nautical miles, Japan received recommendations of the Commission on the Limits of the Continental Shelf in April 2012. Based on the contents of the recommendations, Japan should appropriately promote measures for establishing the limits of its continental shelf, including by continuing to strive to the end that the Commission will make recommendations as soon as possible on the region for which the issuance of the recommendation was deterred.

沿岸域の総合的管理については、それぞれの特性に応じた海域の利用が行われていること等を留意した上で、国、地方公共団体等が連携して各課題に対処し、陸域と一体となった沿岸域の管理を促進する。

With regard to the comprehensive management of coastal zones, the national government, local governments and other parties should address each issue in coordination with each other and promote integrated management of land areas and sea areas, while remaining mindful that sea areas are used in accordance with their individual characteristics.

離島の保全、管理等については、海洋政策推進上の位置付けを明確化した「海洋管理のための離島の保全・管理のあり方に関する基本方針」に基づき、我が国の領海、排他的経済水域の外縁を根拠付ける離島の安定的な保全、管理等を重点的に推進するとともに、「低潮線保全基本計画」に基づき、低潮線及びその周辺の保全を図る。また、遠隔離島（南鳥島及び沖ノ鳥島）において輸送や補給等が可能な活動拠点を整備する。

With regard to stable preservation, management, etc. of remote islands, the government should intensively promote measures that justify the outer limits of Japan's territorial seas and the EEZ, in

accordance with the Basic Policy concerning Preservation and Management of Remote Islands for Management of the Sea, which clarifies the position of the preservation, management, etc. of remote islands in promoting the government's ocean policy. At the same time, the government should strive to preserve the low-water line and its surroundings based on the Basic Low-water Line Preservation Plan. The government should also develop activity bases with transport and supply functions on the remote islands of Minami-Tori Shima Island and Okino-Tori Shima Island.

離島の自律的な発展を促し、住民生活の安定と福祉向上を図るとともに、地域間の交流を促進し、居住する者のない離島の増加及び離島における人口の著しい減少の防止に取り組む。また、離島における定住を促進することで離島が海洋政策上の役割を担えるよう、他の地域に比較して低位にある産業や、生活基盤等を整備するとともに、医療介護、交通通信、産業、生活環境、教育文化、観光交流等に関するソフト施策を実施するなど、総合的かつ継続的な振興を図る。

The government should facilitate self-sustaining development of remote islands, stabilize residents' lives and improve welfare. At the same time, measures should be taken to promote exchanges among communities and prevent increase of uninhabited remote islands and significant decrease of population on remote islands. To enable those remote islands to play a significant role in the government's ocean policy, the government should also comprehensively and successively promote the remote islands by, for example, developing industries, infrastructure, etc. that are at lower levels compared with other regions and by implementing intangible policies concerning health care, transportation and communications, industries, living environment, education and culture, tourism exchanges and other aspects.

#### (6) 海洋に関する国際的協調 / International partnership with regard to the oceans

海洋の利用の確保、海洋資源等の開発及び利用、海洋環境の保全等を図るべく、多国間及び二国間の海洋協議等の場を活用して国際的なルールの整備や国際的なコンセンサスづくりに貢献する。

In order to secure use of the oceans, development and use marine resources, etc., and conservation of the marine environment, Japan should contribute to international rule-making and creation of international consensus-building through the multilateral and bilateral consultations of ocean policies.

特に海洋に関する紛争等については、海洋秩序の形成・発展の観点からも、国際法に基づく国際的なルールによりその解決を図るべきであり、国際司法機関等の第三者機関の積極的な活用が重視されるべきである。このような考え方が、我が国のみならず、各国においても共有されるよう促すとともに、海洋分野における国際司法機関の活動を積極的に支援する。

With regard to ocean-related disputes in particular, settlement should be sought accordance with international rules based on international law, and active use of third-party bodies such as international judicial bodies from the standpoint of formation and development of the order of the sea. Japan should be valued promote this idea to be shared by other countries, and positively support the activities of international judicial bodies in the ocean-related fields.

また、海上の安全保障や治安等の確保に向け、連携訓練や関係国への能力向上支援等の協力・連携を推進する。

In order to ensure safety and security on the sea, Japan should promote international cooperation and coordination holding including of joint exercises and provision of support for capacity-building to related countries.

さらに、科学技術分野において、地球規模の環境変動の理解や海底下のフロンティア領域の実態解明といった様々な課題に対して、広大な海洋の継続的かつ先進的な調査を国際的な協力・連携の下で推進するとともに、津波等の災害対策について、東日本大震災での教訓も生かしつつ、国際的な協力を推進する。

In area of the science and technology, Japan should promote successive and advanced research on the vast oceans under international cooperation and coordination to tackle a variety of issues such as understanding global environmental changes and clarifying the reality of frontier domains under the seabed. At the same time, Japan should promote international cooperation by taking advantage of the lessons it learned from the Great East Japan Earthquake concerning countermeasures against disasters, including tsunamis.

こうした海洋における種々の取組を通じ、国際社会の安定と繁栄に貢献する。

Through these diverse measures in the sea, Japan should contribute to the stability and prosperity of international society.

#### (7) 海洋教育の充実及び海洋に関する理解の増進 / Improvement of marine-related education and heightening of understanding of the oceans

初等中等教育及び高等教育のそれぞれで実施している海洋に関する教育を充実するとともに、それらを体系的につなげる方策を検討する。また、海洋に関する教育を支援する観点から、関係機関、大学、民間企業等が行うアウトリーチ活動等の有機的な連携を図る。

The government should improve marine-related education provided at schools for elementary, secondary and higher education, and discuss measures for linking them systematically. From the standpoint of supporting marine-related education, the government should also promote organic coordination among outreach efforts, etc. undertaken by related agencies, universities, private companies and other entities.

人材の育成については、海洋産業及び海洋教育の担い手を育成するとともに、中長期的な観点で将来の担い手の裾野を広げるための方策を検討する。また、特定の分野の専門的な知識を有する人材や、海洋に関する幅広い知識を有する人材の育成に取り組む。さらに、地域における産学官連携のネットワークづくりを通じて、地域の特色をいかした人材の育成を推進する。

Concerning development of human resources, the government should foster people who will be responsible for marine industries and marine-related education and discuss measures for increasing the number of such people in the future from medium- and long-term perspectives. Measures should also be taken to develop human resources with specialized knowledge in particular fields and those who have wide-ranging knowledge related to the sea. Human resource development that takes

advantage of the characteristics of respective regions should also be promoted through creation of a network for industry-academia-government collaboration in each region.

海洋に関する国民の理解の増進の観点から、国民が海を身近に感じられるよう、幅広い参加が得られる行事や海洋観光など、海洋に実際に触れ合う機会を充実させるとともに、マスメディア、インターネット等を通じた情報発信、水族館、博物館等とも連携した情報発信を検討する。また、海洋に関する国民の声を施策に反映させる等、国と国民との双方向での情報交換を推進する。さらに、マリレジャー等の安全対策や、海洋環境の保全についての啓発活動を引き続き推進するとともに、海洋に関する我が国の歴史・文化を知る機会となる水中遺跡の調査や、この保存・活用方策の検討に取り組む。

From the standpoint of heightening citizens' understanding of the sea, the government should strive to familiarize citizens with the sea by increasing opportunities for them to enjoy it, such as events and marine tours that can attract wider participation, and discuss transmission of information via mass media and the Internet and in collaboration with aquariums, museums and other entities. Exchange of information between the government and citizens, including reflection of citizens' opinions about the sea in government policy, should also be promoted. The government should also continue to promote educational activities on safety measures for marine leisure and other activities and on conservation of the marine environment. At the same time, the government should conduct surveys of underwater archaeological sites, which will provide opportunities to know the history and culture of Japan related to the sea, and discuss how to preserve and utilize such sites.

## 第2部 海洋に関する施策に関し、政府が総合的かつ計画的に講ずべき施策

### Chapter 2. Measures the Government Should Take Comprehensively and Systematically with Regard to the Sea

#### 1 海洋資源の開発及び利用の推進 / Promotion of development and use of marine resources

##### (1) 海洋エネルギー・鉱物資源の開発の推進 / Promotion of development of marine energy and mineral resources

###### ア 海洋エネルギー・鉱物資源調査の加速 / Acceleration of survey of marine energy and mineral resources

- 広大な我が国管轄海域における海洋エネルギー・鉱物資源の賦存量・賦存状況把握のため、海洋資源調査船「白嶺」、三次元物理探査船「資源」、新たに建造される海底を広域調査する研究船等に加えて、主に科学掘削を実施している地球深部探査船「ちきゅう」の活用も含め、関係省庁連携の下、民間企業の協力を得つつ、海洋資源調査を加速する。
- To gain an understanding of the total amount and abundance of marine energy and mineral resources in Japan's vast jurisdictional marine zones, speed up the marine resources survey, under collaboration with related government ministries and agencies, receiving cooperation from private companies, through the use of "Chikyu", a deep-sea drilling vessel that has been mainly conducting scientific drilling, in addition to "Hakurei", a marine resources survey vessel, "Shigen", a three-dimensional geophysical survey vessel, the new research vessel that will be built to survey a wide area of the sea floor, and other vessels.

###### イ 共通基盤等の整備 / Development of common bases, etc.

- 「海洋エネルギー・鉱物資源開発計画」の改定について、これまでの実施状況等を踏まえ、関係府省連携の下、必要に応じ所要の措置を講ずる。
- With respect to the revision of the Plan for the Development of Marine Energy and Mineral Resources, take necessary measures taking into account the situation of progress so far under the collaboration of related government ministries and agencies.
- 広域科学調査により、エネルギー・鉱物資源の鉱床候補地推定の基礎となるデータ等を収集するため、海底を広域調査する研究船、有人潜水調査船、無人探査機等のプラットフォーム及び最先端センサー技術を用いた広域探査システムの開発・整備

を行うとともに、新しい探査手法の研究開発を加速するなど、海洋資源の調査研究能力を強化する。

- To collect data and other materials through the wide-area scientific survey that will be a basis for projecting the potential area of ore deposits of energy and mineral resources, strengthen the abilities of the survey and the research of marine resources mainly by speeding up research and development of new exploration methods, in addition to developing and improving the platforms, such as research vessels that survey a wide area of the sea floor, manned research submersible, Autonomous Underwater Vehicles (AUV) and Remotely Operated Vehicles (ROV), and wide-area survey systems that use leading-edge sensor technologies.
- 資源開発の産業化を推進するとともに国際競争力を強化するため、関係府省の連携の下、海洋エネルギー・鉱物資源関係の調査・探査・研究開発等の成果を集約するとともに、我が国の有する他の分野の先端技術を結集して資源開発に活用する。
- To promote commercialization of resource development and strengthen global competitiveness, under the collaboration of related government ministries and agencies, consolidate results of surveys, exploration, research and development, and initiatives related to marine energy and mineral resources, and rally together leading-edge technologies in other fields that Japan possesses to be used for resource development.
- 海洋資源の開発及び利用や海洋調査等が、本土から遠く離れた海域においても安全かつ安定的に行われるよう、遠隔離島（南鳥島及び沖ノ鳥島）において輸送や補給等が可能な活動拠点を整備するとともに、将来の海洋資源輸送方法を視野に入れた活動拠点の利活用に向けた検討を進める。
- Develop bases which enable transportation, supply and other activities on remote isolated islands (Minami-Tori Shima Island and Okino-Tori Shima Island) so that activities such as development and utilization of marine resources and survey can be conducted on remote islands. Also, conduct examinations on how to effectively use the bases by taking into account transportation methods of marine resources in the future.
- 資源供給国に対する政府一体となった働きかけ、資源国に対する協力のパッケージ化や、資源権益獲得に対する資金供給の機能強化等を通じ、官民のリソースを最大限いかして資源の確保をより戦略的に進める。
- While the government should take an integrated approach to countries that supply resources, secure resources more strategically through maximum use of resources of the public and private sectors by creating cooperation packages for countries with resources, strengthening functions to supply funds to gain interests in resources, and taking other initiatives.

#### ウ 石油・天然ガス / Petroleum and natural gas

- 日本周辺海域の探査実績の少ない海域において、石油・天然ガスの賦存状況を把握するため、三次元物理探査船「資源」を活用した基礎物理探査（6,000km<sup>2</sup>/年）及び賦存可能性の高い海域での基礎試錐を機動的に実施する。

- Flexibly implement primary geophysical exploration (6,000 km<sup>2</sup>/year) by using “Shigen”, a three-dimensional geophysical survey vessel, and exploratory drilling in the marine zones with higher possibility of abundance of petroleum and natural gas, in less explored surrounding marine zones of Japan.
- 「資源」による基礎物理探査や平成 25 年度に実施する新潟県佐渡南西沖の基礎試錐の成果等を民間企業に引き継ぐことにより、探鉱活動の推進を図る。
- Promote exploration activities by transferring results and other findings from primary geophysical exploration by the Shigen, and exploratory drilling to be conducted in the marine zone southwest off Sado, Niigata Prefecture in FY2013, to private companies.

#### エ メタンハイドレート / Methane hydrate

- 日本周辺海域に相当量の賦存が期待されるメタンハイドレートを将来のエネルギー資源として利用可能とするため、海洋産出試験の結果等を踏まえ、平成 30 年度を目途に、商業化の実現に向けた技術の整備を行う。その際、平成 30 年代後半に、民間企業が主導する商業化のためのプロジェクトが開始されるよう、国際情勢をにらみつつ、技術開発を進める。
- Build technologies toward achieving commercialization targeting at around FY2018 in order to enable use of methane hydrate, of which a considerable amount is foreseen as deposited in Japan’s surrounding marine zones, as future energy resources, based on results of offshore production test and other data. In doing so, develop technologies that ensure start of a commercialization project led by private sectors in around FY2023-2027, taking the international situation into account.
- 日本海側を中心に存在が確認された表層型のメタンハイドレートの資源量を把握するため、平成 25 年度以降 3 年間程度で、必要となる広域的な分布調査等に取り組む。
- Conduct the necessary broad-based distributional exploration and other research over approximately three years from FY2013 in order to gain an understanding of the amount of reserves of shallow methane hydrate, whose existence has been confirmed mainly in areas in the Sea of Japan.

#### オ 海底熱水鉱床 / Polymetallic sulphide

- 国際情勢をにらみつつ、平成 30 年代後半以降に民間企業が参画する商業化を目指したプロジェクトが開始されるよう、既知鉱床の資源量評価、新鉱床の発見と概略資源量の把握、実海域実験を含めた採鉱・揚鉱に係る機器の技術開発、環境影響評価手法の開発等を推進するとともに、その成果が着実に民間企業による商業化に資するよう、官民連携の下、推進する。
- Taking the international situation into account, promote assessment of the amount of reserves of known mineral deposits, promote discovery of new mineral deposits and comprehension of the approximate amount of reserves, development of equipment technologies and environmental impact assessment methods related to mining and lifting, including actual offshore tests, expecting projects aiming at commercialization to be initiated with the



participation of private companies in or after FY2023-2027. At the same time, promote commercialization by private companies of results of the development of these technologies and methods under cooperation between the public and private sectors.

カ コバルトリッチクラスト及びマンガン団塊並びにレアアース / Cobalt-rich ferromanganese crusts, polymetallic nodules and rare earth

- コバルトリッチクラスト及びマンガン団塊の資源量調査と生産関連技術について、国際海底機構が定めた探査規則を踏まえ、調査研究に取り組む。特に、コバルトリッチクラストについては、海底熱水鉱床についての取組の成果も踏まえ、具体的な開発計画を策定した上で取り組む。
- In accordance with the Regulations on exploration issued by the International Seabed Authority, implement examinations and research on the exploration of the amount of reserves and production-related technologies of cobalt-rich ferromanganese crusts and polymetallic nodules. In particular, take measures on cobalt-rich ferromanganese crusts by establishing specific development plans based on results of initiatives taken on polymetallic sulphides and other factors.
- レアアースを含む海底堆積物については、将来のレアアース資源としてのポテンシャルを検討するための基礎的な科学調査・研究を行う。また、平成25年度以降3年間程度で、海底に賦存するとされるレアアースの概略資源量・賦存状況調査を行う。さらに、高粘度特性と大深水性を踏まえ、将来の開発・生産を念頭に広範な技術分野の調査・研究を実施する。
- Implement the basic scientific survey and research on submarine deposits that contain rare earth to examine their future potential as rare earth resources. In addition, over approximately three years from FY2013, implement a survey to measure the approximate amount and the abundance of rare earth assumed to be deposited under the seabed. Moreover, in light of its high viscosity and position in the abyssal environment, implement surveys and research on a wide range of technology fields by taking future development and production into consideration.

(2) 海洋再生可能エネルギーの利用促進 / Promotion of the use of marine renewable energy

ア 海洋再生可能エネルギー実用化に向けた技術開発の加速 / Acceleration of technological development to commercialize marine renewable energy

- 海洋再生可能エネルギーを利用した発電技術の開発コスト低減、安全性の確保、民間の参入意欲の向上、海洋産業の国際競争力強化及び関連産業の集積による地域経済活性化を図るため、実証試験のための海域である実証フィールドの整備に取り組む。
- To lower costs for developing electric-power-generation technologies that use marine renewable energy, secure the safety of such technologies, encourage participation of the

private sector, strengthen the international competitiveness of marine industries, and revitalize local economies by building up related industries, take measures to set up demonstration fields, marine zones for experiments.

- 海洋再生可能エネルギーの利用促進に向けた技術開発を支援するため、実証フィールドの活用と他の関連施策の有機的な連携を図る。
- To support technological development to facilitate the use of marine renewable energy, promote the use of demonstration fields and the organic cooperation of other related initiatives.
- 実海域での実証を安全かつ確実に進めるため、実証試験等の実施に当たり、第三者が技術的な課題をクリアしているかどうかを評価する仕組みについて、検討を行う。
- Conduct examinations on a structure in which a third party assesses whether technological issues have been cleared in order to ensure that experiments in actual marine zones are implemented safely and surely when experiments and related activities are implemented.

#### イ 海洋再生可能エネルギーの実用化・事業化の促進 / Promotion of practical application and commercialization of marine renewable energy

- 海洋再生可能エネルギーを利用した発電事業を目的とした海域利用の調整に当たっては、地方公共団体の役割が重要との認識の下、他の海域利用者等との共存共栄を図るとともに、地域ごとの状況に応じて総合的な観点から調整を行う。また、円滑な調整のための環境整備の観点から、地域協調型・漁業協調型の海洋再生可能エネルギー利用メニューを作成・公表するなど、関係者間の認識の共有を図る。
- In coordinating utilization of marine zones to be engaged in the electric power generation business by using marine renewable energy, with the awareness of the importance of the role of local government, achieve co-existence and co-prosperity with other users of the marine zone, and implement coordination from a comprehensive perspective in accordance with regional circumstances. In addition, from the perspective of developing a sound coordination environment, achieve sharing awareness among the related parties by creating and announcing a list of options to use marine renewable energy in coordination with local communities and fisheries.
- 海域利用に係るルールを明確にするため、必要となる法制度の整備も含めて検討する。
- Clarify the rules on use of marine zones, including examination of development of required legal systems.
- 海洋再生可能エネルギーの利用促進のため、必要となる各種海洋情報を充実するとともに、これらの情報を容易に閲覧できるよう海洋台帳の充実・機能強化に取り組む。
- To facilitate the use of marine renewable energy, improve a range of required marine-related information and take initiatives to improve “Marine Cadaster” and strengthen their functions so that marine-related information is readily browsed on PC.

- 港湾区域、漁港区域、海岸保全区域等、個別法により既に管理者が明確になっている海域においては、本来の目的や機能に支障のない範囲において、先導的な取組を進める。
- In marine zones, such as port areas, fishing port areas and coastal protection areas, where the administrators are already clarified in accordance with individual laws, implement leading projects to the extent to which they do not hinder their original purposes and functions.
- 海洋構造物や発電機器の安全性を担保する制度を明確化するとともに、我が国の海洋産業の国際競争力向上の観点から、我が国の技術を背景に、技術的基準の国際標準化等を主導する。
- Clearly define regulations that ensure safety of marine structures and power generators, and the initiative in international technological standardization, based on Japan's technologies from the perspective of improving the international competitiveness of Japan's marine industries.
- 洋上風力発電事業における環境影響評価に関しては、実証事業においてその技術的手法の検討を進める。また、洋上風力発電以外の海洋再生可能エネルギーを利用した発電事業についても、今後必要が生じた場合、適切な環境影響評価の在り方の検討を進める。
- For assessment of the environmental impact of the offshore wind power generation business, examine technical methods of assessment in the demonstration projects conducted by the government. Moreover, when the need arises in the future, examine appropriate methods to assess the environmental impact of ocean energy the power generation businesses, other than the wind power generation business.
- 海洋特有のコスト面に関する課題に対応するため、安全かつ効率的に設置・メンテナンスを行う作業船やバックヤードとなるインフラの整備方策について検討を進める。
- Study the approach of building working vessels engaged in safe and efficient installation and maintenance operations and infrastructure that are used as backyards in order to respond to issues related to costs peculiar to marine operations.

ウ 海洋再生可能エネルギー普及のための基盤・環境整備 / Construction of infrastructure and the environment for increased use of marine renewable energy

- エネルギー政策全体の方向性と整合を取りつつ、海洋再生可能エネルギーの普及を戦略的に進めていく施策について、施策の目標の在り方も含めて総合的に検討する。
- Implement comprehensive studies on measures to strategically increase the use of marine renewable energy, including studies on target-setting, while maintaining consistency with the overall direction of the energy policy.
- 海洋再生可能エネルギーの買取価格については、実用化の見通しが立ち、費用の検証が可能になった段階において、国民負担にも配慮しつつ検討・決定する。

- Study and determine the rate of feed-in tariff (FIT) of marine renewable energy considering burdens on general public, at the stage where commercialization is certain and where it is possible to review the cost.
- 我が国における海洋再生可能エネルギー利用の重要性に関し、国民への普及・啓発活動を実施する。
- Implement enlightening and promoting activities on the importance of the use of marine renewable energy in Japan.

## エ 洋上風力発電 / Wind turbines on the sea

### ①技術開発の推進等 / Promotion of technological development, etc.

- 平成 26 年度を目途に我が国の海象・気象条件に適した洋上風況観測システム及び着床式洋上風力発電システムの技術を確立するため、銚子沖及び北九州沖における 2 MW 級の実証研究を着実に実施するとともに、環境影響評価に係る技術的手法を検討し、市場ニーズに対応した超大型風力発電システムのドライブトレイン、長翼ブレード、遠隔監視技術等を開発する。
- Steadily implement demonstration project of systems with a capacity of 2 MW in areas off Choshi and Kitakyushu to establish technologies for wind condition monitoring systems and bottom-fixed offshore wind turbines that are suitable to Japan's oceanographic and meteorological features targeting at around FY2014, studying technological methods to assess environmental impact. In addition, develop drive-trains, long-wing blades, remote monitoring systems and other technologies for supersized wind turbines that meet the market needs.
- 平成 27 年度までに、我が国の気象・海象の特徴を踏まえた浮体式洋上風力発電技術等を確立するため、長崎県五島市杵島沖において、平成 24 年度に設置された小規模試験機 (100kW) に続き、平成 25 年度には実証機 (2 MW) を設置し、実証研究を進める。
- To establish technologies and other expertise for floating offshore wind turbines by FY2015 based on Japan's meteorological and oceanographic features, implement a demonstration projects by including installing a commercial scale wind turbine (2 MW) in FY2013 in the area off Kabashima, Goto City, Nagasaki Prefecture, following the installation of a small-scale experimental system (100 kW) in FY2012.
- 世界最大級の浮体式洋上風力発電所 (ウインドファーム) の実現を見据え、福島県沖において浮体式洋上風力発電に関する実証研究を進める。加えて、平成 27 年度を目途に、関連する技術の確立、安全性・信頼性・経済性を評価する。
- Implement demonstration projects on floating offshore wind turbines off Fukushima Prefecture to realize construction of the world's largest floating offshore wind power plant (wind farm). In addition, assess the safety, reliability and economic performance of the related technologies in FY2015.
- 維持管理手法及び環境影響評価手法を検討し、船舶の航行安全性の評価及び漁業との共存方法を確立する。

- Establish methods to assess the safety of the navigation of vessels and to coexist with fisheries by studying maintenance and management methods and environmental impact assessment methods.

#### ②安全基準の整備 / Development of safety standards

- 浮体式洋上風力発電施設の安全性を確保するため、漂流、転覆、沈没等、浮体・係留設備の安全性に関する技術的検討、さらに、大規模展開時の係留索の交錯リスク低減等安全確保のための技術的検討を実施する。これらの検討結果を踏まえ、平成25年度までに安全ガイドラインを策定するとともに、国際電気標準会議（IEC）における国際標準化策定を主導し、国際競争力強化を図る。
- Conduct technical studies on the safety of floating and mooring systems against drifting, overturning, sinking and other incidents to ensure the safety of floating offshore wind turbines. Moreover, implement technical studies on safety, such as lowering risks of tangling of mooring cables during the implementation of large-scale operations. Based on results of these studies, create safety guidelines by FY2013, and take an initiative to strengthen international competitiveness by leading preparation of international standards at the International Electrotechnical Commission (IEC).

#### ③インフラ整備 / Development of infrastructure

- 洋上風力発電施設の普及拡大を進めるため、洋上大型風車作業船建造に係る課題を整理し、その克服方法を明確にするなど、洋上大型風車作業船の実用化に向けた検討を行う。
- To facilitate the use of offshore wind turbines, implement studies on the commercialization of offshore large-scale windmill working vessels mainly by analyzing issues related to offshore large-scale windmill working vessels and clarifying methods to address such issues.

#### ④先導的な取組等 / Leading projects

- 既に管理者が明確になっている海域における先導的な取組として、港湾区域においては、洋上風力発電が、港湾の管理運営や諸活動と共生していく仕組みの構築によって、引き続き導入の円滑化に取り組む。また、漁港・漁村においても、エネルギーコストの縮減及び温室効果ガスの排出量削減や、災害時の非常電源として利用する観点から、再生可能エネルギーの導入に向けた取組を推進する。
- As leading projects in marine zones with their administrators already clarified, continually take measures to ensure smooth introduction of offshore wind turbines in port areas by establishing a system in which offshore wind turbines coexist with port management and other port activities. In addition, take initiatives to introduce renewable energy in fishing ports and villages from the perspective of reducing energy costs and greenhouse gas emissions and of use as an emergency power source in times of disaster.

#### オ 波力等の海洋エネルギー / Marine energy, such as wave energy

- 海洋エネルギー（波力、潮流、海流、海洋温度差等）を活用した発電技術として、40円/kWhの達成を目標とする実機を開発するとともに、更なる発電コストの低減

を目指すため、革新的な技術シーズの育成、発電システムの開発、実証研究等、多角的に技術研究開発を実施する。

- To develop an actual system that meets the target of 40 yen/kWh and is based on power generation technologies that use marine energy (e.g., wave energy, tidal energy, ocean currents, ocean thermal energy). In addition, to achieve a further reduction in power generation costs, implement support for fostering seeds of innovative technologies, development of power generation systems, experimental studies and other technical research and development in a diversified manner.
- 海洋エネルギーの導入を進めるため、浮体式や海中浮遊式を含む発電施設の安全性を担保する方策の検討を進めるとともに、港湾の本来の目的や機能と共生し得る円滑な導入や高度な利用の方策について検討する。
- To facilitate introduction of marine energy, implement studies on methods to ensure the safety of power generation facilities, including floating converters and moored underwater converters, and study measures for smooth introduction and advanced utilization in a manner compatible with the original purposes and functions of a port.
- 「東日本大震災からの復興の基本方針」に基づき、東北沿岸の自然条件下で成立する高効率・高信頼性・低コストの革新的発電システムの確立に向けた基盤的研究開発を推進する。
- In accordance with the “Basic Guidelines for Reconstruction in Response to the Great East Japan Earthquake,” implement basic research and development to establish high-performance, reliable, low-cost, innovative power generation systems that can meet natural conditions of coastal areas in the Tohoku region.

### (3) 水産資源の開発及び利用 / Development and use of fishery resources

- ア 水産資源の適切な管理及び水産動植物の生育環境の保全等 / Proper management of fishery resources and conservation of the growing environment for aquatic plants, animals, etc.
- 漁業者が、国及び都道府県で策定する「資源管理指針」に基づき、「資源管理計画」を作成し、これを確実に実施する場合に、資源管理・収入安定対策によって減収の補填を行う。これにより、基本的に全ての漁業者の参画を得て、資源管理指針・資源管理計画に基づく資源管理を全国的に推進する。
  - When fishermen prepare and steadily implement resources management plans in accordance with the resource management guidelines, which are prepared by the central and prefectural governments, compensate for decreased income through resource management and income stabilization measures. Based on this system, with the participation of all fishermen in principle, implement nationwide resource management in accordance with the resource management guidelines and resources management plans.
  - マグロ類を始めとする国際的な水産資源の適切な保存管理を推進するため、各地域漁業管理機関において、我が国のリーダーシップによる科学的根拠に基づく議論を主導する。

- Lead discussions based on scientific evidence at Regional Fisheries Management Organizations (RFMOs) to promote appropriate conservation and management of international fishery resources, such as tuna and tuna-like species.
- 鯨類について、科学的根拠に基づく持続的な利用の実現に向け、鯨類捕獲調査の安全な実施を図るとともに、我が国の立場に対する国際的な理解の拡大に引き続き取り組む。
- Safely conduct the whale research programs, and continually implement initiatives to gain a wider international understanding of Japan's stance to realize sustainable use of whale stocks based on scientific evidence.
- 資源を共有する周辺諸国・地域との連携・協力を強化し、水産資源管理をより一層推進するため、我が国漁船の操業機会を確保するとともに、国別の適切な漁獲割当量・許可隻数などの保存管理措置の適切な設定とその遵守の徹底を図り、国際的な資源管理を推進する。
- To strengthen coordination and cooperation with neighboring nations with which resources are shared, and further promote the management of fishery resources, secure operation opportunities of Japan's fishing boats and promote international resource management by appropriately establishing and thoroughly complying with the individual fishing quotas, the total number of permitted fishing boats by country and other conservation and management measures.
- 資源に関する調査研究の充実のため、漁獲データの効率的かつ迅速な収集体制を構築し、国と都道府県による海洋観測データ等の収集体制を維持するとともに、資源動向の把握に必要な海洋環境を予測する手法の開発に取り組み、資源評価等の精度の向上を図る。
- To improve surveys and research on resources, maintain a system to effectively and promptly collect data of fish catches and maintain a system for collecting data of marine surveys by central and prefectural governments, while implementing initiatives to improve the accuracy of resource assessment and other data by developing methods to forecast a marine environment that is necessary for understanding resource trends.
- 赤潮による養殖被害の防止・軽減を図るため、海洋環境の変動による新たな赤潮の発生機構の解明等の研究開発を推進する。
- Implement research and development to understand the process of the occurrence of new red tides due to changes in the marine environment and other issues in order to prevent and reduce damage to aqua farming by red tides.
- 海洋の生態系や生物多様性の保全と漁業の持続的な発展の調和を図るべく、海鳥、ウミガメ等の混獲の影響評価の実施や混獲回避技術の向上・普及を推進するとともに、資源の保存・管理の手法の一つとして必要な日本型海洋保護区の設定及び管理の充実や、水産資源の希少性評価に取り組む。
- To ensure harmonization between conservation of the marine ecosystem and biodiversity and the sustainable development of fisheries, assess the impact of bycatch of seabirds, sea turtles and other creatures, and take initiatives to improve and more widely use technologies to avoid

bycatch, while taking initiatives to establish and improve the management of Japanese-type marine protected areas that are necessary as a method for the conservation and management of resources, and to assess the scarcity of fishery resources.

- 水産業を支える調査・研究、技術開発を充実するため、国、水産総合研究センターを始めとする独立行政法人、都道府県の試験機関、大学、民間企業等の産学官連携を図り、資源管理の推進、漁業振興、持続的な養殖、漁船の安全性の確保等に関する研究・技術開発を効果的、効率的に推進する。また、海洋モニタリング等の基礎的な調査・研究を着実に推進する。
- To improve surveys, research and technological development that support the fisheries industry, facilitate cooperation among industry, academia and government, including the government, the Fisheries Research Agency and other incorporated administrative agencies, examination organizations of prefectures, universities, private companies, while effectively and efficiently implementing research and technological development of the promotion of resource management, promotion of fisheries, sustainable aqua farming, safety of fishing boats and other matters. In addition, steadily implement basic surveys and research, such as marine monitoring.
- 資源管理のルールへの遵守を担保し、資源管理の効果を上げるため、違反操業の効率的な監視・取締りを実施する。
- Implement effective surveillance and a crackdown on illegal operations to ensure compliance with resource management rules and improve the effectiveness of resource management.
- 我が国の領海及び排他的経済水域において、外国漁船の違法操業が悪質化、巧妙化しているため、監視・取締体制を強化する。
- Because illegal operation of foreign fishing boats has been conducted with greater malevolence and ingenuity in Japan's territorial seas and EEZ, strengthen the surveillance and crackdown structure.

#### イ 漁場の生産力の増進等 / Boosting productivity of fishery grounds, etc.

- 水産資源の育成と持続可能な利用を図るべく、生物相、海洋環境、漁場利用形態の変化に対応しつつ沖合漁場整備や藻場・干潟の保全造成を推進し、生態系全体の生産力を底上げする。また、ノリの色落ち対策として、必要な栄養塩を供給できるレベルに漁場の水質を維持・管理する手法の開発等に取り組む。
- To foster and achieve the sustainable utilization of fishery resources, boost the productivity of the overall ecosystem by developing offshore fishery grounds and promoting the conservation and development of seagrass bed/algae bed and tidal flats while responding to changes in biofacies, the marine environment and the style of the use of fishery grounds. In addition, as a measure to counter the discoloring of seaweeds, take initiatives mainly to develop methods to conserve and manage the water quality of fishery grounds at the level in which the necessary nutrients can be provided.
- 水産業・漁村の多面的機能を発揮するため、漁村の豊かな地域資源を活用した様々な取組を推進し、漁村の活動の増進、漁村の魅力の向上を図る。



- To foster the multifunctions of the fishery industry and fishing village, boost activities in fishing villages and heighten their attractiveness by promoting a variety of initiatives through proactive use of their abundant local resources.

## 2 海洋環境の保全等 / Conservation of marine environment, etc.

### (1) 生物多様性の確保等のための取組 / Efforts for ensuring biodiversity

#### ア 生物多様性保全のための戦略的取組 / Strategic efforts for conservation of biodiversity

- 生物多様性国家戦略 2012-2020 に従い、生物多様性の保全及び持続可能な利用に向けた取組を推進するとともに、愛知目標達成に向けた我が国の取組を着実に推進する。
- In accordance with the National Biodiversity Strategy 2012-2020, promote measures for the conservation and sustainable use of biodiversity, and steadily implement Japan's initiatives to achieve the Aichi Biodiversity Targets.
- 関係府省連携の下、生物多様性条約（CBD）等の国際約束、国連持続可能な開発会議（RIO+20）成果文書等を適切に実施する。
- Under coordination among related agencies, appropriately implement international agreements such as the Convention on Biological Diversity (CBD), the outcome document of Rio+20, the United Nations Conference on Sustainable Development, and other commitments.

#### イ 生物多様性の保全上重要な海域の抽出等 / Identification of marine zones important for conservation of biodiversity, etc.

- 生物多様性の保全の観点から生態学的・生物学的に重要な海域を平成 25 年度までに抽出し、抽出された海域を踏まえ、海域ごとの生態系の特性や社会的・経済的・文化的な要因も考慮しつつ、海洋保護区の設定や管理の充実、海洋保護区のネットワーク化を推進する。
- From the perspective of biodiversity, identify marine zones that are ecologically and biologically important by FY2013, and by taking the identified marine zones into account, enhance the characteristics of ecological systems of each marine zone, and social, economic and cultural factors, establishment and management of marine protected areas, and promote a network of marine protected areas.
- 海洋生物多様性の保全に関する施策の立案や着実な実施等を図るため、平成 28 年度を目途に、海洋生物の絶滅のおそれの度合いを評価し希少な海洋生物に関する情報を整備する。また、絶滅のおそれのある海鳥の保護増殖を実施する。
- Collect and compile information about rare marine organisms by assessing endangered marine organisms by the level of their chance of extinction by FY2016 in order to ensure that

measures related to the conservation of marine biodiversity are established and steadily implemented. In addition, take measures to protect endangered seabirds and help breeding.

- 生態系の特性に応じた生物多様性を確保する観点から、サンゴ礁生態系保全行動計画等の生態系の特性に応じた行動計画を実施する。特に東アジア地域でのサンゴ礁の保全を推進するため、国際サンゴ礁イニシアティブ (ICRI) の枠組みの下、「ICRI 東アジア地域サンゴ礁保護区ネットワーク戦略 2010」を引き続き実施する。
- From the perspective of securing biodiversity in accordance with the characteristics of the ecological systems, implement action plans that meet the characteristics of each ecological system, such as the Action Plan to Conserve Coral Reef Ecosystem in Japan. In particular, to promote conservation of coral reefs in East Asia, under the framework of the International Coral Reef Initiative (ICRI), continually implement the ICRI East Asia Regional Strategy on MPA Networks 2010.

#### ウ 海洋保護区の設定の適切な推進及び管理の充実 / Appropriate promotion of establishing marine protected areas and improved management of the areas

- 海洋保護区を、海洋生物多様性の保全及び生態系サービスの持続可能な利用を目的とした手法の一つとして、平成 32 年までに沿岸域及び海域の 10%を適切に保全・管理することを目標に、関係府省連携の下、その管理の充実を図るとともに、海洋保護区の設定を適切に推進する。
- By considering marine protected areas as a method to conserve marine biodiversity and to achieve the sustainable use of the ecosystem service, with the target of appropriately preserving and managing 10% of coastal zones and marine zones by 2020, with coordination among related agencies, take measures to improve the management of such areas and appropriately establish marine protected areas.
- 海洋保護区を資源の保存管理の手法の一つとして、その設定や管理の充実を推進し、海洋の生態系及び生物多様性の保全と漁業の持続的な発展の両立を図る。
- By considering marine protected areas as a method to conserve resources, take measures to promote the coexistence of conservation of marine ecosystem and biodiversity and the sustainable development of fisheries by improving the establishment and management of the areas.
- 持続可能な利用を目的とした我が国の海洋保護区の在り方について、日本型海洋保護区として国内外への理解の浸透を図る。
- Take initiatives to improve understanding both in Japan and overseas of Japanese-type marine protected areas, whose concept is to achieve sustainable use of the areas.
- 国立・国定公園への指定、拡張を進めるとともに、優れた海中・海上の景観を有する国立・国定公園の海域については、海域公園地区として指定する。
- Take initiatives to designate and expand national and quasi-national parks, and designate marine areas in national or quasi-national parks with superior undersea or sea views as marine park areas.

エ 多様な生態系を育む場としての取組 / Efforts to make areas foster a range of ecological systems

- 水質の浄化、生物多様性の確保、水産資源の育成及び海域の持続可能な利用を図るべく、藻場、干潟、サンゴ礁等の適切な保全・造成を推進する。
- Promote appropriate conservation and development of seagrass bed/algal bed, tidal flats, coral reefs and other areas in order to promote the purification of water quality, maintenance of biodiversity, development of fishery resources and sustainable use of marine zones.

(2) 環境負荷の低減のための取組 / Efforts for reducing environmental burden

ア 地球環境変動への取組 / Initiatives to respond to global environmental changes

- 地球温暖化に伴う海水温の上昇、大陸氷床融解等による海面水位の上昇、海洋の酸性化による海洋生態系への影響等を把握するため、高精度な海洋観測を継続して実施する。また、これらの変動や変化を再現・予測するための数値モデルの高度化に取り組み、海洋環境に与える影響評価に関する研究を推進する。
- Continue sophisticated marine surveys to understand the impact and other effects on marine ecosystem from rising sea temperatures from global warming, rising sea levels mainly due to continental ice sheets melting, and acidification of the oceans. In addition, implement research on the assessment of the impact on the marine environment by taking measures to improve the sophistication of numerical models to reproduce or forecast these environmental changes.
- 地球規模での環境問題解決のため、アルゴ計画、全球海洋観測システム (GOOS)、国際海洋炭素観測調整計画 (IOCCP)、全球海洋各層観測調査プログラム (GO-SHIP)、全球地球観測システム (GEOSS) 10年実施計画等に参画し、国内外の関係機関と連携の下、海洋観測を含む地球環境変動研究を推進する。また、国際的な地球観測計画の策定・実施や地球温暖化に関する科学的・技術的・社会経済的な評価を政策決定者等に提供する気候変動に関する政府間パネル (IPCC) の活動に積極的に貢献する。
- Implement research on global environmental changes, including marine surveys to address global environmental issues, by participating in the Argo project, Global Ocean Observing System (GOOS), International Ocean Carbon Coordination Project (IOCCP), Global Ocean Ship-based Hydrographic Investigations Program (GO-SHIP), Global Earth Observation System of Systems (GEOSS) 10-year Implementation Plan and other programs, in cooperation with related agencies both in Japan and overseas. In addition, make proactive contributions to activities of the Intergovernmental Panel on Climate Change (IPCC), which provides policymakers and other parties with scientific, technical and socioeconomic assessments related to establishment and implementation of international global observation plans and global warming.
- 海洋環境の国際的な連携・協力体制の強化を図るため、国連環境計画 (UNEP) が進める「地域海行動計画」の一つである北西太平洋地域海行動計画 (NOWPAP) や、

東アジア海域環境管理パートナーシップ (PEMSEA)、地球海洋アセスメント (GMA) 等への支援等を行う。

- Offer support to the Northwest Pacific Action Plan (NOWPAP), a part of Regional Seas Programme of the United Nations Environment Programme (UNEP), Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), Global Marine Assessment (GMA) and other programs in order to strengthen international coordination and cooperation structures for the marine environment.

イ 沿岸域等における取組 / Efforts in costal zones, etc.

- 広域的な閉鎖性水域である東京湾、伊勢湾、瀬戸内海等において、第7次水質総量削減 (平成26年度) 及び次期総量削減目標量達成に向けた取組を実施し、水質総量削減を進めるとともに、汚濁負荷削減対策、環境改善対策、環境モニタリング等を実施し「全国海の再生プロジェクト」を推進する。また、瀬戸内海については、中央環境審議会答申「瀬戸内海における今後の目指すべき将来像と環境保全・再生の在り方について」を踏まえ、「瀬戸内海環境保全特別措置法」(昭和48年法律第110号) に基づく基本計画を変更する。有明海・八代海等については、環境悪化の原因・要因究明、再生像及び再生手順を検討するとともに、「有明海及び八代海等を再生するための特別措置に関する法律」(平成14年法律第120号) に基づく審議の促進を図る。
- In Tokyo Bay, Ise Bay, the Seto Inland Sea, make efforts to promote the total pollutant load control by carrying out the Seventh Total Pollutant Load Control (FY2014 as the target year) and measures to achieve the next total pollutant load control target. At the same time, promote the Bay Renaissance Project mainly by implementing pollutant load reduction measures, environmental improvement measures and environmental monitoring. In addition, with regard to the Seto Inland Sea, in light of a report from the Central Environment Council, change the Future Vision of the Seto Inland Sea and Environmental Conservation and Recovery, the basic plan based on the Law concerning Special Measures for Conservation of the Environment of the Seto Inland Sea (Law No. 110 of 1973). Hold discussions to identify causes and factors for environmental deterioration and develop images of restoration and procedures with regard to the Ariake Sea, the Yatsushiro Sea and other seas. At the same time, promote deliberations based on the Law concerning Special Measures for the Rejuvenation of Ariake Sea and Yatsushiro Sea (Law No. 120 of 2002).
- 漂着ごみの実態把握及び対策の検討を進めるとともに、地方公共団体による海岸漂着物の処理や、海岸漂着物を含めた廃棄物の処理に必要な廃棄物処理施設の整備を支援する。また、海岸管理者が行う流木等の緊急的な処理を支援する。
- While assessing the actual situation of article washed ashore and examining countermeasures, provide support to local governments in dealing with such article and developing waste disposal facilities that are necessary for treating article including that washed ashore. Moreover, provide support to coastal management organizations in dealing with driftwood and other materials on an emergency basis.

- 災害からの海岸の防護に加え、海辺へのアクセスの確保等利用者の利便性、優れた海岸景観や生物の生息・生育環境等の保全に十分配慮した上で、海岸保全施設等の整備に取り組む。
- By paying full attention to the convenience of users, such as in securing access to the seaside, and the conservation of superior seashore landscapes and the habitat environment for organisms, in addition to the disaster protection of coasts, take measures to develop coastal preservation facilities.
- 河川を通じて海域に流入するごみ等の削減を推進するため、いわゆるポイ捨てを含む不法投棄の防止や河川美化等の取組を強化する。
- Strengthen measures to prevent illegal dumping, including littering, and measures to promote beautification of rivers to reduce articles flowing into marine zones via rivers.
- 陸域から流入する汚濁負荷を削減するため、下水道等汚水処理施設の整備や高度処理の導入を進める。
- Build wastewater treatment plants and introduce advanced wastewater treatment to reduce the burden of pollutants flowing down from land areas.

#### ウ 海洋汚染の防止 / Prevention of marine pollution

- 「ロンドン条約96年議定書」により「海洋汚染等及び海上災害の防止に関する法律」が改正され、廃棄物の海洋投入処分が原則禁止となったことを受け、新たに導入された許可制度について、適切に運用するとともに、法令の遵守に係る適切な監視・モニタリング方法を開発する。
- Based on the 1996 Protocol to the London Convention, the Act on Prevention of Marine Pollution and Maritime Disaster has been revised, and disposal of articles in the sea has been, in principle, prohibited. Accordingly, appropriately implement a new permission system adopted and develop appropriate supervising and monitoring methods in relation to compliance with laws and regulations.
- 国際海事機関（IMO）の海洋環境保護委員会（MEPC）などで扱われる「海洋汚染防止条約（マルポール条約）」等の国際約束を遵守する観点から、船舶からの油、有害液体物質及び廃棄物の排出並びに廃油処理施設の確保など、適切な対応を図るとともに、バラスト水管理条約の発効に向けた準備を行う。
- From the perspective of compliance with international agreements, such as the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) that is overseen by the Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO), take appropriate control measures for discharge of oil, noxious liquid substances and garbage from ships, securing of waste oil reception facilities, and other matters. At the same time, make preparations for the entry into force of the International Convention for the Control and Management of Ships' Ballast Water and Sediments.
- 油、有害液体物質等による「海洋汚染に関する国家緊急時計画」等に基づき、油等防除活動等を効果的に行うための沿岸海域に係る環境情報の整備、油防除・油回収資機材の整備、関係機関に対する研修・訓練の実施、油汚染事故発生等の損害補償

に的確な対応を図るなど、流出油等の防除体制を充実する。また、安全な船舶航行を実現するため、船舶事故等で発生する流出油の回収を実施する。さらに、我が国へ入港する外航船舶に対して、油汚染事故損害への的確な対応を図る。

- Based on frameworks such as the National Contingency Plan on marine pollution by oil and noxious liquid substances, enhance systems to control spilled oil and other pollutants by properly arranging environmental information concerning coastal marine zones for enabling effective controlling activities, developing equipment to control and recover spilled oil, providing lectures and training to related agencies, and appropriately dealing with compensation in the case of oil pollution incidents. In addition, to achieve safe navigation for ships, recover spilled oil caused by ship accidents and other incidents. Moreover, take appropriate measures regarding compensation for oil pollution incidents from ocean-going ships that enter Japanese ports.

#### エ 放射線モニタリング / Radiation monitoring

- 海洋における放射線モニタリングについて、関係府省・機関の連携の下、海水、海底土、海洋生物のモニタリングを引き続き実施する。
- Continue monitoring seawater, marine soil and marine organisms with regard to marine radiation monitoring, under coordination among related ministries and agencies.
- 東京電力福島第一原子力発電所事故に係るモニタリングについては、総合モニタリング計画に沿って、関係機関連携の下、同発電所近傍海域や沿岸海域、沖合海域、外洋海域における、海水、海底土、水産物及び海洋生物に含まれる放射性物質の濃度の測定を実施する。また、陸地から河川を通じて海へ流出した放射性物質の経路も考慮し、モニタリングの充実・強化を図る。さらに、これらモニタリングの結果、必要となる対策を実施する。
- With regard to monitoring related to the accidents at the Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Station, in accordance with the comprehensive monitoring plan and in cooperation with related agencies, monitor levels of radioactive materials present in seawater, marine soil and marine organisms in the surrounding marine areas of the plant, coastal marine zones, offshore marine zones and open ocean marine zones. In addition, improve and strengthen monitoring by taking into account routes of radioactive materials that flow into the sea from land via rivers. Moreover, implement necessary measures based on results of monitoring as described above.

#### オ 海洋分野での温室効果ガス排出削減に向けた取組 / Efforts to reduce emissions of greenhouse gases in marine-related fields

- 港湾における温室効果ガス排出量を削減するため、陸上輸送から海上輸送へのモーダルシフトを促進するとともに、港湾活動に使用する荷役機械等の省エネルギー化、再生可能エネルギーの利活用、二酸化炭素の収入源拡大等の取組を進めるなど、港湾における低炭素化施策を総合的に推進する。

- To reduce emissions of greenhouse gases in ports, promote a modal shift from land transport to maritime transport, and comprehensively take measures toward lower carbon by promoting energy-saving cargo-handling machines used in port activities, use of renewable energy and expansion of income sources of carbon dioxide.
- 海運における省エネ及び温室効果ガス排出量を削減するため、船舶の革新的省エネ技術等の研究開発・普及促進、革新的な省エネ型海上輸送システムの実証及び普及促進を行うとともに、優れた環境性能を有する天然ガスを燃料とした船舶の早期実用化、普及促進に取り組む。
- Promote research and development and the use of innovative energy saving technologies for ships, and promote experiments and the use of innovative energy saving maritime transport systems in order to encourage energy saving and reduced greenhouse gas emissions in maritime traffic. At the same time, promote early commercialization and use of ships that use natural gas, which has superior environmental-related performance, as fuel.
- 海底下二酸化炭素回収貯留については、事業者が実施する環境影響評価の結果の妥当性を適正に判断するため、日本近海における生態系及び海水と底質の化学的特性の調査を実施する。
- With regard to submarine carbon dioxide capture and storage, to ensure appropriate judgment of results of assessment of environmental impact implemented by operators, implement surveys of ecological systems and the chemical characteristics of seawater and bottom sediments in Japanese coastal waters.

### 3 排他的経済水域等の開発等の推進 / Promotion of Development of EEZ and Continental Shelves

#### (1) 排他的経済水域等の確保・保全等 / Maintenance, preservation, etc. of EEZ and continental shelves

- 我が国の大陸棚延長申請に対する大陸棚限界委員会の勧告内容を踏まえ、勧告が先送りされた海域について早期に勧告が行われるよう引き続き努力するなど、大陸棚の限界の設定に向けた対応を適切に推進する。
- Based on the content of the recommendations of the Commission on the Limits of the Continental Shelf in regard to Japan's submission of information on the extension of its continental shelf, Japan should appropriately promote measures for establishing the limits of its continental shelf, including by continuing to strive to the end that the Commission will make recommendations as soon as possible on the region for which the issuance of the recommendation was deterred.
- 東シナ海等においては、排他的経済水域等について、我が国と外国の主張が重複する海域が存在することに伴う問題に対応し、国際法に基づいた解決に向けて全力を尽くし、排他的経済水域等における我が国の権益を確保する。東シナ海資源開発に関する

平成 20 年 6 月の日中両政府の合意は、その実施に必要な国際約束締結交渉が平成 22 年 9 月以降中断されており、我が国としては、平成 20 年 6 月の合意が早期に実施されるよう、あらゆる機会を通じて、中国側に対して交渉の早期再開を働きかけていく。

- Securing Japan's interest in the EEZ and continental shelves by making every effort to resolve the issues regarding overlapping maritime claims of Japan and neighboring states in East China Sea and other area based on international law. In addition, taking every opportunity, Japan should try to persuade China to restart the negotiation for the implementation agreement of the agreement between Japan and China regarding the development of seabed resources of the East China Sea in June 2008 which have been suspended since September 2010.
- 排他的経済水域等の根拠となる低潮線の保全のため、低潮線保全法及び低潮線保全基本計画に基づき、低潮線保全区域内の海底の掘削等の行為規制を行うとともに、低潮線の状況を把握するため、船舶、ヘリコプター等を活用した巡視、空中写真の周期的な撮影、衛星画像等を活用した調査を実施する。
- Restrict activities of submarine drilling in the low-water line preservation areas in order to preserve the low-water line, which is a basis for the EEZ and continental shelves, in accordance with the Act on the Preservation of Low-Water Line and the Basic Plan for Preservation of Low-water Line. In addition, to understand the status of the low-water line, implement patrol by ships, helicopters and other equipment, periodically take aerial photographs, and promote surveys that use satellite images and other materials.

(2) 排他的経済水域等の有効な利用等の推進 / Promotion of effective use of EEZ and continental shelves

- 広大な排他的経済水域等の有効な利用や、海洋産業の振興と創出を図るため、海域の特性に応じて、水産資源の持続的利用の確保、海洋エネルギー・鉱物資源の開発の推進、海洋再生可能エネルギーの利用促進等に取り組む。
- Make efforts to ensure sustainable use of fishery resources, promote development of marine energy and resources, and facilitate use of marine renewable energy, among other initiatives, to facilitate effective use of the vast EEZ and continental shelves and the promotion and creation of marine industries, in accordance with the characteristics of marine zones.

(3) 排他的経済水域等の開発等を推進するための基盤・環境整備 / Establishment of infrastructure and the environment to promote development and other activities in EEZ and continental shelves

- 海洋資源の開発・利用や海洋調査等が、本土から遠く離れた海域においても安全かつ安定的に行われるよう、遠隔離島（南鳥島及び沖ノ鳥島）において輸送や補給等が可能な活動拠点を整備する。
- Develop bases in which transportation, supply and other activities are able to be implemented on far away and isolated islands (Minami-Tori Shima Island and Okino-Tori Shima Island) to



ensure that the development and use of marine resources, marine surveys and other activities are implemented safely and steadily even in marine zones far from the mainland.

- 排他的経済水域等の開発、利用、管理等の円滑な推進に必要な基盤情報を整備するため、海洋調査を推進するとともに、海洋情報の一元化と公開に取り組む。
- Promote marine surveys and take initiatives for the integration and disclosure of marine-related information to establish fundamental information necessary for efficient promotion of the development, use, management and other activities of EEZ and continental shelves.
- 排他的経済水域等における我が国の主権的権利を侵害する行為の防止等を図るため、外国海洋調査船等による鉱物資源の探査や科学的調査の実施等について、関係省庁が相互連携し、適切に対応する。
- To prevent activities that violate Japan's sovereign rights in the EEZ and continental shelves, under mutual cooperation, the related ministries and agencies should respond to the exploration of mineral resources, implementation of scientific surveys and other activities by foreign research vessels and other ships.
- 排他的経済水域等の開発等を推進するため、海域の開発等の実態や今後の見通し等を踏まえつつ、管理の目的や方策、取組体制やスケジュール等を定めた海域の適切な管理の在り方に関する方針を策定する。当該方針に基づき、総合海洋政策本部において、海洋権益の保全、開発等と環境保全の調和、利用が重複する場合の円滑な調整手法の構築、海洋調査の推進や海洋情報の一元化・公開等の観点を総合的に勘案しながら、海域管理に係る包括的な法体系の整備を進める。
- In order to promote exploitation and exploration in the EEZ and the continental shelf, the Government should introduce a policy on appropriate management of the EEZ and the continental shelf, taking into account the current progress and the future outlook of exploitation and exploration in these maritime zones. This policy should establish the purpose, procedure, plan and schedule of management in the EEZ and the continental shelf. Based on the policy, the Headquarters for Ocean Policy under the Cabinet should examine the establishment of comprehensive laws and regulations for the management of the EEZ and the continental shelf, with extensive consideration for the rights and duties of the coastal states, harmonization between the exploitation and conservation of the environment, development of an efficient coordination mechanism, facilitation of ocean surveys, and the centralization and publication of ocean-related information and data.

#### 4 海上輸送の確保 / Securing Maritime Transport

##### (1) 安定的な海上輸送体制の確保 / Securing a stable marine transport system

- 日本商船隊の国際競争力の確保及び安定的な国際海上輸送の確保を図るため、日本籍船及び日本人船員の計画的増加に取り組む我が国の外航海運事業者に対し、トン数標準税制の適用等を実施し、日本船舶と日本船舶を補完する準日本船舶合わせて 450 隻

体制の早期確立を図るとともに、日本人外航船員の数を平成20年度から10年間で1.5倍に増加させるための取組を引き続き促す。

- Apply tonnage tax and other special treatment to Japanese international shipping operators that try to increase the quantity of Japanese-flagged vessels and Japanese seafarers in a planned manner with an aim of establishing a 450-vessel structure at an early stage that includes Japanese-flagged vessels and -deemed-Japanese-flagged vessels that supplement Japanese-flagged vessels to secure the international competitiveness of Japanese merchant fleets and stable international marine transport. At the same time, continue to promote initiatives to increase the number of Japanese seafarers by 50% in the 10 years from FY2008.
- 公平な条件下で競争を行う環境整備として、交渉参加国が高いレベルの自由化約束を行うことを目指し、世界貿易機関（WTO）や経済連携協定（EPA）等における海運サービス分野の交渉に取り組む。
- As a measure for developing an environment in which competition takes place under equal conditions, engage in maritime transport service negotiations mainly at the World Trade Organization (WTO) and in economic partnership agreements (EPAs) with an aim that countries participating in negotiations will reach high-level liberalization agreements.
- 近年注目されている北極海航路の活用の可能性について、関係国との協議等を進めるとともに、海運事業者や荷主等と連携し、航路が開く可能性、技術的課題、経済的課題等を検討する。
- Promote talks with relevant countries on the possibility of use of the Arctic Sea Route, which has recently been attracting interest, and under coordination with shipping operators, shippers and other parties, examine the possibility of the opening of shipping routes, technological issues, economic issues and other challenges.
- 内航海運の安定的な輸送を確保するため、国際的な慣行となっているカボタージュ制度を維持するとともに、老齢船の代替建造、船舶管理会社を活用したグループ化を促進する。
- Maintain the Cabotage system that is internationally adopted, and promote the replacement shipbuilding of aging ships and grouping through ship management companies in order to secure steady traffic in coastal shipping.

## （2） 船員の確保・育成 / Securing and raising seafarers

- 外航・内航海運のニーズに応じた即戦力・実践力を備えた船員を養成するため①海運事業者が運航する船舶の活用による、より実践的な乗船訓練を可能とする社船実習の拡大及び内航海運への導入、②内航船の運航実態に即した実践的な乗船訓練を可能とする内航用練習船の導入を進めるなど、船員教育の更なる質の向上に取り組む。
- To develop seafarers possessing professional expertise and execution abilities to meet the needs of international and coastal shipping, take initiatives to further improve the quality of training of seafarers by (1) expanding training in owned ships and introducing such training in coastal shipping by using ships operated by shipping operators so that more practical onboard training

can be provided, and (2) promoting introduction of training coastal shipping ships so that practical onboard training that meets the actual operation situation of domestic service ships can be provided.

- 高齢化の進展等に伴う内航船員の不足に対応するため、就業体験を実施するなど、国と内航海運事業者等の関係者とが連携して若年者の志望を増加させるための取組を推進する。また、計画的に新人船員の確保・育成に取り組む事業者を支援する。
- To respond to the shortage of seafarers engaged in coastal shipping, which is mainly due to aging, by offering work experience and other opportunities, promote initiatives to increase the number of young people who wish to join the shipping service industry under cooperation between the government and domestic shipping operators and other parties. In addition, provide in a planned manner support to shipping operators that try to secure and raise new seafarers.
- 船員教育の環境を改善するため、現役船員による実践的な講義の実施や人事交流を通じた現場の知識・経験を教育に取り込むなど、船員の確保・育成に関わる国、船員教育機関及び海運事業者等関係者間での連携を強化する。
- To improve the environment of training of seafarers, by introducing onsite knowledge and experience to training through practical lectures by active seafarers and personnel exchanges and adopting other measures, strengthen cooperation among relevant parties, such as the government, seafarers training institutions and shipping operators, that are engaged in the securing and raising of seafarers.

### (3) 海上輸送拠点の整備 / Developing maritime transport bases

#### ア 経済・産業・生活を支える物流基盤の整備 / Developing distribution infrastructure that supports economies, industries and livelihoods

- 我が国全体と地域の経済・産業・生活を物流面から支えるため、国際海運ネットワークにおける拠点としての国際海上コンテナターミナル、迅速かつ低廉な輸送物流体系を構築するための複合一貫輸送ターミナル、地域の産業の特性や輸送ニーズに応じた内貿ターミナル等の整備を推進するとともに、これらへのアクセス道路網を整備する。
- To support the economies, industries and livelihoods of Japan on the whole and regional areas through the distribution system, promote measures to develop international maritime container terminals as a base in the international shipping network, develop intermodal transport terminals to establish a prompt and economical transport and distribution system, and develop intra-trade terminals that respond to the characteristics of industries and needs of transport in regional areas. At the same time, develop the network of road access to these facilities.
- 我が国と北米・欧州等を直接結ぶ国際基幹航路を維持・拡大するため、国際コンテナ戦略港湾（阪神港、京浜港）において、ハブ機能強化に向けたコンテナターミナル等のインフラ整備、フィーダー輸送網強化による貨物集約、港湾運営の民営化な

ど、ハード・ソフト一体となった総合的な施策を集中して実施し、その機能強化を図る。

- To maintain and expand major international shipping routes that directly connect Japan with North America, Europe and other regions, strengthen the functions of strategic international container ports (Hanshin Port and Keihin Port) by focusing on comprehensive measures that integrate tangible and intangible aspects, such as the development of container terminals and other infrastructure to improve functions as a hub, concentration of cargo by strengthening the network of feeder transport, and privatization of port management.
- 資源・エネルギー等の安定的かつ安価な輸入の実現を目指し、我が国の産業競争力の強化、雇用の創出及び所得の海外流出防止の観点から、大型船の入港を可能とする拠点となる港湾の確保や企業間連携の促進を図り、国全体として効率的かつ安定的な海上輸送ネットワークを形成する。
- With an aim of achieving steady and economical imports of resources, energy and other materials, from the perspective of strengthening the competitiveness of Japanese industries, the creation of employment, and preventing outflows of income, develop an efficient and steady nationwide marine transportation network by establishing major ports that can be a base for large vessels can enter and promoting cooperation among companies.
- 港湾の整備を効率的に実施するため、沿岸域において波浪観測及び潮位観測を行うとともに、沖合においては、地震発生時に津波観測にも資する GPS 波浪計を用いた観測を行う。
- Monitor waves heights and tidal levels in coastal zones, and implement offshore monitoring based on GPS buoys, which can be also useful for tsunami monitoring in case of earthquakes, in order to implement the development of ports and harbors efficiently.
- 港湾において、民間の知恵・資金等を活用するため、官民連携（PPP）を活用した施設の整備・運営に関する検討を推進する。
- Examine and promote development and management of facilities through the use of public-private partnership (PPP) to use expertise, funds and other facilities of the private sector in ports.
- 輸出入及び港湾関連手続を効率的に実施するため、電子処理システムの機能を改善するなど、利用者の更なる利便性向上に取り組む。
- Take measures to further improve the convenience of users by improving the functions of electronic processing systems and other facilities to efficiently conduct import and export and procedures related to port operations.

#### イ 循環型社会に対応した拠点整備 / Developing bases that are compatible with a sound material-cycle society

- 循環資源の物流ネットワークを形成するため、広域流動の拠点となる港湾をリサイクルポート（総合静脈物流拠点港）に指定し、循環資源を取り扱う岸壁等の港湾施設の確保や運用等の改善を図るとともに、民間企業等によって設立されたリサイクルポート推進協議会との連携を推進する。

- To create a distribution network of recyclable resources, by designating ports that become bases for wide-area distribution as Recycle Ports (integrated logistics hubs for extended recycling), take measures to secure berths and other port facilities in which recyclable resources are handled, and improve enforcement of regulations in handling recyclable resources at ports. At the same time, promote cooperation with the Recycle Ports Promotion Council, which was established by public and private entities.
- 港湾の整備に伴うしゅんせつ土砂や循環利用できない廃棄物等について、可能な限り減容化するとともに、最終的に処分するための海面処分場を計画的に整備する。特に、大阪湾圏域の廃棄物は大阪湾内の海面処分場で広域処理し、首都圏の建設発生土は港湾建設資源の広域利用促進システムの活用により、全国の用地造成等に用いる。
- Reduce as much as possible the volume of dredged soil created from development work in ports and other waste that cannot be recycled, and develop coastal disposal sites by which waste is ultimately disposed of in a planned manner. In particular, dispose of regionally collected waste from the Osaka Bay area in coastal disposal sites in Osaka Bay, and use soil generated from construction / dismantling activities in the Tokyo metropolitan area for the reclamation of land nationwide by using a system to promote wide-area utilization of port construction resources.

## 5 海洋の安全の確保 / Securing Safety and Security of the Sea

### (1) 海洋の安全保障や治安の確保 / Securing security and public order of the sea

#### ア 周辺海域の秩序の維持 / Maintaining order on the sea

- 我が国周辺海域における広域的な常時監視体制や遠方・重大事案への対応体制の強化に努める。特に、領海等においてやむを得ない理由なく停留・はいかい等を行う外国船舶に対しては、国内法に基づき、適切に対処する。また、島嶼（とうしょ）部における情報収集・警戒監視体制を整備するとともに、海上保安体制の強化に努める。
- Make efforts to strengthen the broad-based, constant monitoring structure in Japan's surrounding marine zones and the structure to respond to distant or critical events. In particular, in accordance with domestic laws, appropriately respond to foreign ships that anchor, hover or engage in other activities in the territorial seas and other areas without unavoidable reasons. In addition, make efforts to develop a structure to collect information and monitor security in the scattered island areas, and strengthen the maritime safety and security system.
- 海上保安庁の巡視船艇・航空機及び自衛隊の艦艇・航空機等の計画的な整備を進め、持続的な活動を確保するとともに、要員の確保に努める。また、不審船・工作船対

応能力を維持・向上するため、不審船対応訓練を継続的に実施するとともに、情報収集分析体制の強化を図る。

- Secure sustainable activities by procuring in a planned manner patrol vessels, aircraft and other equipment of the Japan Coast Guard and SDF's Vessels, aircraft and other equipment of the Japan Self-Defense Forces, and make efforts to secure necessary personnel. In addition, to maintain and improve abilities to respond to unidentified vessels and spy ships, hold exercise training to respond to unidentified vessels, and strive to strengthen the information collection and analysis structure.
- 自衛隊と海上保安庁との連携体制の強化に努めるとともに、我が国周辺海域における情勢に対し、政府が一体となって対応できるよう、現場・中央を含め、情報収集・警戒監視等で得られた情報の迅速な共有等による関係省庁の連携体制を強化する。
- Make efforts to strengthen the coordination system of the Japan Self-Defense Forces and the Japan Coast Guard. Moreover, to ensure that the government can respond in an integrated manner to developments in Japan's surrounding marine zones, strengthen the coordination system of the related ministries and agencies mainly by ensuring that information obtained through information collection activities and surveillance monitoring is promptly shared by all parties, including operators at actual sites and those at central operations.
- 周辺海域を航行する船舶の動静を把握するため、関係行政機関等が保有する船舶の航行情報を一元的に管理・提供する枠組み、衛星を利用した海洋監視の在り方など、船舶動静把握の在り方について検討する。
- To acquire information of the movement of ships sailing through the surrounding marine zones, investigate the methods of monitoring the movement of ships, including an integrated framework for managing and providing information of sailing ships owned by related administrative agencies and other organizations, and Space-based Maritime Domain Awareness.

#### イ 海上犯罪の取締り / Crackdown on marine crimes

- 海上犯罪を未然に防止するため、引き続き監視・取締りを行う。特に、国内密漁事犯・外国漁船による違法操業、海域への廃棄物の投棄などの海上環境事犯に対する監視・取締り、薬物・銃器等の密輸・密航事犯の取締り・水際阻止に引き続き取り組む。
- To preemptively prevent marine crimes, continue to implement surveillance and crackdown. In particular, implement surveillance and crackdown against illegal domestic poaching, illegal operations by foreign fishing boats, and marine environment crimes, such as disposal of waste in marine zones, while continuing to take initiatives to crack down on or interdict at the border the smuggling of drugs, guns and other items and illegal immigration.
- 治安を確保するための体制充実の観点から、関係機関間での連携の強化、海上保安庁の巡視船艇・航空機及び警察用船舶等の整備を実施する。

- From the perspective of improving the structure to secure security, strengthen cooperation among the related agencies, and maintain and improve patrol vessels and aircraft of the Japan Coast Guard, police boats and other equipment.
- 我が国の沿岸や離島の安全を確保するため、治安維持活動に従事する要員の増員、装備資機材等の整備、海上保安庁・警察等の円滑かつ緊密な情報共有等による連携体制の構築等を、より一層着実に推進する。また、密航監視哨（しょう）を効果的に運用するほか、沿岸警備協力会と連携して各種対策に取り組む。
- To secure the safety of Japan's coasts and islands, further promote initiatives to ensure that the number of necessary personnel engaged in security maintenance activities is increased, equipment and machinery that are used for such activities are improved, and a coordination system among the Japan Coast Guard, the police and other institutions is established mainly by maintaining efficient and close information-sharing. In addition, effectively manage the surveillance system of illegal immigration and take a range of measures under coordination with coastal guard cooperation organizations.

#### ウ 海賊対策等 / Measures of counter-piracy, etc.

- 国際社会と連携し、ソマリア沖・アデン湾での海賊対策を引き続き実施するとともに、海賊多発海域における日本籍船において、小銃を用いた警備を実施することができる等の特別の措置について、その取組を推進する。また、国連ソマリア沖海賊対策コンタクト・グループ（CGPCS）等を通じて、関係国との連携の強化を図る。さらに、ソマリア及びソマリア周辺国の海上保安機関の能力向上及び海賊訴追・取締能力向上のため、国際機関を通じた支援及び二国間での支援を引き続き実施する。
- Under coordination with international society, continue to take measures of counter-piracy off the coast of Somalia and in the Gulf of Aden, and promote initiatives to allow Japanese-flagged vessels to guard themselves with rifles and in other ways as a form of special treatment in pirate-infested waters. In addition, through the Contact Group of Piracy off the Coast of Somalia (CGPCS), an international forum established by the United Nations, and other organizations, strengthen coordination with relevant countries. Moreover, to improve abilities of maritime safety authorities in Somalia and its neighboring countries and their abilities to prosecute and crack down on piracy, Japan continues to provide support through international organizations and bilateral support.
- 航行援助施設の運用・整備に関する協力及び人材育成、アジア海賊対策地域協力協定（ReCAAP）に基づく海賊情報の共有等を通じて、マラッカ・シンガポール海峡等における海賊対策、航行安全対策を実施する。
- By offering cooperation and human resources training on the management and development of Aids to Navigation, sharing information about piracy based on the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) and adopting other measures, Japan implements measures to combat piracy and secure navigation safety in marine zones, such as the Strait of Malacca and Singapore.

- 海上におけるテロ対策として、関係機関が連携し、テロ関連情報の収集・分析、我が国に入港する船舶の安全確認、出入管理情報システムの推進、水際におけるテロ対策、臨海部の原子力発電所、石油コンビナート等の危険物施設及び米軍施設等の重要施設に対する監視警戒を適切に実施するとともに、核燃料輸送船に対する警備体制の強化を図る。
- As countermeasures against terrorism on the seas, under the coordination of related agencies, collect and analyze information about terrorism, confirm the safety of ships entering Japan, promote development of an exit/entry management information system, take countermeasures against terrorism at the border, and appropriately implement monitoring and surveillance of facilities that handle hazardous materials, such as nuclear power plants in coastal regions and petrochemical complexes, and important facilities such as US military facilities. In addition, strive to strengthen the security measures for nuclear fuel transport ships.
- 貨物検査法による措置の実効性を確保するため、関係行政機関と合同訓練等を実施するなど、緊密な連携を図る。
- To ensure the effectiveness of measures taken under the Act on Special Measures concerning Cargo Inspection, etc., strive to maintain close coordination with related administrative organs by holding joint exercise and taking other measures.
- 海上輸送による大量破壊兵器の拡散を阻止するため、「拡散に対する安全保障構想（PSI）」に基づく海上阻止訓練等へ積極的に参加する。また、海上でのテロ行為の防止及び海上輸送による大量破壊兵器の拡散の防止に関し、公海上における船舶上での大量破壊兵器の使用や船舶によるこれらの兵器の輸送等の抑止・取締方法について、国際的な動向を踏まえつつ検討を行う。
- To prevent proliferation of weapons of mass destruction by marine transport, Japan needs to actively participate in maritime exercise and other exercises, etc. under the Proliferation Security Initiative (PSI). In addition, with regard to prevention of terrorist attacks on the seas and prevention of proliferation of weapons of mass destruction by marine transport, by taking into account international trends, examine methods to prevent and crack down on the use of weapons of mass destruction on ships on the high seas and transportation of such weapons via ship.

## (2) 海上交通における安全対策 / Safety measures of maritime transport

### ア 船舶の安全性の向上及び船舶航行の安全確保 / Improving the safety of ships and securing the safety of navigation of ships

- 船舶海難等の発生を未然に防止し、海運業における輸送の安全を確保するため、海運事業者の経営トップから現場まで一貫した安全管理体制の構築を目指す運輸安全マネジメント制度を促進するとともに、従来からの監査業務や安全評価手法の開発等も併せて実施する。



- Promote the transport safety management system, which aims to develop an integrated safety management system that involves every party from the management to onsite workers of shipping operators, in order to preemptively prevent occurrence of maritime accidents of ships and other accidents and secure the safety of transport in the shipping industry. At the same time, implement existing audit operations and develop safety assessment methods.
- 国際機関での協議を通じ、船舶の設計、建造、運航、解体に関わる各種の基準の策定と不断の見直しを行うとともに、検査の確実な実施、外国船舶の監督（PSC）や、海上安全の啓発等に取り組む。
- Through deliberation at international organizations, develop and continuously review various types of standards concerning design, construction, operation and dismantling of ships. At the same time, securely conduct inspections and take measures for supervising foreign ships (port state control or PSC) and educating on maritime safety.
- 安全かつ安定的な海上輸送を確保するため、我が国の国際・国内海上輸送ネットワークの根幹を形成している開発保全航路について、国が一体的に開発、保全及び管理に取り組む。
- To secure safe and stable maritime transport, the government needs to take measures in an integrated manner to develop, preserve and manage waterways designated to be developed and preserved that form the backbone of Japan's international and coastal shipping network.
- 船舶交通の安全と運航効率の向上を図るため、航行船舶の指標となる航路標識について、視認性、識別性を向上する等の高度化に取り組むとともに、整備等を推進する。
- To improve the safety of vessel traffic and the efficient movement of ships, take initiatives to improve Aids to Navigation, guides for navigation of ships, mainly by improving the visibility and identifiability, and promote the maintenance of such assistance.
- 電子海図・航海用刊行物を活用した船舶交通の安全性を向上するため、国際水路機関（IHO）における国際基準策定に積極的に参画し、利便性の高い航海安全情報の提供方法を検討するとともに、電子海図の情報充実と高機能化に取り組む。
- To improve the safety of vessel traffic that uses electronic navigational charts and nautical publications, examine methods to provide highly convenient navigation safety information by actively participating in development of international standards at the International Hydrographic Organization (IHO), and take measures to improve information and functions of electronic navigational charts.
- 海況に関する情報を海洋速報により提供するほか、狭水道における潮流の観測体制及び情報提供体制を強化する。
- Provide information about ocean conditions via the Quick Bulletin of Ocean Conditions, and strengthen systems to monitor and provide information on tidal currents in narrow channels.
- 社会的影響が著しい大規模海難の発生を防止するため、海上交通センター等による航行船舶の安全に必要な情報提供、船舶に対する指導等を行う。また、これらを適切かつ効果的に実施するため、同センターの機能充実を図る。

- To prevent occurrence of large-scale marine accidents that greatly impact society, provide information necessary for safe navigation of ships by vessel traffic service centers and other organizations, give instruction to ships, and take other necessary actions. To ensure that these actions are appropriately and effectively implemented, seek to improve the functions of the service centers.
  - 民間団体・関係行政機関と緊密に連携し、海難防止思想の普及・海難防止に関する知識の向上等を図るとともに、あらゆる機会を通じて法令順守・安全運航の徹底を指導するなど、海難防止対策を推進する。
  - By maintaining close coordination with private organizations and related administrative organs, strive to raise the awareness of the notion of preventing marine accidents and improve knowledge about such prevention, and promote marine accident prevention measures mainly by offering guidance on thorough compliance with laws and regulations and safe navigation at every opportunity.
- イ 海難救助体制及び事故災害対策の強化等 / Strengthening maritime search and rescue system, accident and disaster countermeasures, etc.
- 海難救助等に迅速かつ的確に対応するため、巡視船艇・航空機の高性能化、装備・資機材、訓練・研修の充実による救助・救急能力の強化、漂流予測の精度の向上等に取り組み、海難救助体制の充実・強化を図る。また、民間救助組織との連携を図るとともに、近隣国の搜索救助機関との協議・訓練を定期的実施し、連携を強化する。
  - To promptly and accurately respond to maritime-search-and-rescue-related and other incidents, seek to improve and strengthen the maritime search and rescue system mainly by taking initiatives to improve the performance of patrol vessels and aircraft, strengthen rescue and emergency abilities by improving equipment, materials and machinery, drilling and exercise, and improve the accuracy of drift forecasts. In addition, seek to maintain coordination with private rescue organizations, and strengthen coordination with search and rescue organizations of neighboring countries by regularly holding talks and exercise with such organizations.
  - 船舶火災や船舶に起因する海洋汚染、海上災害の被害を局限化するため、排出油防除体制及びその他防災体制の向上に努めるとともに、対応資機材の整備、合同訓練を実施する。
  - To minimize damage from ship fires, marine pollution caused by ships and maritime disasters, make efforts to improve the system to control and recover discharged oil and other disaster countermeasure systems, maintain materials and machinery used for countermeasures, and implement training.
  - 効果的な排出油防除措置のため、沿岸海域の環境情報を示した脆弱沿岸海域図の整備、衛星画像を活用したモニタリングの整備、沿岸海域環境保全情報のインターネットによる提供 (CeisNet)、関係機関との連携強化等を推進する。

- To effectively control and recover discharged oil, promote improvement of Environmental Sensitivity Index Map that shows environmental information on coastal area, development of monitoring that use satellite images, coastal environmental information service on the Internet (CeisNet), strengthening of coordination with related agencies, and other initiatives.
- 重大な海難事故が発生した場合、発生原因やメカニズムの究明のための調査・分析を行い、安全基準や運航管理体制の改善等、再発防止のための対策の立案を進める。
- If a severe marine accident occurs, implement research and analysis to understand the causes and mechanism of problems, and prepare proposals of countermeasures, including improvement of safety standards and the system on ship management, to prevent recurrence of the accident.

### (3) 海洋由来の自然災害への対策 / Countermeasures against marine-derived natural disasters

- 日本列島周辺海域における地震及び津波の発生予測や被害予測を行うため、地震及び津波に関する調査・観測体制の強化や、観測網の整備を行うとともに、活断層や地質に関する情報の整備に取り組む。
- To forecast the occurrence of earthquakes and tsunamis and estimate damage due to them in the surrounding marine zones of the Japanese archipelago, strengthen the survey and monitoring system related to earthquakes and tsunamis, develop a monitoring network, and take initiatives to collect and compile information about active faults and geological features.
- 「津波防災地域づくりに関する法律」等に基づき、海岸保全施設等の整備や津波防護施設の新設・改良等のハード施策と津波災害警戒区域等の指定、津波ハザードマップの作成・見直し、津波防災総合訓練の実施などのソフト施策を組み合わせた多重防衛による津波防災地域づくりを推進する。
- Based on the Act on Regional Development in Tsunami Disaster, etc promote creation of communities equipped with tsunami disaster countermeasures by adopting multi-layered protection systems that combine measures that involves civil engineering, such as development of coastal protection facilities and establishment and improvement of tsunami protection facilities, and measures that involve planning, such as designation of tsunami disaster caution zones and other areas, preparation and review of tsunami hazard maps, and implementation of comprehensive tsunami disaster reduction drills.
- 東日本大震災を踏まえ、港内における船舶の津波等に対する安全対策を検討し、港則法による避難の勧告等を効果的に運用するとともに、港則法の特定港等に設置されている津波対策協議会による港内船舶の避難基準、避難時期の設定等の対策に取り組む。
- In the wake of the Great East Japan Earthquake, examine safety measures against tsunamis for ships in ports, and effectively issue evacuation orders and take other measures in accordance with the Act on Port Regulations. At the same time, take initiatives to establish evacuation standards and timing of evacuation by tsunami disaster countermeasure councils established in ports and other areas as specified in the Act on Port Regulations.

- 今後予想される南海トラフ巨大地震等の地震・津波被害の防止・軽減を図るため、海岸堤防等の耐震化、水門等の自動化・遠隔操作化、海岸防災林の整備等を進めるとともに、緊急物資輸送のための耐震強化岸壁の整備等を推進する。また、津波が天端（てんば）を越流した場合であっても、施設の効果が粘り強く発揮できるような海岸堤防、防波堤等の整備を推進する。
- To prevent and reduce damage from earthquakes and tsunamis caused by the massive earthquake expected to take place in the Nankai Trough and other earthquakes in the future, promote the development of earthquake-resistant sea embankments and other facilities, automatic operation and remote control of floodgates and other facilities, and development of coastal disaster-prevention woods, and take measures to develop earthquake-resistant berths to secure transport of emergency goods. In addition, promote development of coastal embankments, breakwaters and other facilities in a way that they can consistently exercise their functions even if the tsunami overflows the facilities.
- 津波・高潮・波浪等の災害から人命や財産を守るため、海岸保全施設等の整備を推進するとともに、国土保全の観点から、侵食対策を実施する。また、施設の老朽化対策調査を実施し、維持管理・更新を適切に行い、施設の信頼性を確保する。
- To protect lives and property in times of disaster, such as tsunami, storm surge and high waves, promote development of coastal protection facilities and other facilities, and take measures against shore erosion from the perspective of national land conservation. In addition, by conducting surveys on renovation measures of facilities, appropriately manage and revise maintenance work to ensure the reliability of facilities.
- 東京湾、大阪湾、伊勢湾の三大湾を始めとする全国沿岸の都市、漁村の防災機能の強化、物流機能の維持・継続を図るため、人口・機能が集積する三大湾の港湾における発生頻度の高い津波を超える津波を想定した防護水準の確保の検討、岸壁、臨港道路の耐震化、アクセス道路の耐震化・多重化、避難路・避難施設の整備、オープンスペースの確保、航路機能の確保、コンビナートの防災強化等を進めるとともに、基幹的広域防災拠点の管理等を適切に行う。
- To strengthen disaster prevention functions and maintain and sustain logistics functions of cities and fishing villages in the three major bays, Tokyo Bay, Osaka Bay and Ise Bay, and other coastal areas nationwide, examine securing of the protection level based on the assumption of tsunamis that exceed other tsunamis that frequently take place in ports of the three major bays, in which population and functions are concentrated, apply seismic strengthening work to berths and port roads, develop earthquake-resistant and multiple access roads, develop evacuation roads and facilities, secure open spaces, secure navigation route functions, strengthen disaster prevention facilities in industrial complexes, and take other necessary measures. At the same time, appropriately manage main wide-area disaster management bases.
- 大規模自然災害が発生又は発生する恐れがある場合、被災地方公共団体等が行う被害状況の迅速な把握、被害の発生及び拡大防止、被災地の早期復旧及びその他災害応急対策に対する技術的な支援を行うため、緊急災害対策派遣隊（TEC-FORCE）を派遣する。

- If a large-scale natural disaster occurs or has the chance of occurring, dispatch the Technical Emergency Control Force (TEC-FORCE) to provide technical support to disaster-hit local governments in promptly collecting information about the status of damage, preventing the occurrence and expansion of damage, restoring disaster hit areas at an early stage, and engaging in other disaster emergency countermeasures.
- 大規模災害時の輸送等に重要な役割を果たす内航海運について、地方公共団体と事業者等が連携して、緊急輸送活動等に船舶を活用するための環境整備を進める。
- With regard to coastal shipping that play an important role in transport and other activities at the time of a large-scale disaster, develop a system in which ships are used for emergency transport operations and other activities by coordinating with local governments, business operators and other organizations.
- 船舶、沿岸の安全を確保するため、海洋気象観測船、漂流型海洋気象ブイ、沿岸波浪計、潮位計、衛星等を用いた観測、解析を通じた地域特性の把握及び地域特性を踏まえた高潮・波浪モデル等の予測技術の改良等を行い、高潮・高波に関する防災情報の提供等を引き続き実施するほか、海上予報・警報の発表、気象無線模写通報（JMH）等を実施するとともに、台風予報の精度の向上に取り組む。
- To ensure the safety of ships and coasts, acquire an understanding of regional characteristics through observations and analysis by using research vessels, drifting ocean data buoys, coastal wave observation system, tide gauges, satellites and other equipment, and improve forecast technologies, such as storm surge and high wave models, by taking into account regional characteristics, thereby continuing to provide disaster prevention information about storm surges and high waves. In addition, issue marine forecasts and warnings and the Japan Meteorological Agency Weather Fax Transmission, JMH and other materials, and take initiatives to improve the accuracy of typhoon forecasts.
- 高潮・高波等による浸水被害の軽減や国土保全等に資するため、潮位の継続的な監視、調査、予測及び情報発表を行うとともに、その精度の向上に取り組む。また、地球温暖化に伴う海面上昇に対する適応策を検討する。
- To contribute to reducing flood damage mainly from storm surges and tidal waves, the national land conservation and other issues, continually monitor, survey, forecast and announce information about tidal levels, and seek to improve the accuracy of such activities. In addition, examine measures to adapt to the rising sea level due to global warming.

## 6 海洋調査の推進 / Promotion of Marine Surveys

### (1) 総合的な海洋調査の推進 / Promotion of comprehensive marine surveys

#### ア 海洋調査の戦略的取組 / Strategic measures for marine surveys

- 海洋調査を実施している機関間での連携を強化し、海洋調査を効率的に実施するとともに、調査成果の相互利用の促進や、海洋データの利便性向上を図る。

- Conduct marine surveys effectively by enhancing coordination among agencies responsible for marine surveys, encourage mutual sharing of results of the surveys, and improve the convenience for users to access and handle the marine data.
- 海洋調査の基盤となる海洋調査船、有人・無人調査システム等を着実に整備するとともに、新たな調査機器の開発、新技術の導入を推進する。
- Equip steadily research vessels, manned and unmanned survey systems and other equipment essential for marine surveys, develop new survey equipment, and introduce new technologies.
- 地球温暖化、気候変動、海洋酸性化等の地球規模の変動の実態を把握するため、世界気象機関（WMO）、ユネスコ政府間海洋学委員会（UNESCO/IOC）等が進める国際的な海洋観測計画に参加し、海洋調査船による高精度かつ高密度な観測を実施するとともに、中層フロート等の自動観測システムの活用や水中グライダー等の最新技術の導入を進め、海水温、塩分、温室効果ガス濃度等の観測を着実に実施する。また、数値モデルを高精度化する等により、気候変動、海洋酸性化、海況（海水温、海流、海氷）等の実態把握とその予測精度の向上を図るとともに、情報内容の充実に取り組む。さらに、これらの成果の幅広い利用を促進するため、「海洋の健康診断表」等での情報公開に取り組む。
- Join the international programs for oceanographic observations planned by the World Meteorological Organization (WMO) , Intergovernmental Oceanographic Commission of UNESCO (UNESCO/IOC), etc. and conduct surveys with high density and high accuracy by research vessels, in order to realize the actual global warming, climate change, ocean acidification and other changes. Conduct steadily surveys of sea temperature, salinity, concentration of greenhouse gas, etc. by utilizing automated observation systems such as profiling floats, and introducing new technologies such as Autonomous Underwater Vehicles. Realize the actual status of climate change, ocean acidification, ocean conditions (sea temperatures, currents and sea ice) and other matters, and improve the accuracy of projections of such matters, to enrich the contents of marine-related information, by carrying out actions such as to improve the accuracies of numerical models. Moreover, disclose the results to encourage wide-range sharing by publications such as the Marine Diagnosis Report, marine observation reports prepared by the Japan Meteorological Agency.

#### イ 海洋調査の着実な推進 / Steady promotion of marine surveys

- 海洋資源の開発、海洋権益の保全及び海洋の総合的管理に必要な基盤情報を整備するため、海底地形、海洋地質、地殻構造、領海基線、海潮流等の調査を引き続き実施する。
- Continue to conduct surveys such as bathymetric surveys, marine geological surveys, crustal structure surveys, territorial seas baseline measurements, tidal current observations, etc. in order to collect and compile fundamental information required for marine resources development, preservation of marine interests and comprehensive marine management.
- 我が国周辺海域における海洋環境保全対策を効率的かつ効果的に実施するため、油分、重金属、内分泌かく乱物質等の陸上・海上起因の汚染物質の海洋環境への影響

を把握するとともに、バックグラウンド数値の経年変化を把握する。また、海域における放射性物質のモニタリングを実施する。

- Evaluate the impact on marine environment of pollutants emerged from land or sea, including oil, heavy metals and endocrine disrupting chemicals, and reveal secular variations in background values, to implement measures effectively and efficiently to preserve the marine environment around Japan. In addition, monitor radioactive materials in the sea.
- 東日本大震災に伴い発生した津波による廃棄物の海上流出や油汚染及び東京電力福島第一原子力発電所からの放射性物質の漏出等による海洋環境への影響を把握するため、引き続き有害物質及び放射性物質に関するモニタリングを実施する。
- Continue to monitor hazardous or radioactive materials to realize the impact on the marine environment by events such as the seaward flows of articles and oil pollution in the sea caused by tsunami, and the emission of radioactive materials from the Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Station in the wake of the Great East Japan Earthquake.
- 閉鎖性海域の海洋環境モニタリングとして、東京湾、伊勢湾及び瀬戸内海における水質調査を実施し、陸域から流入する化学的酸素要求量 (COD)、窒素及びリンの負荷量を把握する。また、海洋環境整備船による水質調査や海洋短波レーダーによる流況観測等を実施するとともに、国及び地方公共団体が実施した環境調査データを収集・共有する海域環境情報データベースの充実を図る。
- Conduct water-quality surveys in Tokyo Bay, Ise Bay and the Seto Inland Sea, as the marine environment monitoring of the enclosed coastal seas, and measure the chemical oxygen demand (COD) and the loading amount of nitrogen and phosphorus from land. In addition, survey the water quality by sea environment improvement vessels, and observe ocean current by HF radar, and improve the database of marine environment information that collects and shares environment survey data collected by the government and local governments.
- 海上交通の安全を確保するため、「海洋速報」として海況情報をインターネットで提供するとともに、船舶交通が輻輳 (ふくそう) する狭水道における潮流の観測体制と情報提供体制を強化する。
- To secure the safety of maritime transport, provide marine-related information through *Kaiyo sokuho* (the Quick Bulletin of Ocean Conditions) via the Internet, and enhance the frameworks to collect and provide information of tidal currents in narrow channels with high ship traffic.
- 衛星を利用したリモートセンシング技術を活用し、より効果的な海洋環境モニタリング手法の開発を進めるとともに、環日本海海洋環境ウォッチシステムを運用し、水温、植物プランクトン濃度等の観測データを提供する。
- By using satellite remote sensing technologies, develop more effective marine environment monitoring methods, and provide monitored data such as water temperatures and phytoplankton concentration by using the marine environmental watch system around Sea of Japan.

- 海難事故の発生した際の巡視船や航空機による捜索救助活動や流出油の防除活動を迅速かつ的確に実施するため、関係府省連携の下、海象データの不足海域の解消、データを管理するシステムの強化、予測モデルの改良等による漂流予測手法の改善を進め、漂流予測を正確に行う。
- Make trajectory predictions accurately by collecting oceanographic data in the area with low data density, enhancing data management systems, and improving trajectory prediction methods by means such as revision of the prediction models, to promptly and accurately implement search and rescue activities by patrol vessels and aircraft, and activities to control and recover spilled oil in the case of occurrence of maritime accidents, under coordination among related ministries.
- 水循環変動観測衛星（GCOM-W）や陸域観測技術衛星 2 号（ALOS-2）等の衛星による海水観測データを活用し、北極海航路における船舶の航行安全のための海水速報図作成等に係る利用実証を行う。
- Conduct experimental test to create sea ice flash charts for safe navigation along the Arctic Sea Route, by using sea ice observation data collected by satellites such as the Water Circulation Change Observation Satellite (GCOM-W) and Advanced Land Observing Satellite-2 (ALOS-2).
- プレート境界域における海溝型巨大地震の発生メカニズム解明や地震・津波の発生予測に資する基礎情報を収集・整備するため、海底地殻変動観測、GPS を利用した地殻変動観測、海底変動地形調査、音波探査、津波地震性堆積物調査、地震断層の掘削調査等を実施する。
- Conduct seafloor crustal deformation monitoring with GPS/acoustic technique, crustal deformation monitoring with GPS, deformed seafloor mapping, seismic surveys, tsunami earthquake sediment survey, drilling on earthquake faults and so on, to collect and improve basic information that aids understanding of the mechanism of the occurrence of massive subduction-zone earthquakes along plate boundaries, and forecast of the occurrence of earthquakes and tsunamis.
- 東北地方太平洋沖地震の震源域周辺で発生する津波の早期検知等による津波防災の観点から、東北地方の太平洋側の沖合に設置したブイ式海底津波計による津波観測を実施する。
- From a perspective of tsunami disaster preparedness mainly by detecting tsunamis at an early stage that occur near the source area of the 2011 Great East Japan Earthquake, observe tsunamis with the buoy-type offshore-water-pressure gauges installed in the Pacific Ocean off the Tohoku region.
- 港湾内の船舶の避難等の津波対策及び地方公共団体による津波ハザードマップ作成に活用するため、海底地形データを収集・整備するとともに、津波防災情報図の整備を推進する。
- Collect and compile bathymetric data used for measures against tsunami such as evacuation of ships in harbors, and for the preparation of making up tsunami hazard maps by local governments, and promote improvement of tsunami information maps for ships.



- 火山噴火予知に資する基礎情報を収集・整備するため、南方諸島及び南西諸島の海域火山を中心に航空機や衛星画像の活用等による定期的な監視、海洋調査船による海底地形、地質構造、海上重力及び地磁気の調査を実施する。
- To collect and compile basic data that can help forecast of volcanic eruptions, conduct periodical monitoring with airborne or satellite images, surveys of bathymetry by research vessels, geological structure, gravity and geomagnetism, for volcanic islands and submarine volcanoes especially around Nanpo Shoto Islands and Nansei Shoto Islands.

(2) 海洋に関する情報の一元的管理及び公開 / Comprehensive management and disclosure of marine-related information

- 海洋情報の利便性向上を図るため、政府が行う海洋調査についてその収集・管理・公開に関する共通ルールを策定する。
- To improve the convenience to utilize marine-related information, establish the common rules on collection, management and disclosure for marine surveys conducted by the government.  
国及び地方公共団体による海洋調査で得られた情報を始め、国等が海洋政策を進める上で収集・整備した海洋情報について、一元的に管理・公開を行い、海洋政策の効率的な推進と産業活動への利用促進を図る。
- Manage and disclose comprehensively marine-related information that is collected and managed by the government and other agencies for their ocean policies, such as the marine survey data collected by the government and the local governments, and promote ocean policies effectively and promote the use of such information in industrial activities.
- 関係機関の協力の下、日本海洋データセンター（JODC）において各種海洋情報の収集・管理・提供を実施するとともに、海洋情報クリアリングハウスを引き続き運用し、その充実を図る。
- Under the coordination with related agencies, conduct collection, management and provision of all sorts of marine-related information at the Japan Oceanographic Data Center (JODC), and continue to manage the Marine Information Clearing House and improve their contents.
- 海洋情報の利用促進等の観点から、様々な海洋情報を可視化し情報の選択や重ね合わせ等を可能とする海洋台帳の充実と機能強化に取り組む。
- From a perspective of prompting of utilizing marine-related information, improve the Marine Cadaster, in which various kind of marine-related information are visualized, selected and superimposed on geographic maps, and enhance its functions.
- 海洋情報の収集と解析処理のための共通プラットフォームの整備・運用を進め、都道府県等の地域レベルでの利用を含め、海洋情報の利用促進を図る。また、広く一般への情報提供の観点から、海洋科学技術に関する資料を広く収集・整理するとともに利便性を高める。
- Encourage sharing of marine-related information among agencies including regional levels, such as prefectures, by developing and managing a common platform used for collecting, analyzing and processing marine-related information. Moreover, from a perspective of

providing information to a wide segment of the general public, collect and compile a range of documents related to marine science and technology, and improve the convenience for users to access such documents.

## 7 海洋科学技術に関する研究開発の推進等 / Promotion of Research and Development of Marine Science and Technology

### (1) 国として取り組むべき重要課題に対する研究開発の推進 / Promotion of research and development for important issues the government is required to deal with

#### ア 地球温暖化と気候変動の予測及び適応に関する研究開発 / Research and development related to forecasts and adaptation to global warming and climate change

- 海洋と大気の相互作用、海洋の循環やそれに伴う熱輸送・炭素循環、海洋が吸収する二酸化炭素の増加に伴う海洋の酸性化や、それによる海洋生態系への影響などを解明するための観測、調査研究等を強化する。
- Strengthen observations, surveys, research and other activities to find out the interaction of the sea and the atmosphere, ocean circulation and its resulting heat transport and carbon cycle, ocean acidification as a result of an increase in the absorption of carbon dioxide by the sea, and its impact on marine ecosystems.
- 地球温暖化と長期的な気候変化の不確実性の定量化を進めるとともに、気候変動に係るリスク評価の基盤となる情報を収集・整備する。また、地球温暖化と長期的な気候変化への適応策を講じていくため、都道府県等の地域レベルでの影響評価が可能となるように、数値モデルを改良するとともに、各地域のニーズに応じた観測、調査研究等を充実させる。
- Quantify the uncertainty of global warming and long-term climate change, and collect and compile information that becomes a basis for risk assessment related to climate change. In addition, to take measures to adapt global warming and long-term climate change, improve numerical models so that the impact can be assessed at regional levels, such as prefectures, and improve observations, surveys, research and other activities in accordance with the needs of each region.
- 北極域、黒潮流域など、我が国の気候への影響が大きいと考えられる地域や、南大洋を含む南極域等における観測、調査研究等を推進する。特に、北極域の観測、調査研究等については、近年、地球温暖化に伴う北極海氷の融解によって北極海航路の利用に関する世界的な関心が高まっていることなども踏まえて行う。
- Promote observations, surveys, research and other activities in regions considered to have a great impact on Japan's climate, such as the Arctic region, Kuroshio region, and the Antarctic region including the Southern Ocean. In particular, implement observations, surveys, research and other activities in the Arctic region by taking into account the fact that global interest in

use of the Arctic Sea Route has recently been growing due to melting of Arctic sea ice as a result of global warming.

イ 海洋エネルギー・鉱物資源の開発に関する研究開発 / Research and development related to the development of marine energy and mineral resources

- 広域科学調査により、エネルギー・鉱物資源の鉱床候補地推定の基礎となるデータ等を収集するため、海底を広域調査する研究船、有人潜水調査船や無人探査機等のプラットフォーム及び最先端センサー技術を用いた広域探査システムの開発・整備を行うとともに、鉱床形成モデルの構築による新しい探査手法の研究開発を推進するなど、海洋資源の調査研究能力を強化する。
- To collect data and other materials through wide-area scientific surveys that become a basis for estimating promising mineral deposits of energy and mineral resources, develop and improve platforms, such as research vessels that survey a wide area of the seafloor, manned research submersibles, AUV and ROV, and wide-area exploration systems that use cutting-edge sensor technologies. At the same time, strengthen capabilities of surveys and research of marine resources mainly by conducting research and development of new exploration methods through the establishment of a mineral deposit creation model.
- 我が国の領海、排他的経済水域等を対象に、地質学、地球物理学的な調査研究を実施し、基礎となる海洋地質情報の整備、海洋エネルギー・鉱物資源の成因や生成条件、各種含有元素の起源等の解明を通じて、資源のポテンシャルを明らかにするよう取り組む。
- Conduct geological and geophysical surveys and research mainly in Japan's territorial seas, the EEZ and continental shelves, and take initiatives to uncover the potential of resources by developing basic marine geology information and learning the origin and formation conditions of marine energy and mineral resources, the origin of various contained elements and other matters.
- 海洋エネルギー・鉱物資源の開発に当たっては、我が国の広範な産業界の知見を結集して、取り組むよう努める。海底熱水鉱床やコバルトリッチクラスト等の海洋鉱物資源開発について、対象鉱物ごとのプロジェクトの進捗を踏まえつつ、共通課題である「採鉱（集鉱含む）」、「揚鉱」及び「選鉱・製錬」等の生産技術の研究開発を推進する。
- In developing marine energy and mineral resources, make efforts to take initiatives by gathering the expertise of a wide range of Japan's industries. With regard to the development of marine mineral resources, such as polymetallic sulphides and cobalt-rich ferromanganese crusts, promote research and development of production technologies, common issues, such as mining (including collecting), lifting, and processing and smelting by taking into account the progress of projects for each subject mineral.

ウ 海洋生態系の保全及び海洋生物資源の持続的利用に関する研究開発 / Research and development on conservation of marine ecosystems and sustainable use of marine living

#### resources

- 海洋生物資源の持続的な利用の観点から、海洋生態系の構造と機能及びその変動の様子を総合的に理解するための研究開発を推進するとともに、海洋生態系の保全に必要な海洋生物の生物学的特性や多様性に関する情報の充実を図る。
  - From the perspective of sustainable use of marine living resources, promote research and development to comprehensively understand the structures and functions of marine ecosystems and the progress of changes in marine ecosystems, and seek to improve information about the biological characteristics and diversity of marine organisms that is necessary for the conservation of marine ecosystems.
  - 増養殖に関する新たな生産技術等の研究開発、海洋生物を新たな有用資源として活用するための研究開発を推進し、新たな産業の創出に寄与する。
  - Contribute to creation of new industries by promoting research and development on production technologies and other matters related to propagation and aquacultures, and on the use of marine organisms as new useful resources.
  - 東日本大震災により激変した海洋生態系の回復状況を把握するため、大学や研究機関等によるネットワークを形成し、東北太平洋沖における海洋生態系の調査研究を行う。また、同海域の海の資源を利用して新産業を創出することを目指した技術開発を行い、被災地域の復興に寄与する。さらに、放射性物質のモニタリングや海洋生物への取り込み等を把握するため、放射性物質の海中への拡散に関する調査を長期的・継続的に行う。
  - To gain an understanding of the status of recovery of marine ecosystems that have drastically changed in the aftermath of the Great East Japan Earthquake, implement surveys and research on marine ecosystems in the Pacific Ocean off the Tohoku region by creating a network of universities, research institutions and other organizations. In addition, contribute to the reconstruction of the disaster-afflicted areas by developing technologies with an aim of creating new industries through the use of marine resources in the above marine zone. Moreover, to understand the monitoring of radioactive materials, the intake of such materials by marine organisms and other developments, implement long-term, continual surveys on the spread of radioactive materials in the sea.
- エ 海洋再生可能エネルギーの開発に関する研究開発 / Research and development on the development of marine renewable energy
- 洋上風力発電の実用化と導入拡大のため、技術開発及び実証を推進する。また、専用船等のインフラや、基盤情報など、洋上風力発電の普及のための基盤整備を推進する。
  - To commercialize and facilitate introduction of offshore wind turbines, promote technological development and experimental studies. Promote development of infrastructure, such as that for dedicated ships and other equipment and infrastructure information, to heighten the use of offshore wind turbines.

- 「東日本大震災からの復興の基本方針」に基づき、東北沿岸において波力発電システム及び潮流発電システムの実証実験を行い、特に東北沿岸の自然条件下で成立する高効率・高信頼性・低コストの革新的発電システムの確立の基盤となる研究開発を推進する。また、沖縄においては、その地理的特徴をいかした海洋エネルギーの発電技術の開発に取り組む。
- In accordance with “Basic Guideline for Reconstruction in response to the Great East Japan Earthquake”, by conducting demonstration experiments of wave power generation systems and tidal power generation systems in the coastal areas in the Tohoku region, promote, in particular, research and development that becomes a basis for establishing efficient, reliable, low-cost and innovative electric power generation systems that can operate in the natural conditions in the coastal areas in the Tohoku region. And, take initiatives to develop power generation technologies by marine energy in Okinawa appropriate to its geography and natural resources.

オ 海洋由来の自然災害に関する研究開発 / Research and development on marine-derived natural disasters

- 海域の地震・津波を、稠密（ちゅうみつ）な観測点により、精度高く早期に観測し、警報の高度化や発生メカニズムの解明を行うため、地震・津波のリアルタイム観測が可能な海底観測網を、日本海溝沿い及び南海トラフ沿いに重点的に整備する。また、日本海側も含め、日本列島周辺海域における地震及び津波の発生予測や被害予測に関する調査研究を行い、それらに基づく防災・減災対策の研究を行う。
- To improve warning systems and to uncover the mechanism of the occurrence of earthquakes and tsunamis in marine zones by accurately and promptly detecting them through dense observation networks, develop ocean bottom observation networks particularly along the Japan Trench and Nankai Trough that enables real-time observation of earthquakes and tsunamis. In addition, conduct surveys and research on forecast of the occurrence of earthquakes and tsunamis in marine zones surrounding the Japanese archipelago, including the Sea of Japan, and of the damage from them, and based on such surveys and research, implement research on measures for disaster preparedness and mitigation.
- 地球表層から地球中心核に至る固体地球の諸現象について、その動的挙動に関する基礎的な研究を行うことにより、海洋プレートの運動によって引き起こされる地震・火山活動の原因、島弧・大陸地殻の進化、地球環境の変遷や海底下の構造等に関する知見を蓄積するとともに、地震・津波・火山活動等のモデル化と予測・検証を行う。
- By conducting basic research on the dynamic behavior of the various phenomena on the solid Earth from its surface to the core, increase knowledge about causes of earthquakes and volcanic activities triggered by the movement of oceanic plates, the evolution of island arcs and the continental crust, changes of the Earth’s environment, the structure under the seabed and other matters. At the same time, create models of earthquake, tsunami and volcanic activities and conduct forecasts and verifications.

(2) 基礎研究及び中長期的視点に立った研究開発の推進 / Promotion of basic research and research and development based on medium- to long-term perspectives

- 独創的で多様な基礎研究を広範かつ継続的に推進するための取組を強化し、人類共通の知的資産の創造や重厚な知の蓄積の形成を図る。
- By strengthening the initiative to broadly and continually promote unique and diversified basic research, seek to create common intellectual assets of mankind and accumulate insightful knowledge.
- 海洋及び地球並びにそれらに関連する分野の統合的な理解、解明など、新たな知のフロンティアの開拓に向けた科学技術基盤を構築するため、観測、調査研究、解析等の研究開発を推進する。
- To comprehensively understand and analyze the sea, the Earth and other related fields, and build scientific technological infrastructure to develop new intellectual frontiers, promote research and development mainly on observations, surveys and research and analysis.
- 海底の活発な熱水活動域、生物の多様性豊かなサンゴ礁、世界有数の流れの強い海流である黒潮に囲まれるなど、海洋研究に適した位置にある沖縄において、ゲノム科学や情報科学などの最先端研究分野を積極的に取り入れつつ、国際的に卓越した海洋分野の教育研究拠点の一つのハブとするようなネットワークを形成する。
- In Okinawa, create an international network with a hub of marine research and education by actively promoting cutting-edge research, such as genome and information sciences. Okinawa is geographically well suited to pursue such marine research above, with its active geothermal vents, coral reefs hosting a variety of marine life, and the Kuroshio Current, one of the strongest ocean currents in the world.

(3) 海洋科学技術の共通基盤の充実及び強化 / Improving and strengthening common infrastructure of marine science and technology

ア 世界をリードする基盤的技術の開発 / Development of the world's leading infrastructure technology

- 有用資源の開発や確保に向けた海洋探査及び開発技術、各種ブイや水中グライダーに搭載する生物化学センサー技術など、海上、海中、海底及び海底下の地殻内を含む多様な海洋空間の調査等に必要な機器や基盤技術の開発を推進する。
- Promote development of equipment and infrastructure technology that are necessary mainly for surveys of marine spaces above the sea, in the sea, on the seafloor and in the oceanic crust, including technology for marine exploration and development to develop and secure useful resources and biochemical sensor technology that is installed in a range of buoys and Autonomous Underwater Vehicles.

- 地震や津波等の早期検知に向けた稠密（ちゅうみつ）観測・監視・情報伝達技術、海底ケーブルを利用した長期観測プラットフォーム技術など、プレート境界域における地震等の地殻変動の把握や、海中及び海底における深海底環境変動の継続的な観測等に必要な基盤技術の開発及び応用を推進する。
- Promote development and application of infrastructure technology that is necessary for understanding crustal deformation related with earthquakes along plate boundaries and for continuous observation of environmental variation in the sea and at the deep-sea floor, including technology for dense observations, monitoring and information transmission to detect earthquakes, tsunamis and other events at an early stage, and long-term observation platform technology that uses submarine cables.
- 巨大地震発生メカニズムの解明、海底下地下生命圏の探査や機能の解明、将来的なマントル掘削の実施に向け、超深部海底下地層掘削のための基盤技術の着実な開発を推進する。
- To understand the mechanism of the large earthquakes, explore a marine deep subsurface biosphere and find out its functions, and implement drilling of the mantle in the future, promote steady development of infrastructure technology for drilling deep marine strata.
- 産業への応用展開や国際展開も見据え、国家存立基盤に関わる技術など、基盤的技術の開発に継続して取り組む体制の整備を図る。
- With a view to application to industries and global application, seek to develop a system in which initiatives are continually taken to develop infrastructure technology, such as technology related to the basis of the nation's existence.

#### イ 長期的な観測の実施 / Implementation of long-term observations

- 国際的な海洋観測計画及び海洋情報交換の枠組みに参画し、長期的・継続的に海洋の観測、調査研究等を実施するとともに、観測データの交換及び共有に取り組む。
- By participating in international marine observation programs and a framework for marine-related information exchange, implement marine observations, surveys and research, and other activities on a long-term and continual basis, and take initiatives to exchange and share observation data.
- 観測結果に基づく成果を飛躍的に向上するため、係留・漂流ブイ、船舶、衛星等の異なる手法で得られた観測データの統合（データ同化）を推進する。
- To significantly improve analysis based on the results of observations, promote integration (data assimilation) of observation data that are obtained through different equipment, such as moored and drifting buoys, ships and satellites.

#### ウ プラットフォームの整備・運用 / Development and management of platforms

- 水温、塩分、海流、波高、海上の風や降水といった基本要素の時系列データをリアルタイムに発信する定点観測ステーションや、海洋調査船、観測ブイ等による現場観測、衛星観測等を組み合わせた統合的な観測システムの開発を推進する。

- Promote development of integrated observation systems that combine fixed-point observation stations that issue real-time timeline data of basic factors, such as temperatures, salt content, currents, wave height and wind and rain at sea, and in situ observations mainly through research vessels and observation buoys, and satellites and other facilities.
- 国、独立行政法人等が有する船舶、有人・無人深海調査システム、スーパーコンピュータ等の施設・設備等について、性能を十分に発揮できるよう計画的に代替整備や老朽化対策等を進める。また、新たな観測、調査研究等の推進に向け、共同利用を前提とした新たな施設・設備等の整備や革新的な解析技術等の開発に取り組む。
- Take measures to replace and renovate in a planned manner facilities and equipment owned by the government, incorporated administrative agencies and other institutions, such as ships, manned and unmanned deep-sea survey systems and supercomputers, so that they can adequately perform their functions. In addition, to promote new observations, surveys and research and other activities, promote development of new facilities and equipment and innovative analysis technology and other technologies with the understanding of shared use.
- 研究機関、大学等が所有する船舶等の共同利用を推進するとともに、限られた研究基盤のより有効な活用方策について検討を進める。
- Promote shared use of ships and other facilities owned by research institutions, universities and other organizations, and examine methods in which limited research infrastructure is used more efficiently.

#### (4) 宇宙を活用した施策の推進 / Promotion of initiatives that use outer space

- 海水温、海流、海氷等の海況監視、漁業者に対する漁場情報の提供、海洋上を含む地球規模の温室効果ガスの観測や気候変動予測等の分野において、衛星情報の利用を引き続き推進する。
- Continue to promote use of satellite information in activities such as monitoring of ocean conditions, including sea temperatures, currents and sea ice, provision of fishing ground information to fishermen, observations of greenhouse gases on a global scale including at sea, and forecasts of climate change.
- 関係府省等が連携・協力して、船舶自動識別装置（AIS）受信機を搭載した衛星による外洋海域を含む船舶航行状況を把握するための実証実験や、北極海航路における船舶の航行安全のための海氷速報図作成に係る実証実験等を行うなど、海洋の開発及び利用、海洋の安全の確保、海洋の総合的管理等における衛星情報の新たな利用の可能性と方策について、国内外の衛星インフラの整備状況を踏まえつつ、検討を行う。
- Under coordination among related ministries, implement demonstration experiments to understand the situation of ship navigation in marine zones, including outer sea marine zones, by using a satellite equipped with automatic identification system (AIS) receivers, and implement demonstration experiments related to the creation of sea ice flash chart to secure safe navigation of ships on the Arctic Sea Route. Based on these experiments, examine the possibility and methods of new use of satellite information in development and usage of the sea,



securing of marine safety, comprehensive marine management and other activities by taking into account the progress of development of satellite infrastructure both in Japan and overseas.

## 8 海洋産業の振興及び国際競争力の強化 / Promotion of Marine Industries and Increase in International Competitiveness

### (1) 経営基盤の強化 / Solidifying management base

#### ア 海運業・造船業・インフラシステム / Maritime transport industry, shipbuilding industry and infrastructure system

##### ①受注力の強化 / Increasing competitiveness to obtain orders

- 我が国造船・船用工業の受注力を強化するため、新たな船舶の排ガス規制に対応して、船舶からの二酸化炭素、排出ガス（NO<sub>x</sub> や SO<sub>x</sub>）等の環境負荷低減や船舶の安全確保に取り組む。
- In efforts to make the Japanese shipbuilding and ship machinery industries more competitive to receive new contracts, make efforts toward reducing carbon dioxide, exhaust (NO<sub>x</sub> and SO<sub>x</sub>) emissions and other environmental pollutants from ships in compliance with regulations related to the issues and ensuing ship safety.
- 産学官連携の下、高付加価値船の技術開発を推進し、我が国造船業・船用工業・海洋資源関連産業の国際競争力の強化に寄与する。
- Under coordination between the industrial, academic and governmental sectors, implement technological development for high-value-added vessels to help boost international competitiveness of the Japanese shipbuilding, ship machinery and marine resources-related industries.
- 海外に展開する生産拠点からの投資収益を増進するため、当該拠点における人材育成を促進する。
- Develop human resources at overseas production basis to increase investment returns from foreign operations.
- 我が国造船・船用工業の強みを更にいかすための企業環境を整備するため、各国の公的輸出信用機関の融資条件を規定している経済協力開発機構（OECD）船舶セクター了解の改定を含め、造船市場の活性化に向けた投融資の促進に向けた取組を推進する。
- To create a corporate environment for better capitalizing the advantage of the Japanese shipbuilding and ship machinery industries, make efforts toward facilitating investment and financing for stimulating the shipbuilding market, including revising the OECD Sector Understanding on Export Credit for Ship, which stipulates conditions for financing of public export credit agencies in participating countries.

##### ②新市場・新事業への展開支援 / Supporting expansion into new markets and businesses

- 国際競争力を有する我が国の内航輸送サービスのハード・ソフトについて、パッケージ化したシステムとして提供するなど、海外の物流事業者と連携するビジネスモデルの実現可能性及びアジア等内航海運の成長市場に対する効果的な海外売船システムの構築を行うための方策を検討する。
  - Conduct studies on feasibility of the business model in coordination with overseas logistical operators, such as provision of a package covering equipment and operations of Japan's coastal shipping with international competitiveness, and on construction of an overseas ship sales system that is effective for the growing domestic shipping markets in Asia and elsewhere.
  - 我が国造船業・舶用工業の新市場・新事業への展開を図るため、政府開発援助 (ODA)、国際協力銀行の融資等も活用しつつ、トップセールスの展開や構想段階からのプロジェクトへの参画、新興国における船隊整備、海洋開発等の新たな市場の獲得等に向けた取組を支援する。
  - To achieve expansion of the Japanese shipbuilding and ship machinery industries into new markets and new businesses, make efforts to capture new markets, such as leaders' promotional efforts, participation in projects from their conceptual stage, formation of fleets in emerging countries and marine development, by utilizing support measures including official development assistance (ODA) and loans from the Japan Bank for International Cooperation.
  - 日本の港湾関連技術や経営ノウハウを活用し、官民連携によるインフラシステムの海外展開を推進し、高質かつ安定的な国際物流ネットワークの構築を図る。
  - Support overseas expansion of the infrastructure system in collaboration between the governmental and private sectors with the use of Japan's port-related technologies and management expertise in efforts to construct an international logistics network with high quality and stability.
- ③公正な競争条件の確保等の推進 / Working to achieve fair competitive conditions
- 健全な造船市場の構築や公正な競争条件の確保等のため、OECD造船部会において、造船主要国（日本、韓国、欧州等）間での政策レビュー、造船市場における市場歪曲（わいきょく）措置の精査等を実施する等の政策協調を行うとともに、更に効果的に実施するため、OECD非加盟国に対して、加入に向けた働きかけを推進する。
  - To construct a sound shipbuilding market and attain fair competitive conditions, conduct policy coordination by reviewing policy among principal shipbuilding countries (including Japan, The Republic of Korea and Europe) and close assessment of market distorting measures in the shipbuilding market in the OECD Council Working Party on Shipbuilding. Japan should approach non-OECD member states in an attempt to have them join the organization for the purpose of further increasing effectiveness.
  - 我が国海運・造船業が得意とする省エネ・省 CO2 船舶の普及を促すため、国際海運分野の温暖化対策として、IMO における船舶の燃費規制に関する条約の着実な実施とともに、経済的手法（燃料油課金制度等）の導入に関する条約づくりを主導する。

- To improve energy efficiency and CO<sub>2</sub> abatement technologies, implement the convention relevant to energy efficiency at the IMO and play a pivotal role to develop a framework of MBM (Market-Based Measures) such as fuel contribution to address CO<sub>2</sub> emissions from international shipping.
  - 国際海運市場における競争の激化を踏まえ、諸外国の外航海運政策の動向を注視しつつ、我が国海運にとっての国際的な競争条件の均衡化のための施策に継続的に取り組む。
  - In view of intensifying competition in the international maritime transport market, pay attention to the trend of international shipping policies of other countries and continue efforts on measures for equalizing international competitive conditions for Japan's maritime transport.
- ④構造改革支援 / Supporting structural reform
- 我が国造船業における合併、統合等に向けた動きに対し、必要に応じ、産業活力の再生及び産業活動の革新に関する特別措置法等を活用した支援を講ずる。
  - In response to the moves toward mergers and integrations in the Japanese shipbuilding industry, provide assistance as needed based on the Act on Special Measures Concerning Revitalization of Industry and Innovation in Industrial Activities and other programs.
  - 内航海運活性化のため、老齢船の代替建造、船舶管理会社を活用したグループ化を促進する。
  - Encourage building of ships that replace aging ships and grouping through ship management companies for stimulating coastal shipping.
  - 上記施策を行うことにより、造船業、内航海運業に対する投融資に向けた企業環境を改善する。
  - Improve the corporate conditions for investment and financing in shipbuilding and coastal shipping industries, by implementing above mentioned measures.

## イ 水産業 / Fisheries

- ①消費者の関心に応え得る水産物の供給や食育の推進による消費拡大 / Supplying fishery products that respond to consumers' interests and promoting food education to increase consumption
- 「魚離れ」の進行に伴う水産物消費の減退に歯止めをかけるため、関係者が連携して水産物の消費拡大に取り組む。
  - To stop the decline in consumption of fishery products following the progress in alienation from fish, relevant parties should work together to increase consumption of fishery products.
  - HACCP（危害分析・重要管理点）等の衛生管理の徹底による安全な水産物の提供、食の簡便化等食生活の変化に対応した水産物の提供など、消費者ニーズに即した水産物の生産・流通体制への転換に取り組むとともに、水産物を含む栄養バランスのとれた食生活の実現に向けて食育を進める。

- Make efforts to shift to a system of producing and distributing fishery products that satisfy consumers' needs, such as provision of safe fishery products based on strict hygiene control based on the Hazard Analysis and Critical Control Point (HACCP) and fishery products matched with the changes in dietary habits such as simplification of meals. In addition, food provide education to achieve dietary lifestyles with a good nutritional balance including consumption of fishery products.
- ②漁業経営の体質強化及び国際競争力の強化 / Improving fishery management structure and international competitiveness
  - 水産資源管理に取り組む漁業者と漁場改善に取り組む養殖業者に対し、資源管理・収入安定対策を適切に実施し、年ごとに収入の変動が大きい漁業者・養殖業者の収入の安定化を図る。
  - For fishermen engaging in marine resources management and for aquaculture operators working to improve fishing grounds, appropriately implement measures for resource management and income stabilization to achieve stabilization of their income, which massively fluctuates year by year.
  - 漁業においてはコストに占める燃油費の割合が高く、養殖業においてはコストに占める配合飼料費の割合が高いことから、燃油費及び配合飼料費の負担を軽減する価格高騰対策を適切に実施する。
  - In fisheries, fuel oil costs account for a high percentage of total costs. In aquaculture, the costs of feed mixture make up a large proportion of the total cost. Measures to address the price increase should be properly taken to reduce the burdens of the fuel oil and feed mixture costs.
  - 収益性の高い漁業を育成するため、漁船漁業における収益性を重視した操業・生産体制の導入、省エネ・省人型の代船取得、生産活動の協業化、経営の共同化等の漁業改革推進集中プロジェクトを推進する。
  - For nurturing fisheries with high profitability, implement an intensive fishery reform project, which includes introduction of an operation and production system with a focus on profitability in fisheries with fishing ships, acquisition of energy-efficient and labor-saving substituting ships, collaboration in production activities and a shift to joint management.
  - 収益性の高い養殖業を育成するため、養殖における魚種の多様化や収益性を重視した養殖生産体制の導入、生産活動の協業化、経営の共同化等の先駆的な取組を促進する。
  - For nurturing aquaculture business with high profitability, make pioneering efforts, including diversification of fish species raised, introduction of an aquaculture production system with a focus on profitability, collaboration in production activities and a shift to joint management.
  - 輸出の促進や輸入水産物に対する我が国水産物の国際競争力の強化と消費者に信頼される水産業づくりの実現を図るため、水産物の生産から陸揚げ、流通・加工までの

一貫した供給システムを構築するなど、生産コストの縮減や鮮度保持対策、衛生管理対策に重点的に取り組む水産物の流通拠点となる漁港への重点化を図る。

- For the purposes of promotion of exports, strengthen international competitiveness of Japan's fishery products against imported ones, and developing fisheries trusted by consumers, construct a consistent supply system covering production, landing, distribution and processing and place focus on fishing ports as bases of distribution of fishery products that engage exhaustively in production cost cuts, efforts, freshness maintenance and hygiene control.

#### ③漁船漁業の安全対策の強化 / Strengthening safety measures for fisheries with fishing ships

- 漁船の海難事故を防止するため、気象・海象に応じた的確な出港判断や安全な操船・操業等に関する普及啓発活動を推進するとともに、ライフジャケットの着用を促進する取組を強化する。
- For preventing maritime accidents involving fishing ships, conduct activities for raising awareness of making proper decisions on departure according to weather and hydrographic conditions and of safe ship and fishing operations and strengthen efforts to prompt wearing of lifejackets.

#### ④担い手の確保・人材育成と女性の参画の促進 / Hiring and training of fishermen and encouraging women's participation

- 漁業未経験者が、将来の漁業の担い手としての新規就業を促進するため、漁業への就業情報の提供や現場での研修に取り組む。
- For helping those without experience in fisheries to newly engage in fisheries, offer information for starting fisheries as business and onsite training.
- 水産業及びその関連分野の人材確保のため、水産業において指導的役割を果たす人材を育成する独立行政法人水産大学校や、水産に関する課程を備えた高校・大学において、実践的な専門教育の充実を図る。
- For securing human resources for fisheries and related fields, the National Fisheries University, which is an incorporated administrative agency engaging in development of human resources playing a leading role in fisheries, and high schools and universities with courses on fisheries, should enrich its practical technical education.
- 漁業士や漁協青壮年部で中核となって活動を行う者等の漁村地域のリーダーの育成とそれらのリーダーシップによる意欲的な取組を推進するとともに、普及指導員による先進的な担い手への相談・支援を実施する。
- Make aggressive efforts to develop leaders in fishery village regions such as certified fishermen and those playing central roles in the young fishermen's group in the fishery cooperative. Offer consulting services and support from promotional instructors to young human resources engaging in advanced activities.
- 漁獲物の加工・販売や漁村コミュニティにおける様々な取組の中心となる女性の活動を促進する。

- Encourage activities by women playing primary roles in processing and sales of fishery products and in other activities in fishery village communities.
- ⑤漁業の発展及び水産業・漁村の多面的機能の発揮 / Developing the fisheries industry and exerting multiple functions of the fisheries industry and fishing villages
  - 生態系全体の生産力を底上げし、水産資源の育成と持続可能な利用を図るため、漁場の水質を維持・管理する手法の開発等を進めるとともに、海洋の生態系や生物多様性の保全と漁業の持続的な発展との両立を図る。
  - To boost the productivity of the whole ecosystem and ensure development and sustainable use of marine resources, development and other efforts should be made on methods of maintaining and managing water quality in fishing grounds. In addition, achieve compatibility between maintenance of marine ecosystems and biodiversity and continued development of fisheries.
  - 漁村の活力の増進、漁村の魅力を向上させるため、水産物のみならず景観や伝統行事、地域に根付いた漁業や養殖そのもの等の漁村の豊かな地域資源を活用した取組を推進する。
  - To increase vitality and attractiveness of fishery villages, conduct activities that capitalize on their abundant local resources that are not confined to fishery products but also include scenic views, traditional events and practices of fisheries and aquaculture that are deeply rooted in their localities.
  - 水産業・漁村の持つ水産物の供給以外の多面的な機能が将来にわたって発揮されるよう、多面的機能の発揮の促進、水揚げによる陸から海への物質循環の補完、国境監視・海難救助による国民の生命・財産の保全、保健休養・交流・教育の場の提供等を、関係府省等が連携して総合的に支援する。
  - To enable fisheries and fishing villages to exert their multifunctions in the future other than supply of fishery products, related governmental ministries and agencies should work together to provide comprehensive support in the exertion of their multifunctions, in complement to the material cycle from land to sea by landing of fishery products, in preservation of people's lives and property through national border surveillance and sea rescue operations, and in provision of opportunities for health, recreation, exchange and education.
- ⑥水産物の安定供給の基盤となる漁港施設の保全・強化 / Maintaining and upgrading of fishing port facilities serving as bases of stable supply of fishery products
  - 東日本大震災からの復興として、被災地域の水産業の早期復興を図るため、漁業と流通・加工を始めとする関連分野と一体的に再建し、被災地を新たな食料供給地域として再生するための取組を推進する。
  - To achieve early reconstruction of the fisheries industry in the region devastated by the Great East Japan Earthquake as part of the recovery from the disaster, take efforts to reconstruct the industry in combination with distribution, processing and other related industries and to revive the disaster-hit region into a new food supply district.

- 水産物を安定的に提供可能とする漁港機能を適切に保全するため、既存の漁港施設の計画的な補修・改修に取り組む。
- Systemically repair and improve existing fishing port facilities to properly conserve the functions of fishing ports that ensure stable supply of fishery products.

## (2) 新たな海洋産業の創出 / Creating new marine industries

### ア 海洋資源開発を支える関連産業 / Industries supporting marine resources development

#### ① 海洋資源開発関連産業の育成 / Fostering industries related to marine resources development

- 沖合大水深下での石油・天然ガス等の開発プロジェクトについて、今後導入が本格化すると見込まれる浮体式液化天然ガス生産貯蔵積出設備や、洋上の生産設備に人や物資を効率的に輸送するために必要となる洋上ロジスティックハブの実現に向け、海運業・造船業等と連携しつつ、必要な技術開発や人材育成、安全評価要件の策定、巨大な資源開発プロジェクトへの参入を実現する仕組みの検討等を実施し、国際競争力を有する海洋資源開発関連産業の戦略的な育成を行う。
- With respect to deep-water offshore oil, natural gas and other development projects, collaboration with shipping companies, shipbuilders and other related parties should be made toward LNG-FPSO (Floating Production, Storage and Off-loading system), which will be introduced and shifted into full swing, and logistics hub system, which will be necessary for efficient transport of workers and materials to production facilities on the sea, in efforts to strategically foster internationally competitive industries related to marine resources development. Specific actions to be taken collaboratively include development of necessary technologies and human resources, formulation of safety evaluation requirements, and consideration of mechanisms for entry into large-scale resource development projects.

#### ② 海洋エネルギー・鉱物資源開発の産業化 / Commercializing marine energy and mineral resource development

- 我が国海洋資源開発関連産業の戦略的育成や同産業と既存の資源産業との連携を通じ、世界に先駆け、海洋鉱物資源開発を産業化する。その際、国家存立基盤に関わる技術とされている深海底探査・生産技術等の開発成果を活用し、産業への応用展開を図る。
- Japan should lead the world in commercialization of marine mineral resource development by strategically nurturing its related industries and establishing coordination between these industries and existing resource industries. In this event, the results of development of deep-seabed exploration and production technologies that are considered significant for the basis for the country's existence will be utilized and their application will be expanded into industries.
- メタンハイドレートの開発については、海洋産出試験の結果等を踏まえ、平成30年度を目途に、商業化の実現に向けた技術の整備を行う。その際、平成30年代後半

に民間企業が主導する商業化のためのプロジェクトが開始されるよう、国際情勢をにらみつつ、技術開発を進める。

- For methane hydrate development, technological improvement should be implemented in FY2018, considering of the results of production tests in marine zones in efforts to achieve commercialization. In this process, technological development should be advanced in view of international circumstances for enabling a commercialization project led by private firms to be commenced in FY2023-2027.
- 海底熱水鉱床についての実海域実験も含めた継続的な技術開発を実施するとともに、取組の進ちよく状況を踏まえて、新たな技術的課題の解決について有力な技術を有する民間企業を幅広く加えるなど、産業化の実現に向けた検討を推進する。
- For polymetallic sulphides, conduct successive technological development, including experiments in real marine zones. In addition, conduct studies toward commercialization by, for example, adding a broad range of private companies holding powerful technologies in terms of solving new technological issues in accordance with the progress of the action.

### ③海洋再生可能エネルギー開発の産業化 / Commercializing marine renewable energy development

- 洋上風力発電の実用化・導入拡大や海洋エネルギー発電の要素技術の確立や実証を通じた実用化を推進する。また、関連する作業船の実用化の推進や、浮体式洋上風力発電施設に関する安全ガイドラインの策定等に取り組む。
- Implement actions for practical use and expansion of offshore wind power generation and for commercialization of marine energy power generation by elemental technologies and implementing demonstration projects. In addition, make efforts for realization of practical working vessels and to formulate safety guidelines concerning floating offshore wind turbines.

### イ 海洋情報関連産業の創出 / Creating marine-related information industries

- 海洋情報産業の創出を促進するため、提供内容、提供形態等の在り方について検討を行い、その結果を踏まえ利便性の向上や多様な提供形態の実現等に取り組むなど、海洋情報産業の創出に必要な環境整備を進める。
- To give momentum to the creation of marine-related information industries, make efforts to prepare an environment necessary for creation of such industries. Such efforts will include studies on what marine-related information should be provided and how it should be offered and activities toward increasing convenience and acquiring various styles of information offered in accordance with the study findings.
- 我が国の技術により、海洋資源の開発等に必要となる機器開発を推進するとともに、海洋調査に民間企業が幅広く参画できる体制や海外展開に向けた検討を実施するなど、海洋調査産業の振興を図る。
- Utilize Japan's technologies in development of equipment requisite to marine resources development and other operations. Take other actions for stimulating



marine survey industries, including construction of a system that allows many different private companies to participate in marine surveys and consideration for overseas expansion.

ウ 海洋バイオを活用した産業の創出 / Creating industries based on marine biotechnology

- 海洋の未利用バイオマス資源の利活用を図るため、未利用バイオマス資源の収集を推進するとともに、それらを活用した産業・工業利用、エネルギー・環境問題の解決に向けた研究開発を実施する。特に、海底下微生物圏について、未知の生命機能を探索し、有効利用につなげることを目指した研究開発を実施する。
- For encouraging use of unused marine biomass resources, step up efforts to collect unused biomass resources and conduct research and development for industrial utilization of these resources and for resolving energy and environmental issues. With regard to the sub-seafloor biosphere, conduct research and development activities aimed at exploring unknown vital functions and paving the way for effective use of these functions.
- 藻類による炭素固定技術及びオイル生産技術の研究開発を推進し、地球環境問題の解決に貢献する。
- Advance research and development activities concerning algal carbon fixation technologies and algal oil production technologies to help resolve global environmental issues.

エ 海洋観光の振興 / Developing marine sightseeing

① 地域資源を活用した海洋観光の振興 / Developing marine sightseeing with the use of local resources

- 瀬戸内海や離島において、魅力あふれる島々のネットワーク化等を通じて周遊・滞在型観光を促進することにより、新しい旅行需要の拡大とともに島の地域経済の活性化を図る。
- For the Seto Inland Sea and remote islands, launch a network of attractive islands to promote sightseeing focused on tours and long stays, boost new travel demand and revitalize local economies on these islands.
- 地方公共団体や地元観光事業者等との連携による地域の特性をいかしたイベントの開催を支援するなど、海をテーマとした観光需要の喚起を図る。また、賑わいや交流を創出するみなとの施設「みなとオアシス」における住民参加による地域活性化の取組を促進するとともに、災害発生時における防災拠点としての有効活用を図る。
- To stimulate sightseeing demand on the subject of the sea, provide support in organization of events with an emphasis on local peculiarities in collaboration with local governments and local tourism operators. At “Harbor Oasis” port facilities creating local dynamism and exchange, regional revitalization efforts involving local inhabitants should be encouraged. These facilities should be effectively utilized as disaster prevention bases in times of disaster.

- エコツーリズム推進法（平成 19 年法律第 105 号）に基づき、エコツーリズムに取り組む地域への支援、全体構想の認定・周知、技術的助言、情報の収集、普及啓発広報活動等を総合的に実施する。また、エコツーリズムを通じた地域の魅力向上のため、魅力あるプログラムの開発、ガイド等の人材育成など、地域におけるエコツーリズムの活動の支援を行う。
  - In accordance with the Act on Promotion of Ecotourism (Act No. 105 of 2007), implement comprehensive activities such as support for regions working on ecotourism, approval of the overall plan and making it known to public, technical advice, information gathering and activities for dissemination, raising awareness and increasing publicity. For increasing attractiveness of regions based on ecotourism, provide assistance to regional ecotourism activities, such as creation of attractive programs and human resource development for guides and other personnel.
  - 再生可能エネルギー関連施設を活用した観光についても取組を行う。
  - Actions should also be taken for sightseeing with facilities related to renewable energy.
- ②アジアからの訪日旅行の推進 / Increasing Asian visitors to Japan
- 外航クルーズの普及・振興を目的に、関係者と協力・連携した外国人旅行者数の拡大のための訪日プロモーションを促進し、これに伴い、訪日外国人旅行者の出入国審査について、厳格化を維持しつつも、その円滑化・迅速化の推進に努める。
  - For the purpose of increasing the number of those enjoying ocean cruising and to further ocean cruising, conduct the Visit Japan promotion campaign for boosting foreign visitors in partnership with relevant personnel. In parallel, take actions to make the passport control process smoother and faster while keeping it secure.
  - アジア諸国からの訪日旅行者の更なる増加に向け、我が国の観光の玄関口となる旅客船ターミナルや、荒天時にも大型旅客船等の安定的な入港を可能とする防波堤等を整備するなど、外航クルーズ船の日本寄港促進のための環境整備を推進し、観光立国の実現を目指す。
  - To further increase visitors from Asian countries to Japan, make efforts to improve the environment to increase ocean cruise ships calling at Japanese ports. Such efforts include improvement of passenger ship terminals that serve as gateways to sightseeing in Japan and reinforcement of breakwaters for enabling large passenger ships to stably enter ports even under stormy weather conditions. Japan should thus endeavor to evolve into a tourism nation.

## 9 沿岸域の総合的管理 / Comprehensive Management of Coastal Zones

(1) 沿岸域の総合的管理の推進 / Implementing comprehensive management of coastal zones

- 沿岸域の安全の確保、多面的な利用、良好な環境の形成及び魅力ある自立的な地域の形成を図るため、関係者の共通認識の醸成を図りつつ、各地域の自主性の下、多様な主体の参画と連携、協働により、各地域の特性に応じて陸域と海域を一体的かつ総合的に管理する取組を推進することとし、地域の計画の構築に取り組む地方を支援する。
- For ensuring safety of coastal zones, establishing multiple uses for them, creating desirable environments in these zones and developing attractive and autonomous regions, make efforts to comprehensively manage land areas and marine zones together in accordance with regional peculiarities with the participation, coordination and collaboration of many different players based on independence of individual regions while building consensus among the parties concerned. Offer assistance to regions that strive to formulate their own plans.

(2) 陸域と一体的に行う沿岸域管理 / Implementing coastal zone management integrated with that of land areas

ア 総合的な土砂管理の取組の推進 / Implementing overall sediment management

- 陸域から海域への土砂供給の減少や沿岸構造物による沿岸漂砂の流れの変化等による国土の減少、自然環境への影響の軽減を図るため、砂防設備による流出土砂の調節、ダムにおける堆砂対策やダム下流への土砂還元を進めるとともに、侵食海岸におけるサンドバイパスや離岸堤の整備等に取り組む。また、山地から海岸まで一貫した総合的な土砂管理の取組を推進するため、関係機関が連携し、土砂移動の実態把握や予測手法の向上を図るため、調査研究を進める。
- For slowing the decrease of national territory following a decline in sediment supply from land to sea and its impact on the natural environment, take actions including adjustment of the outflowing sediment by means of sand control equipment, measures for controlling sedimentation in dams, return of sediment to the downstream sections of dams and construction of sand bypassing system and detached breakwaters. Conduct research activities for pressing ahead with consistent and comprehensive sediment management covering all areas from mountains to coasts and for improving the methods of understanding and forecasting the movement of sediment.
- 沖縄等における赤土等の流出を防止するため、沈砂池の整備による農地等の発生源対策の強化、流出防止技術の研究開発等を推進する。
- To prevent outflows of red clay in Okinawa and elsewhere, strengthen measures to control the sources, such as farmlands, by developing sediment control basins and research and promote development on technologies to prevent red clay outflow.

イ 栄養塩類及び汚濁負荷の適正管理と循環の回復・促進 / Properly controlling nutrients and pollutant load and restoring and promoting cycles

- 陸域から流入する汚濁負荷を削減するため、未普及地区での下水道等污水处理施設の整備や合流式下水道の改善を進めるとともに、農業用排水施設や河川における水質浄化を推進する。
- To reduce the pollutant load flowing down from land areas, construct sewer systems and other wastewater treatment facilities in districts without sewerage and improve combined sewer systems. Advance water purification at irrigation and drainage facilities and rivers.
- 生物多様性に富み豊かで健全な海域を構築する観点から、陸域と海域を含めた流域全体の栄養塩類循環状況を把握し、それぞれの海域の状況に応じた栄養塩類の円滑な循環を達成するための効率的かつ効果的な管理方策（海域ヘルシープラン）の策定に向けた検討を行う。
- For the purpose of developing healthy and rich marine areas with broad biodiversity, conduct studies toward formulating an efficient and effective control measure (an Action Plans for Healthy Material Circulation in Ocean) for monitoring the status of circulation of nutrients in the entire watershed areas, including land areas and marine zones, and for achieving a smooth cycle of nutrients in accordance with specific marine zones.
- 栄養塩類が過剰な海域においては、水質を改善するため、下水道等污水处理施設の整備や高度処理の導入を進めるとともに、関係機関連携の下、陸域と海域が一体となった栄養塩類の循環システムの検討、構築を進める。また、栄養塩濃度が環境基準を達成している海域においては、環境基準値の範囲内で栄養塩濃度レベルを管理する新たな手法を開発しつつ、負荷量管理の事例を積み重ねる。
- In marine zones containing excessive amounts of nutrients, construct sewer systems and other wastewater treatment plants and introduce advanced wastewater management for improving water quality. Related agencies need to cooperatively discuss and build an integrated nutrients circulation system that covers both land areas and marine zones. In marine zones where the concentrations of nutrients comply with the environmental standards, assemble a new method of controlling the concentrations of nutrients within the range provided by the environmental standards and performance records in load management.

ウ 生物及び生物の生息・生育の場の保全と生態系サービスの享受への取組 / Working to preserve aquatic life and its habitat and enjoy ecosystem services

- 水質の浄化や生物多様性の確保の観点から、漁業者や地域住民等による高度経済成長期以降大幅に減少した藻場、干潟、サンゴ礁等に対する維持管理等の取組を支援する。
- For improving water quality and maintaining biodiversity, offer aid to maintenance and management activities conducted by fishermen and locals for seagrass bed/algal

bed, tidal flats and coral reefs, which decreased significantly after the high economic growth period.

- 里海ネットや里海づくりの手引書等を通じて、里海づくりに関する情報発信を行う。また、東日本大震災により甚大な被害等を受けた海域においては、地域の意向も踏まえ、海域再生へ向けた里海づくりを進める。
- Distribute information on creation of *sato-umi* (a coastal area where biological productivity and biodiversity has increased through human interaction) by means of the Sato-umi Net website and a manual to create *sato-umi*. In marine zones severely damaged by the Great East Japan Earthquake conduct *sato-umi* construction activities for revitalizing the zones in consideration of local intent.

#### エ 漂流・漂着ごみ対策の推進 / Implementing actions to deal with articles drifting or washed ashore

- 「美しく豊かな自然を保護するための海岸における良好な景観及び環境の保全に係る海岸漂着物等の処理等の推進に関する法律（海岸漂着物処理推進法）」（平成21年法律第82号）については、同法の附則に基づき、法律の規定について検討を加え、平成25年度中に必要な措置を講ずる。
- With regard to the Act on Promotion of Disposal of Articles Washed Ashore for Conservation of Good Coastal Views and Environment for Conserving Beautiful Rich Nature (Act No. 82 of 2009; Washed-Ashore Articles Disposal Promotion Act), its provisions should be reviewed in accordance with supplementary provisions thereto to take necessary steps within FY2013.
- 海岸漂着物処理推進法を基に作成された地域計画に基づき実施されている海岸漂着物の回収・処理、発生抑制策等の取組に対して、支援を実施する。
- Support needs to be offered to collection, disposal, suppression of emissions and other activities concerning articles washed ashore conducted in accordance with local plans drawn up based on the Washed-Ashore Articles Disposal Promotion Act.
- 漂着ごみの実態把握及び対策の検討を進めるため、漂着ごみの全国的な分布状況や経年変化等を把握するためのモニタリング、代表的な地域における主要漂着ごみの発生実態や流出状況等を追跡した原因究明調査、我が国から流出するごみの状況把握調査等に引き続き取り組む。また、海岸漂着物処理推進法の附帯決議に基づき、漂流・海底ごみの状況把握、原因究明、対策手法等の検討を進める。
- To acquire an understanding of the actual state of articles on the seabed and study the measures for dealing with them, continue monitoring of nationwide distribution of such articles and its secular change and an investigation to determine the cause by analyzing the actual emission and outflow of major articles washed ashore in principal regions, and status surveys on articles that flows out of Japan. In accordance with the supplementary resolution of the Washed-Ashore Articles Disposal Promotion Act, take actions to understand the status of articles drifting or washed ashore to find the causes and study the methods of dealing with it.

- 河川を通じて海域に流入するごみ等を削減するため、いわゆるポイ捨てを含む不法投棄の防止や河川美化等について、関係機関が連携して、国民への実態の周知や意識の向上等の普及啓発、監視、取締り等の取組を強化する。
- With respect to littering, illegal dumping and beautification of rivers, relevant institutions should work together to make the actual state known to the public for building public awareness and to step up surveillance and crackdown operations in efforts to reduce articles flowing via rivers into the sea.
- 地方公共団体による海岸漂着物の処理や、海岸漂着物を含めた廃棄物の処理に必要な廃棄物処理施設の整備を支援するとともに、海岸管理者による緊急的な流木等の処理を支援する。
- Provide support for disposal of articles washed ashore by local governments and for construction of articles disposal facilities necessary for disposal of articles including that washed ashore. Assistance should also be given in emergency disposal of driftwood by the administrative agency for the coast.
- 国外起因の廃ポリタンク等の海岸漂着物の実態を把握し、国内関係地方公共団体への注意喚起を行うとともに、必要に応じて発生国への申入れを行う。
- The facts about waste plastic tanks and other articles washed ashore that come from outside the country should be understood in order to arouse attention of relevant local governments in Japan and to make necessary requests to their countries of origin.
- 日本海及び黄海における海洋環境の保全を目的としたNOWPAPへ参画するとともに、東・東南アジアの海域において海洋開発と海洋環境の保全と調和を目指すPEMSEAへの支援を実施することにより、国際的な連携・協力体制の強化を図る。
- Participate in the Northwest Pacific Action Plan (NOWPAP), a plan aimed at conservation of ocean environment in the Sea of Japan and the Yellow Sea, and to provide assistance for the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), which aim to achieve harmony between ocean development and conservation of the ocean environment in the marine areas in East Asia and Southeast Asia, to upgrade the international system of coordination and cooperation in the field.
- 海洋環境の保全を図るため、海面に浮遊するごみ、油の回収を実施する。
- To preserve the marine environment, collect articles and oil floating on the sea.

オ 自然に優しく利用しやすい海岸づくり / Construct coasts that are friendly to nature and users.

- 優れた自然の風景地について、自然公園として適切に保全を図る。
- Appropriately maintain sites with good natural scenic views as natural parks.
- 災害からの海岸の防護に加え、海辺へのアクセスの確保等利用者の利便性、優れた海岸景観や生物の生息・生育環境等の保全に十分配慮した上で、海岸保全施設等の整備に取り組む。

- Construct coastal protection facilities with full attention paid to users' convenience, including accessibility to the seashore, conservation of good seashore landscapes and the habitat of the organisms as well as to coastal protection from disasters.
- 海辺の空間を有効活用した公園、緑地等の整備を推進する。
- Develop parks and green spaces by fully utilizing the seashore space.

(3) 閉鎖性海域での沿岸域管理の推進 / Implementing coastal zone management in enclosed coastal seas

- 汚濁負荷の再生産防止対策等を推進するため、下水道の高度処理を推進するとともに、関係機関連携の下、生活排水、工場等事業場排水、畜産排水等の点源負荷対策に加え、市街地、農地等の面源負荷対策、海域のヘドロ除去及び覆砂を実施する。
- For implementing the measures to prevent reproduction of pollutant load, expand advanced wastewater treatment. Related agencies should cooperate to implement countermeasures against point source load, such as drainage from houses, factories and other business establishments and livestock farms, against nonpoint source load, including urban zones and farmlands, to remove sludge and overlay sand in marine zones.
- 海水交換の悪い閉鎖性海域における富栄養化防止のため、窒素及びリンについて排水規制を実施するとともに、陸域からのCOD、窒素及びリンの負荷量の把握や水質等の調査を実施する。
- For preventing eutrophication in enclosed coastal seas with poor seawater exchange, nitrogen and phosphorus emission concentration control should be in place and efforts to understand land-derived COD, nitrogen and phosphorus load and to survey water quality should be implemented.
- 「豊かな海」の創造に向け、関係者間の連携による推進体制の強化、環境モニタリング、情報共有システムの活用等の包括的な取組と、汚泥浚渫、浚渫土砂等を有効に活用した干潟や藻場等の保全・再生・創出、覆砂、深掘跡の埋め戻し、生物共生型港湾構造物の普及等の個別の取組を総合的に推進する。また、海洋における炭素固定（ブルーカーボン）の研究を推進する。
- For creating rich seas, improve the structure of implementation based on collaboration among relevant parties to implement comprehensive efforts including environment monitoring and use of information-sharing systems. Other individual activities such as conservation, revitalization and creation of tidal flats and seagrass bed/algal bed with the use of dredged sludge and sediment, overlaying sand, backfilling of deep-drilled holes and increase of port structures symbiotic with organisms should be implemented in an integrated manner. Research on carbon fixation in the ocean (blue carbon) should be conducted.

- 広域的な閉鎖性水域である東京湾、伊勢湾及び瀬戸内海における水質総量削減を進め、第7次水質総量削減（平成26年度）及び次期総量削減目標量達成に向けた取組を実施する。
- Reduce the total pollutant load in large enclosed coastal seas, specifically in Tokyo Bay, Ise Bay and the Seto Inland Sea. Take efforts toward achieving the targets under the seventh (FY2014 as the target year) and following basic policies to reduce the total pollution load.
- 瀬戸内海の更なる環境保全・再生のため、中央環境審議会答申「瀬戸内海における今後の目指すべき将来像と環境保全・再生の在り方について」の環境保全・再生の基本的考え方を踏まえ、瀬戸内海環境保全特別措置法に基づく基本計画を変更する。
- In efforts for improved environmental conservation and recovery in the Seto Inland Sea, change the basic plan under the Law concerning Special Measures for Conservation of the Environment of the Seto Inland Sea in accordance with the basic concept of environmental conservation and rehabilitation in the report of the Central Environment Council titled the Future Vision of the Seto Inland Sea and Environmental Conservation and Recovery.
- 有明海及び八代海等の再生の観点から、有明海及び八代海等に関わる環境悪化の原因・要因究明、再生像及び再生手順を検討するために必要なデータの収集等の体制を整備するとともに、有明海及び八代海等を再生するための特別措置法に基づく審議の促進を図る。
- For recovery of the Ariake Sea, the Yatsushiro Sea and other seas, build a structure for collecting necessary data for identifying the causes of their environmental deterioration and for studying the vision and procedures of their recovery. Speed up deliberations under the Law concerning Special Measures for the Rejuvenation of Ariake Sea and Yatsushiro Sea.
- 東京湾、大阪湾、伊勢湾、広島湾においては、全国海の再生プロジェクトとして、国及び関係地方公共団体が連携して海の再生のための行動計画を策定し、多様な主体との連携・協働の下、計画的、総合的に取組を推進する。
- For Tokyo Bay, Osaka Bay, Ise Bay and Hiroshima Bay, draw up plans of action for revitalization of the seas in coordination between national and relevant local governments in the forms of Bay Renaissance Projects. Action should be implemented in coordination and collaboration with many different players in an orderly and comprehensive manner.

#### （４）沿岸域における利用調整 / Coordination of activities in coastal zones

- 沿岸域における地域の実態も考慮した海面の利用調整ルールづくりを推進する。また、地域の利用調整ルール等の情報へのアクセスを改善するとともに、海洋レジャー関係者を始めとする沿岸域利用者に対する周知・啓発を進める。



- Conduct the process for establishment of sea surface utilization implement coordination rules in consideration of local actual status in coastal zones. Improve access to information on the utilization coordination rules in different regions and conduct awareness-raising and educational activities for users of coastal zones, including those engaged in marine recreational activities.
- 小型船舶の安全・環境対策として、小型船舶の海難等による死亡・行方不明者の減少及び環境問題の解消・低減並びに健全な利用振興及び関連産業の活性化を図る。また、小型船舶の利用適正化に向けた利用環境の整備を進めるため、「海の駅」の設置等を推進する。さらに、プレジャーボートの適正な管理を実現させるため、係留・保管能力の向上と規制措置を両輪とした放置艇対策を推進する。
- As part of safety and environmental measures for small ships, take actions for decreasing the number of deaths and missing persons in small ship accidents, for eliminating and alleviating environmental issues, for increasing proper utilization and for stimulating related businesses. For accelerating development of the environment for proper use of small ships, take efforts such as construction of *umi no eki* (marine station) facilities. In addition, conduct actions against abandoned pleasure boats, based on a combination between boosting of the mooring and safekeeping capacity and regulatory actions for proper management of pleasure boats.

## 1 0 離島の保全等 / Preservation of Remote Islands

### (1) 離島の保全・管理 / Preservation and management of remote islands

ア 排他的経済水域・領海等の根拠となる離島の保全・管理 / Preserving and managing islands that give grounds for the EEZ and territorial seas, etc.

#### ① 離島及び低潮線の安定的な保全・管理の推進 / Implementing stable preservation and management of remote islands and low-water lines

- 離島における排他的経済水域等の根拠となる低潮線を保全するため、低潮線保全法及び低潮線保全基本計画に基づき、低潮線保全区域内の海底の掘削等の行為規制を行うとともに、低潮線の状況を把握するため、船舶、ヘリコプター等を活用した巡視、空中写真の周期的な撮影、衛星画像等を活用した調査を実施する。
- Restrict activities of submarine drilling in the low-water line preservation areas in order to preserve the low-water line, which is a basis for the EEZ and continental shelves, in accordance with the Act on the Preservation of Low-Water Line and the Basic Plan for Preservation of Low-water Line. In addition, to understand the status of the low-water line, implement patrol by ships, helicopters and other equipment, periodically take aerial photographs, and promote surveys that use satellite images and other materials.

- 関係機関での共有を可能とする「低潮線データベース」を維持・更新し、低潮線に関する各種情報を一元的に管理する。また、低潮線保全区域の重要性を周知するため、看板の設置や啓発活動を実施するとともに、海岸保全区域についても国土保全の観点から、低潮線と一体的に浸食対策や保全、維持管理を推進する。
- Maintain and update the database of low-water lines for information-sharing among related institutions so as to integrate and manage various kind of information on low-water lines. To make widely known the importance of low-water line preservation zones, erect signboards and conduct activities for building awareness. In addition, from the perspective of territorial preservation, implement erosion-control measures and maintenance management in coastal conservation zones together with the low-water lines.
- 離島の地名等の国土情報について地方公共団体等への確認等を通じて情報を更新する。特に、領海を根拠付ける離島の保全・管理の適切な実施及び国民の理解を増進するため、付されている名称を確認し、不明確な場合には関係機関間で協議の上、名称を決定し、地図・海図等での統一した名称の活用を図る。
- Update the national land information such as names of islands by contacting local governments and their equivalent for confirmation. Especially for properly conserving and managing islands serving as grounds for territorial seas and for increasing public understanding, check the names given to islands and, if they are uncertain, conduct deliberations among related agencies to determine the names so that standardized names will be used in maps and charts.
- 海洋資源の開発・利用や海洋調査等が、本土から遠く離れた海域においても安全かつ安定的に行われるよう、遠隔離島（南鳥島及び沖ノ鳥島）において輸送や補給等が可能な活動拠点を整備する。
- Construct action bases with transport and supply capabilities on remote islands, namely Minami-Tori Shima Island and Okino-Tori Shima Island, to ensure that development and utilization of marine resources and marine surveys can be safely and stably implemented in marine zones distant from the mainland.
- ② 離島における安全確保や観測活動の実施 / Securing safety of islands and implementing observation activities
  - 海上交通の安全確保の観点から、離島に設置されている灯台等の航路標識の整備及び適切な維持管理を図る。
  - For securing safety of marine transport, improve lighthouses and other navigational aids established on islands and subject them to appropriate maintenance and management.
  - 台風、地震、津波等の自然災害による被害の防止・軽減の観点から、離島の気象・海象観測施設等の整備及び適切な維持管理を進めるとともに、地上・高層の気象観測、温室効果ガス、オゾン、日射放射等の観測を継続して実施する。
  - For preventing and decreasing damages resulting from typhoons, earthquakes, tsunamis and other natural disasters, improve and properly maintain and manage

meteorological and oceanographic observation facilities on islands. In parallel, continue ground and upper-air meteorological observation as well as observation of greenhouse gases, ozone and solar radiation.

- 海洋プレートの観測にも寄与する離島の位置情報基盤を整備する。
- Construct for islands georeferencing infrastructure since it is helpful for observation of oceanic plates.

③離島及び周辺海域の自然環境の保全 / Preserving natural environment on islands and in surrounding marine zones

- 海洋によって他の地域から隔離され、独特の生態系が形成されている離島は、人間の諸活動や外来種の侵入による影響を受けやすい脆弱な地域であることから、これらの離島の貴重な生態系等を適切に保全、管理、再生するとともに、生物多様性の確保に取り組む。
- Islands separated by the ocean from other regions and where unique ecosystems are formed are vulnerable to the impacts of human activities and introduction of alien species. Properly maintain, manage and restore valuable ecosystems on these islands in efforts to conserve biodiversity.
- 海岸漂着物の処理、外来生物の防除及び伝染病の防疫に取り組むとともに、生態系の維持又は回復を図る。
- Take efforts for disposal of articles washed ashore, control of invasive alien species and infectious disease control, and to maintain or restore ecosystems.
- 藻場、干潟、サンゴ礁等が残る離島周辺の海域は、貴重な漁場であるため、漁場環境の保全・再生及び漁場の整備を推進するとともに、漁業者や地域住民により行われる藻場、干潟、サンゴ礁等の維持管理等の取組を促進し、水産動植物の生息・生育環境の改善や水産資源の回復を図る。
- There are valuable fishing grounds in marine zones around islands with seagrass bed/algal bed, tidal flats and coral reefs. Conserve and rehabilitate the environment of fishing grounds and improve the fishing grounds. Bolster activities of fishermen and local residents to maintain and manage seagrass bed/algal bed, tidal flats and coral reefs in efforts to improve the habitat environment for aquatic plants and animals and restore fishery resources.
- 優れた自然の風景地や海域景観、自然海岸等を保全するため、海岸の適正利用、自然公園制度の適切な活用、赤土や栄養塩類等の陸域からの流出の低減、市民と連携した清掃活動、不法投棄防止の普及啓発、漂流・漂着ごみや流木の撤去及び島外への輸送や廃棄物処理施設の整備を推進する。
- For the purpose of preserving sites with good natural views, appealing seashore landscapes and natural coasts, conduct activities for sound coastal utilization, proper use of the natural park system, decreasing the outflow of red clay and nutrients from land areas, cleaning with citizens, raising awareness against illegal dumping, removing articles drifting and washed ashore, moving such articles away from islands and constructing waste disposal facilities.

- イ 我が国の安全保障及び海洋秩序維持上重要な離島に関する取組 / Efforts with regard to islands important to Japan's security and maintenance of the order of the sea
- 我が国の安全保障及び海洋秩序維持の観点から、重要な離島及びその周辺海域における監視・警戒を適切に実施する。
  - For the purpose of Japan's security and maintenance of the order of the sea, implement appropriate surveillance and monitoring operations on key islands and in their surrounding marine zones.
  - 南西諸島を含む島嶼（とうしょ）部の防衛態勢強化に係る事業を推進し、南西地域を始めとする我が国周辺における情報収集・警戒監視及び安全確保を図り、各種事態生起時の対応に万全を期す。
  - Implement programs for reinforcing the defense posture in islands regions including the Southwestern Islands. Implement information-gathering, surveillance and monitoring and security activities around Japan including its southwest region to conduct thorough preparation for occurrence of different kinds of events.
  - 離島をめぐる情勢の変化を踏まえ、我が国の領域、排他的経済水域等の保全等我が国の安全並びに海洋資源の確保及び利用を図る上で特に重要な離島（いわゆる「国境離島」）について、その保全、管理及び振興に関する特別の措置について検討を行い、その結果を踏まえ必要な措置を講ずる。
  - In view of the circumstances surrounding islands, conduct studies on special preservation, management and development of islands of particular significance to maintenance of Japan's territorial zones, EEZs and their equivalent, and to ensuring Japan's security and marine resources (so-called border islands). Take necessary steps in accordance with the findings.

## （２） 離島の振興 / Development of Remote Islands

- ア 交通通信の確保 / Maintaining transport and communication
- 離島における流通の効率化に効果のある施設の整備や機材の導入を支援する。
  - Provide assistance in construction of facilities and introduction of equipment that are effective to streamlining of distribution on islands.
  - 離島住民の利便性の確保や地域資源を活用した海洋観光の振興等を図る観点から、離島航路、離島航空路の安定的な確保維持を支援するとともに、安全かつ安定的な輸送の確保のための離島ターミナルの整備を推進する。
  - From the perspective of providing convenience for inhabitants on remote islands and stimulating marine sightseeing with the use of local resources, provide support for stably maintaining sea and air routes to and from the remote islands. Construct island terminals for ensuring safety and stability of transport.
  - 本土に比べ割高となっている離島の燃油価格の実質的な小売価格が下がるよう支援する。

- Fuel oil prices are higher on islands than on the mainland. Aid should thus be offered to effectively reduce fuel oil prices.
  - 情報の流通の円滑化及び高度情報通信ネットワーク等の通信体系を整備するため、超高速ブロードバンドや携帯電話等のサービスの利用を可能とするための施設や伝送路の整備を支援する。
  - For increasing the efficiency of information distribution and for establishing a communication system including an advanced information and communication network, assistance should be offered in construction of facilities and transmission lines that give access to ultra-high speed broadband connection, cell phones and other services.
- イ 医療介護の確保及び教育文化の振興 / Maintaining medical and long-term care and fostering education and culture
- 離島等のへき地における医療を確保するため、地域の実情に応じたきめ細かい支援体制を整備し、必要な医師等の確保、定期的な巡回診療、医療機関の協力体制の整備を図る。
  - For maintaining medical care on islands and in other remote areas, create a close support system matched with local circumstances and take efforts to hire necessary medical doctors and other personnel, operate regular visiting medical care and construct a platform for cooperation among medical institutions.
  - 離島に住む妊婦が、その島を離れて妊婦健診・分娩する際の経済的負担の軽減を図る。
  - Economic burdens should be reduced for expecting mothers living on islands at the time of receiving medical checks and giving childbirth away from their islands.
  - 高校未設置の離島に住む高校生が、高校進学のために島外に通学又は居住する際の経済的負担の軽減を図る。
  - Economic burdens should be lowered for high school children living on islands without high school in the case of commuting to high school or living outside their islands for receiving high school education.
- ウ 離島における産業の振興等 / Developing industries on remote islands
- 離島における地域活性化を推進し、定住を促進するため、海上輸送費の軽減等戦略産業の育成による雇用拡大等の取組、観光の推進等による交流の拡大促進の取組、安全・安心な定住条件の整備強化等の取組を支援する。
  - Take different actions for stimulating the local economy on islands and encouraging more people to live permanently on remote islands, including reduction of marine transport expenses for nurturing strategic industries and increasing job opportunities, sightseeing promotion for increasing exchange and acceleration of efforts to create safe and reassuring living conditions.

- 離島の水産業・漁村が発揮する多面的機能の維持・増進を図るため、漁業再生活動への支援を通じて離島の基幹産業である漁業の再生に取り組むとともに、農林漁業者等の6次産業化を推進するため、新商品開発や販路開拓などの積極的な取組を促す環境づくり等を支援する。
- For maintaining and boosting the multiple functions exerted by fisheries and fishing villages on islands, conduct efforts to revive fishery industries as core business on islands through assistance in fishery rehabilitation activities. Assistance should also be given in construction of an environment that gives impetus for new product development, cultivation of sales channels and other positive actions for speeding up the expansion of those engaging in agriculture, forestry and fisheries into manufacturing and service sectors.
- 離島の産業の振興を図るための計画を策定している市町村における製造業、旅館業、情報サービス業等の用に供する機械等の新增設を促進する。
- Facilitate new and additional machinery and other equipment for municipal governments which have plans for industrial development on islands manufacturing, hotel, information service and other businesses.
- エネルギーの安定的かつ適切な供給及び環境負荷の低減を図る観点から、離島の自然的特性をいかした再生可能エネルギーの利用を促進する。
- For attaining constant and appropriate supply of energy and reducing environmental burdens, encourage utilization of renewable energy based on natural characteristics of islands.
- 地域の創意工夫をいかした振興を図るため、離島特区制度について総合的に検討する。
- Implement a comprehensive study on a special zone system for islands in order to develop islands based on local innovative ideas.

#### エ 基盤の整備 / Constructing infrastructure

- 離島の産業振興の基盤となる道路、港湾、農林水産基盤等や定住環境の向上のための生活基盤の整備を推進する。
- Conduct construction of infrastructure for industrial development on islands, including roads, ports and other infrastructure for agriculture, forestry and fisheries and living infrastructure for an improved environment for permanent living.

### 1 1 国際的な連携の確保及び国際協力の推進 / Securing International Coordination and Promoting International Cooperation

## (1) 海洋の秩序形成・発展 / Formation and development of the order of the sea

- 海洋の秩序の形成・発展に貢献するため、海洋に関する種々の国際約束等の策定等に積極的に取り組む。また、排他的経済水域等に関し我が国と相手国の主張が重複する海域があることにより生じている問題について、我が国の権益を確保し、周辺海域の秩序をより安定したものとするため、国際法に基づいた解決に向けて全力を尽くす。
- To contribute to the formation and development of the order of the sea, Japan should actively work to establish various international agreements with regard to the sea. There are issues stemming from existence of marine zones where Japan's claims on jurisdiction over the EEZ and continental shelves are overlapping with those of neighboring countries. The government should make every possible effort to solve such issues based on international law in order to secure Japan's interests and further stabilize the order of the surrounding marine zones.
- 国連海洋法条約その他の国際約束等を適切に実施するため、国際連合等における海洋に関する議論に積極的に対応するとともに、IMO 等における海洋に関する国際約束等の策定や国際的な連携・協力を主体的に参画する。
- To ensure appropriate implementation of UNCLOS and other international agreements, Japan should positively participate in ocean-related discussions at organizations such as the United Nations and proactively participate in the development of international agreements regarding to the ocean at the IMO meetings and other opportunities and in international coordination and cooperation regarding to the ocean.
- 海洋の秩序の形成・発展に貢献するため、国際法を始めとする国際ルールにのっとり、海洋に関する紛争の解決を図る。また、国際司法機関等第三者機関の積極的な活用を重視すべきという考え方を、我が国のみならず、各国も共有することを促進するとともに、国際海洋法裁判所等の海洋分野における国際司法機関の活動を積極的に支援する。
- To contribute to formation and development of the order of the sea, Japan should seek resolutions for marine-related conflicts based on international law and other international rules. Japan should place emphasis on active utilization of independent bodies such as international judicial bodies, and share this idea with other countries. And Japan should also proactively support activities of international judicial bodies in the marine-related fields, including those by the International Tribunal for the Law of the Sea.

## (2) 海洋に関する国際的連携 / International coordination with regard to the sea

- 海洋に関する国際的な枠組みに積極的に参加し、国際社会の連携・協力の下で行われる活動等において主導的役割を担うよう努める。特に、経済的側面を含む我が国の安全の確保の基盤である長大な海上航路における航行の自由及び安全を確保するため、ASEAN 地域フォーラム等様々な場を積極的に活用し、関係各国と海洋の安全に関する協力関係を強化するとともに、協力の具体化を進める。

- Japan should actively participate in international frameworks with regard to the sea and try to take the initiative in activities carried out under the coordination and cooperation of international society. In particular, to secure freedom of navigation and safety on very long marine routes, which are the very basis for ensuring Japan's safety, including safety in economic aspects, Japan should strengthen cooperative relations with relevant countries concerning maritime safety and materialize cooperation by actively utilizing opportunities such as the ASEAN Regional Forum.
- 北太平洋海上保安フォーラム、アジア海上保安機関長官級会合等の多国間会合や、インド、韓国、ロシア等との二国間会合を通じ、関係国海上保安機関との連携を深める。また、NOWPAP や PEMSEA 等への参画等を通じて、関係諸国と海洋環境に係る国際的な連携・協力体制を強化する。
- Japan should deepen coordination with coast guard agencies of relevant countries through multilateral meetings such as the North Pacific Coast Guard Forum and the Heads of Asian Coast Guard Agencies Meeting and through bilateral meetings with India, The Republic of Korea, Russia and other countries. Japan should also strengthen the international coordination and cooperation systems with relevant countries concerning the marine environment through participation in NOWPAP, PEMSEA and other international frameworks.
- マグロ類を始めとする国際的な水産資源の適切な保存管理を推進するため、各地域漁業管理機関において、我が国のリーダーシップによる科学的根拠に基づく議論を主導する。
- To promote appropriate conservation and management of international fishery resources, such as tuna and tuna-like species, Japan should take a leadership role in science-based discussions at regional fisheries management organizations.
- 船舶の解体及び再生利用(シップリサイクル)に係る安全確保及び環境保全について、新条約の早期発効に向けた各国による環境整備等を推進する。
- Japan should promote improvement of the environment and other measures by each country aimed at putting new conventions into effect with regard to securing of safety and preservation of the environment related to dismantling and recycling of ships.
- 米国等に漂着しており、引き続き漂着する可能性も指摘されている東日本大震災起因の洋上漂流物の漂流予測を実施し、関係国への適切な情報提供を行うとともに、当該問題に取り組む民間団体への支援を行う。平成 25 年度までは、漂流予測を実施し関係国へ情報発信を行い、平成 26 年度以降は、漂着の状況及び専門家の意見も踏まえ適切に対応していく。
- Drifting marine debris generated as a result of the Great East Japan Earthquake has washed ashore in countries including the United States, and still more drifting marine debris reportedly may be washed ashore in other countries. Japan should predict drift patterns of such marine debris, appropriately provide information to relevant countries and support private organizations working on this problem. Japan should continue the prediction of the drift patterns and keep providing information to relevant countries until FY2013 and should address the issue appropriately based on the actual drift patterns and experts' opinions in FY2014 and onward.



- ソマリア沖・アデン湾での海賊対策を国際社会と連携して引き続き推進する。海上でのテロ行為の防止及び海上輸送による大量破壊兵器の拡散防止のための体制を整備する。また、PSIに基づく海上阻止訓練等へ積極的に参画する。
- Japan should continue to promote measures to address the problem of pirate attacks off the coast of Somalia and in the Gulf of Aden by cooperating with international society. Japan should establish systems for preventing terrorism in the sea and proliferation of weapons of mass destruction by maritime transport. Japan should also actively participate in maritime exercise and other exercises, etc. under PSI.
- 海上でのテロ行為の防止及び海上輸送による大量破壊兵器の拡散の防止に関し、「海洋航行不法行為防止条約 2005 年改正議定書」等を早期に締結する。
- With regard to prevention of terrorist attacks in the sea and proliferation of weapons of mass destruction by maritime transport, the Protocol of 2005 to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation and other agreements should be concluded at an early stage.
- 沿岸国の主権を尊重しつつ、締約国が海賊に関する情報を共有し、海賊対策についての協力を強化する等を内容とする ReCAAP の下での活動等を支援するとともに、関係各国の参加を促進する。
- Japan should support activities under ReCAAP, whose objectives include sharing of information on pirates among Contracting Parties to strengthen cooperation for combating piracy while respecting coastal countries' sovereignty, and encourage other relevant countries to join this agreement.
- 北極評議会における我が国のオブザーバー資格承認の実現に向けて、政府一体となって努力する。
- The government should make concerted efforts to gain observer status at the Arctic Council.
- 日本海の名称をめぐる問題に関し、日本海の名称が当該海域の国際的に確立した唯一の名称であることについて、国際社会及び国民に正しい理解を広げるべく努める。
- Concerning the issue of name of the Sea of Japan, Japan should strive to make more widely known the proper understanding, in the international community and among citizens of Japan that the Sea of Japan is the only internationally established name of the sea area concerned.

### (3) 海洋に関する国際協力 / International cooperation with regard to the sea

#### ア 海洋調査・海洋科学技術 / Marine surveys and marine science and technology

- 地球温暖化や海洋酸性化等の地球規模の問題に対応していくため、WMO、UNESCO/IOC 等が実施する国際的な海洋観測計画やデータ交換の枠組み等に引き続き参画・貢献する。
- To continue to address global issues such as global warming and ocean acidification, Japan should continue to participate in and contribute to international frameworks on marine observation plans, data exchanges, etc. implemented by the WMO, UNESCO/IOC and other organizations.

- 近年、世界的に関心が高まっている北極海や、太平洋・インド洋系の海洋と大気の変動が環境に及ぼす影響評価を視野に入れた海洋観測研究を推進するため、科学技術協力協定等に基づく二国間協力を含め、国内外の関係機関と連携した海洋観測に関する国際協力を推進する。
- Japan should actively promote international cooperation for marine observations conducted in coordination with related agencies of Japan and other countries, including bilateral cooperation based on agreements on cooperation in science and technology, etc. in order to promote marine observational research with a view to assessing the impacts of atmospheric fluctuations in the Arctic, Pacific and Indian Oceans on the environment, which have been drawing increasing attention globally.
- 我が国の地球深部探査船「ちきゅう」と欧米の掘削船を国際的に共同利用する統合国際深海掘削計画（IODP）に、引き続き積極的に参画するとともに、日米欧だけでなくアジア大洋州諸国等を加えた協力体制を構築する。
- Japan should continue to participate actively in the Integrated Ocean Drilling Program (IODP), under which Chikyu, a Japanese deep sea drilling vessel, and drilling vessels of Europe and the United States are shared among nations. Japan should also establish a cooperative framework involving not only Japan, the United States, and Europe but also countries in Asia, Oceania and other regions.

#### イ 海洋環境 / Marine environment

- 生物多様性を保全する観点から、サンゴ礁や広域を移動する動物等の保護に関し、国際協力の下で、海洋環境生物圏の調査・研究を行う。
- From the viewpoint of ensuring biodiversity, Japan should promote efforts for surveys and research on the marine environment and biosphere under international cooperation with regard to the protection of coral reefs and animals that migrate wide areas.
- 世界閉鎖性海域環境保全会議（EMECS）等の国際会議において、我が国の水質総量削減制度や里海づくり等の環境保全施策の情報発信を行う。また、アジア諸国の水質汚濁問題に貢献するため、水質総量削減制度導入指針を活用した情報発信等を行い、その導入を支援する。
- At international conferences such as the International Conference on the Environmental Management of Enclosed Coastal Seas (EMECS), Japan should inform other countries of its measures for protecting the marine environment, such as the Total Pollutant Load Control System (TPLCS) and initiatives for creating *sato-umi* (a coastal area where biological productivity and biodiversity has increased through human interaction). In addition, to contribute to solving water pollution problems in Asian countries, Japan should transmit information by utilizing the guidelines on the TPLCS and help those countries introduce such a system.
- 太平洋島嶼（とうしょ）国等との間で、島の保全・管理、周辺海域の管理、漁業資源の管理、気候変動への対応など、我が国の島と共通の問題の解決に向けて連携・協力を推進する。

- Japan should promote coordination and cooperation with Pacific island countries and other countries toward solution of issues common to those states and islands of Japan, such as preservation and management of islands, management of the surrounding sea areas, management of fishery resources, and response to climate change.

#### ウ 海洋の治安対策・航行安全確保 / Security measures for the sea and securement of navigation safety

- 「マラッカ・シンガポール海峡協力メカニズム」の下で実施されるプロジェクトのうち、航行援助施設の整備に関する協力や、航行援助施設の維持管理に係る人材育成を推進するとともに、同メカニズムを有効に機能させ、マラッカ・シンガポール海峡における航行安全・環境保全対策の充実に図られるよう、利用国、利用者等に幅広く参加を働きかける。
- Among projects under the Cooperative Mechanism in the Straits of Malacca and Singapore, Japan should promote cooperation related to maintenance of Aids to Navigation and development of human resources to be involved in the maintenance and management of such facilities. At the same time, Japan should encourage a wide range of countries and parties using the facilities to participate in the Mechanism so that the Mechanism function effectively and measures for securing navigational safety and environmental preservation in the Straits of Malacca and Singapore be strengthened.
- 関係国の海賊への対応能力向上に向けた支援を実施するとともに、アジア各国の海上保安機関等と密輸・密航取締り、テロ対策等について連携・協力を推進する。
- Japan should provide support to related countries for enhancing their abilities to cope with piracy and promote coordination and cooperation with maritime safety agencies of other Asian countries for strengthening control of smuggling and illegal immigration and countermeasures against terrorism.
- 港湾保安に関する国際連携を強化するため、能力向上支援、共同訓練の実施等を推進する。
- To boost international coordination concerning port security, Japan should promote assistance for capacity-building and implement joint exercises.
- 「アジア人船員国際共同養成プログラム」等を通じて、諸外国における船員の資質向上に貢献する。また、世界海事大学等を通じて、諸外国における海事関係者の資質向上に貢献する。
- Japan should contribute to strengthening the qualities of seafarers in other countries through the International Cooperative Training Project for Asian Seafarers and other programs. Japan should also contribute to strengthening the qualities of people in other countries involved in maritime affairs through the World Maritime University and other institutions.

#### エ 防災・海難救助支援 / Support for disaster prevention and maritime search and rescue

- 我が国の優れた防災技術を、アジアを始めとする災害に脆弱な国に対して周知・普及活動を行う。特に、地球温暖化に伴い一層深刻化する津波、高潮・高波等による

災害を防止するため、アジア・太平洋地域等への高潮・高波予測情報の提供、技術的助言、情報ネットワーク活動の支援等を推進する。

- Japan should promote and disseminate its advanced disaster prevention technologies to countries vulnerable to disasters, including Asian countries. Above all, Japan should provide countries in Asia-Pacific and other regions with information on forecast of storm surges and high waves, technical advice and support for information network activities in order to prevent disasters caused by tsunamis, storm surges, high waves and other phenomena, which have been growing more severe due to global warming.
- アジア環太平洋地域等における防災・減災のため、地震・津波等のモデル化とその予測・検証に取り組むとともに、津波災害が懸念される諸外国への津波情報の迅速な提供等を継続する。
- For disaster preparedness and mitigation in Asia-Pacific and other regions, Japan should create models of earthquakes, tsunamis and other disasters to predict and verify them and continue the quick provision of tsunami information to countries where tsunami-related disasters are of concern.
- 効率的かつ効果的な海難救助を実施するため、各国との間で情報交換・合同訓練等により連携・協力を強化する。
- To conduct maritime search and rescue efficiently and effectively, Japan should strengthen coordination and cooperation with relevant countries by mutually exchanging information, implementing joint exercises, etc.

## 1 2 海洋に関する国民の理解の増進と人材育成 / Enhancement of Citizens' Understanding of the Sea and Fostering of Human Resources

### (1) 海洋に関する教育の推進 / Promotion of marine-related education

- 小学校、中学校及び高等学校において、学習指導要領を踏まえ、海洋に関する教育を充実させる。また、それらの取組の状況を踏まえつつ、海洋に関する教育がそれぞれの関係する教科や総合的な学習の時間を通じて体系的に行われるよう、必要に応じ学習指導要領における取扱いも含め、有効な方策を検討する。
- The government should heighten marine-related education at elementary schools, junior high schools and high schools based on courses of study. In addition, based on measures actually implemented for this purpose, the government should discuss effective measures for ensuring marine-related education to be provided systematically in classes of related subjects and in the Period for Integrated Studies, including, as necessary, how to position such education in courses of study.
- 海洋関連の副教材の作成を促進する。また、海洋に関する教育の実践事例集や手引きなどの指導資料の作成、教員研修の充実等を通じ、教育現場が主体的かつ継続的に取り組めるような環境整備を行う。

- The government should facilitate creation of supplementary materials for marine-related education. In addition, the government should create teaching materials such as manuals and documents showing case examples of marine-related education that was actually provided, and improve related training programs for teachers. Through these and other measures, the government should create an environment that will allow educators to independently and continuously provide marine-related education.
- 海洋に関する教育の総合的な支援体制を整備する観点から、学校教育と水族館や博物館等の社会教育施設、水産業や海事産業等の産業施設、海に関する学習の場を提供する各種団体等との有機的な連携を促進する。
- From the viewpoint of developing a comprehensive support system for marine-related education, the government should facilitate organic coordination between school education and social educational facilities such as aquariums and museums, industrial facilities of the fisheries industry, maritime industries and other industries, organizations that provide opportunities to receive marine-related education, and others.
- 海洋に係る夢を抱き、感動を覚えるなど、海洋の魅力を実感できるよう、学協会等との協力の下、アウトリーチ活動を重視した取組等を推進する。
- Outreach efforts should be promoted, with cooperation from academic circles and associations, so that the citizens can, for example, feel the appeal of the sea and possess marine-related dreams and a sense of excitement.

(2) 海洋立国を支える人材の育成と確保 / Fostering and securing human resources who will support an oceanic state

ア 特定分野における専門的人材の育成と確保 / Fostering and securing human resources specialized in particular fields

- 海洋や水産に関する教育を行う高等学校において、現場実習等を通じた実践的な教育を促進するとともに、実習船等の着実な整備を引き続き推進する。
- At high schools that provide education on the sea and fisheries, practical education should be promoted through onsite practice and other measures and more training vessels need be equipped and improved.
- 高等専門学校や海洋系・商船系・水産系の大学・大専校において、海洋・海事・水産の分野における専門的人材を育成する。また、水産業及びその関連分野における人材を確保するため、将来の担い手の漁業への参入促進、実践的な専門教育の充実、女性の参画の促進等を図る。さらに、日本人船員を計画的に確保するため、退職海上自衛官等が船員として就業するための環境整備を引き続き行う。
- Human resources specializing in maritime science and technologies, maritime affairs and fisheries should be fostered at technical colleges and universities and colleges specializing in maritime science and technologies, mercantile marines and fisheries. In addition, to secure human resources in the fisheries industries and related fields, measures should be implemented to, for example, encourage future leaders to enter the fisheries industries,

improve practical specialized education and facilitate the participation of women. In order to secure Japanese seafarers in a planned manner, improvement of environment should also be continued to permit retired Maritime Self-Defense Force officials and other people to be employed as seafarers.

- 中長期的な観点から今後発展が期待できる海洋に関する産業分野の人材や技術の専門家を養成・確保するため、産業界や国の関係機関等における技術開発と大学等における教育・研究が連動して一体的に行われる取組を推進する。
- To foster and secure human resources and technology experts in marine-related industry fields that are expected to grow in the future from medium- and long-term perspectives, the government should promote measures implemented in an integrated manner through coordination between technology development at related organizations, etc. in the industrial world and the national government and education and research at universities and other institutes.
- 国際的な研究プロジェクトにおいてリーダーシップを発揮できる研究者を養成するため、異分野の研究者が国際的な環境の下で研究を進めることが出来るような機会の確保と拡大を図る。
- To foster researchers who can exercise leadership in international research projects, the government should secure and expand opportunities that will permit researchers in different fields to conduct research in an international environment.

イ 海洋に関する幅広い知識を有する人材の育成と確保 / Fostering and securing human resources with wide-ranging knowledge with regard to the sea

- 大学及び大学院の学生の海洋に関わる理学・工学・農学等の基礎的な能力を培うとともに、若手研究者の自発性・独創性を伸ばしていくため、大学や研究機関等における海洋分野の基礎的・先端的な研究を推進する。
- The government should promote basic and advanced research in marine-related fields at universities, research institutes, etc. to develop the spontaneity and creativity of young researchers as well as to develop the basic marine-related abilities of students and graduate students in science, engineering, agriculture and other fields.
- 大学等において、学際的な教育及び研究が推進されるようカリキュラムの充実を図るとともに、産業界等とも連携しながらインターンシップ実習の推進や、社会人再教育等の実践的な取組を推進する。
- Improve curriculums at universities and other institutes so as to promote interdisciplinary education and research. At the same time, promote practical measures such as internship and reeducation of people in the working world under coordination with the industrial world.
- IMO、UNESCO/IOC、大陸棚限界委員会、国際海洋法裁判所等の海洋分野の国際機関に、引き続き我が国からの人的貢献を行う。
- Japan should continue to contribute personnel to international organizations in the marine-related fields, such as in the IMO, UNESCO/IOC, the Commission on the Limits of the Continental Shelf, and the International Tribunal for the Law of the Sea (ITLOS).

ウ 地域の特色をいかした人材の育成 / Fostering human resources by utilizing regional characteristics

- 地域の特色をいかした多様な知的海洋クラスターの創出や、地域に根ざした海洋産業の創出等の観点から、様々な制度を通じて、地域における産学官連携のネットワークづくりを推進する。
- From the viewpoint of creating diverse marine-related knowledge clusters that utilize regional characteristics and creating regionally based marine industries, etc., the government should promote creation of networks for industry-academia-government collaborations through various programs.
- 海洋に関する学部等を持つ大学が、それぞれの教育理念に基づき、各地域において特色ある教育研究を行うため、練習船、水産実験所、臨海実験所等の共同利用を推進する。
- The government should promote sharing of training ships, fisheries research laboratories, marine laboratories and other facilities by universities with marine-related departments, etc. so that they can engage in research and education reflecting characteristics of each region based on the individual educational philosophies.

(3) 海洋に関する国民の理解の増進 / Heightening of citizens' understanding of the sea

- 海洋に関する国民の理解と関心を喚起するため、国民の祝日である「海の日」制定の意義に鑑み、「海の日」や「海の月間」等の機会を通じて、練習船等の一般公開、各種海洋産業の施設見学会や職場体験会、海岸清掃活動、海洋環境保全、海洋安全、沿岸域についての普及啓発活動、マリンレジャーの普及や理解増進等の多様な取組を、産学官等で連携・協力の下、実施する。
- To stimulate citizens' understanding and interest in the sea, a variety of measures including public opening of training ships and other facilities, study tours of marine-industry-related facilities, work-study programs, beach cleaning campaigns, educational activities on conservation of the marine environment, marine safety and coastal zones, dissemination of marine leisure activities, and activities to deepen people's understanding of the sea, should be implemented under industry-academia-government collaborations and cooperation, through opportunities such as the 'Ocean Day' and 'Ocean Month', in consideration of the meaning of establishment of 'Ocean Day' as a national holiday.
- 海洋分野における普及啓発、学術推進、研究、産業振興等において顕著な功績を挙げた個人・団体に対して、海洋立国推進功労者表彰を継続的に実施する。
- The government should continue to commend individuals and organizations that have made outstanding achievements in the marine-related fields, such as in awareness-raising activities, advancement of science, research and industrial development, as contributors to promotion of an oceanic state.

- 国民が海洋に触れ合う機会を充実する観点から、豊富な魚介類、優れた海岸景観、歴史・文化等に培われた風土、マリンレジャーに適した海洋空間等、地域それぞれが有する資源をいかした海洋観光等の取組を推進し、地域振興に寄与する。
- With a view to increasing opportunities for the citizens to enjoy the sea, efforts should be promoted to revitalize local communities by promoting measures including marine tourism that utilizes respective regions' potential marine resources, such as seafood, beautiful seashore landscape, unique climate created by their own history and culture, and marine space suitable for marine leisure activities.
- 海洋国家である我が国の歴史・文化を知る上で重要な文化遺産である水中遺跡について、観光資源等としての活用を考慮しつつ、遺跡の保存や活用等に関する調査研究を進める。
- With regard to underwater archaeological sites as cultural heritage that is important for knowing the history and culture of Japan as a maritime country, the government should conduct surveys and research concerning how to preserve and utilize such sites while considering their use as tourism resources, etc.
- 海洋に関する様々な情報をメディアやインターネット等を通じて分かりやすく発信する。
- Marine-related information should be transmitted in an easily comprehensible manner via means such as the media and Internet.



## 第3部 海洋に関する施策を総合的かつ計画的に推進するために必要な事項

### Chapter 3. Requirements for Comprehensive and Planned Implementation of Ocean Measures

#### 1 施策を効果的に推進するための総合海洋政策本部の見直し / Revision of Headquarters for Ocean Policy for Effective Implementation of Measures

今後、海洋産業の振興と創出、海洋調査の推進等の諸課題について重点的に取り組むこととするが、これに当たっては、従来以上に、関係行政機関のみならず産業界、大学等の関係者が適切に連携・協力しながら、我が国全体で総合的・戦略的に取り組んでいくことが重要となる。また、近年の海洋をめぐる社会情勢等の急速な変化等に対応して、海洋に関する重要な施策の企画立案を適切に行っていくことも必要となる。

The government will work intensively on issues such as promotion and creation of marine industries and promotion of marine research. In relation to this, it is more important than ever that the entire country comprehensively and strategically work on the aforementioned issues through appropriate coordination and cooperation among not only related administrative organs but also related parties in the industrial world, universities and others. It will also be necessary to appropriately plan important ocean measures in response to, for instance, the rapid changes in social circumstances surrounding the sea in recent years.

さらに、海洋基本計画に掲げる諸施策を実施し、海洋立国日本の目指すべき姿を実現していくためには、本計画策定後、各施策についての工程表の作成とこれに基づく事業等の計画的な実施、総合的な戦略の策定とこれに基づく事業等の総合的な実施、必要となる法制度の整備等の具体的な取組を進めていくとともに、実施状況等の評価に基づき、選択と集中を図りながら、また、事業等の重複を排除しつつ、効果的にこれを進めていくことが重要である。

このような観点から、総合海洋政策本部の総合調整機能及び企画立案機能が十分に発揮されるよう、幅広い分野の有識者から構成される参与会議及び事務局について以下の取組を行う。

For implementing measures established in the Basic Plan on Ocean Policy and realizing the vision of Japan as an oceanic state, it is important that, after establishment of the Plan, timetables for individual measures be developed, projects be implemented in a planned manner based on the timetables, comprehensive strategies be formulated, projects, etc. be comprehensively implemented based on the strategies, and specific initiatives such as development of required legal systems be promoted. At the same time, it is important to ensure effective implementation of those measures in accordance with assessment of implementation status, by refining focus, eliminating overlapping

projects, etc. From these perspectives, to ensure that the Headquarters for Ocean Policy fully demonstrates its planning functions and functions as the general coordinator, the government should implement the following measures concerning the Councilors' Meeting and Administrative Office, which consist of experts from a wide range of fields.

(1) 参与会議の検討体制の充実 / Improvement of System for Study at Councilors' Meeting

- 海洋基本計画に掲げる諸施策の実施状況等を定期的にフォローアップし、その実施状況等を評価する。また、特に重要と考えられる施策については、社会情勢の変化等も踏まえつつ重点的に検討する。これらの評価・検討を行った上で、新たに必要と考えられる措置等について総合海洋政策本部長に提案する。

また、これらの評価・検討が可能となるよう、必要に応じプロジェクトチーム等を設置し、参与以外の幅広い関係者の参画も得ながら、テーマごとに集中的に評価・検討できる体制とする。

- Follow-up on implementation status of measures established in the Basic Plan on Ocean Policy should be conducted regularly to assess such status. Measures that are deemed to be of particular significance should also be studied intensively in consideration of changes in social circumstances and other factors. After these assessments and studies are conducted, new measures that are believed to be necessary should be proposed to the director-general of the Headquarters for Ocean Policy.

In addition, to enable these assessments and studies, project teams, etc. should be set up as necessary to permit intensive assessment and study of each theme with participation of a wide variety of related parties other than councilors.

(2) 事務局機能の充実 / Functional improvement of Administrative Office

- 今後重点的に推進すべき海洋産業の振興及び創出等の諸課題に取り組むため、総合海洋政策本部事務局において、関係行政機関（海洋施策以外の分野に係る行政機関を含む。）や産業界等との連携を強化する。また、例えば新たに民間や関係行政機関から出向等した職員が中心となって特定の重要課題についての総合調整等を行えるようにするなど、こうした機能を十分に発揮できる体制とする。

- Coordination with relevant governmental institutions (including those related to fields other than ocean measures) and the industrial world, etc. should be improved at the Administrative Office of the Headquarters for Ocean Policy in order to work on issues such as promotion and creation of marine industries, which should be promoted intensively in the future. Measures should also be implemented to establish a system under which the Administrative Office can fully demonstrate its functions. For example, officials on temporary assignment, etc. from the private sector or relevant governmental institutions should be allowed to play the central role in the comprehensive coordination of particular important issues.

## 2 関係者の責務及び相互の連携 / Duties of Relevant Personnel and Mutual Coordination

- 海洋に関する施策を総合的かつ計画的に推進するためには、施策に関わる国、地方公共団体、海洋産業の事業者、大学・研究機関等が相互に連携を図りつつ、それぞれの役割に応じて積極的に取り組むことが重要である。
- For promoting ocean measures comprehensively and in a planned manner it is important that the national government, local governments, marine business operators, universities and research institutes, and other parties involved in the measures work on them actively based on their individual roles and through mutual coordination.
- 地方公共団体は、国と地方の役割分担の下、地域の実態や特色に応じて、海岸等における漂着ごみの処理に努める等の良好な海洋環境の保全、地域の重要な産業である水産業や地域資源を活用した海洋関連観光等の海洋産業の振興、陸域と海域を一体的かつ総合的に管理する地域の計画の策定、地域の特色をいかした人材の育成等に努めることが重要である。その際、複数の地方公共団体にまたがる広域的な取組が求められる場合における地方公共団体相互の連携強化や、各部局の密接な連携による効率的な施策推進に努めることが重要である。
- Local governments should, by sharing roles with the national government, take measures to preserve a favorable marine environment in accordance with respective regions' circumstances and characteristics, such as through promoting disposal of drifting marine debris on beaches, endeavor to promote marine industries, such as the fisheries industry and marine-related tourism that makes use of the regional resources, which are the key industries of the region, formulate regional plans for managing land areas and marine zones in an integrated, comprehensive manner, and strive to foster human resources by taking advantage of regional characteristics. In relation to this, it is also important that local governments strengthen mutual coordination, which applies where broad-based measures involving multiple local governments are required, and promote the above measures efficiently under close coordination between respective departments.
- 海洋産業の事業者は、環境負荷の低減技術の開発等の環境対策等を通じた海洋環境の保全、水産資源の自主的な管理、効率的・安定的な海上輸送の確保等に努めることが重要である。また、今後は特に、海洋エネルギー・鉱物資源開発、海洋再生可能エネルギー利用を始めとした海洋産業の振興と創出に重点的に取り組むことが必要となってきている。こうした中、国による適切な基盤整備や支援等と相まって、民間の活力や創意工夫を活かしながら、積極的に新規投資や新市場の開拓等に取り組むよう努めることが期待される。
- Marine business operators have to try hard to preserve the marine environment through environmental measures such as the technological development to reduce environmental load, voluntarily manage fishery resources, and ensure efficient and stable maritime transport. Above all, from here forward it is necessary to intensively work on promotion and creation of marine industries, including development of marine energy and mineral resources and use of marine

renewable energy. Under such circumstances, marine business operators are expected to strive to take actions, such as actively making new investments and developing new markets, by utilizing the private sector's vitality, originality and ingenuity, combined with the appropriate infrastructure development and support by the national government.

- 大学・研究機関等は、海洋国家の実現に向けて海洋科学技術に関する研究開発の推進等に努めることが重要である。また、これに当たって、産官学連携の枠組みの構築・活用を通じて、海洋産業の創出や振興、人材育成等にも大きく寄与するよう努めることが期待される。
- It is important that universities, research institutes, and other organizations strive to promote research and development related to marine science and technology toward realization of an oceanic state. In relation to the above, they are also expected to strive to contribute greatly to creation and promotion of marine industries, development of human resources, etc. by building and utilizing frameworks for industry-academia-government collaborations.
- 国民、NPO 等は、海洋に関する会議やイベントへの参加、海洋産業の事業者との交流、海浜清掃等身近な海洋環境保全活動の実施等を通じて、海洋への理解を深めるよう努めることが重要である。
- Citizens and NPOs are to make efforts to deepen their understanding of the sea by participating in marine-related meetings and events, interacting with marine business operators, and carrying out ordinary environmental conservation activities such as cleaning of beaches.
- 海洋に関する施策の企画立案・実施に際しては、こうした取組が促進されるよう、国民やその他の関係者の意見の施策への反映等に取り組む。
- When ocean measures are planned and implemented, opinions of the citizens and other related parties should be reflected so that the aforementioned efforts are promoted.

### 3 施策に関する情報の積極的な公表 / Proactive Publication of Information concerning Measures

海洋基本計画については、広く国民に周知されるよう印刷物、インターネット等様々な媒体を通じて情報提供するとともに、海外向けの英訳版や青少年向けの資料を作成し、配布する。また、施策に関わる関係者が相互に連携を図りながら施策を推進できるよう、関係者間で情報を共有する基盤を構築することが重要である。このため、海洋基本計画に基づく施策について、これを容易かつ簡便に入手できるようにすべく、インターネット上で海洋基本計画から関連する施策にリンクを結ぶ等、本計画から具体的な施策を容易に参照できるようにする等の措置を講じる。

To ensure that the Basic Plan on Ocean Policy will be widely known to citizens, information about the Plan should be provided via diverse media such as printed materials and the Internet. At the same time, the information should be translated into English for overseas publications and materials for young people should be created and distributed. It is also important to create a base for allowing related parties to share information so that parties related to measures can promote them through

mutual coordination. Therefore, measures should be taken to, for example, easily facilitate reference to specific measures from the Plan, by providing links from the Basic Plan on Ocean Policy to related measures on the Internet.

また、毎年度、海洋基本計画に基づく個別施策の進捗状況について、参与会議における評価等も踏まえつつ、フォローアップを行い、適切な方法により公表する。

In addition, each year follow-ups should be implemented concerning the progress of individual measures under the Basic Plan on Ocean Policy in consideration of the assessments by the Councilors' Meeting, etc., and the progress should be appropriately publicized.