# Speech by Deputy Prime Minister, Coordinating Minister for National Security and Minister for Home Affairs, Mr Teo Chee Hean, at the World Oceans Summit, 23 February 2012, at Capella Singapore

His Excellency, Mr Olafur Ragnar Grimsson President, Republic of Iceland

Ministers, Distinguished Guests,

Ladies and gentlemen

Good morning. It gives me great pleasure to join you this morning, at the World Oceans Summit.

It is significant that the inaugural World Oceans Summit organised by The Economist is being held this year. 2012 marks the 30th anniversary of the signing of the United Nations Convention on the Law of the Sea (or UNCLOS for short). This year also marks the 20th anniversary of the Rio "Earth" Summit which led to the establishment of the United Nations Framework Convention on Climate Change (or the UNFCCC) and other key international environmental agreements.

To our visitors from overseas, a warm welcome to Singapore. Singapore is a small island nation located strategically at the junction of the Straits of Malacca and Singapore, and the South China Sea – the gateways between the Indian and Pacific Oceans. Our history, people and economy, are intricately intertwined with the sea; and the oceans and climate change will have a deep impact on our future. We are honoured to have been able to make a contribution to both UNCLOS and the UNFCCC. Ambassador Tommy Koh from Singapore chaired UNCLOS III during the final two years of the negotiations in 1981 and 1982. He was also entrusted with the Chair of the Preparatory Committee and the Main Committee for the UN Conference on Environment and Development or "Earth Summit" from 1990 to 1992, from which the UNFCCC arose.

# UNCLOS

UNCLOS was a historic milestone in the global governance of our seas and oceans. It came at a time when many coastal states were making increasingly extensive claims, almost in a free-for-all, to unilaterally expand their jurisdiction and their rights to exploit the ocean's resources. UNCLOS was able to create a global order, which struck a balance between increasing the jurisdictional claims of coastal states over adjacent sea areas, and preserving important rights of the international community in areas claimed by coastal states, including the freedom of navigation.

UNCLOS also succeeded in entrenching the concept of the "common heritage of mankind" in international law. This concept safeguarded the collective rights of nations over those parts of the oceans that were beyond the claims that coastal states couid legitimately make. Just as importantly, UNCLOS established a comprehensive set of dispute settlement mechanisms which enable states to resolve their differences peacefully through bilateral negotiations, arbitration or third-party adjudication. This has helped maintain peace, order and discipline in the governance of our oceans.

Looking back, I think we would all agree that the founding fathers of UNCLOS were visionary in their creation of this "Constitution of the Oceans", which remains highly relevant to this day. In fact, with the growing coastal population around the world and increasing global appetite for the oceans' resources, one could argue that UNCLOS plays an even more crucial role today in

maintaining harmony in the oceans.

# **Potential of the Oceans**

The oceans are an important part of our planet. They have traditionally been conduits which connected far flung civilizations and nations, avenues for cultural and people-to-people interaction, arteries of trade and commerce, and an important source of food. More recently, they have been exploited for their oil and gas, and for rare minerals. Today, more than 90% of the world's trade is carried on the oceans1

About 30% of the world's oil and about half of the world's natural gas are produced offshore<sub>2</sub>. Fleets of ships trawl the oceans for food to feed hungry populations. Increasingly, the oceans are also becoming alternative sources of renewable energy, in the form of tides, currents and waves, offshore wind, and even ocean thermal gradients.

In addition, oceans are a major carbon sink. They naturally cycle over 90% of the Earth's carbon dioxide, and help remove a portion of the carbon dioxide from the atmosphere<sub>3</sub>. The interaction between human activity and the oceans is growing.

# **Growing Coastal Population**

Since UNCLOS was adopted 30 years ago, the coastal population has increased dramatically. Already, 3.4 billion people, or more than 50% of the world's population, live in coastal areas. By 2025, it is estimated that global coastal population will reach 6 billion, or 75% of the world's population 4

This is not surprising. There are huge advantages to living near the seas. Coastal cities and towns benefit from stronger links to international trade and communication networks, and the resources, economic activity and income that flow from them.

However, the growing coastal population has also led to three sets of challenges for our oceans.

# **Challenges for the Oceans**

## (i) Degradation of Coastal and Marine Ecosystems

First, the degradation of coastal and marine ecosystems when increasing coastal population density and economic activity create pressures on coastal ecosystems. There are now greater demands for water resources from desalination and food from the oceans; while at the same time there are more pollutant discharges, and greater reliance on coastal waters for transporting people and goods across regions.

In some areas, heavy fisheries exploitation has reduced endemic coastal fish stocks to 10 to 30% of the supply that existed 30 years ago5. Mangroves have been reduced to 30 to 50% of their historical cover.

Approximately 20% of the world's coral reefs have been lost and another 20% degraded by development<sub>6</sub>. Yet, restricting fishing rights can disrupt an important global supply of food. And measures aimed at protecting the marine environment may also hurt the livelihood of vulnerable groups who rely solely on traditional fishing methods. Balancing these demands is particularly acute for small island developing states.

Coastal and marine pollution can come from ocean-based activities and shipping. However, in recent years, there has also been greater international acknowledgement that about 80% of ocean pollution is in fact caused by land-based activities from human settlements in coastal areas7. The UN Environment Programme estimated in 2006 that every square kilometer of sea held nearly 18,000 pieces of floating plastic, and about 90% of the plastic in the sea had been carried by wind or water from land8;

The key to managing degradation of coastal and marine environments is to adopt a holistic approach of integrated coastal management that balances the various environmental, economic, social, and cultural needs of coastal areas. In Singapore, for instance, an inter-Ministry committee on integrated coastal management9 takes a whole-of-government approach to ensure that increasing urban pressures on the limited land in Singapore are balanced against our international obligations to protect the marine environment and preserve biodiversity around our coasts.

I am also glad to note that the International Maritime Organisation (IMO) has raised design and environmental standards for vessels, and worked with coastal states to manage the movement and activity of vessels near environmentally-sensitive areas. This will help the international shipping community develop and promote the most environmentally friendly ways of using the oceans as natural highways.

To encourage environmentally-friendly shipping practices above and beyond what is IMOmandated, the Maritime and Port Authority of Singapore is investing up to S\$100 million over 5 years from 2011 in the Maritime Singapore Green Initiative. For example, MPA will provide incentives to ship owners of Singapore-flagged ships that adopt energy efficient ship designs which reduce fuel consumption and carbon dioxide, beyond the requirements of IMO's Energy Efficiency Design Index.

#### (ii) Securing the Highways of the World

As world trade grows, the sea will remain the most efficient and environmentally friendly mode of transporting goods. This poses the second set of challenges – securing the highways of the world.

UNCLOS struck a delicate balance between the rights of coastal states and the rights to freedom of navigation, especially in straits used for international navigation.

For at least half a millennium, the seas have been the preferred conduit for long-distance trade between nations. One important reason is that the movement of vessels and goods by sea for legitimate and peaceful purposes is relatively free of the duties, tolls, levies and taxes, or other national requirements, which the overland transport of goods across countries and borders are often legitimately subject to.

In this modern world, more countries are engaged in and benefitting from increased trade. All countries should thus safeguard these important navigational freedoms provided for in UNCLOS. For Singapore, whose total trade is some 3 times our GDP, freedom of navigation is of vital interest.

Singapore will therefore continue to work with the IMO and the international community, to safeguard the freedom of navigation, while improving cooperation between littoral states and user states to ensure navigational safety, and environmental protection. One example is the Co-operative Mechanism on Safety of Navigation and Environmental Protection in the Straits of Malacca and Singapore launched by Singapore, Malaysia and Indonesia in 2007, with the assistance and endorsement of the IMO10.

The incidence of marauders on land, or pirates at sea, has also influenced the choice of trade routes. Hence it is also important, even in this modern day, for all countries to work together to suppress piracy, both at sea, as well as from the places on land that pirates operate from.

## (iii) Impacts of Climate Change

The third set of challenges relates to the impacts of climate change. Coastal communities and island states will be affected disproportionately from the severe impacts of climate change. It has

been estimated that up to 23% of the world's population lives within 100 kilometres of the coast and less than 100 metres above sea level11, making them particularly vulnerable to the effects of rising sea levels, extreme weather events and coastal inundation. In recent years, the scientific community within the ambit of the Intergovernmental Panel on Climate Change has been studying how the impacts of climate change will affect the livelihoods of coastal communities.

There is much that can and must be done at the local and national levels to address these impending impacts. For instance, ecosystem-based adaptive management, which promotes the preservation and restoration of coastal ecosystems as natural buffers, can be strengthened to increase the resilience of coastal ecosystems and communities.

As a low-lying island state, Singapore takes the issue of climate change seriously. Singapore's coastal reclamation sites were previously required to be at a minimum level of 1.25 metres above the highest recorded tide levels. This minimum level has now been raised by an additional 1 metre to safeguard against projected sea level rises by the year 210012. New York City has also done some work in assessing what a projected rise in sea levels might mean for the areas in the city that are most likely to flood. It is currently working on a "risk index", with indicative cost-benefit analysis of where the risks are, relative to land value or population density13.

## **Emerging Norms for the Governance of Oceans**

While littoral states can address the sustainability of coastal and marine eco-systems, and the localised impacts of climate change at the national and regional level, we need a robust multilateral system to effectively deal with these complex issues at the global level. At the UN Climate Change Conference in Durban14 last December, the world reaffirmed its collective commitment to a multilateral rules-based system to deal with climate change. It is also important to have a global dialogue on the governance of oceans, given the growing calls for additional norms to complement UNCLOS.

One of the issues is over areas beyond national jurisdiction (ABNJ), which represent 59 per cent of the area of the global oceans15. Given the growing momentum at the UN to develop a system for managing these areas and their resources, this Summit provides a timely and useful platform to debate issues and surface ideas related to the governance of areas beyond national jurisdiction. Some of the questions that we need to think about include: How do we continue to ensure that all competing uses of these areas are adequately balanced? How do we create a compliance and enforcement mechanism to regulate activities beyond national jurisdiction, and how do we resolve disputes that arise in these areas?

Another topic of global significance is the governance of the Arctic, in the light of global climate change and the receding polar ice-cap. This will have significant impact on sea levels and weather patterns. The Arctic States have primary responsibility over the Arctic waters within their sovereign jurisdiction, and have a particular interest in the governance of the Arctic as a whole. Extra-regional countries, however, also have a useful and legitimate role to play, for example with regard to maritime passages that will become open for international navigation for longer periods each year. Singapore has been following developments in the Arctic closely. Even though we are located near the equator, developments in the Arctic will have a global impact, and we therefore stand ready to participate actively and contribute constructively in these discussions.

We cannot ignore the growing calls for additional norms of ocean governance, but at the same time we must ensure that any emerging norms must strengthen or at least complement the existing framework, and not unravel all that we have achieved over the years.

## Proposed Principles to Guide Emerging Norms for Ocean Governance

Let me take this opportunity to suggest three over-arching principles that could be applied to the

current discussions on emerging international norms for ocean governance.

First, UNCLOS must remain the primary basis for all discussions. In areas where UNCLOS is seen to be silent or less well-defined, any supplementary norms of ocean governance must be built upon the existing provisions of UNCLOS and not contradict nor undermine UNCLOS. This is to ensure that we continue to uphold the UNCLOS principles of the "common heritage of mankind", and ensure that diverse interests are adequately balanced, whether they be the exploitation of resources, freedom of navigation, conservation of biodiversity or the right to other uses already provided for in UNCLOS.

Second, any discussions on ocean governance must be open, inclusive and involve all interested stakeholders. To develop norms that will endure and be respected by all parties, we need to follow the spirit of consensus-building that characterised the UNCLOS negotiations. Getting buy-in from all parties will take time and effort, but the resulting framework will be more robust, long-lasting, and not easily undermined by any single dissenting party.

Third, we must also explore how to develop a clear set of dispute settlement mechanisms. It is inevitable that disputes will arise; and where an impasse remains after bilateral talks, it would be useful to have a ready roadmap on how differences can be resolved peacefully in accordance to international law. Clear dispute settlement mechanisms will also send a strong signal that it would not be acceptable for any party to take unilateral actions in contravention of international norms.

I hope these principles provide some useful parameters to spark off discussions during this Summit.

## Conclusion

This World Oceans Summit, held on the 30th anniversary of UNCLOS and the 20th anniversary of the Earth Summit, has brought together stakeholders and interested parties, with leading experts and scientists. I am confident that you will collectively surface fresh insights and ideas for strengthening our existing framework of ocean governance. We all have a common interest, and a common responsibility, for harmoniously managing the use of our oceans, in a sustainable manner, for the benefit of the generations to come.

I wish everyone a stimulating and fruitful time at the Summit. Thank you.

1 International Maritime Organisation (IMO), "International Shipping Facts and Figures – Information Resources on Trade, Safety, Security, Environment" (Maritime Knowledge Centre, July 2011). http://www.imo.org/KnowledgeCentre/ShipsAndShippingFactsAndFigures/Statisticalresources/Documents/December-2011-update-to-July-2011-version-of-International-Shipping-Facts-and-Figures.pdf

2 Global Marine Oil Pollution Information Gateway (http://oils.gpa.unep.org/facts/quantities.htm)

3 Biliana Cicin-Sain et al, "Oceans at Rio+20: How Well are we Doing in Meeting the Commitments from the 1992 Earth Summit and the 2002 World Summit on Sustainable Development?", University of Delaware and Global Ocean Forum, September 2011 (Oceans at Rio+20)

4 Presentation by Takehiro Nakamura, UN Environment Programme, given at the 2011 World Water Week, Stockholm, 21-27 Aug 11, http://www.worldwaterweek.org/documents/WWW\_PDF/2011/Wednesday/T4/Living-on-the-Edge-Management-in-Coastal-Cities/Living-on-the-edge-Hilltops-2-Oceans.pdf

<sup>5</sup> Liz Creel, "Ripple Effects: Population and Coastal Regions", Population Reference Bureau, September 2003.

6 Intergovernmental Oceanographic Commission of UNESCO, IMO, Food and Agriculture Organisation of United Nations, United Nations Development Programme, "A Blueprint for Ocean and Coastal Sustainability", 2011. (http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/interagency\_blue\_paper\_ocean\_rioPlus20.pdf)

7 United Nations Environment Programme, "Land Based Sources of Pollution", (http://www.unep.org/regionalseas/issues/landactivities/default.asp)

8 The Economist, "Troubled waters: A special report on the seas", January 3, 2009. Scientists believe that as much as 100 million tonnes of plastic jetsam are suspended in two separate gyres of garbage in the central Pacific, over an area twice the size of the US.

9 Singapore has adapted the ICM Framework drawn up by PEMSEA – Partnerships in Environmental Management of the Seas of East Asia. PEMSEA is an IGO dedicated to instituting ICM in all of South-East Asia (plus China and Korea). However, the PEMSEA ICM implementation plan has several key pillars which are specific to developing countries in South East Asia (e.g. conservation of small-scale fisheries; incorporating ecotourism into small coastal communities). Singapore has modified the ICM framework to become more relevant to a highly-urbanised coastal city, including tracking enhancement and rehabilitation efforts; tracking how much integration of government platforms; and impact assessment practice for development projects.

10 The Co-operative Mechanism was a landmark initiative as it realised, for the first time, Article 43 of UNCLOS which states that "user states and states bordering a strait should by agreement cooperate: (a) in the establishment and maintenance in a strait of necessary navigational and safety aids or other improvements in aid of international navigation; and (b) for the prevention, reduction and control of pollution from ships".

11 United Nations Environment Programme/GRID-Arendal, "Climate in Peril: Projected climate changes and its impacts" (http://www.grida.no/publications/climate-in-peril/page/3545.aspx)

12Drainage Code Revised to Enhance Singapore's Flood Protection, 30 November 2011 (http://www.pub.gov.sg/mpublications/Pages/PressReleases.aspx?ltemId=327)

13 Katharine Jose, "Before the flood: New York City is just beginning to gird for the '100- year storm', if it is not already too late", February 3, 2012. (http://www.capitalnewyork.com/article/politics/2012/02/5190075/flood-new-york-city-just-beginning-gird-100-year-storm-if-its-not-a?page=all)

14 The UN Climate Change Conference in Durban was a series of meetings of the 17th Conference of the Parties to the UNFCCC, and the 7th session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP-17/CMP-7)

15 Deputy Secretary-General Asha-Rose Migiro's statement to the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction in New York, 1 February 2010. (http://www.un.org/News/Press/docs/2010/dsgsm485.doc.htm)