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Ocean-Related Disasters: Cataclysms and Longer-Term Threats

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The story of nuclear pollution in the oceans cannot be airbrushed, nor should we underestimate the seriousness of other environmental problems in the world's seas. “Disaster” in an ocean or coastal setting is not exclusively a matter of sudden cataclysms such as the tsunamis. Currently, for example, coral bleaching is going on all over the globe, even happening recently in Arctic waters. Throughout the Earth's oceans are huge dead zones where pollution has created an environment in which life cannot thrive or even survive; and the future of the marine environment in the Gulf of Mexico, which before the BP event already had a huge dead zone, is a big question mark.

There are many issues unrelated to pollution but rather arise from ordinary activities at sea on an unprecedented scale and intensity. China's role in the world fishing industry has greatly expanded the number of fish caught, and increasing pressure on fish stocks (a reflection of population). The world's fishing fleet has nearly tripled in 25 years. In the shipping and trade sectors, there are portents of danger: The world seaborne trade, as measured in ton-miles, has increased nearly three times in 35 years. The number and percentage of ships registered in “flag of convenience” nations, which do not impose strong safety regulations or labor standards, is matter of concern; and new design vessels of enormous tonnage are posing new challenges to safety at sea and accommodation issues in ports. The recent move toward ultra-deep sea drilling is problematic as it is based on the experiences and knowledge of drilling in shallower ocean areas, which are geologically quite different.

From 1945 to the early 1990s, tremendous damage was done to marine environments from nuclear testing and dumping. There have been some changes, however. Since the Kiev agreement, spills are down; and the “Prestige” led to a spread of new regulations – bans on single-hulled vessels, requirements as to minimum distance from shore for oil carrier operations, etc. The “Exxon Valdez” accident, the widespread destruction caused by the “Prestige” event, the damage to the Gulf coast by the BP event, and the combination of tsunami and nuclear catastrophe in Japan indicate the degree to which cataclysms associated with human activity and with a natural event raise new issues for the role of regulatory law and precautionary measures to cope with damage in the oceans and coastal areas. To a significant degree, this will require both international

action and coordination of national measures. Unlike earlier periods of history, in recent decades there has been progress on the basis of a “constitution for the oceans” in the operation of the 1982 UN Convention on the Law of the Sea, the regional seas conventions that have as goals effective ecosystem management and application of the precautionary principle, and a strengthening of measures (including designation of sensitive ecological areas in which shipping is restricted) for safety and security at sea. The traditional doctrines of international law have been challenged and are being transformed as well by the agreements formed since 2000 for actions against piracy at sea and for confronting the problem shipping in the proliferation of weapons of mass destruction.