

BRIEF ON SEAWATCH™ IN ASIAN COUNTRIES

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Abstract

The oceans on our dear Earth, the “Blue Planet” are at stake. These oceans, the marine environment, have served as the ultimate sink for the by-products of human activity since the very first day. Today we see that the cumulative effect of our discharges has finally exceeded the tolerance limit in many areas, resulting in pollution problems and eventually also climatic changes. The oceans illustrating the linkage and interdependence across national borders and generations must be saved. Our only options to work together to overcome the dangerous trends, threatening the human race and its natural environment.

The oceans have huge resources, which the coastal states have learned to use and utilize through centuries of experience. The oceans’ influence on the climate and the environment, underlines the importance of monitoring and understanding the ocean and the marine environment. Thailand, Indonesia and Vietnam are, as most other developing countries, eager to utilize the marine resources as this represent one of their major challenges in their efforts to maintain a sustainable growth, making it possible for them to take a seat among the industrialized countries. Among the steps taken in the direction of ensuring that this development is in line with the principles of sustainable development, is the establishment of ocean observing systems within the framework of the Global Ocean Observing System (GOOS), launched by IOC (the Intergovernmental Oceanographic Commission of UN). This system, the SEAWATCH™ system an advanced marine monitoring and forecasting system, comprising a network of state of the art data buoys transmitting data in real time, reliable data analysis and control systems, tools for environmental forecasting, including a number of numerical models and finally a computer-based data distribution system.

This paper presents the SEAWATCH™ system, some of the expected benefits thereof and some of the aggregated experience from operating the system. The SEAWATCH™ system is expected support a wide range of areas, such as: general marine environmental aspects, meteorological aspects, monitoring and forecasting of harmful algae blooms, environmental impact on mangroves, seagrass and coral reefs, coastal and offshore circulation, tides, storm surges, climatic changes etc. The paper concentrates on the achievements and experience gained from implementing the SEAWATCH™ system in Asian countries.

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