

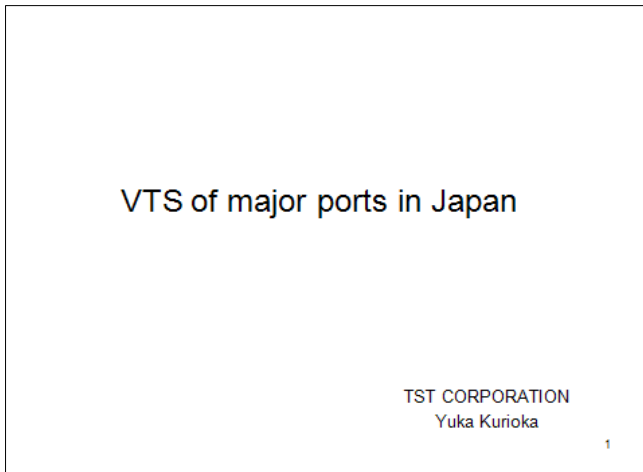
VTS of Major ports in Japan

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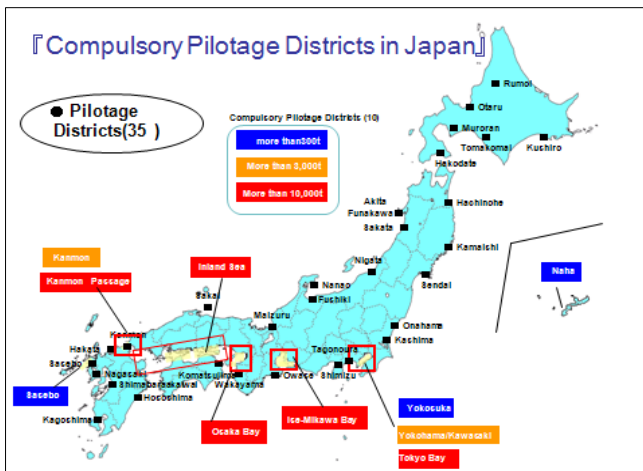
요약 : 일본의 항만 및 연안에서는 대한민국의 연안·항만 VTS처럼 선박항행지원을 위하여 항외 및 항내에 따라 각 영역별로 VTS 관할구역이 구분되어 있다. 이 중 항내를 관할하는 일본 Port Radio의 업무 내용에 대하여 고찰하고, 이전과 다른 일본 Port Radio의 역할 변화(수역이용 조정 업무, 항공국과의 연대 등)에 따른 발전방향에 대하여 살펴본다. 아울러 일본 Port Radio가 현재 직면하고 있는 운용 요원의 교육훈련과 VTS 의사결정 지원 시스템 도입의 필요성에 대하여 살펴봄으로써 일본 주요 항만의 VTS가 보다 안전하고 효율적으로 운영되는 것을 목적으로 한다.

핵심용어 : VTS, Port Radio, 선박항행지원, 교육훈련, 의사결정 지원 시스템



The problem with ship operations by foreign crew (No-pilot)

- ❶ **lack of understanding of the navigation of domestic Regulations**
 - Ignored in control signal
 - Ignored in the route based on Port Regulation
 - No-fly destination signal
 - Anchored outside the anchorage-specified
- ❷ **Entry into port without fully understanding the circumstances port**
 - Entering port without understanding the position of the berth
 - Entering port without waiting tugboat, line-handlers
 - Arrange emergency tugboat
- ❸ **Selfish Operations**
 - Operation on dangerous situation with vessel
 - Anchored to the anchoring prohibited area

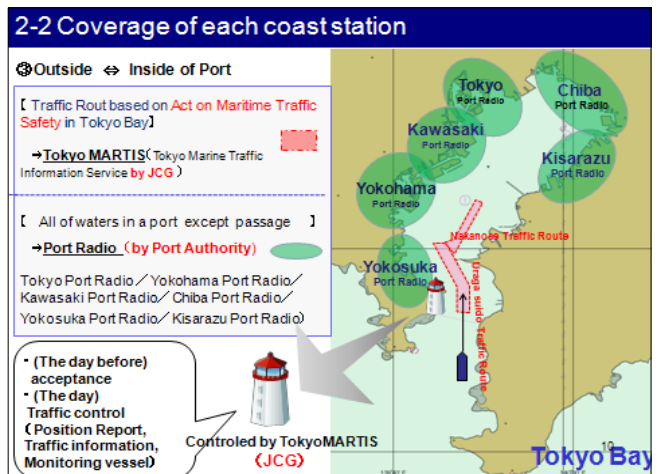
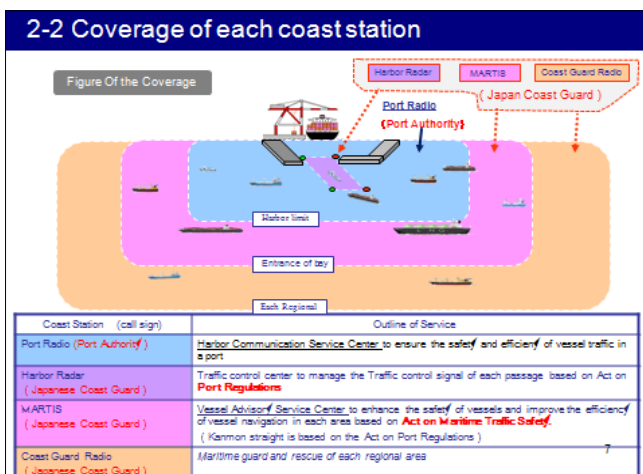
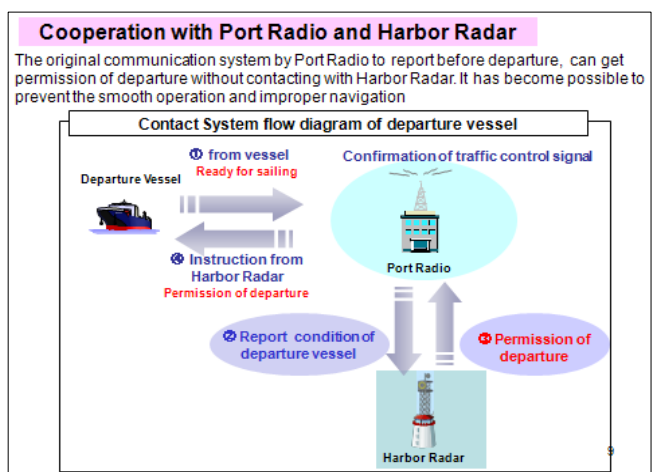
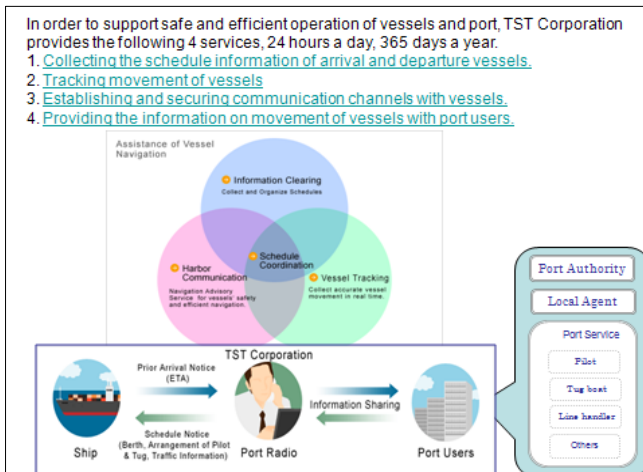
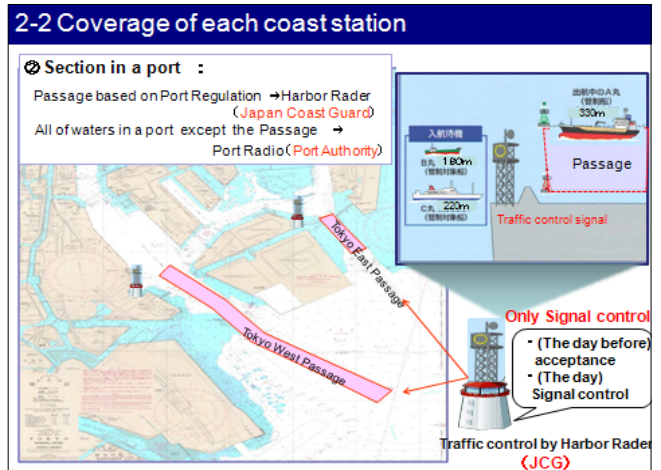
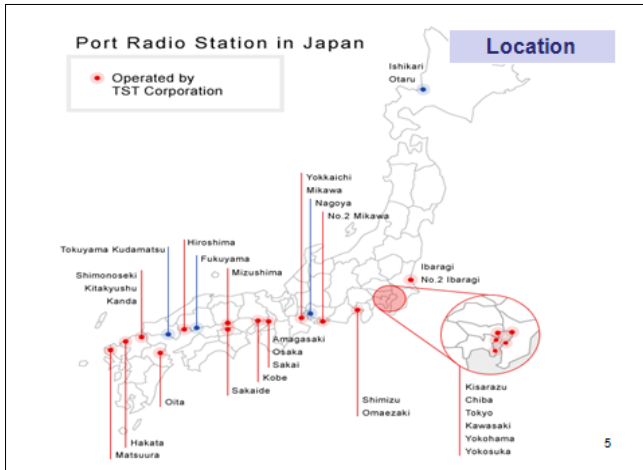


2. About Port Radio – Service Overview

- The port authorities commission us to operate harbor communication Services in 26 major ports in Japan.
- This communication service is called "Port Radio", we establish and secure communication channels with arrival and departure vessels by using international VHF.
- The service coverage of "Port Radio" is, it varies depend on the situations, approximate 50 miles in radius from each port, and it means that we can contact with arrival vessels 3 hours prior to port ETA.
- When we contact with vessel, we provide not only port schedule information, but also information for navigational safety e.g., latest traffic situations insideport and passages,, information of marine constrictions.)

1. Notification of ETA and ETD
2. Notification of Anchored Position and Time.
3. Assignment of Berth
4. Arrangement of Pilot Service
5. Arrangement of Tug boat Service
6. Arrangement of Line Handling Service
7. Inquiry about Water Supply or Engine Repair
8. Inquiry about Weather and Visibility
9. Arrangement of Doctor, Emergency boat, and Ambulance car in case of emergency
10. Securing communication with vessels in case of emergency
11. Providing Vessel Traffic Information Service to vessels

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3. Profile of Shipwrecks (Collision)

In Port of Niigata which doesn't have Port Radio



【Date】 2012.2.7 (16:25)
【Place】 ····· East Port in Niigata
【Objects】
 · Cargo ship :T(2,163t)Russia
 · Container Shio:K(6,245t)Singapore
【Result of collision】
 · Vessel T is sinking



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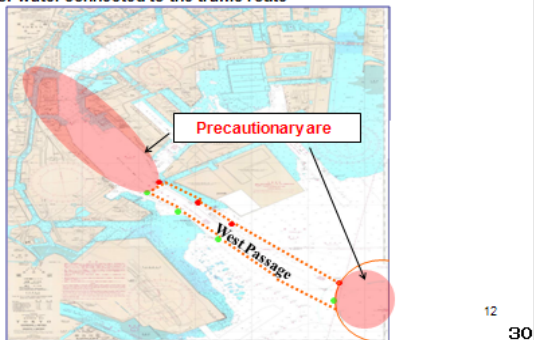
5. Assignment of Port Radio (Education for Operator)

Skill necessary to accomplish Port Radio which continues changing

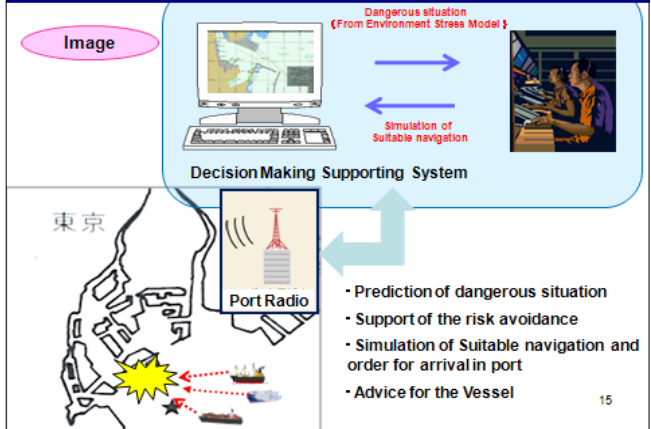


Outline of Navigation adjustment operation in waters (Tokyo West Passage)

Support the safe operation of vessels by efficient use of water such as the order of entering and departure
 (Due to the change in shape of Tokyo West Passage, in response to changes of environment of water connected to the traffic route)



Install of Decision Making Supporting System



The rules of Navigation adjustment operation

