WORLD CLASS – through people, technology and dedication

Vessel Traffic System (VTS) Fees & BOOT Concept

by Roberto González Álvarez
Business Development Manager
Kongsberg Norcontrol IT – Horten, Noruega

roberto.gonzalez@kongsberg.com
Agenda

- Kongsberg Norcontrol IT / VTS Concept
- VTS Fees / examples /requirements
Kongsberg Norcontrol IT

World renowned and market leader in development and implementation of Vessel traffic Systems (VTS), Coastal Surveillance Systems and AIS Networks:

- Over 30 years of experience
- Subsidiaries and presence in all continents
- Installed over 220 systems worldwide
- Systems installed in over 30 countries
- Over 100 of installed systems contain at least 3 sensors and/or radars
‘User Led’ initiative...

"Shore based needs are currently being developed with the assistance of IALA and are anticipated to fall into the categories of:

• **better data collection** for marine domain awareness;

• **more effective information management**;

• better provision of information to vessels;

• greater quality assurance;

• **more effective sharing of information** between authorised shore users to reduce the burden on seafarers and improve logistic management; and

• To **support Search and Rescue (SAR)** operations by improving access to relevant information and ensuring effective communication."

**Ref:** IALA FAQ ver 1.5 dated Sept 2010
Maritime Domain Awareness

- **Situation Awareness**
  - Real time monitoring of maritime domain with multiple sensors
  - Recognised Surface Picture/Common Operating Picture for all users
  - Multi Sensor fusion

- **Prevention**
  - Accurate, timely and user friendly data flow enabling high risk situations to be identified
  - Port Security and act upon illegal activities

- **Port Efficiency**
  - Berth and Port programming
  - Anchorage allocation and integration into administrative procedures (invoicing, resources, etc.)
C-Scope – System architecture

Networked Sensors
- Radar
- Automatic Identification System
- Closed Circuit Television
- Radio Direction Finder
- Environmental
- Satellite Ground Station
- Subsea
- Thermal Imagery
- Voice and GMDSS

Services
- Radar Video Extraction
- AIS Network Management
- Sensor Fusion
- Decision Support
- Radar Tracking
- Interoperability
- Emergency Response
- Management of Information
- Voice Communication
- Recording and Replay
- Web Presentation
- Simulation
- Health Monitoring System
- Web Map Service

Operator Position

External Users & Information Sources
- Reaction Assets
  - (Tugs, Pilot vessel, Patrol Boat, Supply vessel etc.)

Port
- VTS
- Security Management

Coastal
- VTS
- Security
- EEZ Management

Offshore
- Collision Avoidance
- Security
- Logistic Management
External sensors
Requirements for establishing a VTS Fee

Preliminary Requirements:

- Legislature in place (national, regional or port Legislature)
- Similar concept to current AtoN’s fees charged by Ports today
- Compromise by Port Authority / Maritime Authority to implement system
- 24/7 operation with reaction assets ready to be deployed
- Construction permits and clearance

Operating Requirements:

- Formal establishment of “VTS Fee”
- VTS Fee of USD x.x per DWT or USD x.x per mt of LOA, or flat fee
- VTS Fee to be within reasonable boundaries to prevent lack of port competitiveness or large impact
- Be part of “no due certificate” prior to departure
- VTS Fee increase mechanism over the years (legislature)
- Insure maintenance, mid-life upgrades and major upgrades
Advantages of establishing a VTS Fee

Economical and Operational:

- Decrease cost for investment in VTS system and maintenance as well as manning
- Better vessel programming, berth allocation, designation of pilots and other resources
- Possibility of info-linking into port administrative system, and effective mean to charge port expenses (use of berth, for example)
- Improve Port efficiency by means of accurate statistics
- Possibility to reduce Port insurance policy (less incidents of possible collision, boarding, stowaways, etc)
- Improve Port Security overall
BOOT – BUILD, OWN, OPERATE, TRANSFER

- A single organization or consortium (BOOT Provider) designing, funding, owning and operating the scheme for a defined period of time – and then transferring this ownership across to an agreed party

- The customer enter into long term supply contract with the BOOT provider

- BOOT schemes are becoming popular for means of financing infrastructure developments in e.g. India, Australia, etc.

- A BOOT model is 100 % debt funding / no investment requirement from client (example port authority / maritime authority)

- The key requirement of a BOOT provider is long term contract with the customer

- BOOT terms vary between projects (for example 10-20-30 years)
Basic BOOT Contract Diagram

Government/state/authority

Transfer of ownership after 10-20-30 years

Grants concession to collect fees

Users

Fees income

BOOT Provider
KONGSBERG

.Finance
.Design
.Construct
.Operate

New control center Golf of Khambat VTS
Thanks for your attention

Roberto González Álvarez
Kongsberg Norcontrol IT
Horten – Norway
E-mail: roberto.gonzalez@kongsberg.com
Telf: +47 92 88 1095