The Importance of International Guidelines to effective Maritime and Port Security Operations

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Contents of this presentation

- International Maritime Organization (IMO) - Overview
- IMO’s efforts to enhance maritime security
- Maritime security legislation
- Maritime cyber risk management
- Current and future electronic developments
- Piracy and armed robbery against ships
- World Maritime Day 2017
- IMO’s technical cooperation programme
IMO – the International Maritime Organization

IMO mission:

Safe, secure and efficient shipping on clean oceans
IMO – the International Maritime Organization

Ten largest contributors to IMO in 2015. Assessed contributions based on flat base rate with additional components based on ability to pay and merchant fleet tonnage

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<tr>
<th>Country</th>
<th>Contribution (£m)</th>
<th>Percentage</th>
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IMO – Structure

Assembly
171 Member Governments

Council
40 Member Governments

Maritime Safety

Technical Cooperation

Facilitation

Legal

Marine Environment Protection

SHIP DESIGN AND CONSTRUCTION (SDC)

SHIP SYSTEMS AND EQUIPMENT (SSE)

HUMAN ELEMENT, TRAINING AND WATCHKEEPING (HTW)

NAVIGATION, COMMUNICATION AND SEARCH AND RESCUE (NCSR)

CARRIAGE OF CARGOES AND CONTAINERS (CCC)

IMPLEMENTATION OF IMO INSTRUMENTS (III)

POLLUTION PREVENTION AND RESPONSE (PPR)
IMO – Progress of measures at IMO

Casualty/Review/Technology → Proposal to IMO → Discuss, agree to refer on → Draft text → Adoption or approval
No Enforcement Role

The main focus of the IMO is to develop and adopt international instruments or regulations for safe, secure and efficient shipping on clean oceans.

The implementation and enforcement of these instruments is the responsibility of Member States.

IMO has no enforcement role.
Impetus for Action

Safety

- Titanic catastrophe led to international safety regulations

Environment

- Torrey Canyon grounding led to MARPOL Convention

Security

- Hijacked aircrafts 11 September 2001
London Diplomatic Conference

- December 2002
Conference Resolution 8

Enhancement of security in cooperation with the International Labour Organization

- Guidance on wider port security
- Recommends development of port security strategy and appointment of port security committee
Conference Resolution 9

Enhancement of security in cooperation with the World Customs Organization

- IMO requested WCO to urgently consider measures to enhance security throughout international movements of closed CTUs

- WCO adopted in June 2005 the SAFE Framework of Standards
Related guidance

Significant related guidance produced to date:

- Amendments to SOLAS chapter XI-2 and the ISPS Code;
- Amendments to 1978 STCW Convention relating to the training and certification of Ship Security Officers;
- Amendments to 1978 STCW Convention relating to the training and certification of shipboard personnel with and without security-related duties, adopted as part of the comprehensive revision to the STCW Convention and STCW Code;
- Guidelines on training and certification for Company and Port Facility Security Officers;
- Guidelines on security-related training and familiarization for shipboard personnel;
- Performance standards, guidelines and recommendations with respect to ship security alert systems (SSAS) and related matters;
- Guidance on voluntary self-assessments for Companies, port facilities and ships;
- Interim guidance on the authorization of Recognized Security Organizations (RSOs);
- Guidance on the access of public authorities, emergency response services and pilots onboard ships to which SOLAS chapter XI-2 and the ISPS Code apply;
- Interim guidance on control and compliance measures to enhance maritime security;
- Non-mandatory guidelines on security and the ISPS Code;
- Guidance on the submission of security-related information prior to the entry of a ship into port;
- Guidelines for the implementation of specific aspects of SOLAS chapter XI-2 and the ISPS Code;
- Guidance on the implementation of the FAL Convention and SOLAS chapter XI-2 and the ISPS Code, in the context of the World Customs Organization’s SAFE Framework of Standards;
- Guidelines on security-related training and familiarization for port facility personnel;
- Guidelines on security-related training and familiarization for shore leave and access to ships under the ISPS Code.
Implementation of the ISPS Code
Maritime Security Legislation

The Maritime Safety Committee, at its 96th session (11 to 20 May 2016) approved the Guidance for the development of national maritime security legislation (MSC.1/Circ.1525).

The Guidance is drawn from the following resources:
- the **SOLAS Convention**
- parts A and B of the **ISPS Code**
- the 2012 IMO "Guide to Maritime Security and the ISPS Code", and
- related **IMO resolutions** and **circulars**.
SOLAS chapter XI-2 and the ISPS Code in force for 13 years

Many Governments are still striving to implement fully the maritime security measures, particularly those pertaining to port facilities.

Reasons include:

- the lack of legal and policy instruments required to achieve compliance with the ISPS Code
- jurisdictional issues between Government agencies (partly as a result hereof)
MSC.1/Circ.1525 of May 2016:

- The drafting and enactment of appropriate **national legislation** is essential to the successful implementation and oversight of the maritime security measures.

- The legislation should **specify the powers needed for Government officials to undertake their duties**, including:
  - inspection and testing of security measures and procedures
  - application of enforcement actions to correct incidents of non-compliance.

Legislation should cover:

.1 General provisions (definitions, application, etc.)
.2 National authorities for ship and port security (duties, powers, enforcement, inspections, audits, etc.)
.3 Specific provisions for ship and port facility security (Designated Authority and Administration;)
.4 Enforcement and control measures.
Voluntary nature

- While the compilation in the new MSC circular provides the framework to assist in the development of national legislation, it is not intended as an auditing or assessment tool.

- Further, while this Guidance refers to mandatory provisions from the SOLAS Convention, as well as both mandatory provisions and voluntary guidance in the ISPS Code, the use of this Guidance is not mandatory.
Recommended Provisions

National Maritime Security Committee

A national maritime security committee should be formed to address the development, relevance and acceptability of a national maritime security framework or strategy.

A national maritime security committee should involve representatives of those regulated: major stakeholders in the port and shipping industries, port workers and seafarers, and cargo and passenger interests.
Recommended Provisions

Examples:

RSO Oversight
Security Plans
Security Level Coordination
Company, ship and port facility security officers
Training, drills and exercises
Communications
Cargo operations and ship’s stores
Security Incidents
Best Management Practices
Administrative and criminal enforcement
Recommended Provisions

Part 5 on **Enforcement** represents a new focus, particularly with a view to ensuring that **national legislation is in place**:

*Essential to the successful implementation and oversight of the ISPS Code is the drafting and enactment of appropriate national legislation to provide for the full implementation and oversight of the maritime security measures. The legislation should specify the powers needed for government officials to undertake the application of enforcement actions to correct incidents of non-compliance.*
Cyber Security
MSC.1/Circ.1526 on **Interim guidelines on maritime cyber risk management**: Approved by MSC 96 in May 2016 due to the urgent need to raise awareness on cyber risk threats and vulnerabilities.

Provide **high-level recommendations** on maritime cyber risk management to safeguard shipping from **current and emerging cyberthreats and vulnerabilities** and include functional elements that support effective cyber risk management.
**Maritime cyber risk** refers to a measure of the extent to which a technology asset is threatened by a potential circumstance or event, which may result in shipping-related operational, safety or security failures as a consequence of information or systems being corrupted, lost or compromised.
Cyber risk management means the process of identifying, analysing, assessing and communicating a cyber-related risk and accepting, avoiding, transferring or mitigating it to an acceptable level, considering costs and benefits of actions taken to stakeholders.

The Overall goal is to support safe and secure shipping, which is operationally resilient to cyber risks.
Maritime cyber risk management

The Guidelines are primarily intended for all organizations in the shipping industry, and are designed to encourage safety and security management practices in the cyber domain.
Maritime cyber risk management

Who is involved?

Everybody should be involved (crew members, passengers, shipping companies, etc.). However, effective cyber risk management should start at the senior management level.

A culture of cyber risk awareness and discipline should be embedded into all levels of an organization. The level of awareness and preparedness should be appropriate to roles and responsibilities in the cyber risk management system.

A holistic and flexible cyber risk management regime should be in continuous operation and constantly evaluated through effective feedback mechanisms.
Maritime cyber risk management

Functional elements to support effective cyber risk management:

- Identify
- Protect
- Detect
- Respond
- Recover
Maritime cyber risk management

To address the rapidly evolving technologies and changing threats, the Guidelines recommend a risk management approach to cyber risks that is resilient and evolves as a natural extension of existing safety and security management practices established by this Organization.
Maritime cyber risk management

Additional guidance and standards may include:

- The **Guidelines on Cyber Security on board Ships** by BIMCO, CLIA, ICS, INTERCARGO and INTERTANKO.

- **ISO/IEC 27001 standard on Information technology** - Security techniques - Information security management systems - Requirements. Published jointly by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).

- United States National Institute of Standards and Technology's Framework for Improving Critical Infrastructure Security (**the NIST Framework**).
Current and future electronic developments

- Ship reporting
- E-navigation
- Ship communications
- Maritime Single Window
- AIS > VDEs
- ECDIS
- Electronic data exchange
- Access to internet

Maritime Safety Division
Vulnerable systems onboard ships

- Bridge systems
- Cargo handling and management systems
- Propulsion and machinery management and power control systems
- Access control systems
- Passenger servicing and management systems
- Passenger facing public networks
- Administrative and crew welfare systems
- Communication systems
Software quality assurance

MSC.1/Circ.1512 on **Guideline on Software Quality Assurance and Human-Centred Design for e-navigation:** Approved by MSC 95 in June 2015.

SQA focuses on defining and testing software quality and how that helps meet user requirements to ensure that high quality, robust, testable and stable software is used in e-navigation systems.

The basic premise of HCD is that systems are designed to suit the characteristics of intended users and the tasks they perform, rather than requiring users to adapt to a system.
Latest FAL amendments

Electronically exchange information

Are you ready?

8 April 2019

Ready for the exchange of information?
What has changed since 2004?

• More than 11,500 port facilities with approved Port Security Plans.
• Better coordination of security measures between ships and port facilities.
• Enhanced awareness of the importance of effective implementation of security measures and the continuous improvement.
What has changed since 2004?

RESPOND TO SITUATIONS BY USING THE APPROPRIATE TOOLS
Reports on acts of piracy and armed robbery against ships

### Act of Piracy and Armed Robbery Against Ships 2010 - 2016

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<th>Year</th>
<th>Malacca Strait</th>
<th>Indian Ocean</th>
<th>East Africa</th>
<th>West Africa</th>
<th>Latin America and the Caribbean</th>
<th>Mediterranean Sea</th>
<th>North Atlantic</th>
<th>South China Sea</th>
<th>Arabian Sea</th>
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Reports on acts of piracy and armed robbery against ships

### Act of Piracy and Armed Robbery Against Ships 2010 - 2016

**Latin America and The Caribbean**

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Reports on acts of piracy and armed robbery against ships

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Reports on acts of piracy and armed robbery against ships

### Act of Piracy and Armed Robbery Against Ships 2010 - 2016

South China Sea

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<tr>
<td>2016</td>
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</table>
Latest attack in Southern Philippines

- 19 February 2017:
- Vietnamese Bulk Carrier “MV Giang Hai”
- One dead, seven kidnapped
IMO Secretary General

Kitack Lim, Secretary General, International Maritime Organization (IMO)
IMO – World Maritime Day

28 September 2017
Technical assistance

- Needs assessment.
- Table-top exercises
- ISPS training for DA and PFSOs, including train-the-trainer option
- ISPS Self-assessment and audit training Workshops
- ISPS Drills and exercises Workshops
- Legal assessment, review of national legislation
- Training material for security guards with designated security duties
- Maritime Domain Awareness.

- Contact the IMO Secretariat at marsec@imo.org
The development of regulations, guidelines and recommendations, including the sharing of best practices, is essential for the effective and harmonized implementation of security measures.
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<tr>
<td>United Kingdom</td>
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