



## Value of the ISO 14000 series and the ISO 28000 Series for a Maritime Administration





## ISO 14000 Series

**ISO 14000** is a series of standards on environmental management aiming to

- (a) minimize how organisations operations (processes etc.) negatively affect the environment (i.e. cause adverse changes to air, water, or land);
- (b) comply with applicable laws, regulations, and other environmentally oriented requirements, and
- (c) continually improve in the above.





# ISO 14001

- Basic approach is similar to the 9001 approach
- Process oriented
- PDCA approach
- Continuous improvement approach





## ISO 14001

- The requirements of ISO 14001 are integral part of the EU's Eco-Management and Audit Scheme (EMAS).
- EMAS's structure and material requirements are more demanding, foremost concerning performance improvement, legal compliance and reporting duties.





# Samples of other 14000 Standards

- **ISO 14004** Environmental management systems—General guidelines on principles, systems and support techniques
- **ISO 14015** Environmental assessment of sites and organizations
- **ISO 14020** series (14020 to 14025) Environmental labels and declarations
- **ISO 14030** discusses post production environmental assessment
- **ISO 14031** Environmental performance evaluation—Guidelines
- **ISO 14040** ff. Life Cycle Assessment, LCA
- **ISO 14050** terms and definitions.
- **ISO 14062** discusses making improvements to environmental impact goals.
- **ISO 14063** Environmental communication—Guidelines and examples





## Possible application and benefits for MARADs

- Ports and Shipyards, in particular branches dealing with environmentally challenging materials, e.g. port reception facilities
- Ships managed by a MARAD
- Strengthening of the national reputation as acting environmental responsible
- Improvement of the international reputation
  - ⇒ Requires a sound communication approach



# ISO 28000 series Supply Chain Security

- ISO 28000 has been developed by the ISO Technical Committee TC8 “Ships and Maritime Technology”. It is based on the ISO format adopted by ISO 14001:2004 because of its risk based approach to management standards. The ISO 28000 series of standards consists of:
- ISO 28000:2007 – The Security Management Standard (SMS) requirements standard, a specification for an SMS against which organizations can certify compliant.
- ISO 28001:2007 –. Provides requirements and guidance for organizations in international supply chains.
- Assists in meeting the applicable authorized economic operator (AEO) criteria set forth in the World Customs Organization Framework of Standards and conforming national supply chain security programmes.





# ISO 28000 series Supply Chain Security

- ISO 28002:2010 PAS - Development of resilience in the supply chain - Requirements with guidance for use.
- ISO 28003:2007 - Requirements for bodies providing audit and certification of supply chain security management systems
- ISO 28004:2007 - provides generic advice on the application of ISO 28000:2007.
- ISO 28005 – 1:2013 Electronic port clearance (EPC) -- Part 1: Message structures.
- ISO 28005 – 2:2013 Electronic port clearance (EPC) -- Part 2: Core data elements







## ISO 28000 Supply Chain Security

During development ISO 28000 was predicted to be the standard that would break all records, regarding the number of organizations that would adopt it, and the speed with which it would spread. This did not happen. So far relatively few organizations have, in fact, implemented ISO 28000.





## 28000 and MARADs

- Port of Houston Port Authority was the worlds first Port Authority certified against 28000 in 2008
- 4 Objectives:
  - *Emergency response planning*
  - *Equipment management*
  - *Entry processing times of visitors and vendors*
  - *Training of PHA personnel with security duties*
- DP World in 2013 certified



# SUPPLY CHAIN SECURITY - ISO 28000

- ISO 28000 - the only published and certifiable International Standard that takes a **holistic, risk-based approach to managing risks associated with any disruptive incident in the supply chain -before, during and after the event. It suggests how to improve resilience and preparedness performance in a cost effective way based on a plan-do-check-act**
- Section 4.3.1 states, “**risk assessment** shall consider the likelihood of an event and all of its consequences which shall include: **physical failure threats and risks; operational threats and risks; natural environmental events; factors outside of the organization’s control; & stakeholder threats and risks**”
- Section 4.4.7 - **emergency preparedness, response and security recovery**
- **ISO Secretary General noted in Press Release on publication of ISO 28000:**
  - **Reducing Piracy, Fraud, and Terrorism**
  - **The standards address potential security issues at all stages of the supply process from point of manufacture, including sources of financing, to the final consumer thus targeting threats such as terrorism, fraud and piracy.**

# How 28000 is being used



**World  
Customs  
Organization  
(WCO)**  
**SAFE  
Framework**



**European  
Commission  
Authorized  
Economic  
Operator\***



**Customs Trade  
Partnership  
Against  
Terrorism  
(C-TPAT)\***



**Singapore  
Secure  
Trade  
Partnership  
(STP)\***



**Transported  
Assets  
Protection  
Association  
(TAPA)\***



**ISO 28000**