

**Presentation to ARM WG2
October 22, 2018**

Standardized and Automated Ship Reporting

Presentation Theme

- IMO carries overall responsibility for development of Standardized and Automated Ship Reporting as a prioritized solution (SIP Solution #2) to streamline ship-board and shore-side reporting processes and procedures
- IMO is uniquely positioned to address the ship-board side of the solution
- IALA is well positioned to address the solution from a shore-based perspective and, in doing, so assist IMO in moving towards

Standardized and Automated Ship Reporting

Agenda

1. Introduction
2. Background
3. Solution Components
4. Expected Benefits
5. IALA's Potential Role
6. Conclusion

1. Introduction

The Ship Reporting Correspondence Group (SRCG) represents vendors that are interested in offering effective and affordable products and services that address ship reporting needs both for bridge teams and for shore-based authorities

Members include:

Airbus

Chartworld

Fulcrum-Maritime

Kongsberg

NAVTOR

Pole Star

Raytheon Anschütz

SIRM

Telko

Wärtsilä (Transas)

Inmarsat (Observer)

Fred Pot is Secretary of the SRCG and represents their interests

2. Background

IALA's ENAV Committee Work Group 4 Work Program for 2012-2017:

“Develop Guideline/Recommendation on Maritime Services”

- Operational User Requirements for MS8 “Vessel Shore Reporting Service” (and many others)
- Unlike most other proposed Maritime Services, Vessel Shore Reporting Service lacks a “Domain Coordinating Body”

Findings

1. Most shore-based authorities still require unique reports (>1000)
2. A few (quite expensive) ship reporting solutions are currently available
3. Few bridge teams currently use a ship reporting solution
4. Many other solutions proposed (i.e. National Single Windows)
5. Most assume that shore-based authorities will harmonize reporting requirements and accept electronic reports but progress is limited

Findings (Cont'd)

Solutions will not be effective and widely adopted unless

- Their cost is reduced
- They fulfill current shore-based authorities' reporting requirements including hard copy reports using their unique forms

To do so, the solution will need to include five distinct components:

1. Ship Report Template Registry
2. Cyber Security Infrastructure
3. Ship Report Collection Tools
4. Ship Reporting Tools for Bridge Teams
5. Common Ship Report Data Model

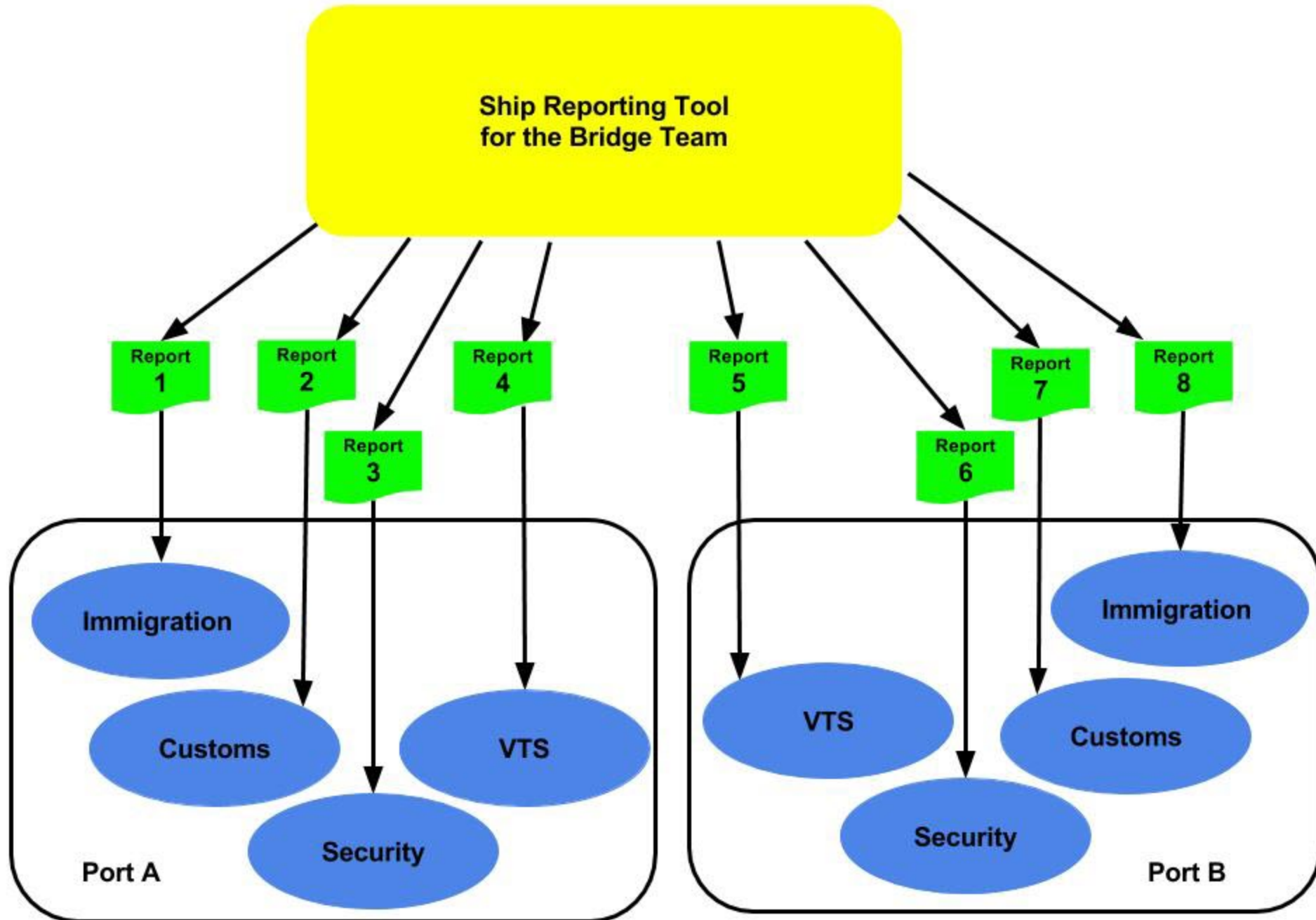
ARM Committee Work Plan for 2018-2022 includes:

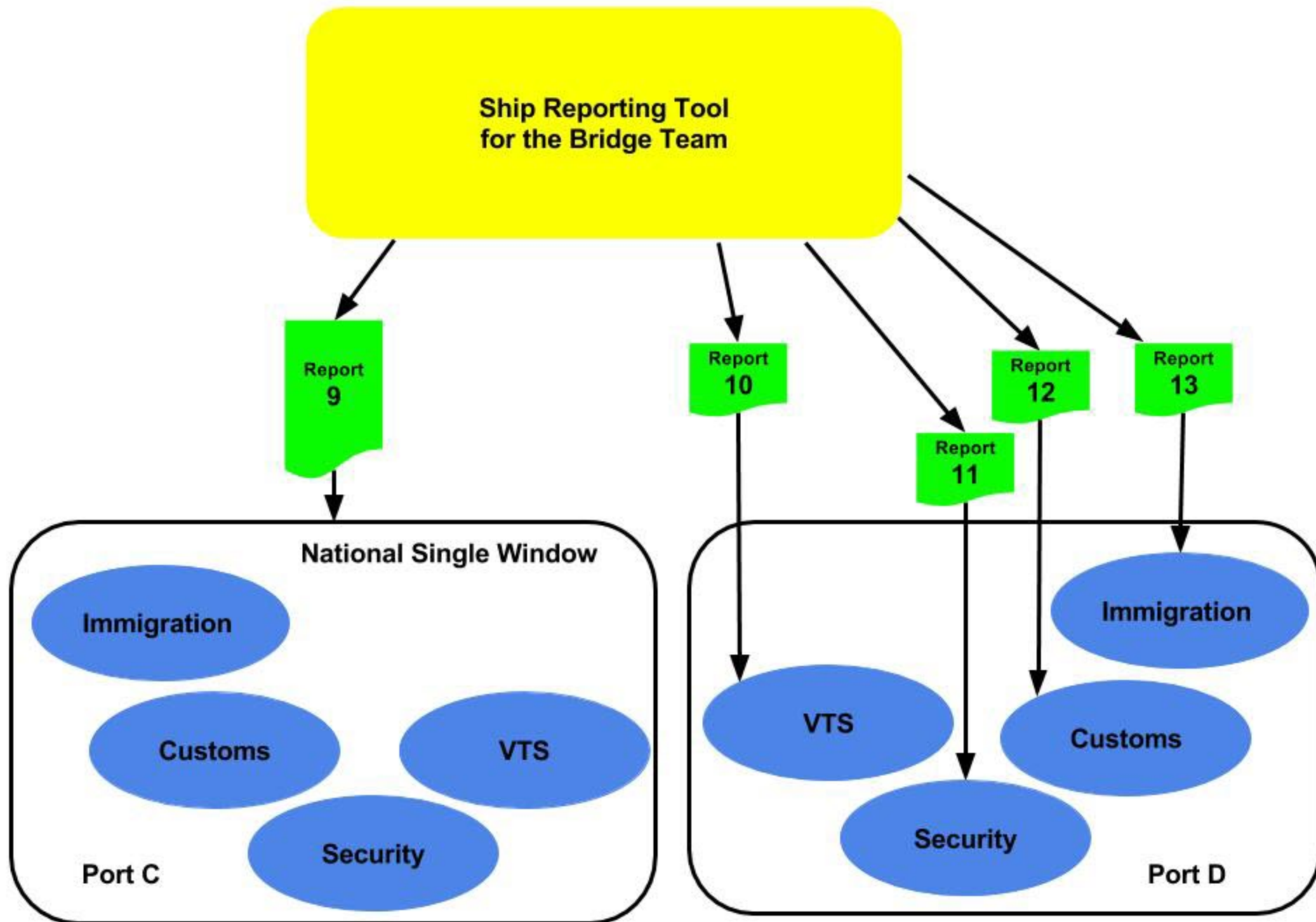
5. Standard 1070 – Information services

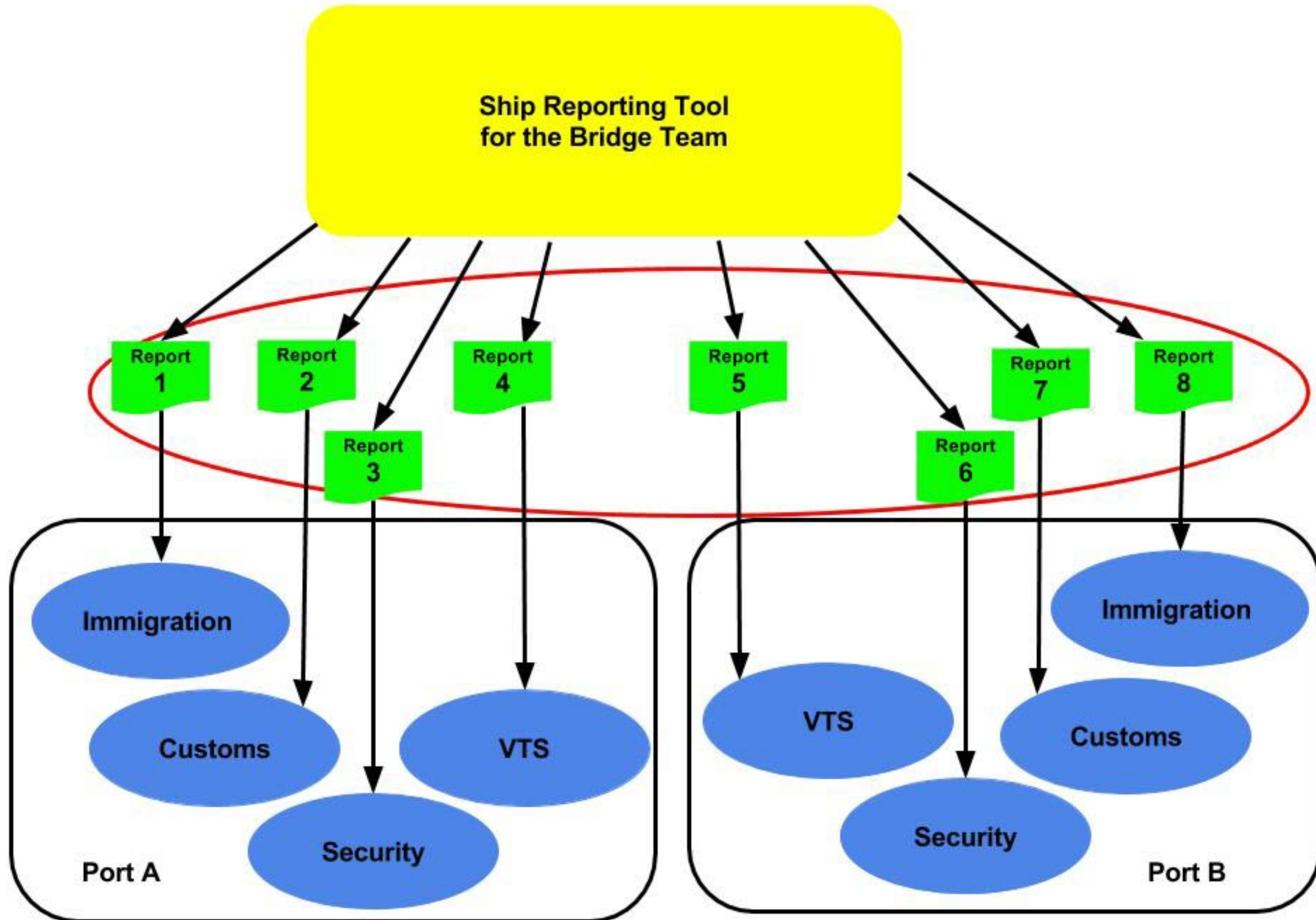
5.2 Data exchange systems (Traffic Information)

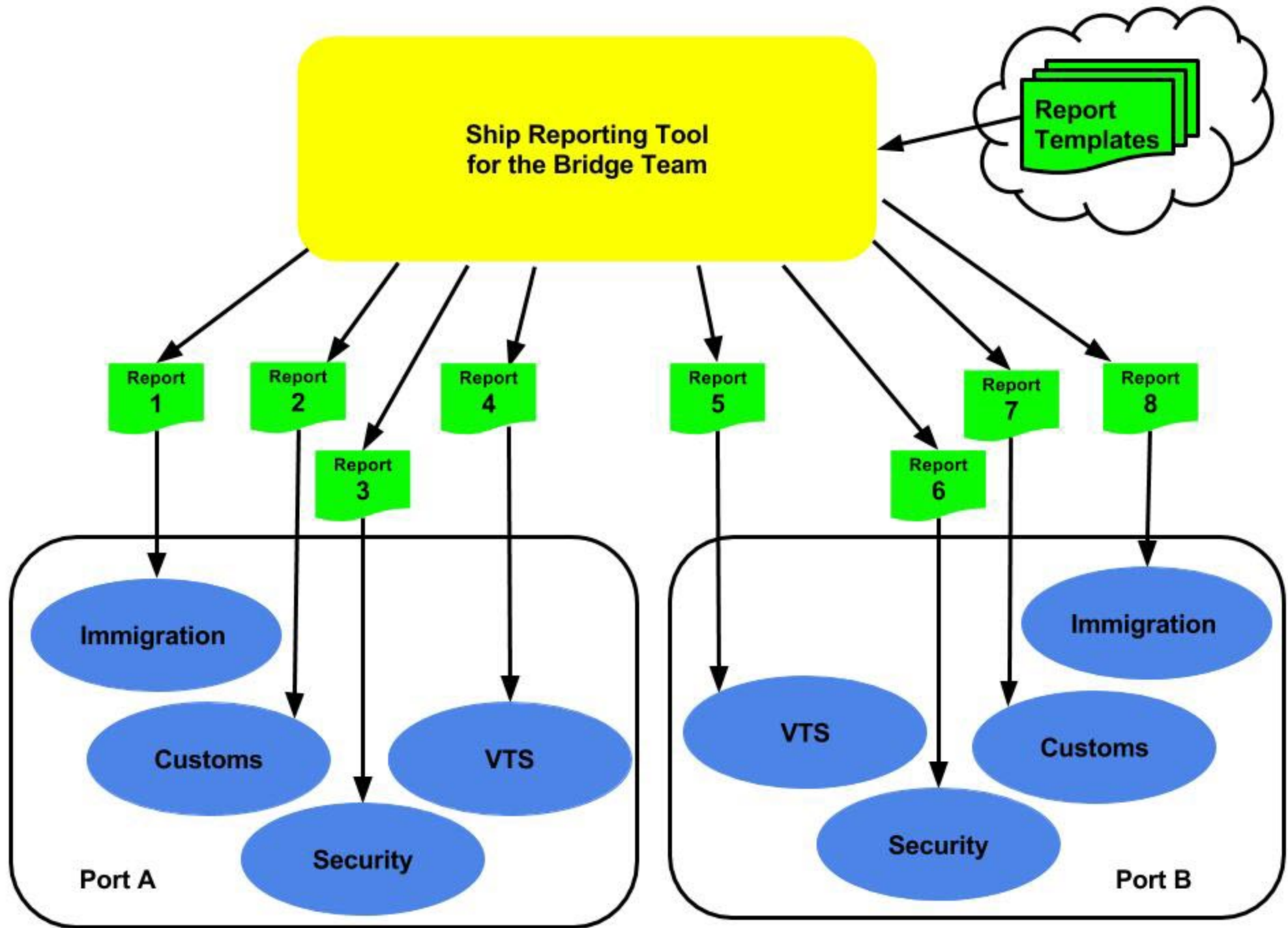
5.2.2 Develop Guideline on ship reporting from the shore-side perspective

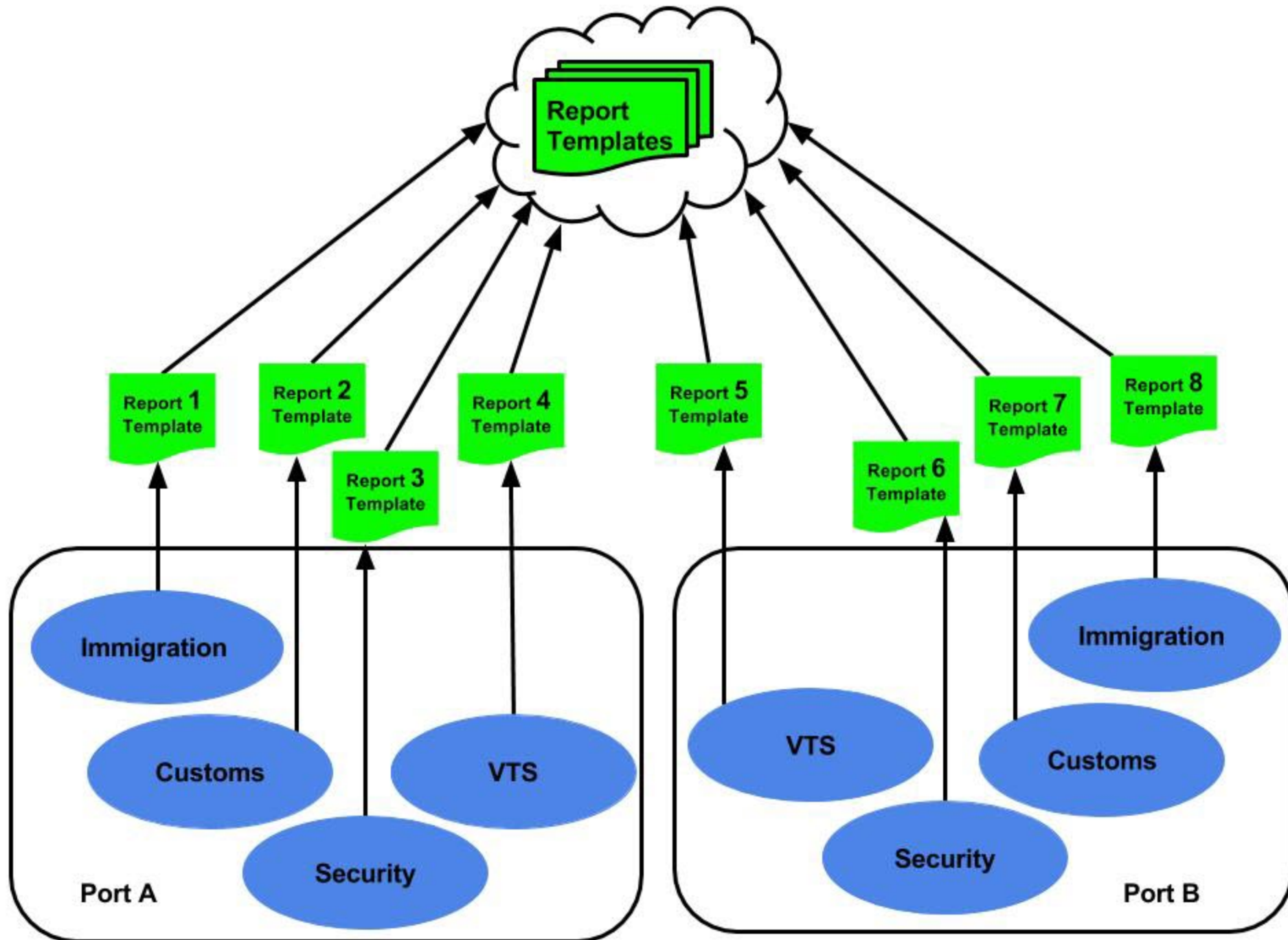
- a. Ship Report Template Registry specifications and governance;
- b. Guideline on ship reporting tools;
- c. Minimum cyber security requirements for sharing ship report information;
- d. Guidance on migration from current ship reporting system to a harmonised and secure electronic system;

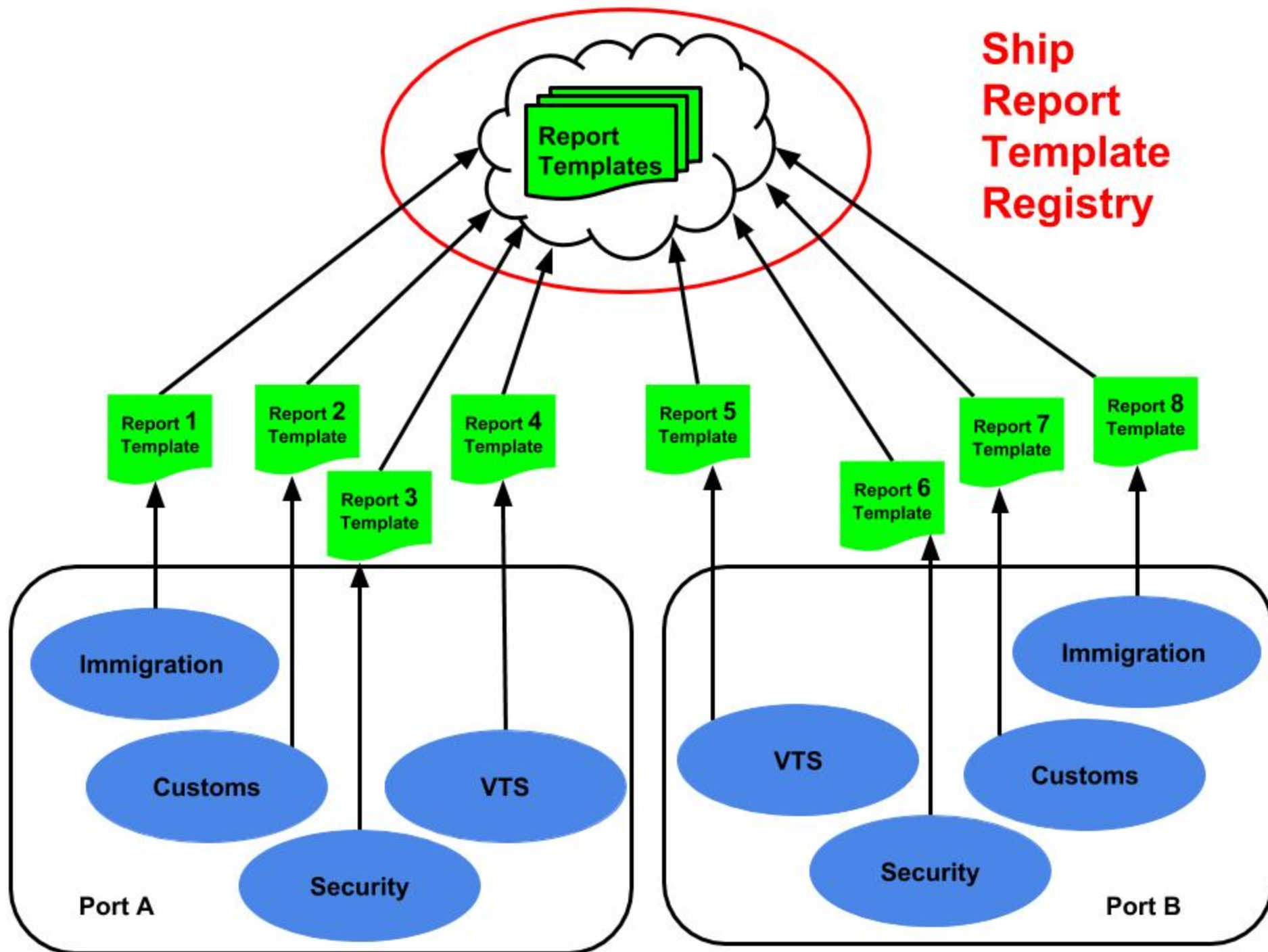


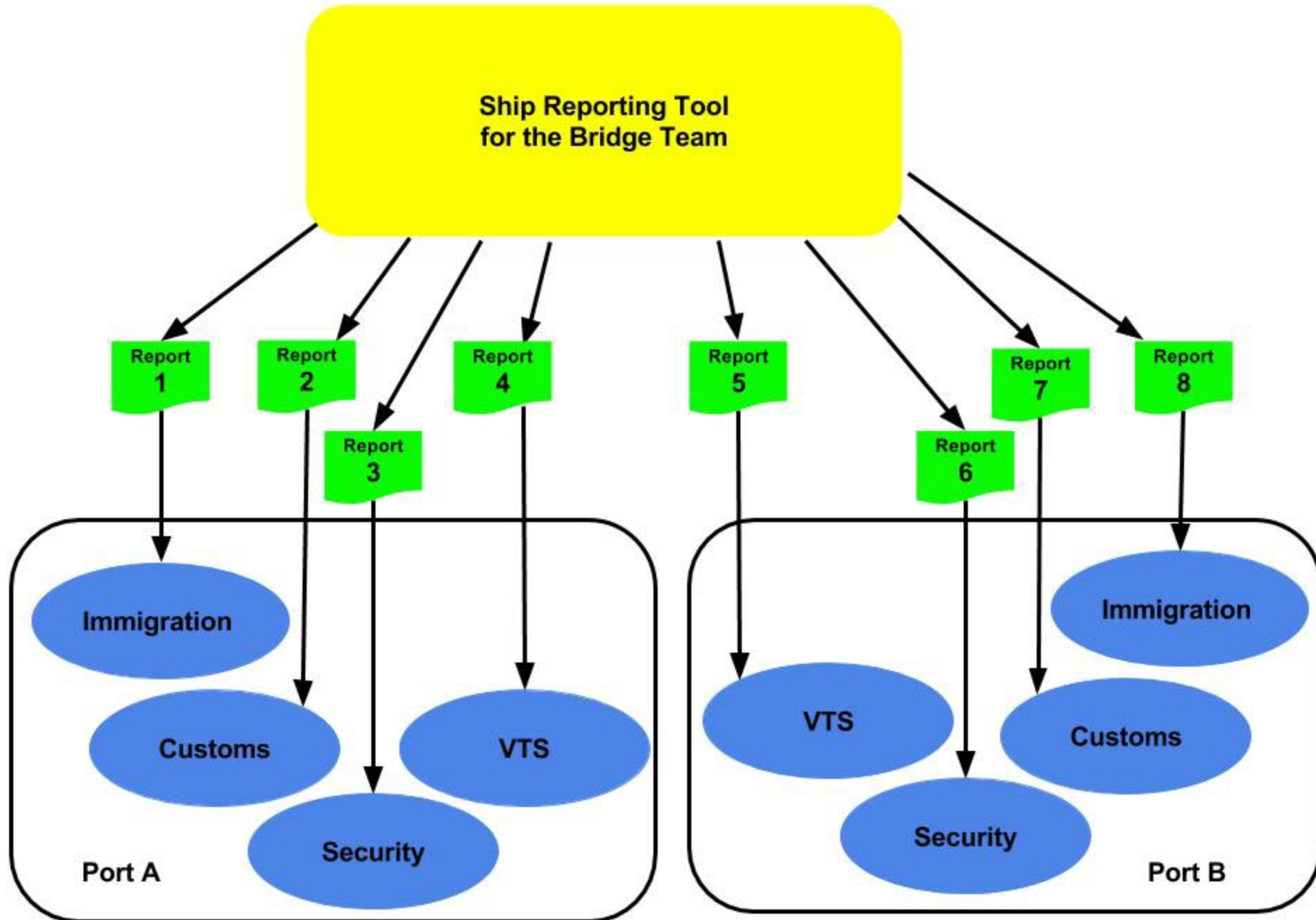


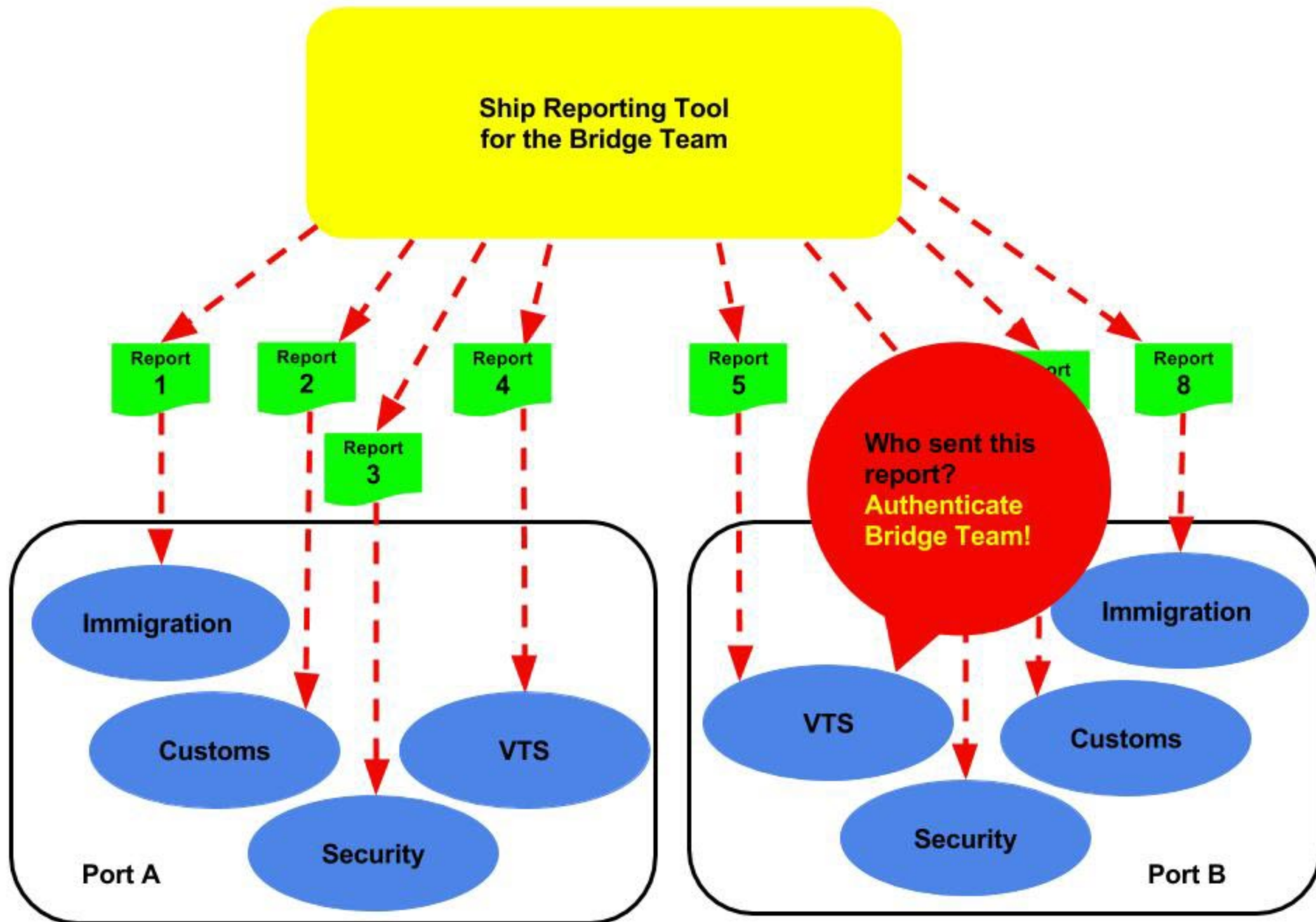


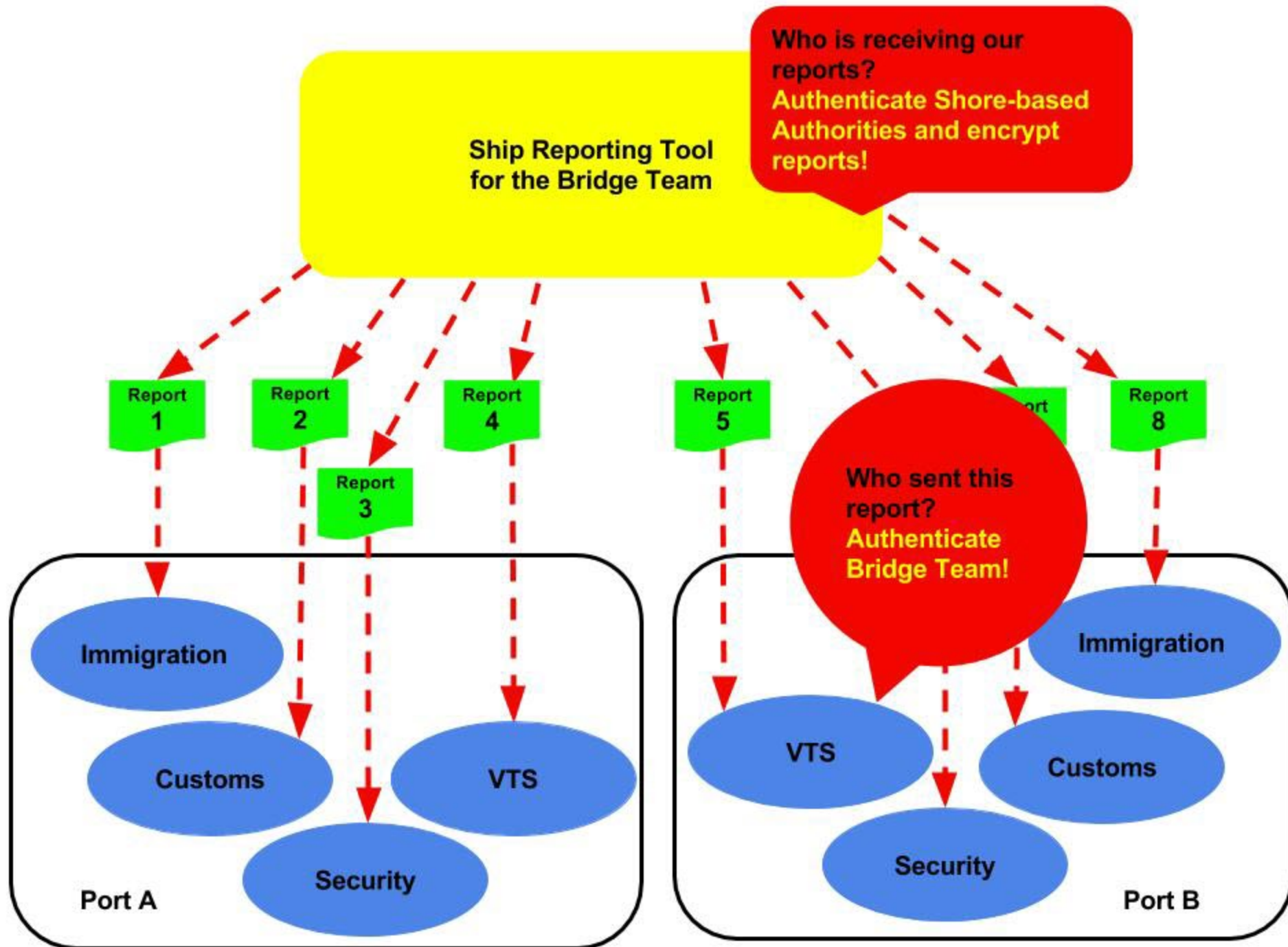


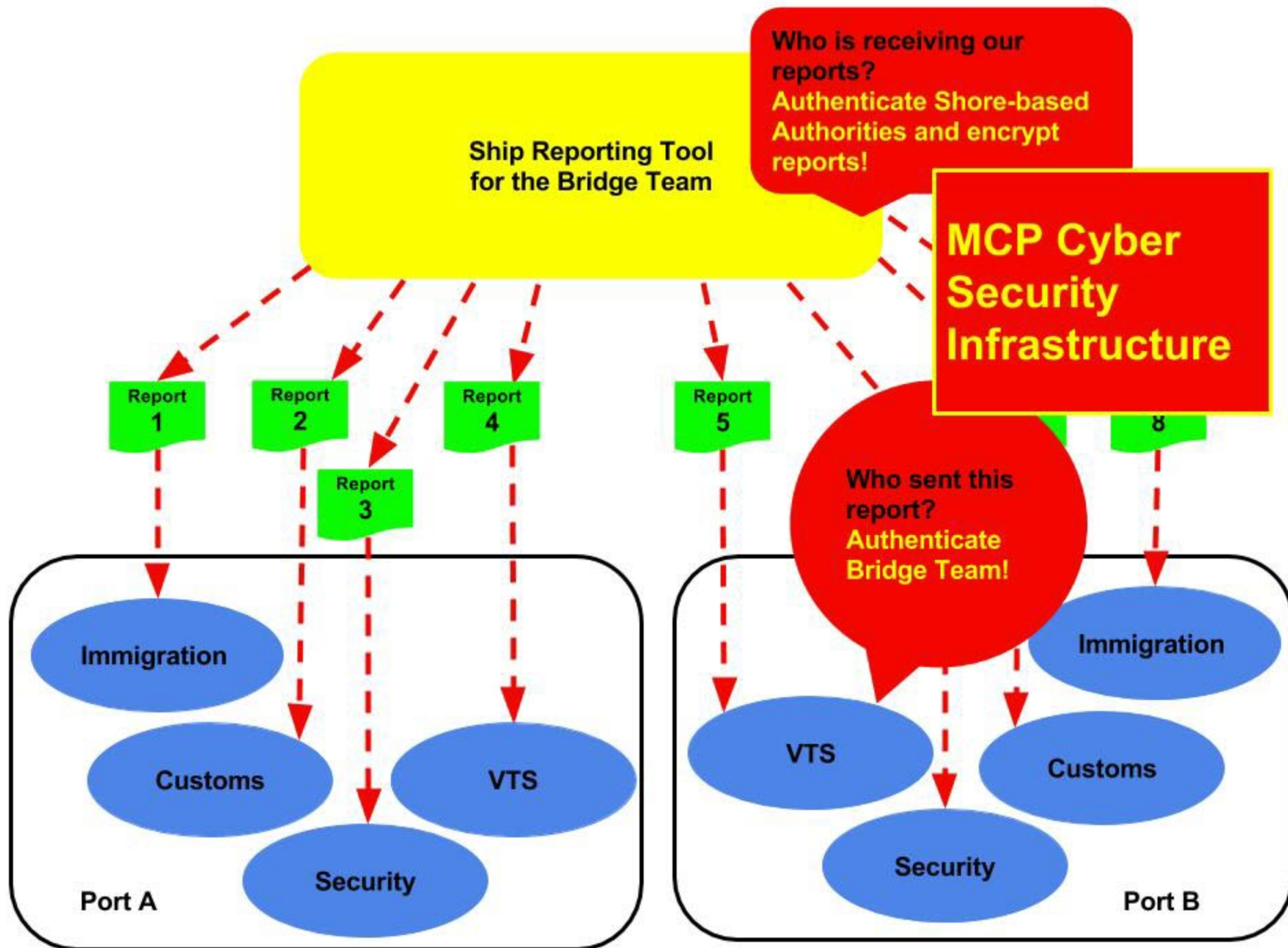


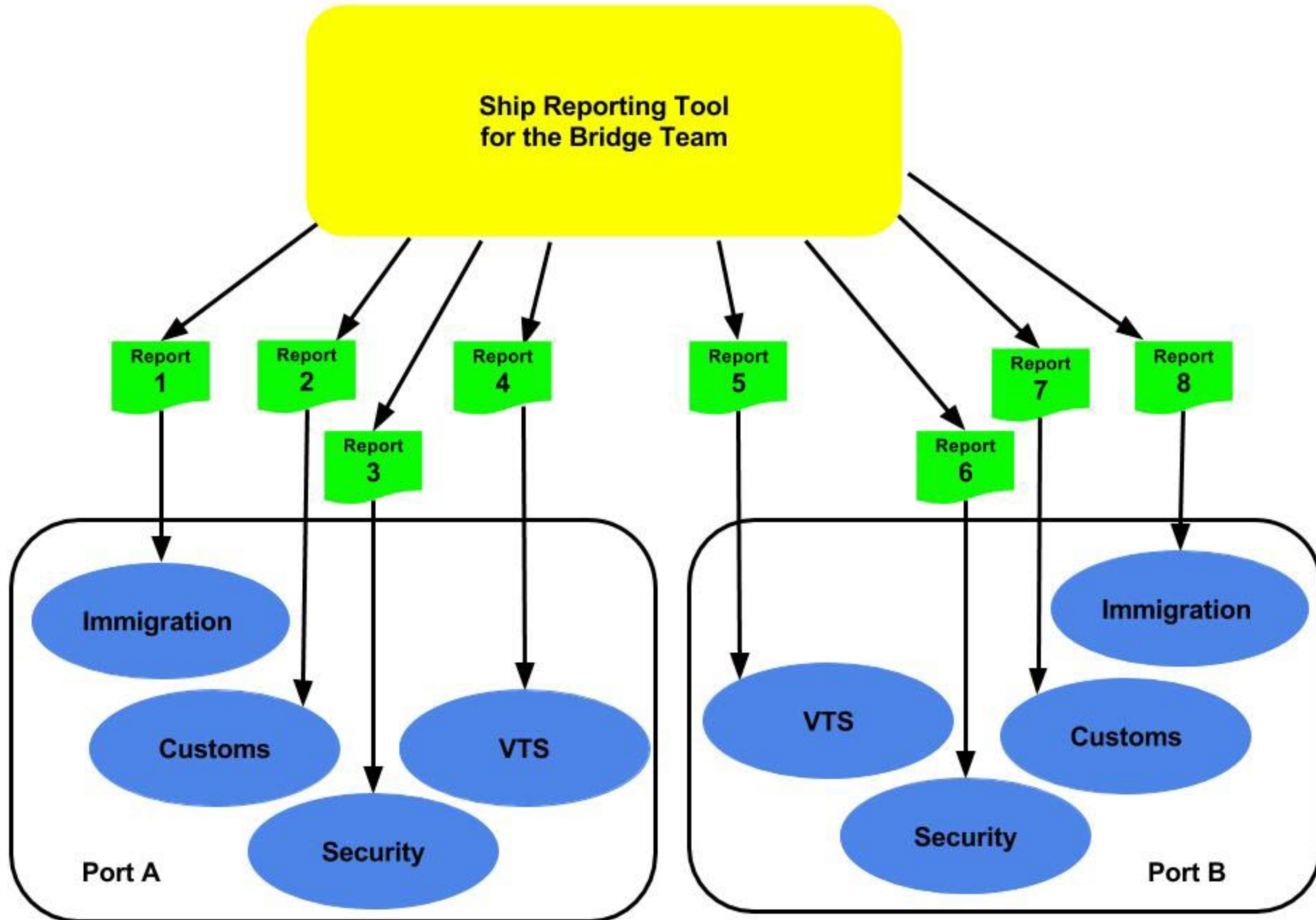










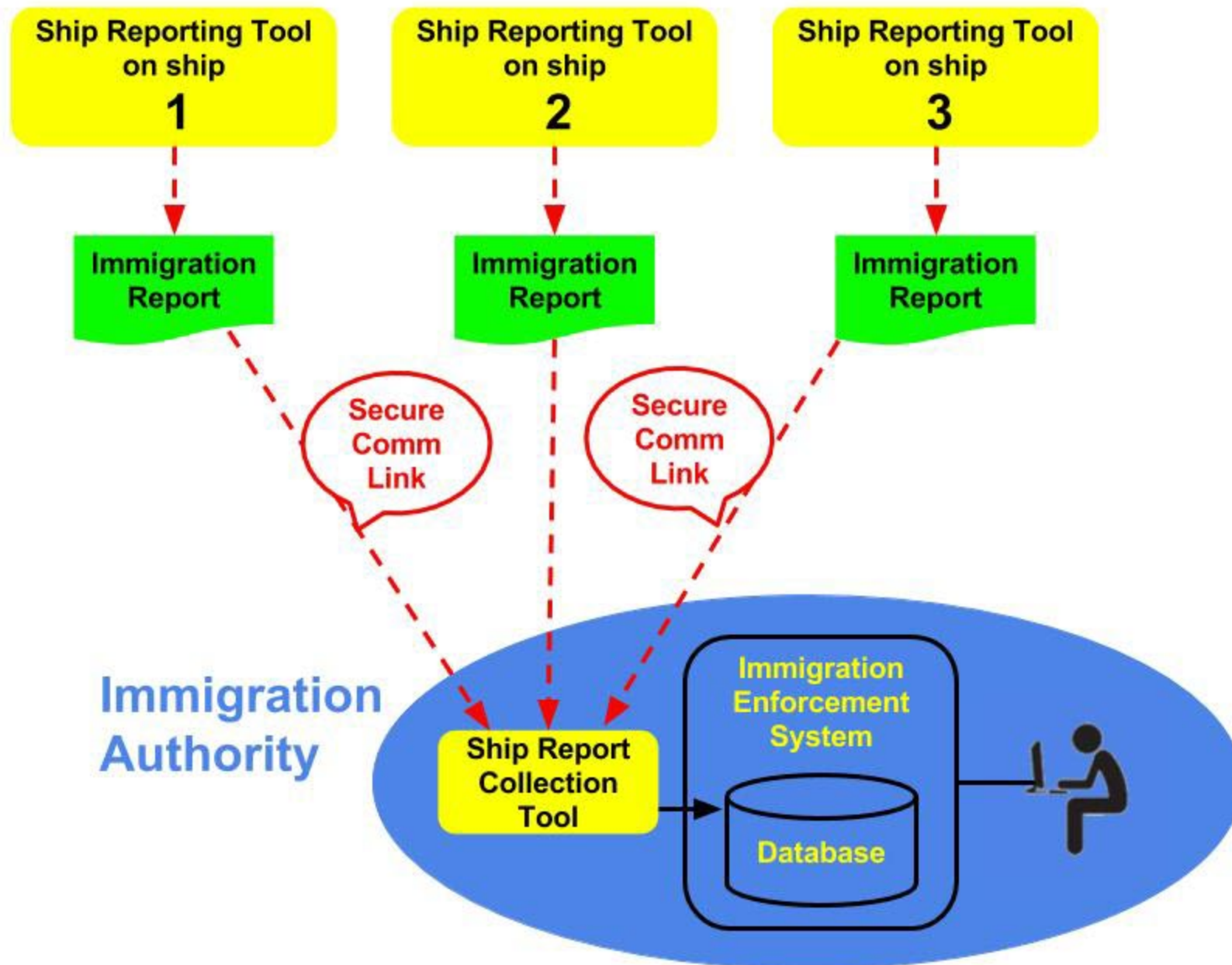


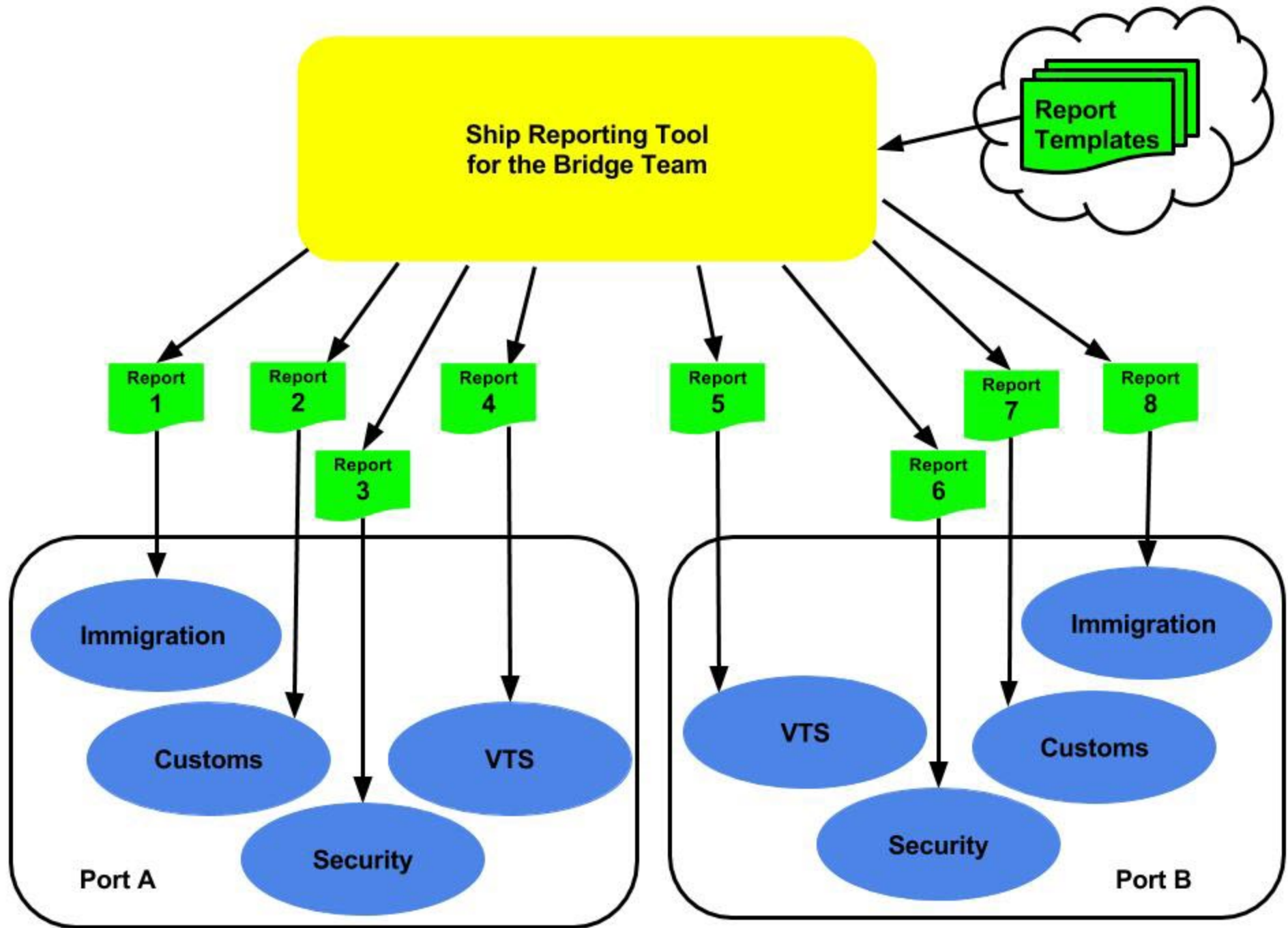
Ship Reporting Tool
for the Bridge Team

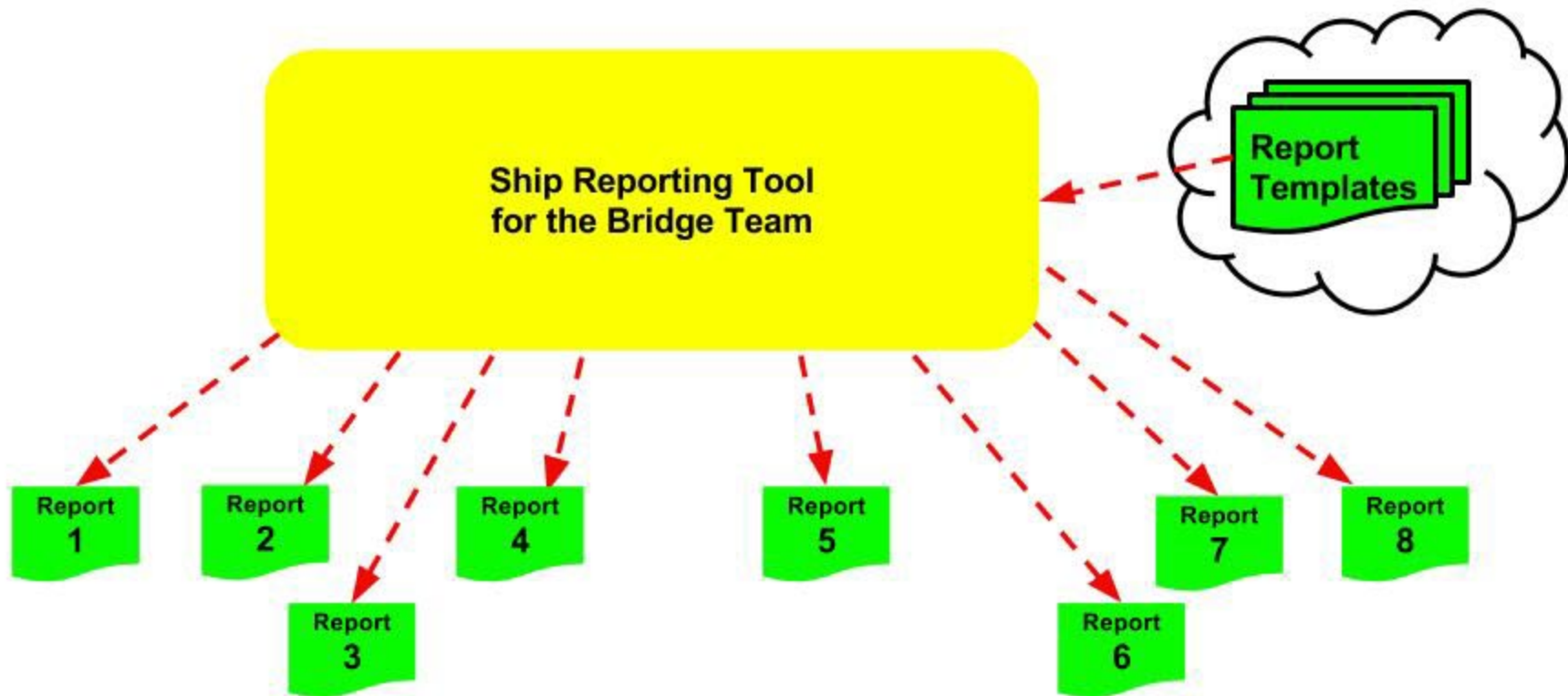
Report
1

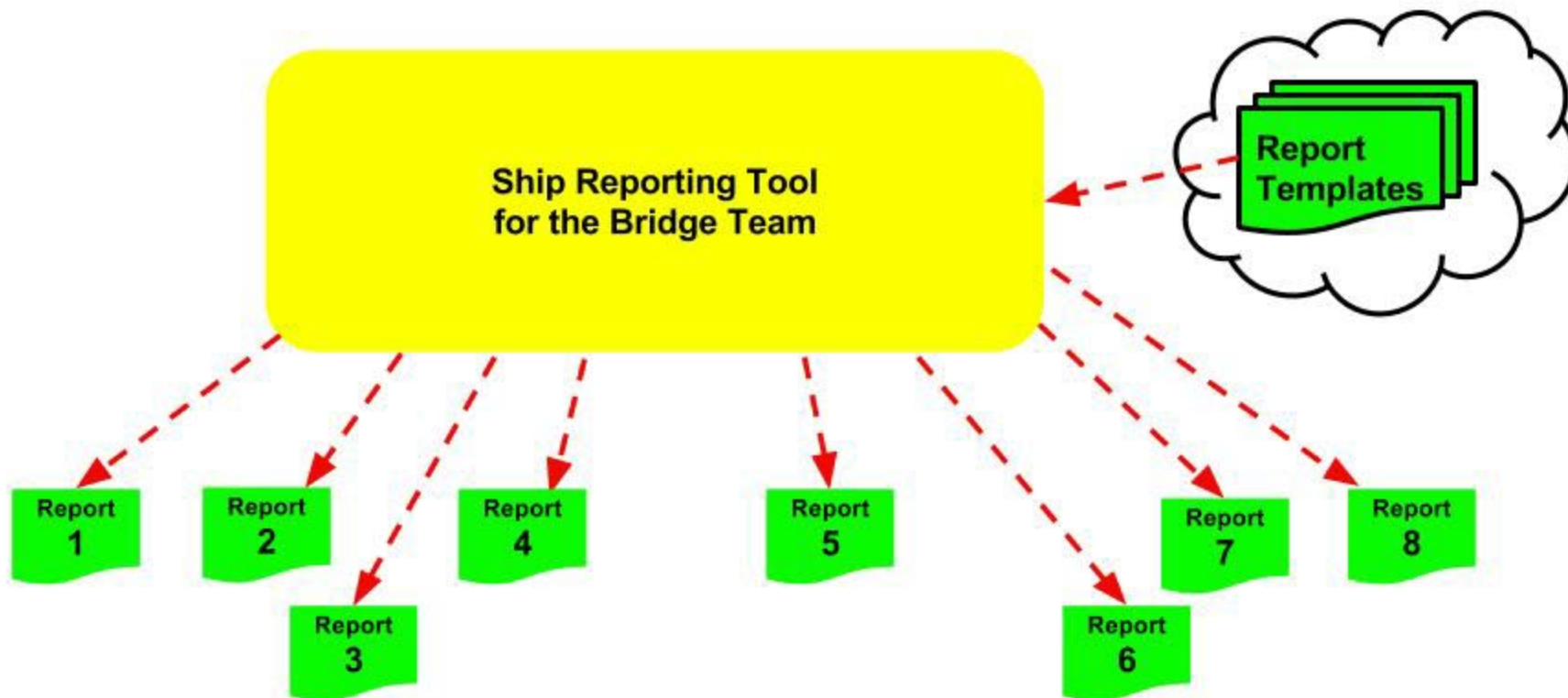
Immigration

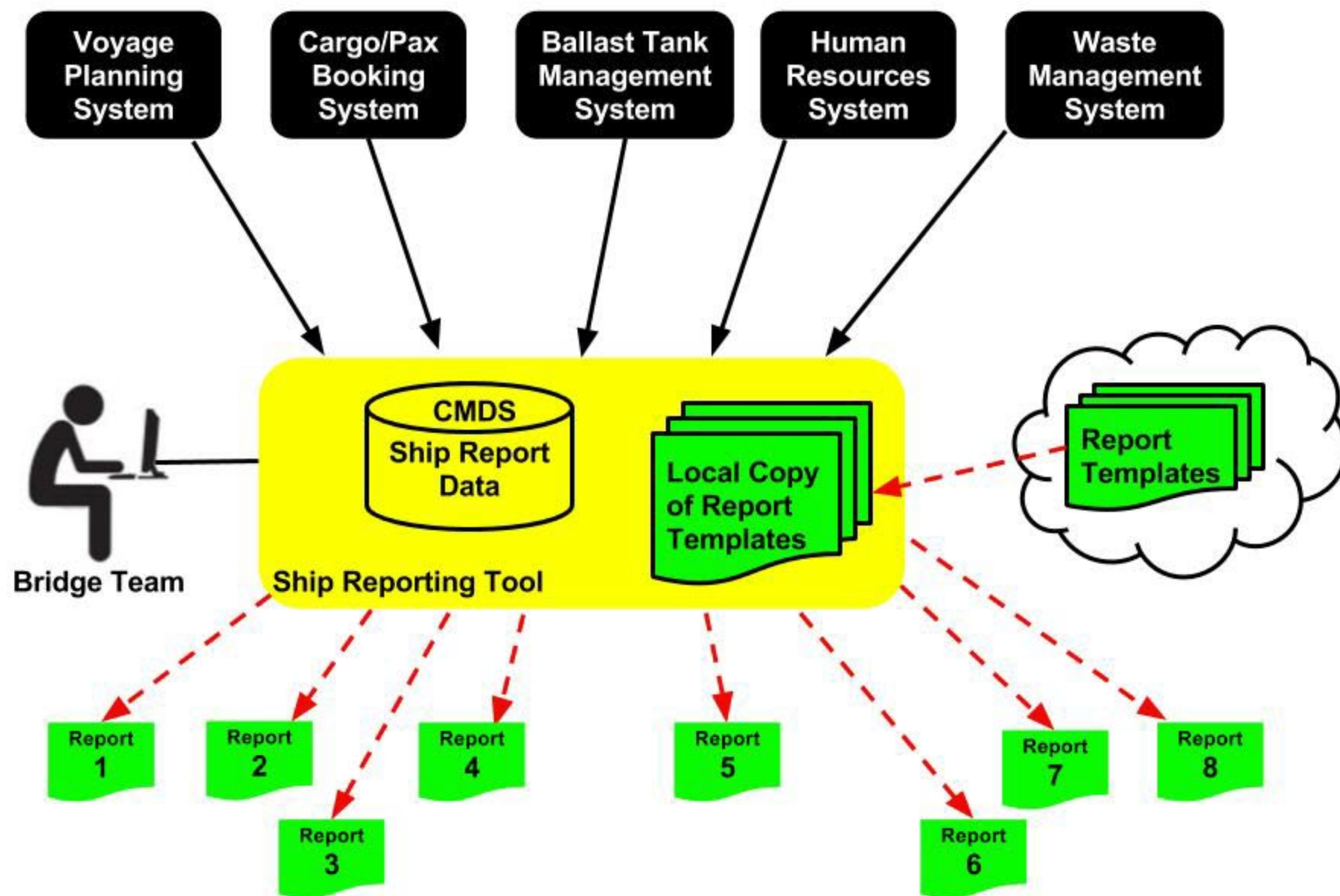
Port A



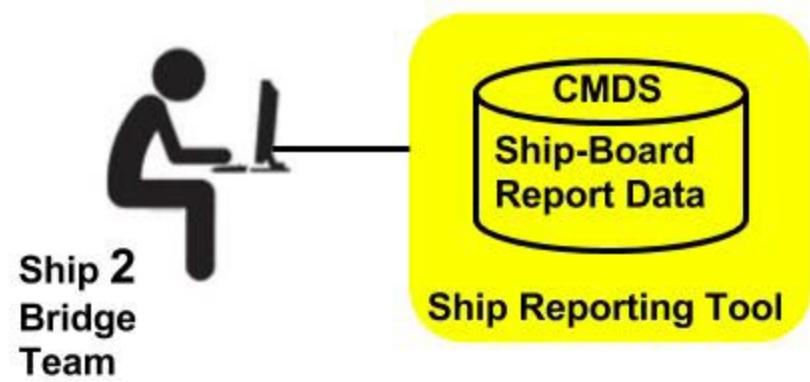


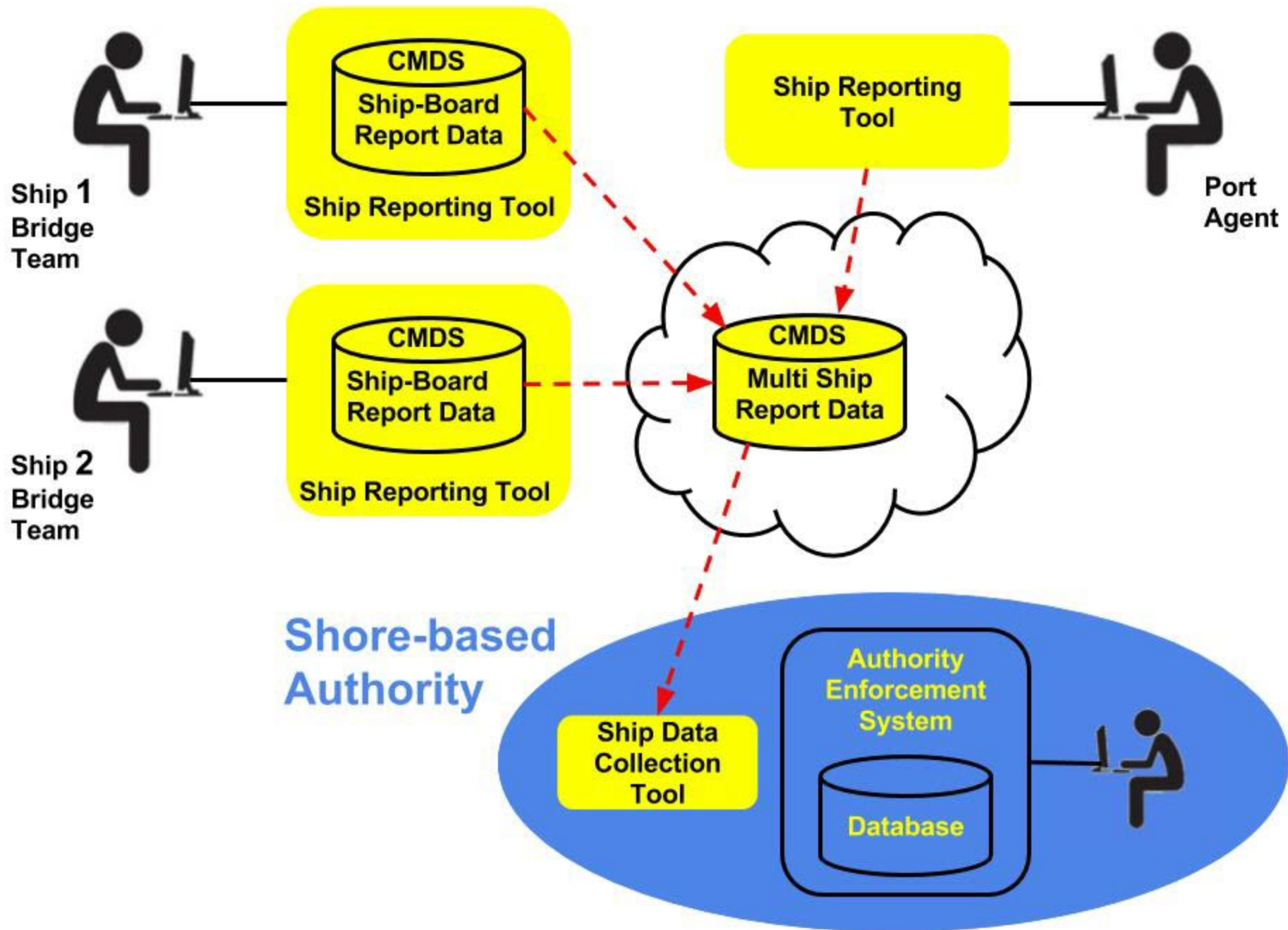












3. Expected Benefits



Ship Report Registry

- This is a High Priority Item
- Reduce Cost of Ship Reporting Tools
 - ✓ Obviates need for vendors to maintain a proprietary ship report template registry
 - ✓ Without the Ship Report Registry, Ship Reporting Tools will remain too expensive for most ship owners/operators
- Will likely entice shore-based authorities to harmonize their ship reports
 - ✓ They will be able to see what reports their colleagues require
 - ✓ They will be assigned a security certificate to receive encrypted reports

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MCP Cyber
Security
Infrastructure

MCP Cyber Security Infrastructure

- Will allow shore-based authorities to authenticate report originators
- Will allow ship owners/operators to control access to their report information

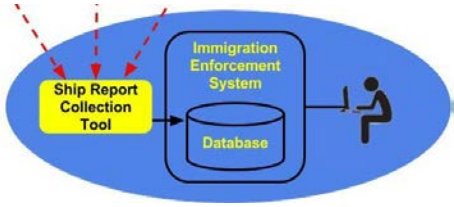
3. Expected Benefits (Cont'd)



Ship Report Collection Tools

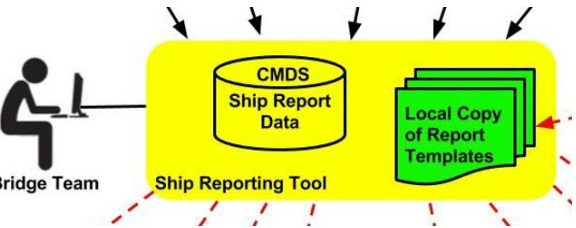
- Allows shore-based authorities to decrypt ship reports
- Allows shore-based authorities to automate data entry into their enforcement systems

3. Expected Benefits (Cont'd)



Ship Report Collection Tools

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Ship Reporting Tools for Bridge Teams

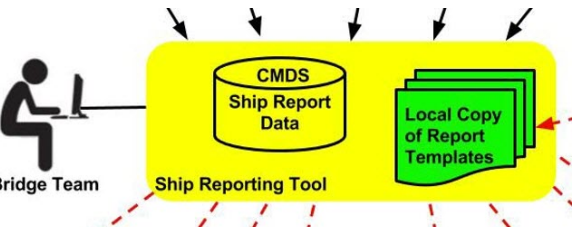
- Will minimize administrative burden on Bridge Teams
- Will allow Bridge Teams to encrypt their reports
- Will allow Bridge Teams to delegate ship reporting tasks

3. Expected Benefits (Cont'd)



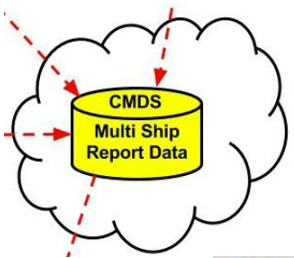
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Ship Reporting Tools for Bridge Teams

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Common Ship Report Data Model (Part of CMDS)

- Will allow collaboration on ship reporting tools
 - ✓ CMDS Structure is independent of the tool used to generate reports
- Will allow shore-based authorities to subscribe to new reports published in CMDS



4. IALA's Role



Ship Report Template Registry

- Clearly in IALA's remit

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**MCP Cyber
Security
Infrastructure**

Ship Report Template Registry

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MCP Cyber Security Infrastructure

- IALA is Partner in EfficienSea2 and holds a Board Seat

4. IALA's Role



**MCP Cyber
Security
Infrastructure**

Ship Report Template Registry

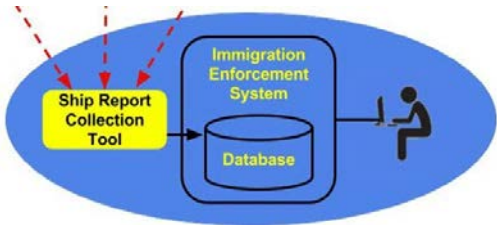
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MCP Cyber Security Infrastructure

- IALA is Partner in EfficienSea2 and holds a Board Seat

Ship Report Collection Tools

- IALA National Members represent Shore-based Authorities



4. IALA's Role



MCP Cyber Security Infrastructure

Ship Report Template Registry

- Clearly in IALA's remit

MCP Cyber Security Infrastructure

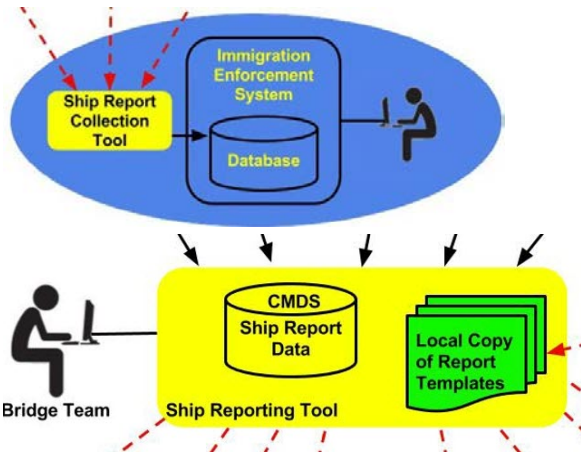
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Ship Report Collection Tools

- IALA National Members represent Shore-based Authorities

Ship Reporting Tools for Bridge Teams

- IMO develops rules and regulations



4. IALA's Role



MCP Cyber Security Infrastructure

Ship Report Template Registry

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MCP Cyber Security Infrastructure

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Ship Report Collection Tools

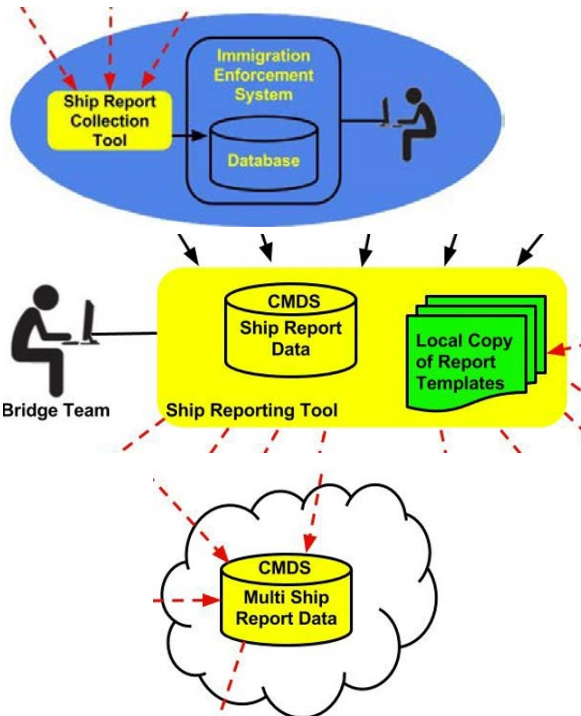
- IALA National Members represent Shore-based Authorities

Ship Reporting Tools for Bridge Teams

- IMO develops rules and regulations

Common Ship Report Data Model (Part of CMDS)

- In IALA's remit. Closely related to Ship Report Registry



5. Conclusion

The Ship Reporting Correspondence Group invites the ARM Committee to take the lead in the development and maintenance of the Ship Report Template Registry to assist IMO in moving towards

Standardized and Automated Reporting

6. Questions?

Please feel free to contact me....

Fred W. Pot

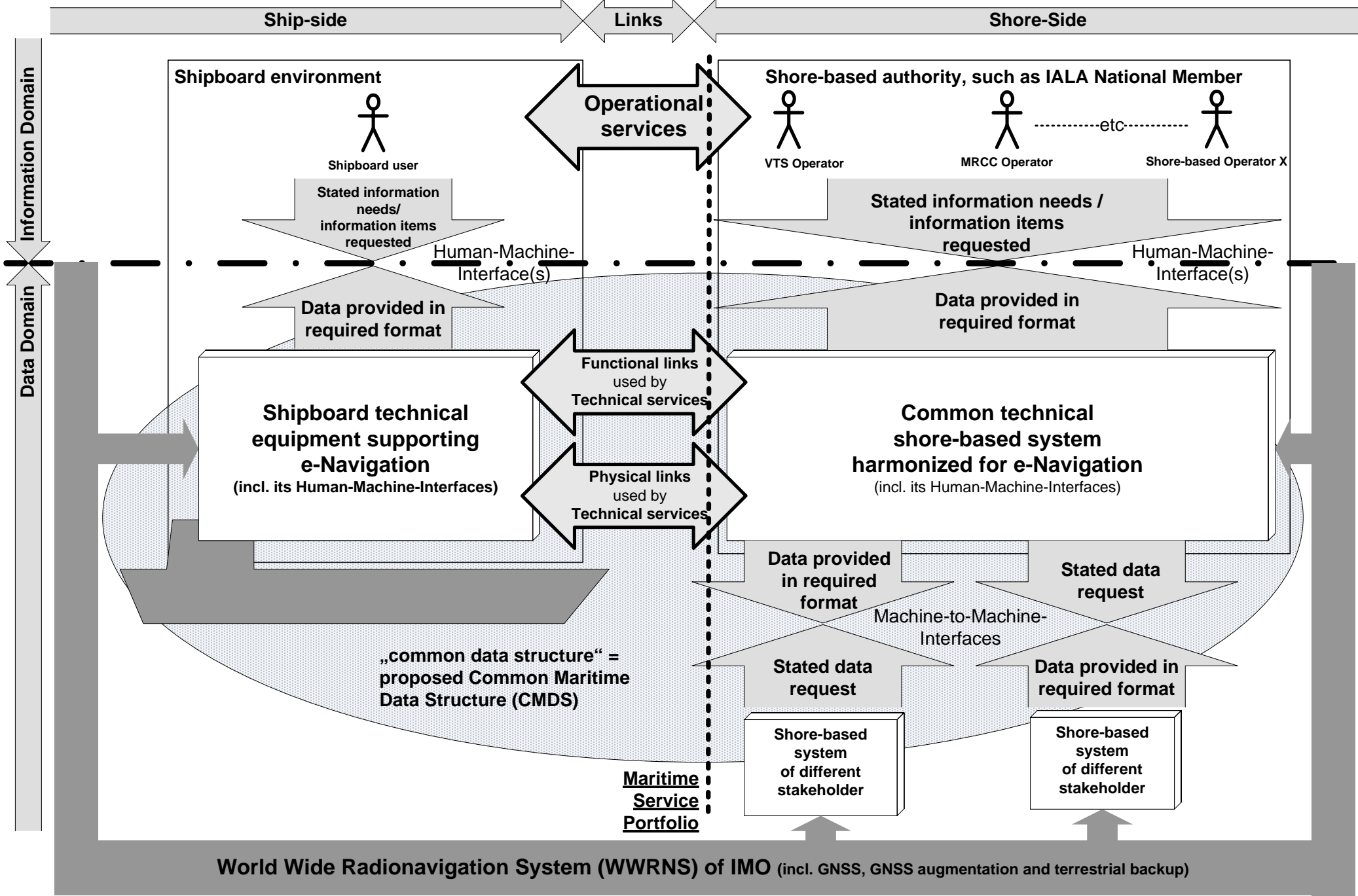
Secretary

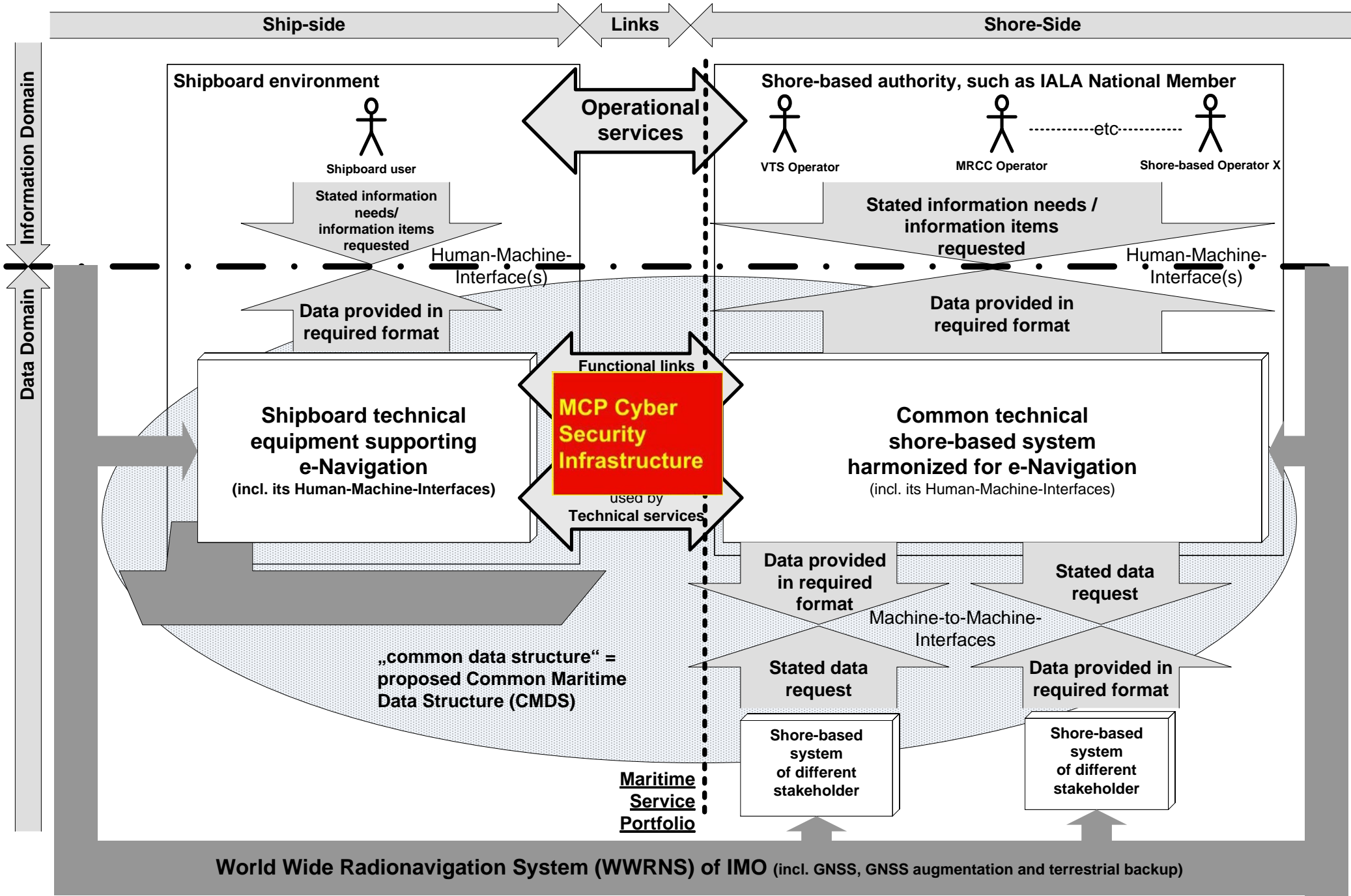
Ship Reporting Correspondence Group

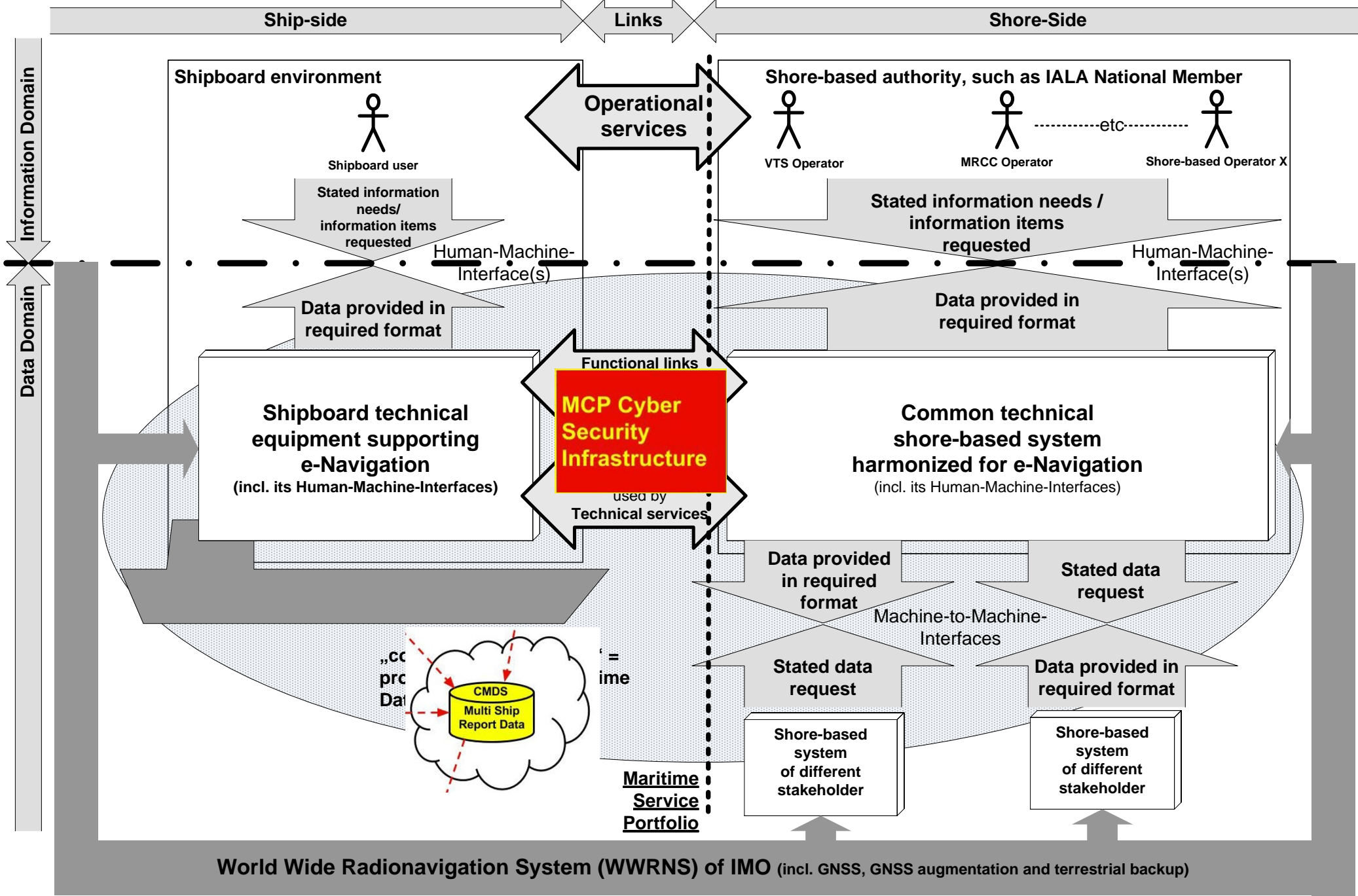
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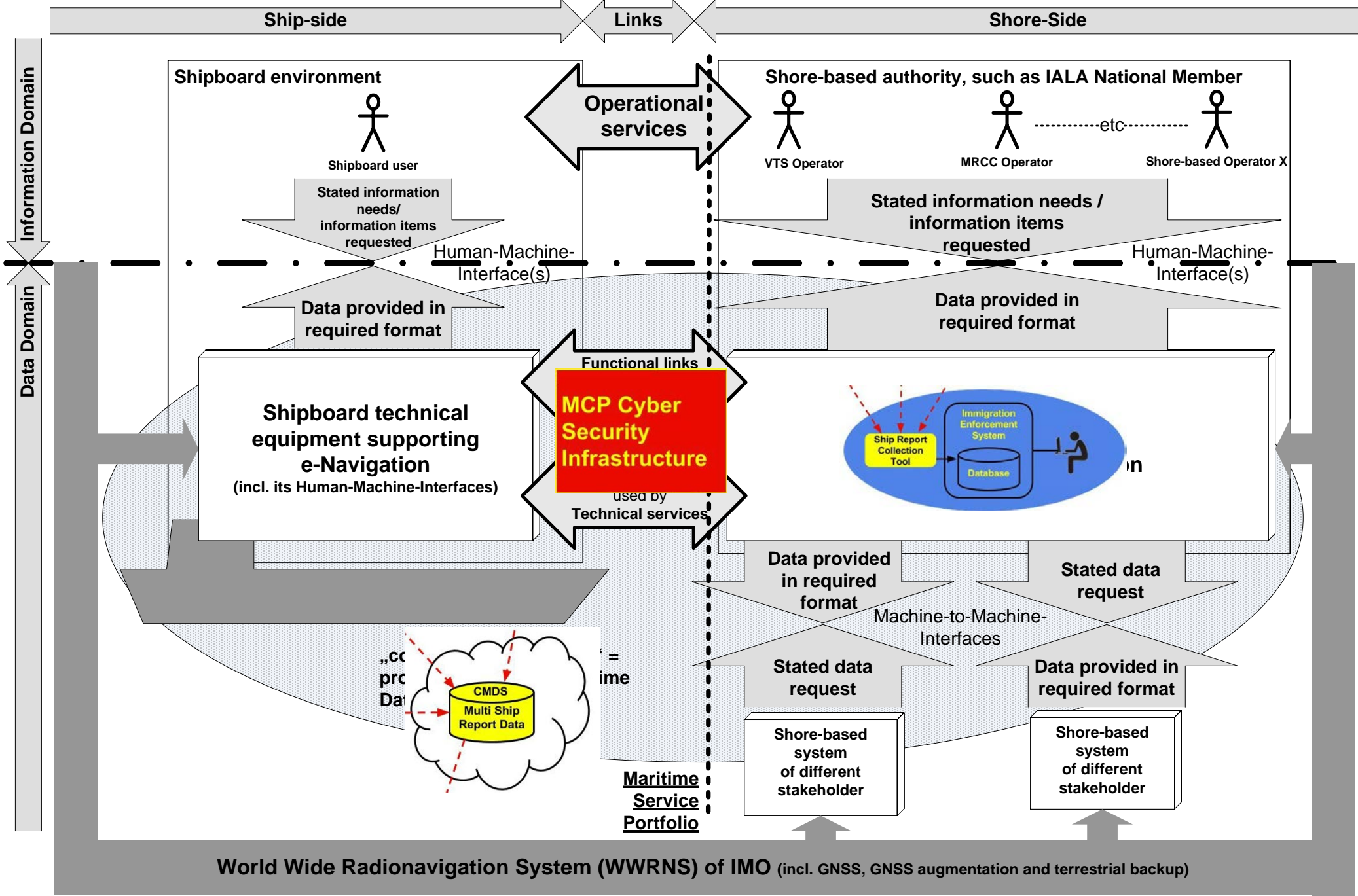
fred.pot@bergmann-marine.com

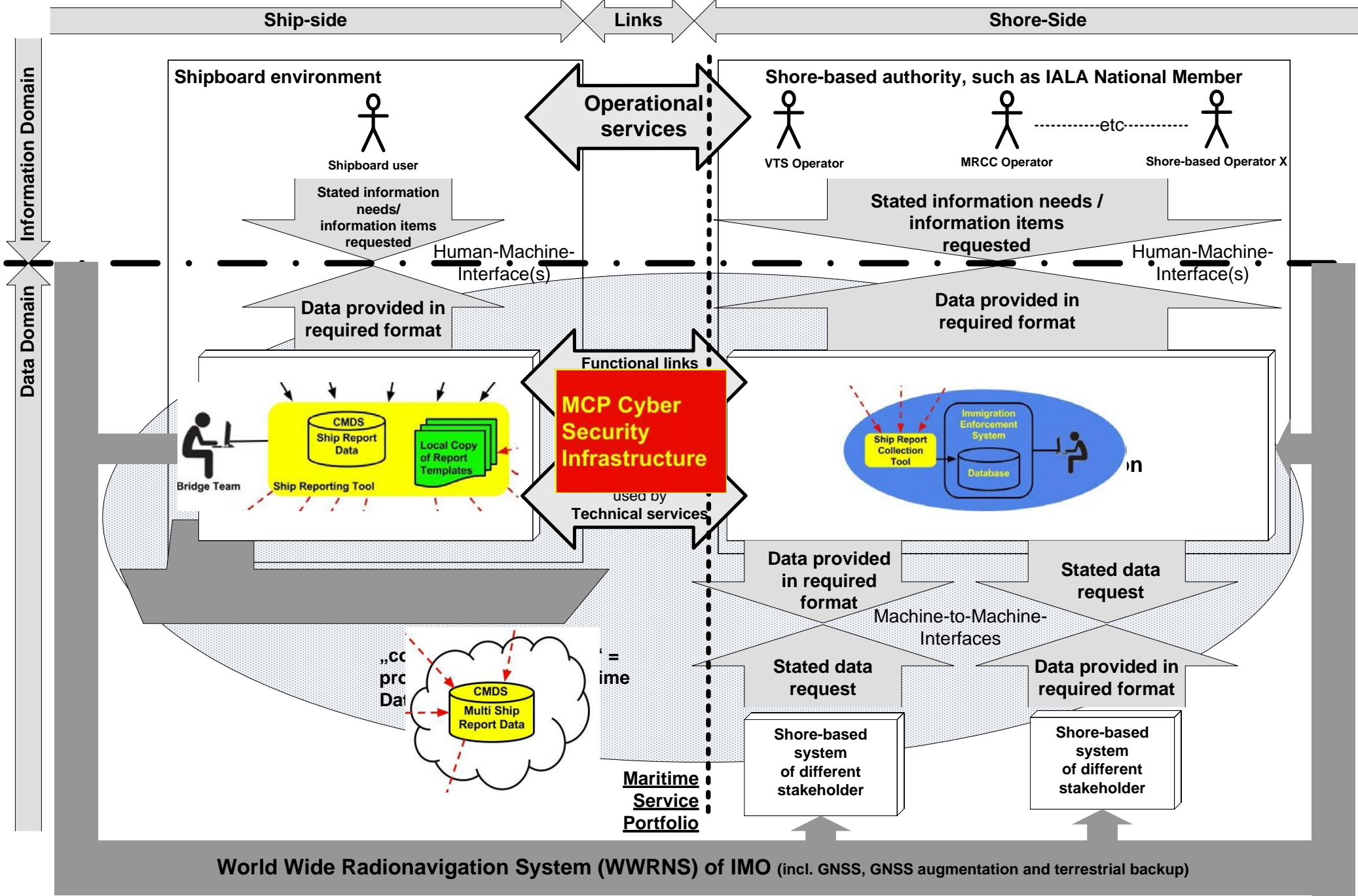
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Automate Ship Reporting to Authorities

