

1st IMDatE Meeting

IMDatE: supporting future needs for traffic monitoring

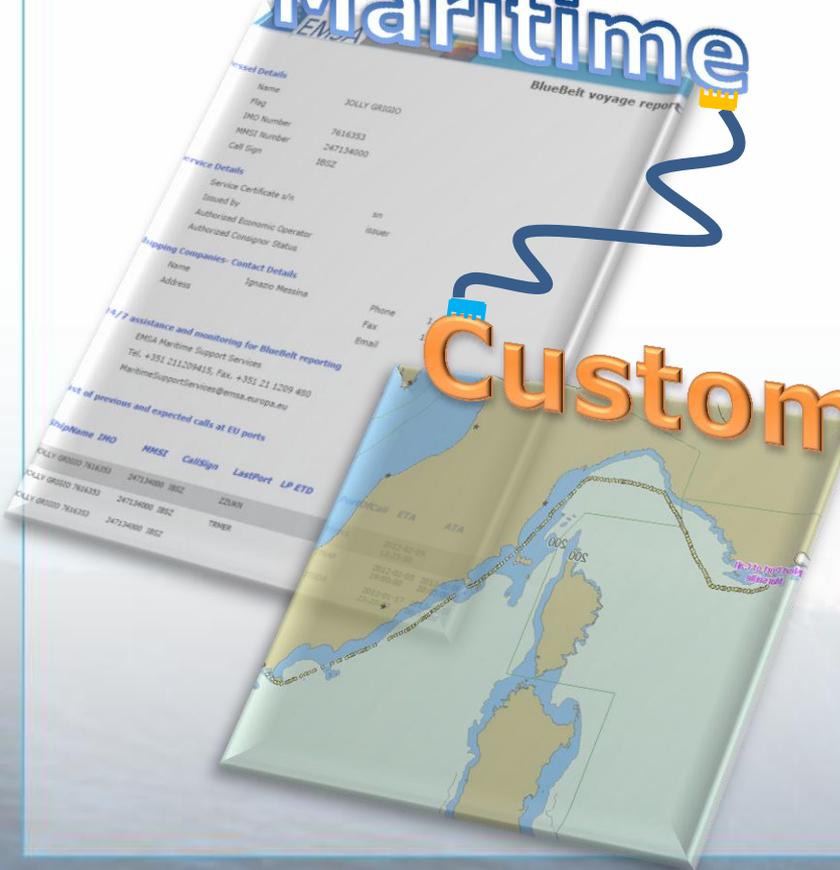
**Lorenzo Fiamma
Project Officer
Integrated Maritime Data
Lisbon, 28 February 2012**

Use cases being considered in this presentation:

Use case 1: BLUE BELT service

Use case 2: Traffic monitoring & PSC

Maritime



Use case 1 BLUE BELT service

Customs

1. BLUE BELT service

Policy framework

- **Initiative of the Belgian EU Presidency**
- Agreed at the Informal Meeting of Transport Ministers, Antwerp 15-16 September 2010
- **The Council confirmed on 2 December 2010**

Objectives

- **Stimulate Short Sea Shipping** and **contribute to facilitating** vessels operating on **intra-EU trading routes**
- Provide **custom authorities with vessel voyage information** with an added degree of certainty regarding the ship whereabouts



1. BLUE BELT service

The Blue Belt Pilot Project aims at

- providing ship notification reports to maritime customs authorities
- providing an added degree of certainty on vessels whereabouts
- supporting the application of customs formalities



1. BLUE BELT service

The Blue Belt report is forwarded via e-mail, 2 hours before arrival

Blue Belt voyage report for vessel with IMO number: 9429211

Safe-Sea-Net@emsa.europa.eu

Sent: Fri 2012-02-17 08:40

To:

Cc:

Message report.pdf (38 KB) gisImage.png (18 KB)

Dear Madam/Sir

This is an automatically generated e-mail by the SSN Blue Belt application related to a voyage report.

Attached you may find:

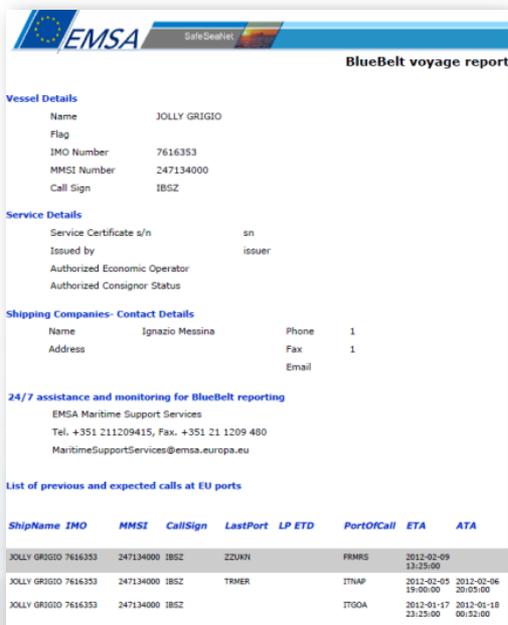
1. A PDF file containing the Vessel & Voyage information.
2. A screen shot indicating the Blue Belt ship track.

**** The email you get is an automatic email which you can not reply to. ****

End of email transmission.

1. BLUE BELT service

The report is split into two parts:



BlueBelt voyage report

Vessel Details

Name: JOLLY GRIGIO
 Flag:
 IMO Number: 7616353
 MMSI Number: 247134000
 Call Sign: IBSZ

Service Details

Service Certificate s/n: sn
 Issued by: issuer
 Authorized Economic Operator:
 Authorized Consignor Status:

Shipping Companies- Contact Details

Name: Ignazio Messina Phone: 1
 Address: Fax: 1
 Email:

24/7 assistance and monitoring for BlueBelt reporting

EMSA Maritime Support Services
 Tel. +351 211209415, Fax. +351 21 1209 480
 MaritimeSupportServices@emsa.europa.eu

List of previous and expected calls at EU ports

ShipName	IMO	MMSI	CallSign	LastPort	LP ETA	PortOfCall	ETA	ATA
JOLLY GRIGIO	7616353	247134000	IBSZ	ZZUKN		FRMRS	2012-02-09 13:35:00	
JOLLY GRIGIO	7616353	247134000	IBSZ	TRMER		ITNAP	2012-02-05 19:00:00	2012-02-06 20:05:00
JOLLY GRIGIO	7616353	247134000	IBSZ			ITGOA	2012-01-17 23:35:00	2012-01-18 00:52:00

Information about the vessel, its recent ports of call and the last voyage details



A plot of the ship's track toward the destination port



1. BLUE BELT service

About the pilot project

- The Operational Phase run from **5 May** to **2 Nov 2011**
- **253** participating ships selected by ECSA/WSC
- More than **45,700** reports sent to customs authorities
- **Feedback** received from EU customs (questionnaires)
- **Evaluation** is on-going



1. BLUE BELT service

Based on Blue Belt questionnaires:

- Information is helpful for risk assessment
- Reports provide assurance about the correctness of the vessel's declared route
- It would be preferable to involve ALL ships in intra EU trade (not only 253)
- It would be preferable to enrich the report with more information on the ship's voyage
- It would be preferable to get the Blue Belt info directly through the existing customs systems



1. BLUE BELT service

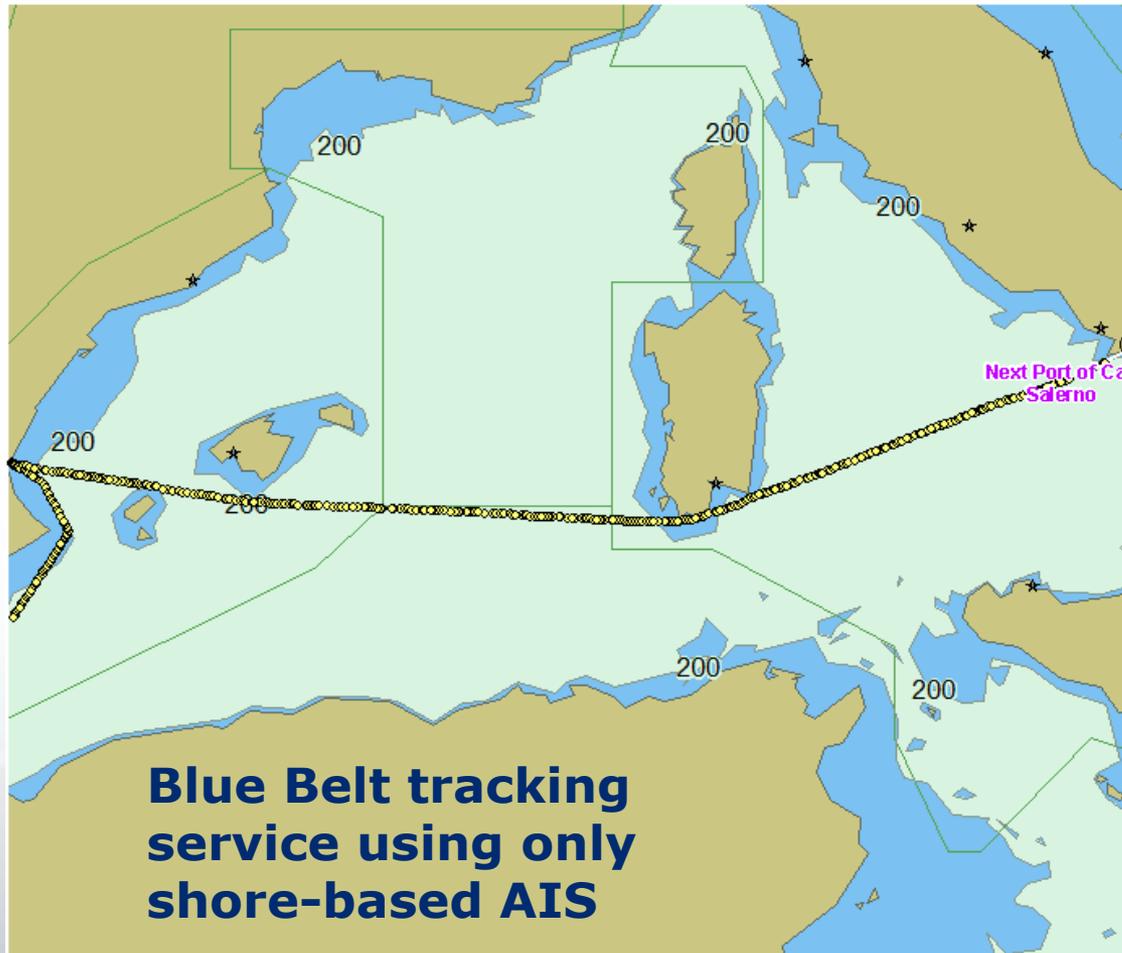
Blue Belt project may evolve in:

- a permanent service
- covering all ships in intra-EU trade
- including more details on ship voyage
- distributing information via e-mail and XML
- integrating Satellite AIS and LRIT, to track ships beyond coastal coverage
- implementing vessel behaviour detection (e.g. encounter at sea)



1. BLUE BELT service

Example
Ship's track
from shore-based AIS



Blue Belt tracking service using only shore-based AIS

ShipName	IMO	MMSI	CallSign	LastPort	LP ETD	PortOfCall	ETA	ATA
GRANDE ELLADE	9220627	247019600	IBNK	ESVLC	2011-07-09 23:00:00	ITSAL	2011-07-12 10:00:00	

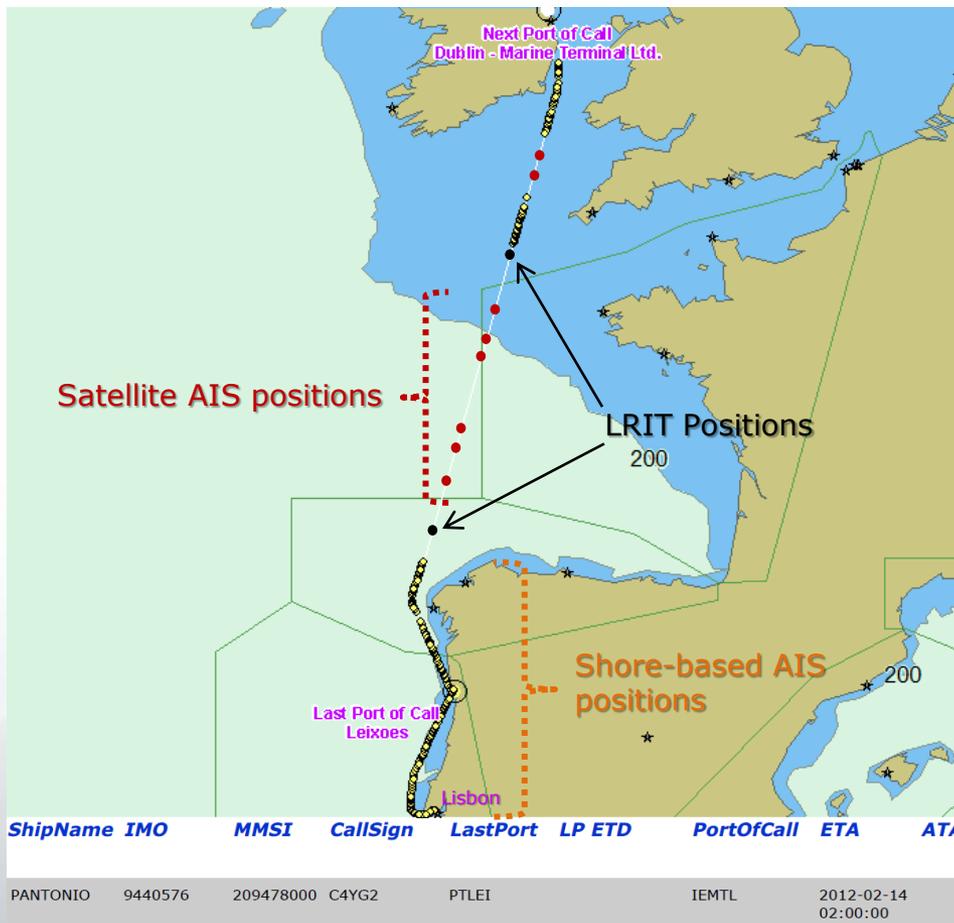


1. BLUE BELT service

Example

Integrated tracking service

Ship's track from AIS and SAT-AIS and LRIT



Maritime
Customs

1. BLUE BELT service

Why should Blue Belt evolve in IMDatE?

- Easier integration with other systems (e.g. eCustoms)
- Reusability of existing services (e.g. SOA)
- Easier re-configurability (e.g. piloting)
- Easier customization (e.g. new reports)





Use case 2 Traffic Monitoring and Port State Control

2. Traffic monitoring and PSC

What are we talking about?

Traffic monitoring: is a service established by harbor or port authorities to keep track of vessel movements with a view to enhancing safety and minimizing the environmental impact of shipping accidents

Port State Control: inspection of foreign ships in other national ports by officers (inspectors) for the purpose of verifying that the competency of the master and officers on board, and the condition of the ship and its equipment comply with the requirements of international conventions (e.g. SOLAS, MARPOL, STCW, etc.) and that the vessel is manned and operated in compliance with applicable international law.



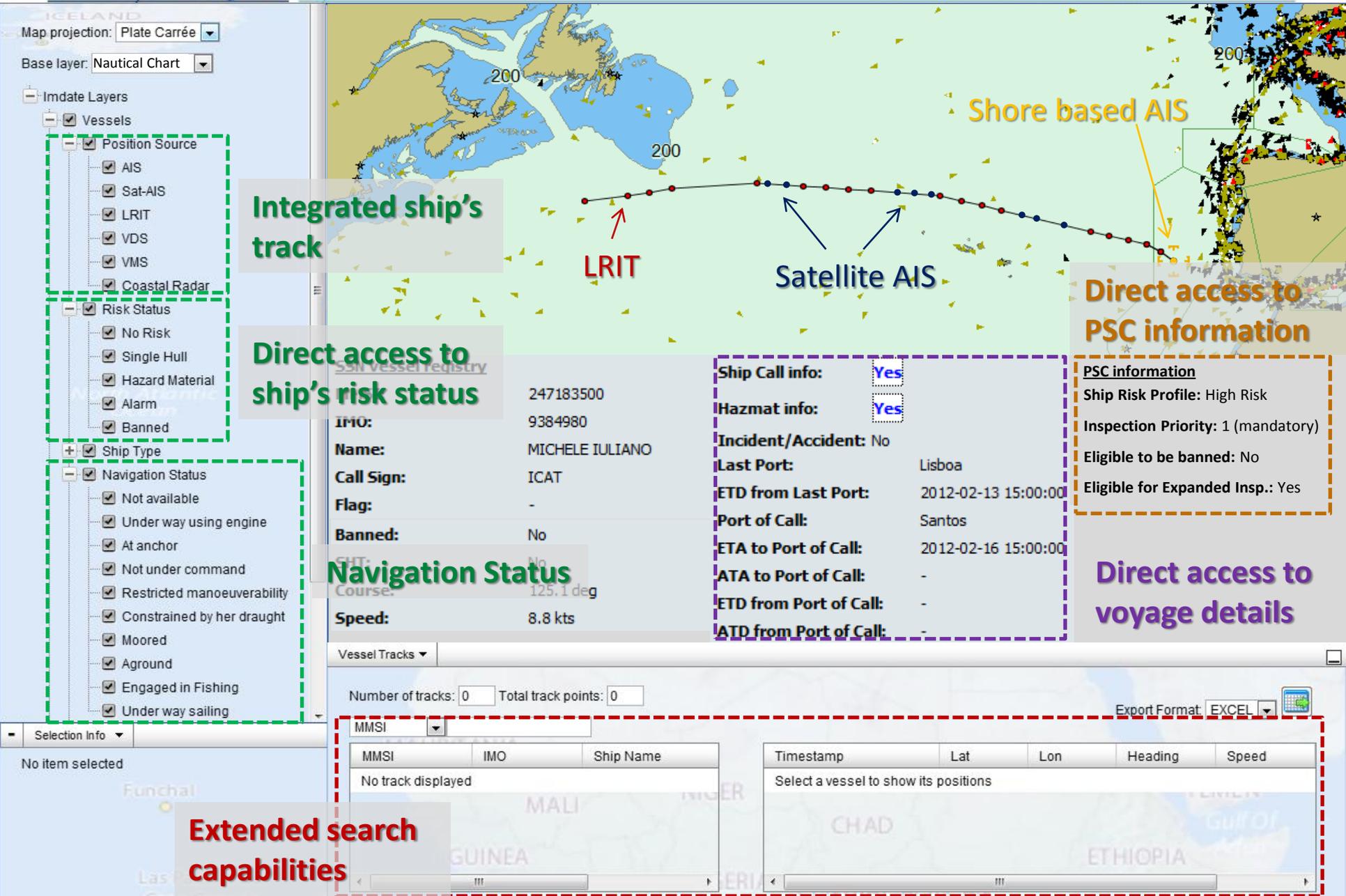
2. Traffic monitoring and PSC

How can IMDatE help traffic monitoring and planning of PSC inspections?

- Possibility to monitor the traffic beyond the coastal boundaries (Multiple data streams in an integrated manner)
- Possibility to exploit extended search functionalities
- Possibility to get clearer ship's whereabouts
- Possibility to ease and to plan more efficiently port operations



2. Traffic monitoring and PSC



Map projection: Plate Carrée
Base layer: Nautical Chart

Imdate Layers

- Vessels
- Position Source
 - AIS
 - Sat-AIS
 - LRIT
 - VDS
 - VMS
 - Coastal Radar
- Risk Status
 - No Risk
 - Single Hull
 - Hazard Material
 - Alarm
 - Banned
- Ship Type
 - Navigation Status
 - Not available
 - Under way using engine
 - At anchor
 - Not under command
 - Restricted manoeuvrability
 - Constrained by her draught
 - Moored
 - Aground
 - Engaged in Fishing
 - Under way sailing

Integrated ship's track

Direct access to ship's risk status

Navigation Status

Shore based AIS

LRIT

Satellite AIS

Direct access to PSC information

Direct access to voyage details

Extended search capabilities

SSN Vessel Registry

IMO:	247183500
Name:	MICHELE IULIANO
Call Sign:	ICAT
Flag:	-
Banned:	No
Speed:	8.8 kts
Course:	125.1 deg

Ship Call info: Yes

Hazmat info: Yes

Incident/Accident: No

Last Port: Lisboa

ETD from Last Port: 2012-02-13 15:00:00

Port of Call: Santos

ETA to Port of Call: 2012-02-16 15:00:00

ATA to Port of Call: -

ETD from Port of Call: -

ATD from Port of Call: -

PSC information

Ship Risk Profile: High Risk

Inspection Priority: 1 (mandatory)

Eligible to be banned: No

Eligible for Expanded Insp.: Yes

Vessel Tracks

Number of tracks: 0 Total track points: 0

Export Format: EXCEL

MMSI	IMO	Ship Name	Timestamp	Lat	Lon	Heading	Speed
No track displayed							
Select a vessel to show its positions							

2. Traffic monitoring and PSC

How can IMDatE help traffic monitoring and PSC planning of operations?

- Coastal authorities can monitor ships with better confidence
- Ship's position, voyage details and PSC status are made available in real time and in one go
- Coastal authorities can better plan for operations ashore, and well in advance
- Coastal authorities can plan and organize inspections which require careful preparation (e.g. expanded inspection)



Thanks for listening!

