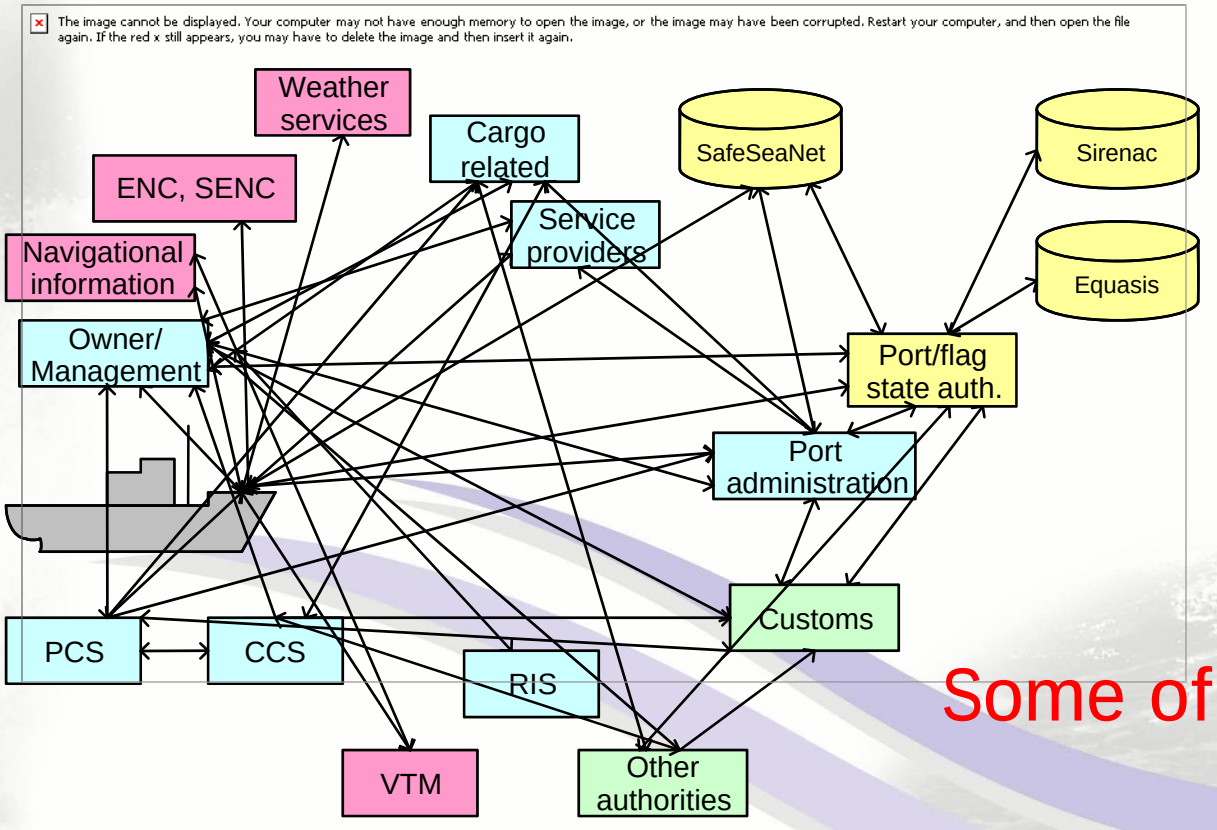
Maritime Navigation and Information Services

Maritime Information Management

- Single Windows
- Reporting

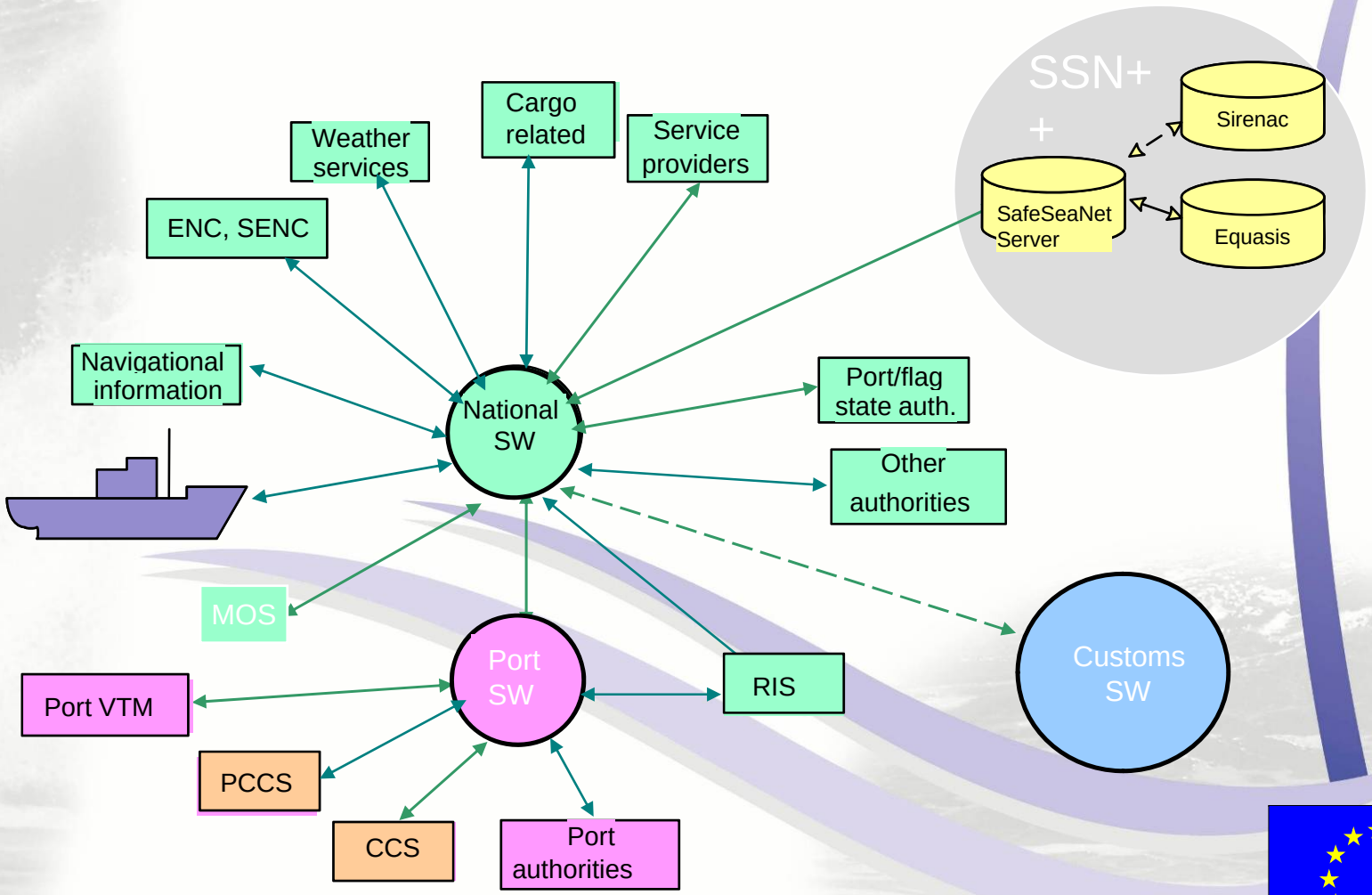
IALA
11/12 February 2009

Today's information flow

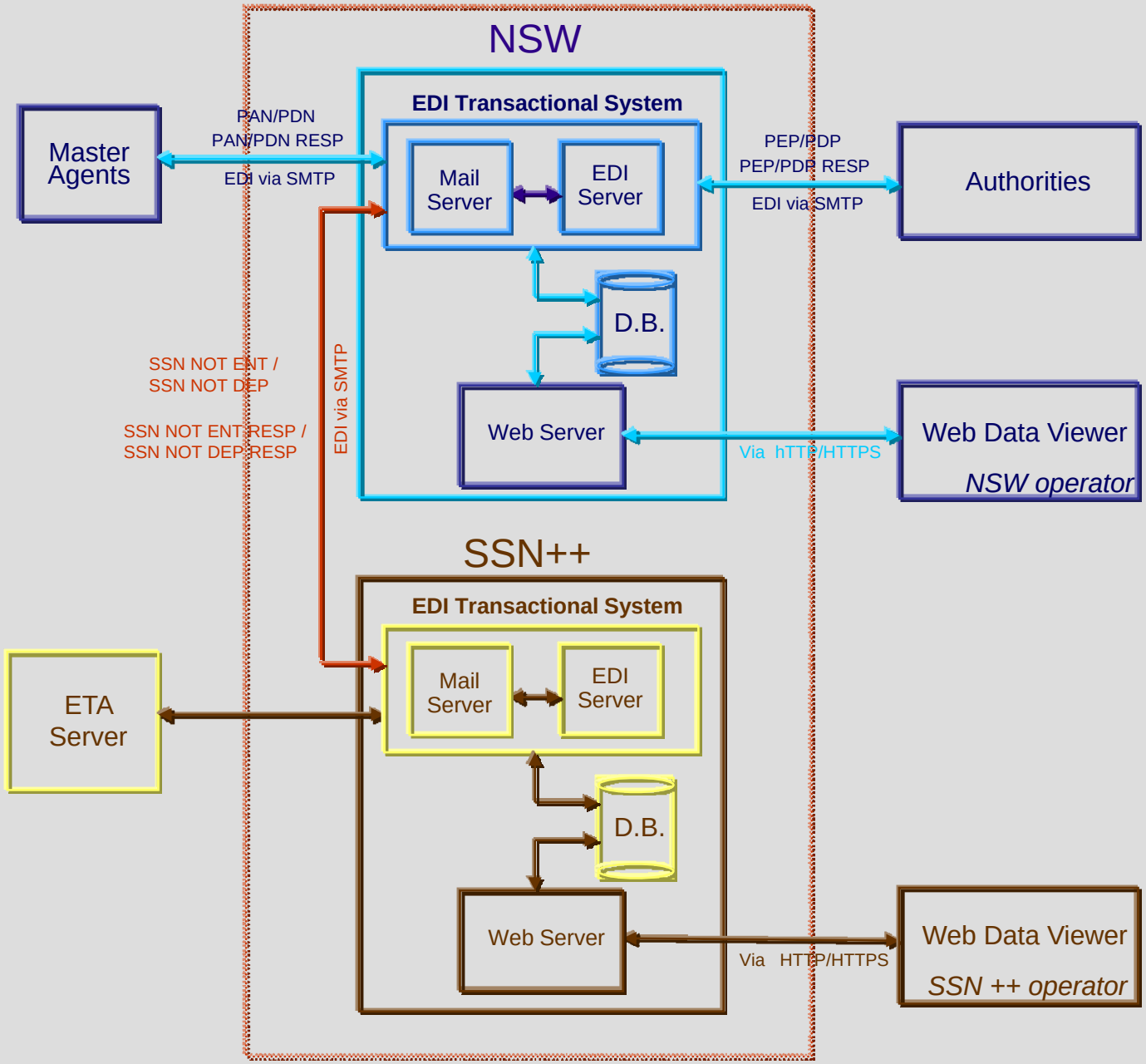


Some of it !

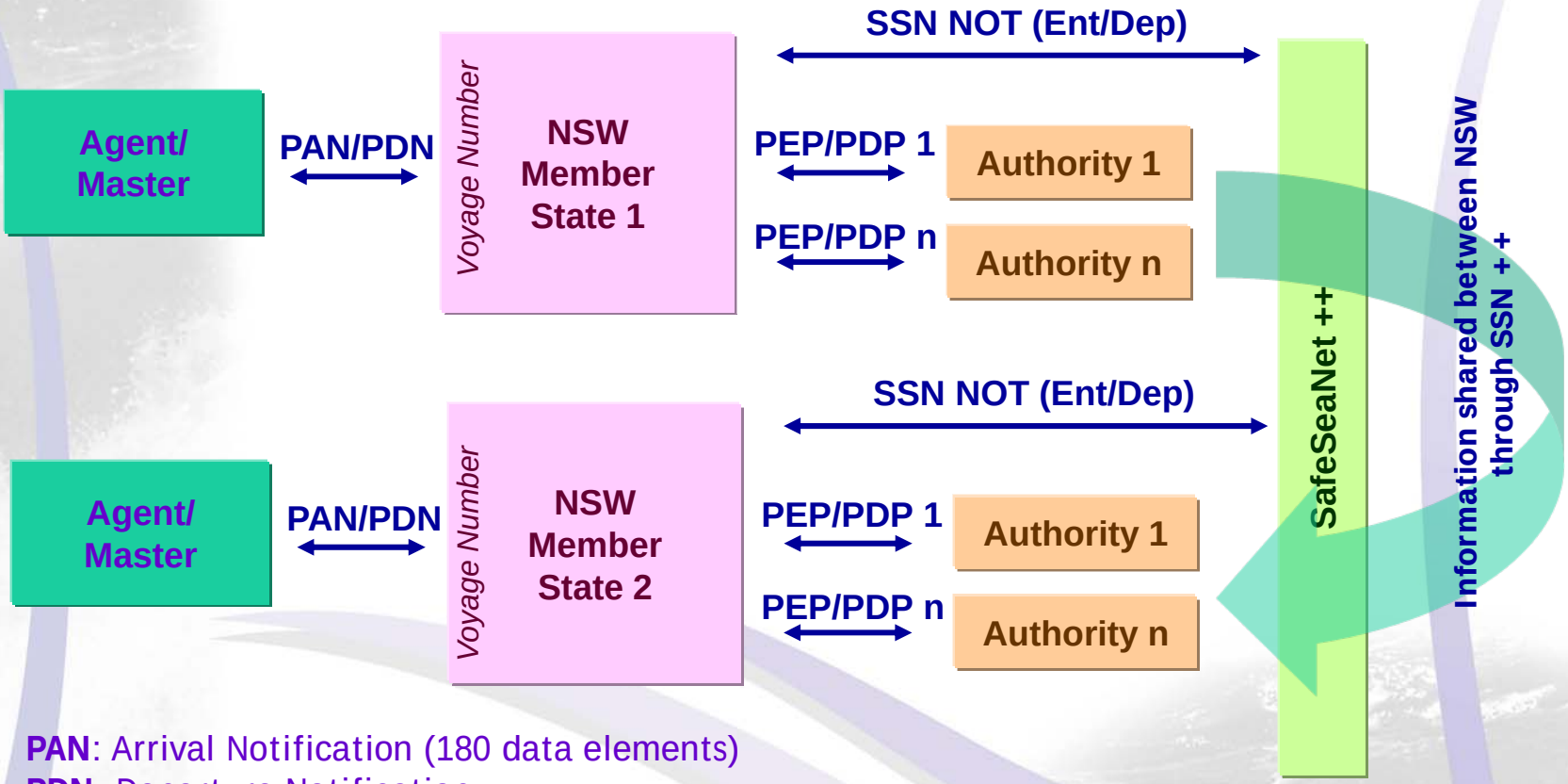
MarNIS: Single Window Concept



System Architecture



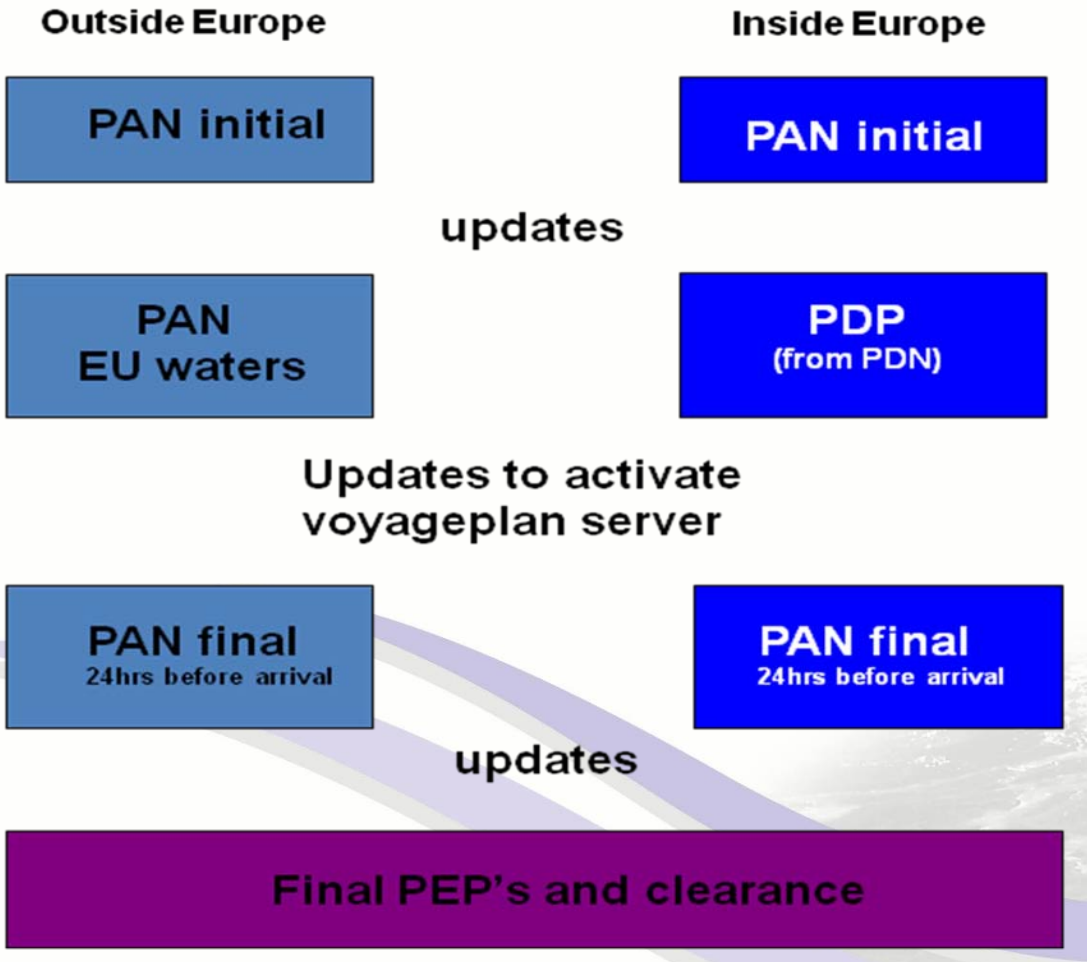
BASICS OF THE CONCEPT



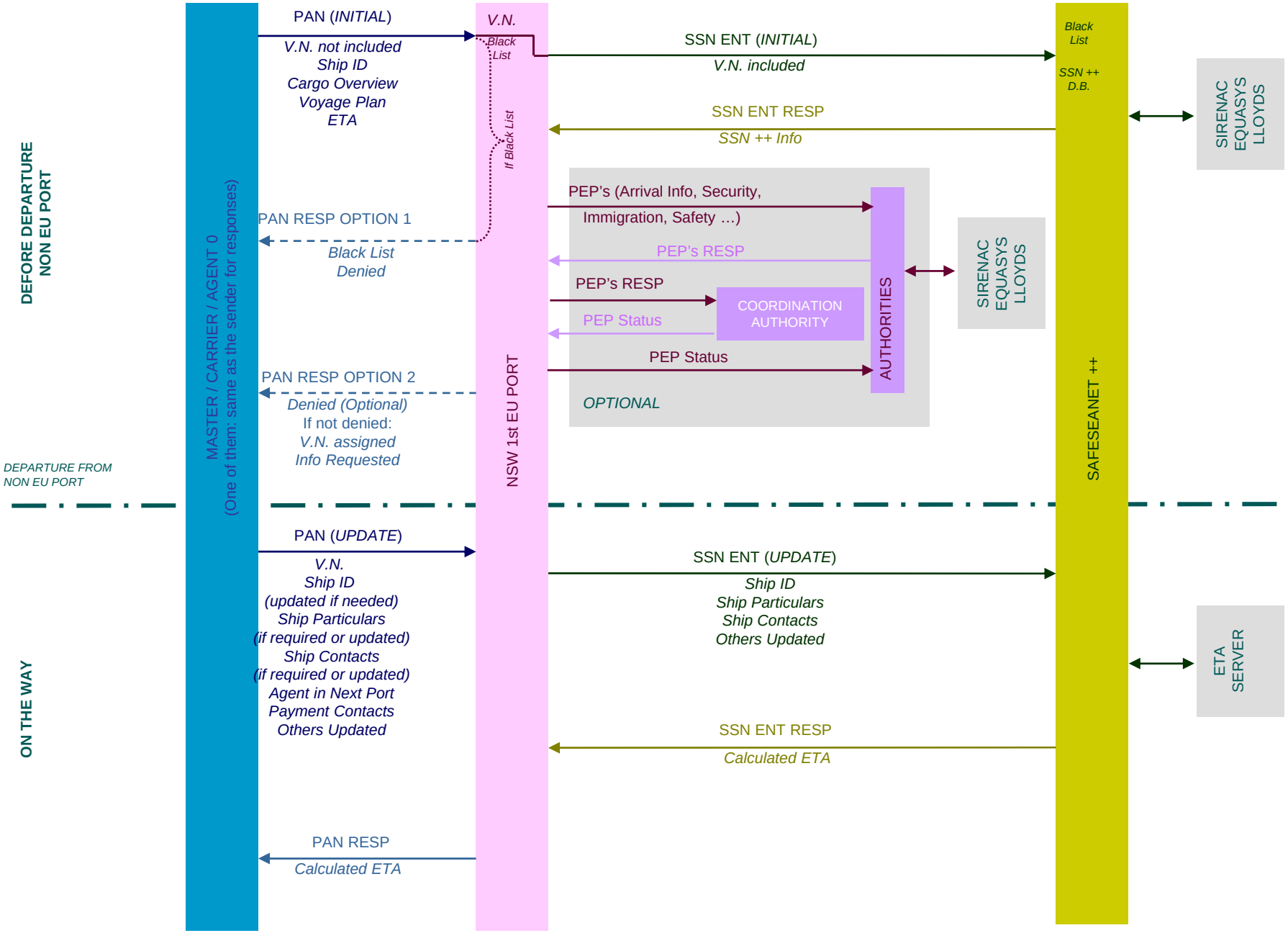
PAN: Arrival Notification (180 data elements)
PDN: Departure Notification

PEP: Entrance Profile (one per Authority: Harbour Master, Port Authority, Innmigration, Customs, etc)
PDP: Departure Profile (one per Authority)

SSN NOT ENT : Safeseanet Notification (Entry)
SSN NOT DEP: Safeseanet Notification (Departure)


Outside Europe
Inside Europe
PAN initial
PAN initial
updates
PAN
EU waters
PDP
(from PDN)
Updates to activate
voyageplan server
PAN final
24hrs before arrival
PAN final
24hrs before arrival
updates
Final PEP's and clearance

Phase 0: Departure from Non EU Port



(Port/Pre-) Entrance/Departure Profiles (1)

Nowadays:

- Master/agents reports to different authorities
- More or less the same information
- Often making use of IMO FAL messages/forms

MarNIS:

- Master/agent reports only once to NSW
- Make use of already available information at other authorities and reference databases
- NSW compiles Entrance/Departure Profile Messages
- NSW informs the other Authorities

(Port/Pre-) Entrance/Departure Profiles(2)

- IMO FAL messages
  - Overlap in information
  - Authorities select the information they need and ask often for additional information
- PEP/PDPs
  - Tailor made, directly linked to the tasks of the authorities
  - More information related to the tasks
  - Cross Reference Checks
- Based on PEPs Port Clearance will be given

PEPs and PDP's

- Dangerous goods PEP/PDP
- Arrival info PEP
- Departure info PDP
- Safety PEP
- Emergency PEP
- Port Security PEP/PDP
- Port Planning PEP/PDP
- Health PEP/PDP
- Port Environment PEP/PDP
- Immigration PEP/PDP
- Customs PEP/PDP

CONTENT OF MESSAGES

			SHIP ID	CLASS AND CERTIFICATES	SHIP CONTACTS	SHIP PARTICULARS	VOYAGE DATA	ISPS CODE	CARGO ANS PASSENGER OVERVIEW	CREW DATA	PASSENGER DATA	GENERAL CARGO DATA	DANGEROUS CARGO	WASTE	SERVICES	OPERATIONS
PAN	ARRIVAL NOTIFICATION	INITIAL	X	-	-	m	m	-	m	X	X	m	m	m	m	-
		EU WATERS	X	X	X	m	m	m	m	X	X	X	X	m	X	m
		FINAL	X	R	R	R	X	R	X	X	X	X	X	X	X	X
PDN	DEPARTURE NOTIFICATION INITIAL	INITIAL	X	-	-	m	m	-	m	X	X	m	m	m	m	-
		FINAL	X	R	R	R	X	R	X	X	X	X	X	X	X	X
PEP 1	ARRIVAL INFORMATION		X	X	X	X	X	m	X	m	m	X	m	X	X	m
PEP 2	PORT PLANNING		X	X	X	X	X	X	X	m	m	X	X	X	X	X
PEP 3	SAFETY PSC		X	m	m	X	X	m	-	X	m	m	X	m	m	X
PEP 4	DANGEROUS CARGO		X	m	m	X	X	-	X	-	-	m	X	-	m	m
PEP 4	ENVIRONMENTAL ISSUES		X	m	X	X	m	-	X	-	-	m	X	X	-	m
PEP 5	SECURITY		X	m	m	X	X	X	X	X	X	m	m	-	-	m
PEP 6	EMERGENCY (in case of)		X	m	m	m	m	-	X	m	m	m	X	m	m	m
PEP 7	HEALTH		X	m	m	m	X	-	X	X	m	m	m	-	-	m
PEP 8	INMIGRATION		X	m	m	m	X	-	X	X	X	-	-	-	-	m
PEP 9	VETERINARY AND AGRICULTURE		X	m	m	m	X	-	-	-	-	m	-	-	-	m

i c e s

X	*FULL DATA REQUIRED*
R	*DATA COULD BE RECOVERED FROM NSW/S*
m	*MINIMUM DATA REQUIRED*
-	*NOT REQUIRED*

...Additional Elements...

- Voyage Plan Server
  - Expected vessels
  - Data
- ENC/ECDIS updating
- NavTex / SMS / ECDIS
- CTA Server
- .....

...NSW & SSN++ benefits.....

- Sharing information, co-operation between authorities
- Simplifying reporting / less burden
- Reuse of data
- Improved availability, reliability and quality
- Relevant data to relevant Authority : tailor-made
- One reference point for the vessel in the port
- All Authorities, not only maritime

E-Navigation Core Objectives

- facilitate safe and secure navigation of vessels having regard to hydrographic meteorological and navigational information and risks;
- facilitate vessel traffic observation and management from shore/coastal facilities, where appropriate;
- facilitate communications, including data exchange, among ship to ship, ship to shore, shore to ship, shore to shore and other users;
- provide opportunities for improving the efficiency of transport and logistics;
- Support the effective operation of contingency response, and search and rescue services; .....