

Vessel Planning

BAPLIE / MOVINS

74TH SMDG MEETING, SINGAPORE

Chair: Jost Müller

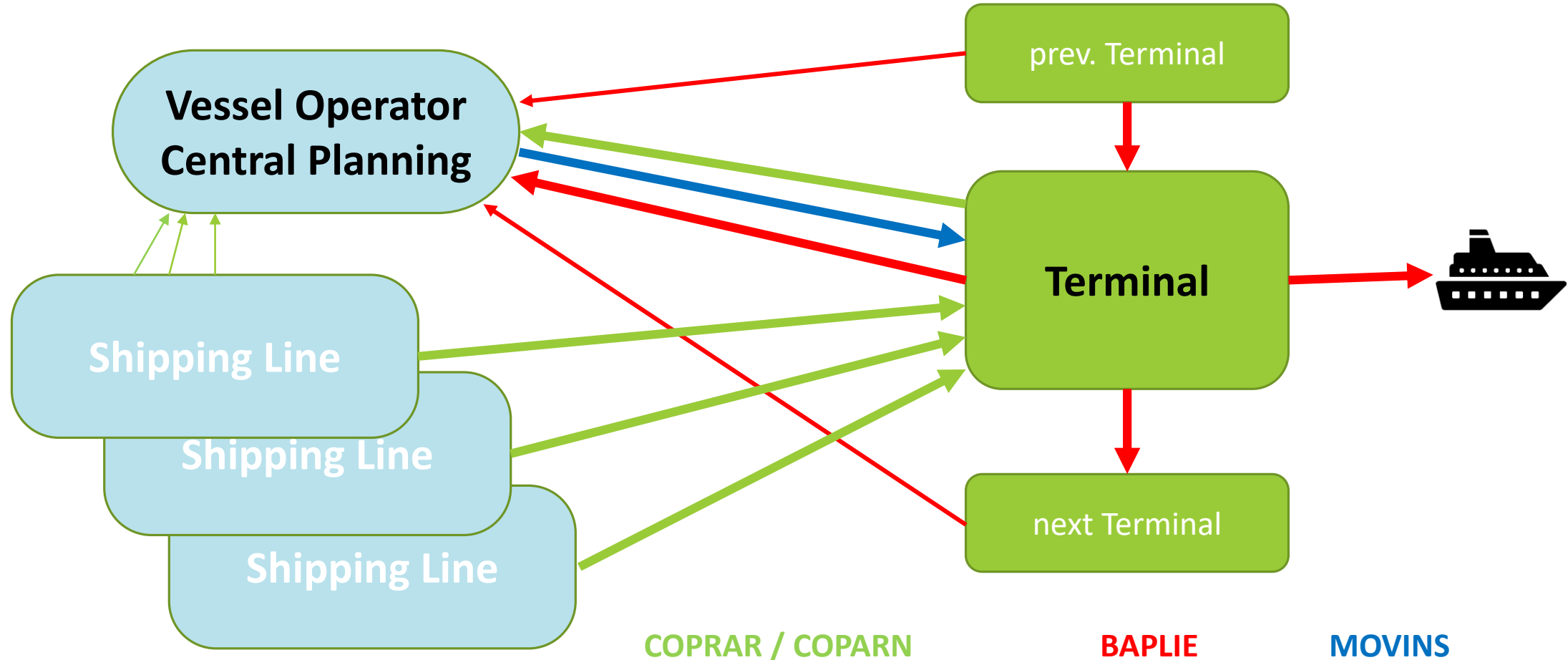
Agenda – Vessel Planning Best Practice

- Vessel Planning Operations Message flow
- Vessel Planning by vessel operator's central planning office
- Vessel Planning by terminal office
- Solverminds – Baplie Viewer

- MOVINS v3
 - principles and message structure
 - MIG timeline
- MIG BAPLIE v3
 - minor amendments and corrections
- MIG BAPLIEv2 and MOVINSv2
 - major revision of MIG referring to code lists instead of defining codes in MIG
- GEFEG Validation Portal
 - BAPLIE / MOVINS
 - other SMDG Edifact messages
Requirement: MIG available in GEFEG FX

Vessel Planning Operations – Message Flow

Vessel Sharing Agreement



Vessel Planning by Central Planning Office

Booking situation

- preview: COPRAR sent from lines to vessel operator
- Final: Terminal built-up sent from Terminal → Central Planning Office

Discharge / Load / Restow Planning

- Based on arrival BAPLIE
- MOVINS stowage instructions sent from Central Planning Office → Terminal

Actual departure status

- BAPLIE sent from terminal → Central Planning Office

Vessel Planning by Terminal

Yard planning

- COPARN sent from [Lines](#) → [Terminal](#) (loading)
- Discharge COPRAR sent from [Lines](#) → [Terminal](#)

Discharge Planning

- Based on arrival BAPLIE [received from previous port](#) (or vessel operator)
- and Discharge COPRAR sent from [Lines](#) → [Terminal](#)

Load and Restow Operations

- MOVINS stowage instructions sent from [Central Planning Office](#) → [Terminal](#)
- Optionally send preliminary BAPLIE [Terminal](#) → [Central Planning Office](#)

Actual departure status

- BAPLIE sent from [Terminal](#) → [Central Planning Office](#)
- BAPLIE given [on board for loading calculation](#)

BAPLIE – stowage plan

Cell grid of bays / rows / tiers – stowage locations identified by BBBRRTT

Specify equipment transported in a stowage location

- Characteristics per unit of equipment
 - Equipment size type (20"/40"; 8'6/9'6, etc) and Id
 - Port of loading and discharge
 - Gross weight (VGM)
 - Container operator (carrier)
 - Special properties: reefers, over-sizes, Dangerous Goods, bundles, ...
 - Handling requirements: On-deck only, away from living quarters, ...
 - Status: open doors, damaged, ...
 - Breakbulk with supporting equipment

Mark stowage locations as

- lost slots
- damaged / not usable

BAPLIE – purpose of message

Specify a set of stowage locations with loaded equipment

- Complete actual status of the vessel
- Listing only equipment of a special operator
– stowage location with other operators' cargo are not listed
- Status of a vessel is marked as preliminary (proposed)

Use as cargo loading status of a vessel in an on-board loading calculator

- together with tank status used for calculation of vessel's draft, trim, stability, stresses
- Important for arrangement of ballast tanks

Use as template for discharge in POD

Use as template for settlement of voyage cost in vessel sharing agreement

Vessel operator's central planning

Purposes:

- Safe sailing of the vessel
- Ensure adherence of IMDG regulations and other requirements by authorities
- Planning of whole voyage – not just a single port of call
 - avoiding restows, prepare for operations / limits in future ports
- Care for economic sailing (fuel consumption)
- Maintain vessel's schedule

MOVINS – loading instructions

Specify the intended loading status of a vessel

Definition of stowage locations and equipment is identical as in BAPLIE

Problem

- assignment of cargo to stowage locations may cause inconvenient loading operations if the situation in terminal's yard is not considered by the loading instructions.

Remedy

- Consider the loading instructions as binding only for a constraint set of equipment's properties / requirements, e.g. DG, OOG, breakbulk, reefer units,
- The terminal may replace excepted units of equipment by units with similar properties (same POD, size type, weight class) and send an adjusted draft proposal for loading by a preliminary departure BAPLIE to the central planning office for validation and approval.

BAPLIE / MOVINS – message details

→ Thursday, 19. Sept. 2019 – 11:30

BAPLIE – available versions

Message version	Usage
BAPLIE 1.5 ¹⁾	still in use – 91-1
BAPLIE 2.2.1 (VGM)	frequently used – D.95B
BAPLIE 3.1.1 (VGM)	still rarely used – D.13B
MOVINS 2.1.2	frequently used – D.95B
MOVINS 3.0	publication still pending – D.19A

¹⁾ message version no longer maintained

Why BAPLIE 3.0?

BAPLIE is the most important container message used in the transport industry by various stakeholders. It describes the situation of cargo and containers onboard a container ship.

Since the last major redesign of the message in 1995 enhancements were required in the following areas:

- Dangerous goods description
- Non-standard equipment
- Empty flat rack / bundles of flat racks
- Breakbulk
- Slot owners, lost slots
- Data for safety validation (weight limits, mass distribution, DG stowage and segregation)

Benefits of using BAPLIE 3.0

- Less interruptions of terminal operations
- Less inquiries caused by specials / missing details (e.g. DG Limited Quantities)
- Complete set of stowage instructions, standardized handling codes
- Less mails, less phone calls needed
- Add efficiency to your operative and cost-controlling processes

Improvements in BAPLIE 3.0

- **Dangerous goods description**
 - Fully identify DG items according to IMDG code
 - LQ (Limited Quantities) and CFR49 cargo
 - Reflect IMDG Code amendments
 - Harmonized with IFTDGN
- **Non-standard equipment**
 - Shippers owned containers with non-ISO number, limited stacking weight etc.
- **Breakbulk**
 - Center of gravity
 - Lost slots / occupied positions
- **Slot owners**
 - Vessel operator, Container operator, Slot owner / VSA partner

- **EDIFACT Syntax**
 - All data in structured elements, new code lists, no more free text
 - Handling Instructions coded
 - Increased number of LOC segments for stow positions from 9.999 to 99.999
 - Types of BAPLIE: Full vs Partial, Draft vs Final BAPLIE
- **Adoption to increased vessel size**
 - Weight limits, mass distribution, DG stowage and segregation
 - 10+ tiers on deck
- **Adoption to new technical developments**
 - Device for On-Shore Power Supply
 - Height of flat racks with extendable end-walls, or collapsed end-walls, bundles of flat racks

BAPLIEv3.x

Recent amendments

- Attributes SADT/SAPT in DG-group to be added
 - Use data element C956.9018 in ATT for transmission of DG-booking number
 - Specify “agreed number of slots” (applies only for BAPLIE exchanged within VSA, settlement)
-
- publish MIG BAPLIEv3.1.2 once D.19A published
 - Publish MIG BAPLIEv3.2 once D.19B published

BAPLIEv2.x and MOVINSv2.x

- ❖ These MIGs define codes as part of MIG
 - requires new MIG version when code added

Proposal:

- create revised D.95 version BAPLIEv2.3 referring to code lists
 - Wait until ITIGG/JM4 has been merged into SMDG code lists

MOVINS version 3 - Overview

Discussed since 2015:

- ~~◦ reduce ballast by cargo distribution~~
- ~~◦ trim optimization to minimize fuel consumption~~
- Conclusion: **keep it minimal**, avoid features which might be nice to have, but difficult to implement
- Inherit message structure and feature enhancements from BAPLIEv3

Separate groups for distinguished types of stowage instructions
load – restow – shifting – discharge

Principles:

- Instructions given by **vessel operator's planning -> terminal operator's planning**
- allow for limited degree of freedom in following instructions for optimizing terminal operations
- MIG describes which instructions are strictly to be followed based on specifications given for equipment and stowage location properties

Some mandatory relations of equipment and target position

- Stowage location's POD must be observed
- Stowage location's size/type must be observed
- Stowage location is strictly to be observed for equipment of type
 - contains dangerous goods
 - Out-of-gauge cargo
 - Breakbulk and its supporting equipment
 - Temperature controlled equipment at stowage location allowing for power connection
 - Contains handling instructions related to stowage of equipment
 - Explicit requirement to use stowage location
- more special cases will be defined in the MIG
- Exception: equipment may be swapped if all attributes except equipment ID are identical

Preview of MIG

FX slides

MOVINSv3 – time line MIG

- internal review of MIG document by working group members
- Adjust TDT according D.19B
- Final draft until 75th SMDG meeting
- Publish MIG MOVINSv3.0 spring 2020

GEFEG Validation Portal

- Comments by GEFEG
- Validation for BAPLIE, MOVINS, VERMAS basically possible (potentially update required)
- more SMDG Edifact messages (MIG in GEFEG-FX required)
 - TPFREP
 - IFTSAI
 - IFTMBF / IFTMBC
 - Container Messages
 - ...
- For more details see separate presentation by Tayfun Mermer (GEFEG)

Working Group

Jesmond Baldacchino (Malta Freeport)

Michael Bergen (Navis Xvela)

Jasmin Dröner (Eurogate)

Caroline Guerin (Bolloré Ports)

Peter Horstkorte (Hapag Lloyd)

Lee Mun Keong (Maersk)

Yoshi Kito (Consultant)

Henrik Monberg Carlsen (Kockumation)

Jost Müller (Consultant) - **Chair**

Stefano Ottonello (MSC)

Nn (CMA CGM)

Michael Schröder (Hapag Lloyd)

Heidi Stemler (HHLA)

Arthur Touzot (HPC)

Paul Wauters (PSA)

