BAPLIE and MOVINS in the Future

Proposal for Discussion by Jost Müller

This document assembles a couple of issues around BAPLIE and MOVINS which (in most cases) have been mentioned already in earlier SMDG meetings. It lists newer requirements arising from daily use of the messages.

BAPLIE is in widespread use for describing a ship's loading status and users try to exploit it for all kind of data they want to transmit between terminal, ship and stowage center. Most of these additional demands are caused by new developments in regulations, technology and business procedures. SMDG should take account of these developments providing recommendations on how additional data should be transmitted.

Extending specifications for BAPLIE and MOVINS does not mean that all users must use all extensions. Intention of extensions rather is to provide for a common reference for those who want to take advantage of it. Without such a guideline users are left to care for their demands in an uncoordinated self-defined way. Quite often the results are idividual bilateral solutions – which stands in contrast with SMDG's aim of standardization.

Objective for the 58th SMDG plenary is to

- discuss below listed subjects and potentially add some more
- acknowledge the importance of these subjects
- Establish a plan for developing and publishing enhanced recommendations:
  My proposal is to decide for a new version which incorporates all subjects rather than make a series of versions with smaller changes. Announce intended dates when a new specification should become complete and ready for implementation. Immediately establish a working group and define a preliminary list of subjects to work at.

1 Extension of DG-Data

In today's practice BAPLIE is used by many ship operators as electronic input for on-board loading instruments. This input important is used for calculation of important safety criteria like stability, stresses, lashing, etc. Modern container vessels have computers on board which allow to validate correct stowage and segregation of hazardous cargo. It is highly desirable to use EDI for quickly providing the necessary data of an updated stowage situation. The current BAPLIE message structure is not sufficient to transmit all required DG data.

All required DG information is usually available in ship operator's preplanning system.

From there it can be transmitted directly on board or via MOVINS to terminal operator and with the departure BAPLIE be given on board.

For discussion:

- Is this transmission of extended DG data covered by BAPLIE's purpose?
- If no, different EDI means need to be implemented. a.) use IFTDGN b.) develop proprietary extensions to BAPLIE or even different messages. The latter should be against SMDG's basic understanding.

1.1 DG-data currently missing in BAPLIE

With reference to IMDG amendment 32 the following items cannot be covered in the current BAPLIE version:

- limited quantities
- excepted quantities
- segregation groups
- stowage categories
- stowage remarks

1.2 Proposal for Extension of BAPLIE Message Structure

Basic problem with current message structure is that a single FTX segment in the DG group does not allow for clean specification of necessary DG data.

Taking up an idea discussed in 54th meeting (Rotterdam 2009) description of DG data in Protect's IFTDGN and SMDG's BAPLIE/MOVINS could be harmonized. The DG-group in

BAPLIE D10.B (still almost the same as in D95.B) see
http://www.unece.org/trade/untdid/d10b/trmd/baplie_c.htm

```
     ----- Segment group 7  ------------------ C   999-------------+|
DGS  Dangerous goods                           M   1                ||
FTX  Free text                                 C   1----------------++
```

could become adjusted to IFTDGN in D10.B see
http://www.unece.org/trade/untdid/d10b/trmd/iftdgn_c.htm

```
     ----- Segment group 7 ------------------- C   999------------+||
DGS  Dangerous goods                           M   1               |||
FTX  Free text                                 M   9               |||
MEA  Measurements                              M   9               |||
LOC  Place/location identification             C   99              |||
RFF  Reference                                 C   9               |||
```

This would allow to specify DG data in the same style as it is defined for IFTDGN, I.e. data elements and codes are used as defined with IFTDGN. Potential future extensions should be kept in harmonization with IFTDGN.

MOVINS should be extended in the same way. According changes for container messages may be discussed.

This proposal requires a DMR for a revised message structure!

2 Other BAPLIE/MOVINS Extensions

2.1 Flats / Platforms

2.1.1 Status of Collapsible Flat

Some collapsible flats can be used in collapsed state as platform for supporting uncontainerized cargo. BAPLIE does not define how to indicate whether end walls are standing up or folded down. This is important for planning stow on board and load/discharge operations.

(We have seen messages the container type of a folded down flat has been wrongly specified by a platform type in order to indicate the actual stowage situation. This is causing confusion for terminal operations.)

2.1.2 Flexible Height of End Walls

Some flats allow to modify height of end walls. Height may be set to 8'6, 9'6 or some other measure. BAPLIE does not allow to specify the actual height. This may cause wrong computation of stack height.

2.1.3 Bundles of Flats / Platforms

In BAPLIE 2.1.1 specified as remark to segment LOC+147 (stowage cell):

> Bundles of flats should be specified as a leading flat in the EQD segment and attached flats in EQA segments.

This does not allow to specify a ISO size-type code for attached equipment. Bundles of mixed equipment (e.g. flats and platforms) cannot clearly be specified. The resulting height of the bundle cannot be determined.

2.2 Discharge Priorities / Block Stow

In some ports with high discharge volume carriers and terminals have agreed on a priority handling for a defined group of containers. For the ship planner it means to stow containers for a port in different blocks. These blocks need to be specified in BAPLIE/MVINS.

SMDG's BAPLIE/MOVINS MIGs do not allow to specify different blocks / discharge priorities for containers with the same port of discharge. Some users (e.g. Grand Alliance) have already defined their own means for specifying discharge priorities. SMDG should provide for a common recommendation for discharge priorities.

2.3 Shipper's Owned Container Identification

Some Shipper's Owned Containers (SOC) do not have a container Id according to ISO 6346 made up of prefix, registration number and check digit. Examples of odd SOC container-Ids “AB 123”, “123456”, “///9876”.

Since SOCs are to be specified by EQD+CN as any standard container many BAPLIE recipients try to interpret data element 8260 (equipment identification number) according to ISO 6346. This fails for some SOCs resulting in manual efforts for sorting out the subject. An example for an IT-system requiring a standard prefix is US customs.

SMDG should

- either give a firm recommendation on how to specify values in DE 8260 for SOCs (e.g. always use XXXX as prefix for SOCs)
- or alternatively provide means to distinguish EQDs for SOCs from those of standard conform containers (e.g. EQD+SOC vs. EQD+CN).

2.4 Break Bulk – Uncontainerized Cargo

Uncontainerized cargo is usually placed on supporting equipment (potentially using additional equipment for safe transportation) and may occupy multiple stowage cells. Current BAPLIE does not sufficiently describe the arrangement of cargo and additional equipment. Distribution of mass is important for calculation of stability, stresses and stack weights and currently cannot be specified in BAPLIE.

2.5 Lost slots / Blocked Slots

Cell positions not usable during terminal operations shall be specified with ship's status message. It should be distinguished:

- cell temporarily blocked due to other cargo (blocking ends when cargo discharged)
- cell temporarily blocked for other reason (blocking ends in some port)
- cell permanently blocked

BAPLIE should be able to specify and distinguish these types of blocked cells.

(The current BAPLIE MIG mentions blocked cells of the first type only – hidden in the chapter describing special user guidelines for break-bulk cargo.)

2.6 Variable Reefer Settings

There are reefer containers on board for which temperature control needs to be adjusted while on board. Current BAPLIE allows only for specification of a single setting / range. Modern container ships make use of centralized reefer control which reads reference values from BAPLIE messages. To make such controls work properly for reefer containers with time dependent setting an enhancement of BAPLIE is necessary.

Clean specification of time dependent settings probably requires a change of BAPLIE's message structure. (E.g. introduce a new group C99 for TMP, RNG and DTM segments.)

2.7 Stacking Weight

Triggered by recent accidents there is special attention to containers with reduced stacking weight (< 192t) required. There is no possibility to mark such containers in BAPLIE nor MOVINS. (reference IMO International Convention for Safe Containers, Annex 1, amendment see http://www.currieassociates.com/IMO%20Papers/2009%20-%2014%20Session/DSC%2014-12.pdf)

In practice reduces stacking weight often applies for “shipper's owned containers” (no regular ISO type) and to some kinds of tank containers.

As long as there is no information to which containers reduced stacking weight applies load calculators cannot check for safe stow in this regard, neither on board nor at land.

Information about reduced stacking weight is to be provided by the container operator.