

New Edifact Message Type

VERMAS – Verification of Gross Mass

67th SMDG Meeting in Copenhagen
20. April 2016

Michael Schröder
Hapag-Lloyd AG

michael.schroeder@hlag.com

new Edifact Message VERMAS – Verification of Mass



In this presentation

- New SOLAS regulation + IMO guidelines
- Business requirements – Shipper, Forwarder, Carrier, Terminal
- Existing Edifact messages
- New VERMAS message: Use cases
- New message: Final structure, data elements
- Time line – Next steps

What is SOLAS?



The **SOLAS Convention** (Safety of Life at Sea) is maintained by the IMO (International Maritime Organization) as a UN agency. It is an **UN international treaty** concerning the safety of merchant ships. SOLAS has been in place for many decades and is well known at carriers, terminals and ports.

With the VGM regulation, SOLAS for the first time reaches out to the **shipper of a container**.

The SOLAS Convention has been ratified by 162 contracting states. SOLAS represents **99% of the tonnage of the global merchant fleet**. It applies to ships flying the flag of a SOLAS country. The SOLAS Convention is **Binding International Law**.

Why are these guidelines needed?

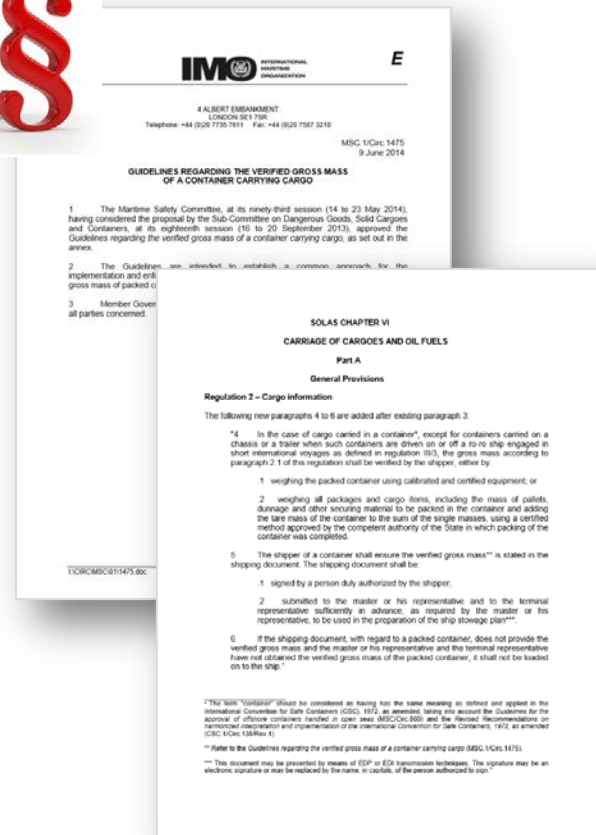
For many containers, too many, the actual gross weight is higher than the declared gross weight. The problems resulting from misdeclared container weights include the following:

- Damage to ships and terminal equipment
- Stability risks for ships
- Risk of personal injury to seafarers and shoreside workers
- Collapsed container stacks
- Containers lost overboard (both those overweight and containers that were not overweight)



Is the SOLAS VGM regulation valid without National Legislation?

1. The SOLAS Convention is **Binding International Law** in each of the 162 signatory states, even **without national legislation**.
2. The VGM reporting requirements are clearly described in the IMO guidelines and must be followed. The typical flow is: **Shipper → Carrier → Terminal**. Carrier and Terminal have a joint responsibility to ensure that a container without VGM is not loaded.
3. A **national legislation** would clarify the following items:
 - How can the shipper become certified for method 2?
 - Which is the competent authority for that certification?
 - Which weight tolerance is allowed by the authority in case of re-weighing?
 - What happens in case of violation?
4. The legislation will **not clarify the time** or deadline when the VGM must be reported. This has to be an operational agreement with the carrier.



Additional information can be found on:

<http://www.worldshipping.org/industry-issues/safety/cargo-weight>

Requirements and consequences of the IMO Guidelines

1. The **Shipper on the ocean carrier's B/L is responsible** for providing a Verified Gross Mass (VGM) for each full container.
He may decide between two methods: 1) to weigh the packed container or 2) to add the weight of all cargo items plus the weight of the packing material plus the tare weight of the container.
2. The VGM can only be determined for a completely **packed container**.
3. The shipper may **delegate** the actual procedure of obtaining the VGM to a **3rd party**, for example a forwarder or a weighing facility. This does not release the shipper from his responsibility according to 1 above.
4. The **carrier and the terminal have a joint responsibility** to ensure that a packed container is **not loaded** on a SOLAS ocean vessel if there is no VGM available.
5. The **vessel command** must not accept a packed container on board until they have been informed about its VGM.
6. The VGM is part of shipping documents. Besides the weight itself, the **name of the person duly authorized by the Shipper** must be transmitted to the carrier.
7. A container status may change from "VGM not available" to "VGM available".
An existing VGM may be revised by means of EDI messages.
8. EDI messages must be able to distinguish "VGM" and "gross mass without verification".
9. The typical reporting chains is: Shipper → Carrier → Terminal → Vessel
but different variants are possible.

Business requirements resulting from the IMO Guidelines

Standard reporting chain:

Shipper → Carrier → Terminal → Vessel

Non-standard reporting chains possible:

Weighing facility → Shipper → Carrier

Weighing facility → Carrier

(if so agreed by the business parties)

Shipper → Forwarder → Carrier

Shipper → Terminal → Carrier

(if the Shipper has a business relationship with the terminal)

Terminal → Carrier → Shipper

(if re-weighed)

challenge

The detailed business requirements and the possible VGM reporting chains are not clear yet, they might differ in various countries.

There is no real-life practice yet.

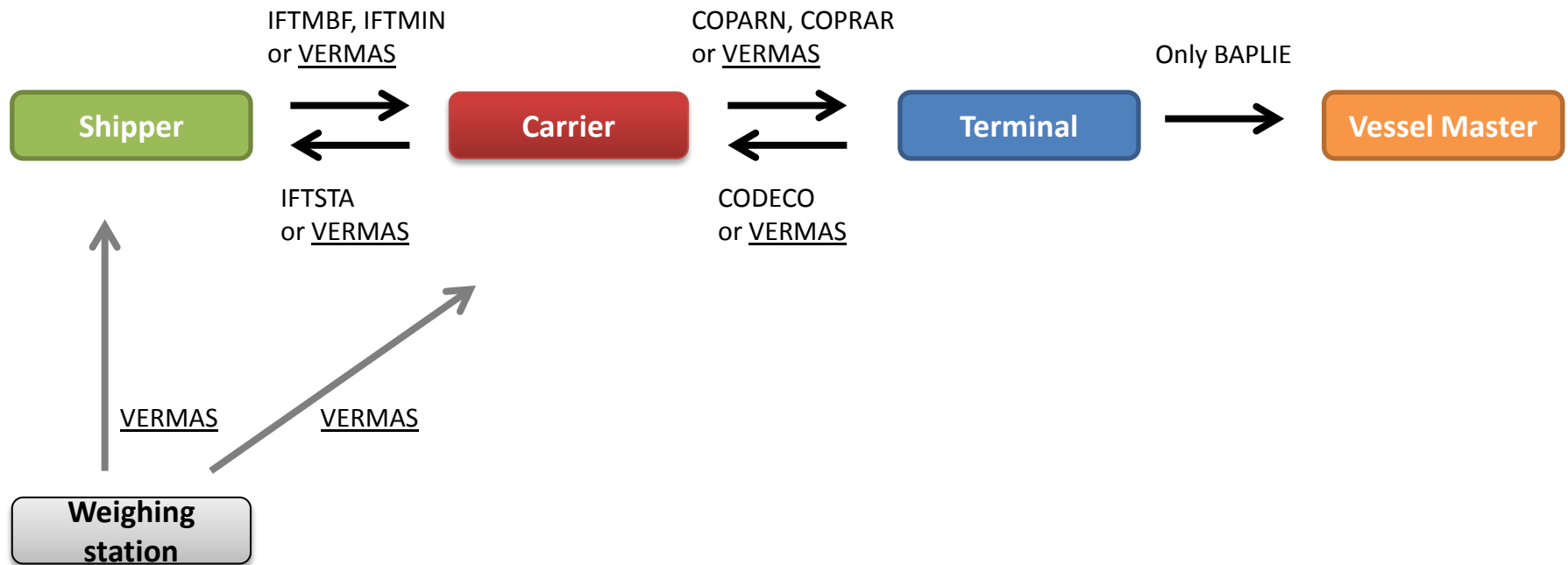
But the VERMAS has to be made available now, in order to meet the deadline 1st July 2016.

SMDG Activities

The structure of following messages is being enhanced by the SMDG in order to enable VGM reporting. New versions have been published. Details on www.smdg.org

Message	Activity	Purpose	Sender-Receiver
BAPLIE	Enhanced	Stowage Plan	Carrier <> Terminal
MOVINS	No change	Move Instructions	Carrier > Terminal
COPARN	Enhanced	Pre-arrival notice	Carrier > Terminal
COPRAR	Enhanced	Load List	Carrier > Terminal
CODECO	Enhanced	Gate-In confirmation	Terminal > Carrier
COARRI	Enhanced	Load/Discharge	Terminal > Carrier
VERMAS	New development	VGM Reporting	Between various parties in the transport chain

VERMAS in the Process Chain



Scope of the new message VERMAS

To transmit the verified gross mass (the weight) and all details of the related weighing certificate for a packed container including the name of the authorized person.

It is a legal requirement that all parties along the transport chain are informed about the Verified Gross Mass of the container:

Shipper, Carrier, Vessel Operator, Terminal and the vessel itself.



Different process steps

Unlike other EDIFACT messages, the VERMAS is not dedicated to a certain process step in the transport chain. It can be used by different parties at different times in the process chain.

Not to use as an order

The VERMAS purpose is only to report a weight that was determined earlier. It will *not* be used to *order* a service such as weighing a container. For the purpose of ordering services, for example the COHAOR should be used.

Why a completely new message?

1. New processes

There are new process steps that are not covered by existing message types. For example reporting from a weighing station to the shipper, or the weight from the terminal to the carrier or from the carrier to the shipper.

2. Different timing for weight transmission in current messages

In many cases the existing messages are sent at a different time than the VGM is known or is required. The existing messages are sent too early or too late for transmission of the VGM.

3. One new message easier than changing many existing messages

Shippers, carriers and terminals need to change a large number of message versions on a fixed deadline. Many of them find it easier to implement one new message for this special purpose of VGM reporting than upgrading many existing message versions and test simultaneously with many EDI partners.

4. Message identification determines the purpose

The receiver can detect the purpose (VGM update) from the message identification VERMAS. He does not have to go into the message to detect the function.

Use cases for the new message

Just examples – detailed list in the MIG

	Sender	Receiver	Purpose
1	Shipper or Forwarder	Carrier (Shipping Line)	<ul style="list-style-type: none"> • If the shipping instructions are sent too early, when the VGM is not yet known. • If the shipping instructions are sent too late, when the container is already at the terminal. <p>➔ In these cases the timing of existing messages is not suitable.</p>
2	Carrier	Terminal	In cases where COPARN and COPRAR are not suitable for the terminal.
3	Weighing station	Shipper	<p>If the shipper ordered the weighing service.</p> <p>➔ New process, not covered by existing messages.</p>
4	Weighing station	Carrier	<p>If the shipper has authorized the weighing station to transmit directly.</p> <p>➔ New process, not covered by existing messages.</p>
5	Terminal	Shipper or Carrier	<p>If the terminal weighed the container upon arrival and determined a new VGM.</p> <p>➔ New process, not covered by existing messages.</p>

Sender and Receiver of the new message

Sender

The party who has knowledge about the verified gross mass. This can be for example:

- a) The shipper who has stuffed the container and verified the gross weight.
- b) The operator of a weighing facility who has determined the VGM for the packed container.
- c) The vessel operator or the terminal who forwards the VGM to another party in the transport chain.

Receiver

The party who requires the verified gross mass. This can be for example:

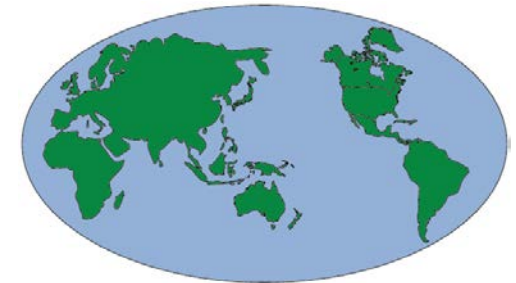
- a) The party who has ordered the service of weighing the packed container.
- b) The forwarder, or the carrier, or the terminal

*The VERMAS message is an offer to the maritime industry .
Its usage is optional and is left to agreements between the trading partners.
They may also decide to use the enhanced versions of IFTMIN, COPRAR, CODECO etc for VGM transmission*

Who supports the development and implementation of the VERMAS?

As per status of April 2016, it appears that the VERMAS will become the **world standard** for transmission of VGM. Parties that are preparing to implement the VERMAS include

- All shipping lines that are participating in the SMDG
- Most of the shippers and forwarders will send the VERMAS
- Many container terminals prepare to receive the VERMAS
- Big portals like INTTRA or DAKOSY will receive and send the VERMAS
- Stationary and mobile weighing facilities will send the VERMAS



In addition the WSC World Shipping Council supports and promotes the VERMAS as the electronic medium to transmit the VGM and thus enable the SOLAS implementation.

The shippers, booking portals and weighing facilities are not members of the SMDG but they welcome the new message to cover the legal requirements.

Content of the VERMAS message – in a nutshell

Mandatory for VGM to the carrier:

- The unique **container ID** (e.g. HLXU1234567) and ISO size/type.
- The **Verified Gross Mass** in kilogram or lbs.
- The **identity of the message sender**
- The **identity of the Shipper** (SOLAS responsible party)
- The name of the **authorized person** in capital letters, as electronic equivalent of the signature.

Optional:

- All **details** that a paper **certificate** would show: date and place of weighing, the weighing company, method used (1 or 2 according to SOLAS), reference number etc.
- Reference to a particular **transport order or purchase order**, by means of booking number, B/L number, port of loading, port of discharge, vessel name, voyage number etc.
- Related **transport parties**: Shipper, carrier, terminal, weighing facility etc.
- Seal number

Content of the message page 1/2. One message may contain *multiple* containers.

Reference	Data element	Segment in Message
Message sender	Indicating the identity and the role (e.g. Shipper, Forwarder, Weighing facility) of the message sender	NAD header
Shipper = Party responsible to provide the VGM as per SOLAS	Company name, address and contact	DOC+SHP NAD+SPC
Authorized Person	Person authorized by the Shipper, Name in capital letters, with contact details mail/phone. This person may belong to another company than the shipper.	DOC+SHP NAD+AM
Weighing station	The party that has actually determined the weight, optionally with address and contact details. E.g. the weighing station in case of method 1 or the party that has performed the VGM calculation in case of method 2.	NAD+WPA
Generic reference to VGM documentation = Company holding the VGM documentation	In case the actual shipper shall not be disclosed, the company holding the VGM documentation can be e.g. the carrier's agent	DOC+DRF NAD+WC
Shipper identification, usage of different code lists possible	DUNS Number issued by Dun & Bradstreet (D&B)	SG8/ NAD/ C082
	AEO number (Authorized Economic Operator)	
	Tax ID and Tax Authority	
	INTTRA Company ID	
	EORI number (Economic Operators Registration and Identification)	
Container Reference	Container ID	EQD
	Size Type	

Content of the message page 2/2. One message may contain *multiple* containers.

Reference	Data element	Segment in Message
Weight reference (the VGM)	Verified gross mass of the container incl. unit of measurement KGM or LBS	MEA
Weighing details	Date+time when the container was weighed or the weight was determined	DOC+SM1 DTM+798
	Date+time when the weight certificate was issued	DOC+SM1 DTM+137
	Country of verification (it is relevant because different national legislations apply)	NAD+WPA
	SOLAS Method of weight verification (1 or 2 as per IMO rules)	DOC+SM1 DOC+SM2
	Weight Certificate reference = unique reference which identifies a single container weighing instance	DOC+SHP C503
Weighing Order	Weighing Order Number	RFF+VOR
Transport Order Reference	Carrier's Booking Number	RFF+BN
	Shipper's internal reference	RFF+SI
	Bill of Lading Number	RFF+BM
	Seal Number	SEL
	Port of Loading	LOC+9
	Port of Discharge	LOC+11
	Final Destination	LOC+65
	Vessel Name	TDT
	Voyage Number	TDT
Cargo/Container Operator Eg. HSD, HLC, CMA		NAD+CF

Message Structure

The development of the VERMAS structure follows the KISS principle:

Keep it short and simple

The VERMAS is made for a dedicated purpose and contains only data elements that are clearly needed. The message content is based on the best assessment of the business requirements (as per April 2016) depending on the IMO guidelines.

It shall not be overloaded with data elements that could be *potential* candidates or that *might* perhaps be required in future. Additional requirements resulting from national legislation of all seafaring countries will not be available before mid of 2016.

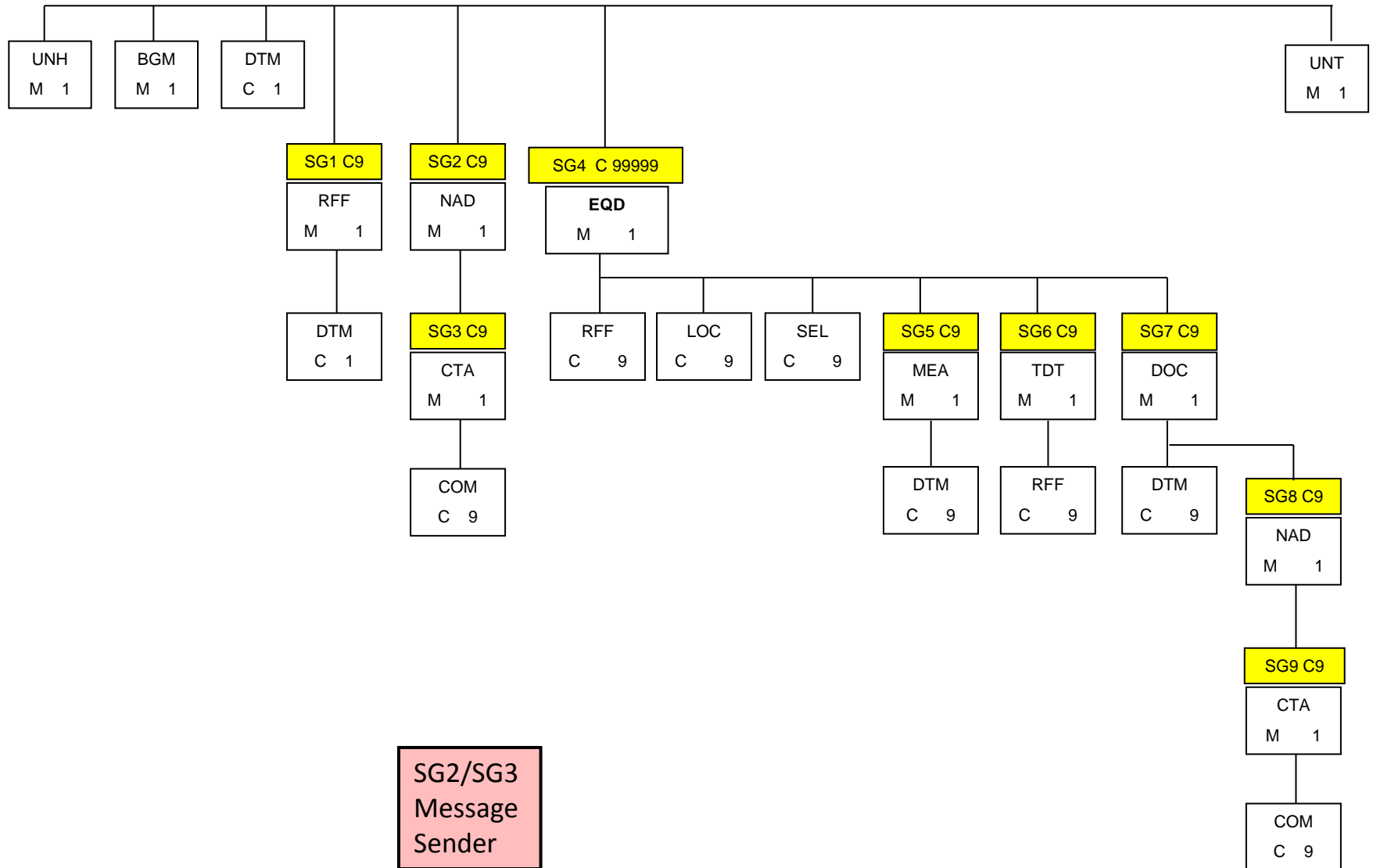
The VERMAS is likely to be implemented by a large number of parties in a short time. Acceptance of the message will be much higher if the structure is kept simple.

Message Structure on next slide:

new Edifact Message VERMAS – Verification of Mass



USER GROUP FOR SHIPPING LINES AND CONTAINER TERMINALS



SG4

EQD – Container ID and Sizetype

RFF - Booking No *OR* Bill of Lading *OR* Shipper's reference

LOC – POL *OR* POD *OR* Final Destination etc.

SEL – Seal number

SG5 MEA – Verified Gross Mass and Unit

DTM - Date of Verification or Weighing

SG6 – Vessel Names / Voyage Numbers for *this* cntr.

SG7

DOC – Method of verification and Certificate ID/reference

DTM – Dates referring to the weighing document,
e.g. issue date of the weighing certificate

SG8/SG9

NAD – Party that has verified the weight and issued the certificate.

CTA, COM

- Name of the Responsible Person, belonging to that party.

– Contact information

VERMAS working group in the SMDG

- Michael Schröder Hapag-Lloyd (chair)
- Jost Müller Müller&Blanck Software
- Paul Wauters PSA Antwerp
- Stefano Ottonello MSC Le Navi
- Yoshi Kito EDI Expert



VERMAS Timeline

1.4.2015 SMDG Meeting in Malmoe	Agreement to pursue the development of a new message
1.7.2015 T&L Group interim meeting in Paris	T&L Group within UN/CEFACT agrees and supports the development of a new Edifact message for VGM
21.9.2015	DMRs for new codes submitted to UN/CEFACT for D.15B
30.9.2015 SMDG meeting in Malta	Proposal for VERMAS message was approved
4.11.2015 UN/CEFACT Forum Marseille	General approval for VERMAS message structure
6.11.2015	SMDG publishes first VERMAS MIG as version 0.4
11.2.2016	UN/CEFACT project proposal supported by 3 national HoD
26.2.2016	SMDG provides VERMAS Boiler Plate for D.16A
8.3.2016	SMDG provides the BRS for the VERMAS message
20.4.2016 SMDG Meeting in Copenhagen	now Prepare next VERMAS MIG version 1.0
25. - 29.4.2016 UN/CEFACT Forum in Geneva	Final VERMAS approval by UN/CEFACT
May / June 2016	Publish VERMAS in D.16A directory