



APL's

SOLAS VGM Handbook

APL.com/VGM

**SOLAS VERIFIED GROSS MASS (VGM)
REGULATIONS EFFECTIVE 1 JULY 2016**

Version dated 1 July 2016

CMA CGM group

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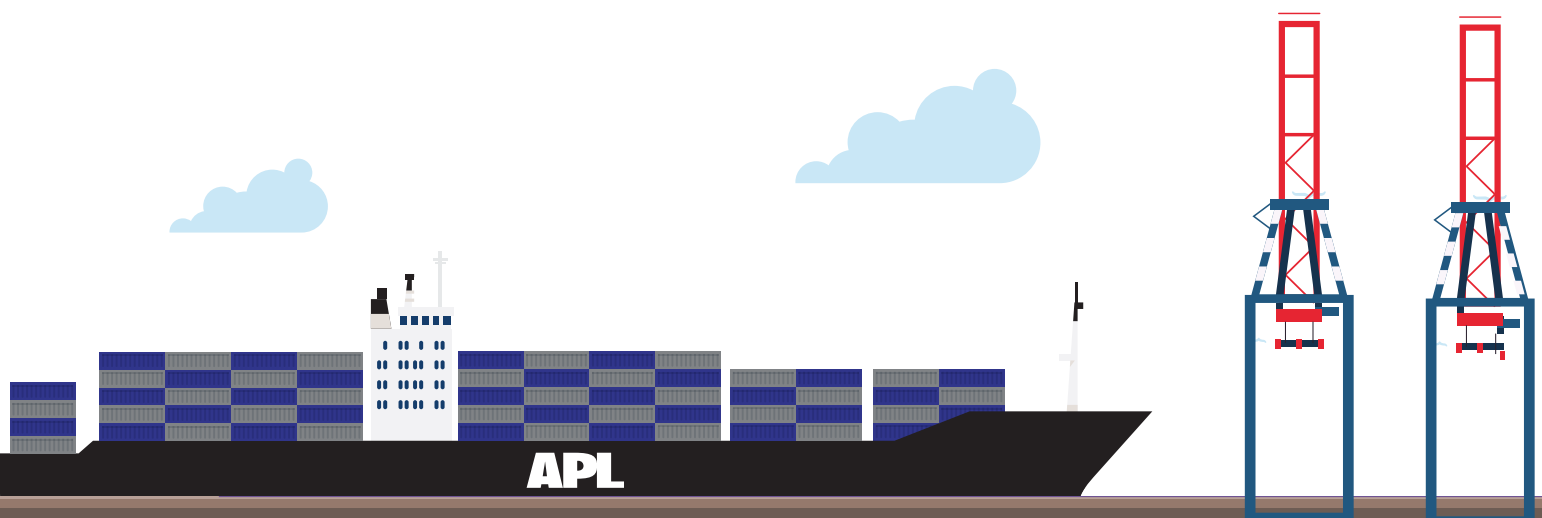


I. Introduction

Discrepancy between the declared and actual gross mass of a packed container can lead to incorrect vessel stowage decisions and consequentially major accidents. To ensure the safety of seafarers and shore-side workers, with effect from **1 July 2016**, the 171 members States of the International Maritime Organization (IMO) will start enforcing the [Safety of Life at Sea \(SOLAS\)](#) amendments to require a packed container to have shipper-verified weight as a condition for loading onto a ship for export.

As a global leader in responsible and sustainable shipping, APL is well-prepared to assist our customers in meeting the new global safety compliance standards. To warrant operational readiness come 1 July 2016, we have been working closely with our partners and terminals, and will be implementing internal process and system enhancements to handle your verified gross mass (VGM) data submission timely and accurately.

The APL team has put together this Handbook to provide you with good understanding of SOLAS VGM requirements as well as APL's implementation procedures. The information herein is to be updated continually, so please ensure you get hold of the latest version either via APL's dedicated SOLAS VGM webpage at APL.com/VGM, or by contacting your Sales Representative.



II. Effecting SOLAS Worldwide

1. When is the enforcement date?

The new SOLAS amendments go into effect from **1 July 2016**. From this date, carriers such as APL will only be allowed to load a packed container on board their ships after its VGM has been received (refer to Question IV.1 for definition of VGM).

2. Is there a grace period for compliance?

On 23 May 2016, the IMO recommended national administrations and Port State Control authorities in its membership to adopt a practical and pragmatic approach in enforcing compliance to the SOLAS amendments between 1 July 2016 and 30 September 2016.

This, however, is NOT to be interpreted as a postponement of the effective date, which remains as 1 July 2016. The three-month transitional period has been advised primarily to allow the flexibility of transshipment containers that were loaded onto a vessel prior to 1 July 2016 to tranship on or after this effective date without a VGM.

Other than for shipments falling into the above-mentioned transshipment scenario, we strongly advise that you plan for VGM compliance by **1 July 2016**.

3. What does the SOLAS regulation apply to?

The regulation applies to all packed containers to which the [International Convention for Safe Containers \(CSC\)](#) applies and which are to be loaded onto a ship subject to [SOLAS Chapter VI](#).

All packed export containers will legally need VGM declaration, including all standard sea freight containers, tank containers, flat racks and bulk containers. Effectively, 99% of all global shipping volume will be subjected to this new SOLAS regulation.

4. What is the geographical scope affected?

The regulation is globally legal-binding. All [171 IMO member States](#) have undertaken to implement the amendments, including those in relation to verified gross mass (VGM), in their respective jurisdictions.

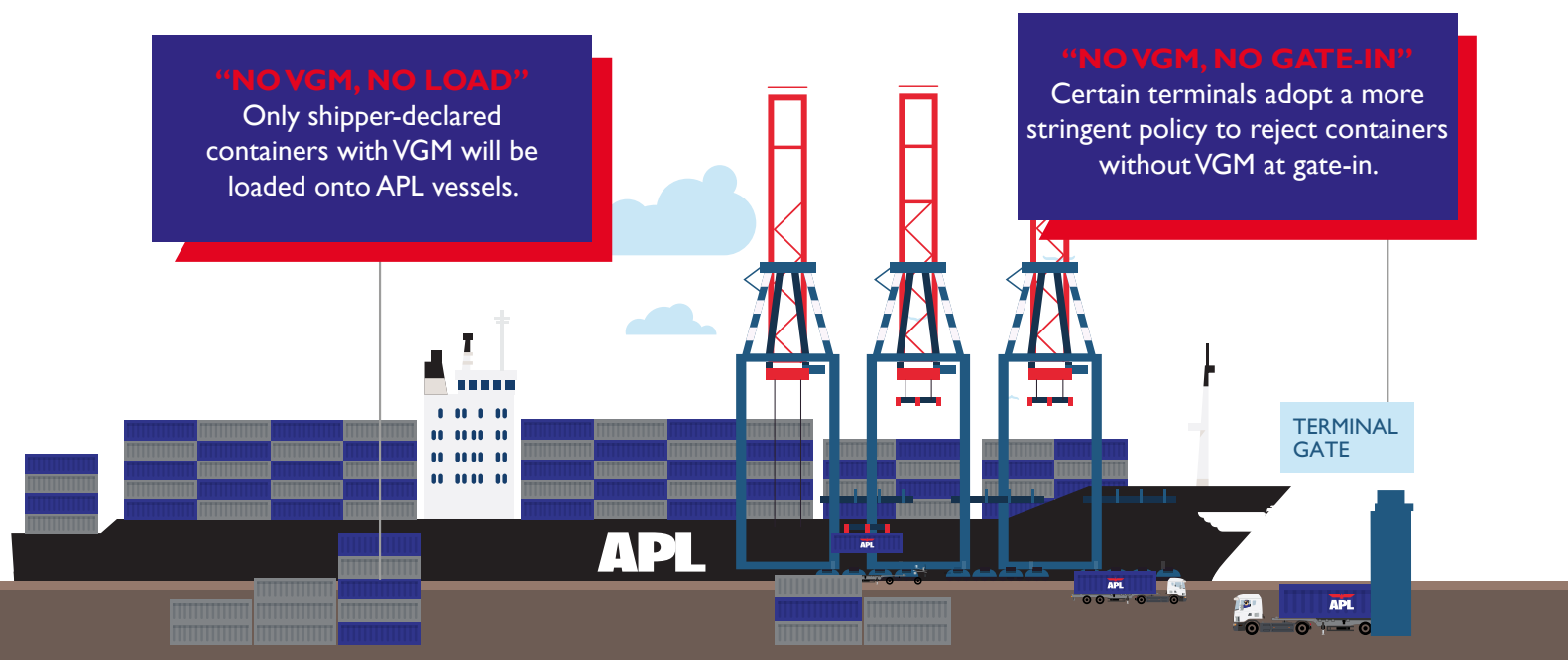


Figure 1. VGM Policies

5. Will different local authorities enforce SOLAS differently?

It is up to an individual country's authorities to enforce SOLAS requirements along their own guidelines. For example, certain country's authorities can decide their own policies on:

- Certification of weighing service providers
- Calibration of weighing scales and methods
- Allowance for VGM versus actual mass variance

We strive to keep you up-to-date with latest local SOLAS implementation guidelines via [APL's SOLAS webpage](#) as and when such information is available.

6. How do I know whether my upcoming shipments will require VGM submission to APL?

APL will require VGM submission for any international cargo scheduled to depart the first seaport where it is loaded on or after 1 July 2016, basing on the relevant local time. You may want to check with your local APL representative if you are unsure if a specific shipment requires VGM.

7. How about transshipments?

For practical reasons, APL will apply the VGM rule only if your international cargo departs at the shipment's first loading seaport on or after 1 July 2016. If the shipment has already embarked on its sea-going journey before 1 July 2016 and transships at another seaport on or after this date, APL will not apply the VGM rule against your container.

II. Effecting SOLAS Worldwide

8. Is APL's policy different from terminals'?

Globally, carriers are not allowed to load a packed container for which VGM has not been provided by the shipper in time, on board its vessels. To comply with the global regulation, from 1 July 2016, APL will follow a **“No VGM, No Load”** policy across all countries.

In addition, it is important to note that certain terminals may choose to adopt a **“No VGM, No Gate-in”** policy. A packed container without VGM declared may be denied gate entry into these terminals by their operators.

9. How do I learn more about the different terminals' policies?

APL is working closely with all terminals in our network to collect relevant information on their respective VGM implementation policies, including, but not limited to:

- If they adopt a “No VGM, No Gate-In” policy
- If certified weighing service is provided at the respective terminals
- APL's VGM submission cut-off deadlines at the respective terminals
- Their VGM variation tolerance policy, if any

The above information is published and updated on APL's interactive map tool via [APL.com/VGM](https://www.apl.com/VGM).

III. Implications on Shippers

I. As the Responsible Party

The new SOLAS amendments spell out clearly that **it is the shipper's responsibility to provide the VGM** to carriers sufficiently in advance to be used in the preparation of the ship stowage plan.

As a result, even in the instance where the shipper engages a third party to obtain the VGM, the shipper will still remain the responsible party. Where missing VGM results in the shipper's container not being loaded, the shipper will be liable for any associated costs.

2. What is the definition of 'shipper'?

The shipper is defined as a legal entity or person named on the bill of lading or sea waybill as shipper and/or who a contract of carriage has been concluded with a shipping company (see [Chapter 2 of IMO SOLAS Guidelines](#)).

Hence, depending on the contractual agreement, the shipper can be either **the cargo exporter, importer** or **a logistic service provider** (NVOCC, consolidator or co-loader).



3. Implication on the booking process

As a shipper, you will need to ensure that your booking & shipment lead times factor in container weighing time (if any) and your relevant VGM submission cut-offs.

With regards to documentation, you will need to submit additional VGM data to APL, either separately or as part of shipping instructions, depending on the submission channel. See Question V.3.

4. Implication on costs

In addition to any costs associated with weighing your containers and submitting your VGM data, you will need to factor in possible incidental costs in the event you fail to submit your VGM in time. See Question V.8.

III. Implications on Shippers

5. What will I need to do as a shipper?

As a shipper, you will need to be mindful and ensure to:










-  Look at your internal processes to determine who is the legally defined shipper (yourself or a logistics provider)
-  Evaluate your weighing options – factoring in relevant costings and procedures
-  Decide if you will need to engage a weighing service provider
-  Obtain your containers' VGM data (See Section IV. Determining VGM)
-  Submit your containers' VGM data to APL (See Section V. Submitting VGM)
-  Be aware of each terminal's VGM submission cut-off requirements
-  Be aware of local authorities' SOLAS VGM implementation guidelines, including auditing and penalty rules (if any)
-  Seek more information from your local shipper community where necessary
-  Contact your APL representative if you have questions

Figure 2. Shipper's VGM To-Do Checklist

As your carrier of choice, APL will do our best to assist you along the process by providing necessary information and timely notifications in case of missing VGM or late submission, and designing smooth and friendly VGM submission procedures.

IV. Determining VGM

I. What exactly is verified gross mass (VGM)?

VGM policy requires that the total weight of each packed container must be measured and declared. This total weight not only consists of the weight of all packaging and cargo items, but also the container tare and all additional loading equipment (e.g. lashing material) too.

Please refer to Chapter 2.1 of the [IMO SOLAS Guidelines](#) for the exact definition of such.

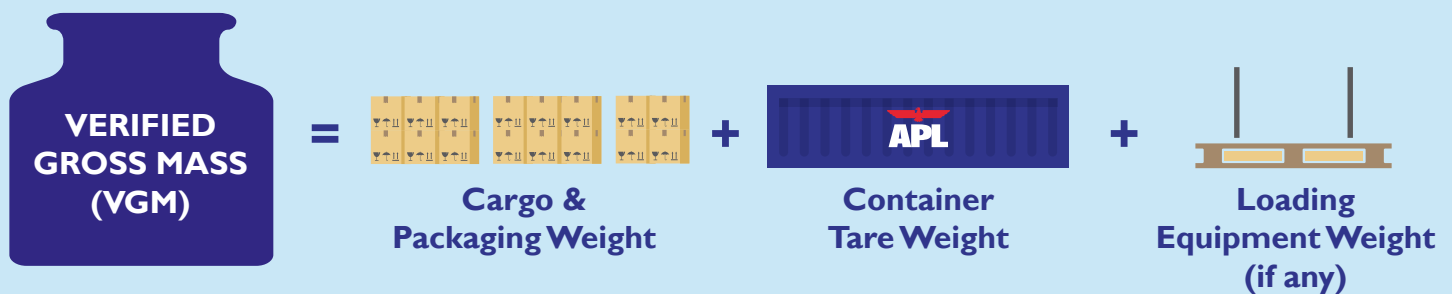


Figure 3. Definition of VGM

It is important to note that VGM does NOT have the same meaning, and should not be confused with the estimated weight declared in the Booking nor with the cargo weight declared on the Bill of Lading.



Figure 4. What VGM is NOT

IV. Determining VGM

2. How do I determine the VGM?

There are two methods for weighing (refer to Chapter 5 of the [IMO SOLAS Guidelines](#))

- **Method 1:** Weighing the whole container after it has been packed (e.g. weighing the entire truck along with the container at a certified weighing bridge, then subtracting weights of the truck and chassis).



- **Method 2:** Weighing all the cargo and contents of the container individually, and adding those weights to the container's tare weight. Factor in additional loading equipment weight, if any.



Figure 5 & 6. Two VGM Determination Methods

IV. Determining VGM

3. Who can provide the weighing service?

The shipper can do the weighing themselves, or engage a third-party certified for such service (some terminals offer this within their yard). However, according to Chapter 2 of the [IMO SOLAS Guidelines](#), any weighing equipment used to weigh the contents of the container must meet the applicable accuracy standards and requirements of the country or state in which the equipment is being used.

In addition, the method used for weighing the container's content is subject to the certification and approval as determined by the competent authority of the state in which the packing and sealing of the container are completed.

4. Will APL terminals be providing certified weighing service?

At the moment, certified weighing service is not available at APL-owned terminals.

5. Which weighing method is recommended for bulk cargo?

As it is not practical to measure bulk cargo (e.g. scrap or unbagged grain) individually and add up the weight, therefore Method 1 may be more applicable.

It is important to note that not all terminals offer a certified VGM weighing service. You may want confirm with the terminal operator before sending in your bulk cargo for weighing.

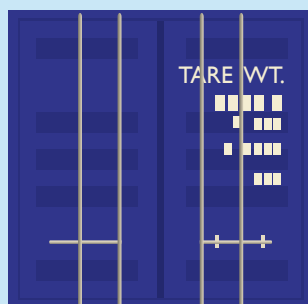
6. To what degree is a variance in VGM tolerated?

Certain local authorities do provide for a specific margin of error for VGM. For your convenience, APL maintains an interactive map tool where you can find the specific implementation rules adopted by each terminal. Check it out at [APL.com/VGM](https://apl.com/VGM).

IV. Determining VGM

7. In Method 2, can I just submit the cargo gross mass to APL since you have the container tare weight data?

The SOLAS regulation puts the responsibility on the shippers to provide the VGM, and therefore shippers are required to submit the total packed container mass data to APL. But we endeavor to let you have the container tare weight data in the most convenient manner possible.



The tare weight is available on the door-side of each APL container.

Figure 7. Reading Tare Weight on Container

8. How do I obtain an APL container's tare weight?

The tare weight is available on the door-side of each container. You may also obtain the container tare weight via APL's Container Tare Weight online query tool at [APL.com/tareweight](https://www.apl.com/tareweight).

Container Tare Weight

+

APHU664668

TRI038207

Look Up ▶

| Container Number | Tare Weight (KG) | Tare Weight (LB) |
|---------------------------------|------------------|------------------|
| APHU664668 more | 3,869.15 | 8,530.00 |
| TRI038207 more | 2,179.97 | 4,806.00 |

Note: Click "more" to view detailed container specifications.

Figure 8. Sample results of Tare Weight query tool

IV. Determining VGM

9. Will APL be responsible for providing an inaccurate tare weight?

Yes, APL is accountable for the accuracy of the tare weight listed on the container door-side and in our query tool.

10. What happens when the VGM is higher than the maximum payload?

APL will verify every submitted VGM against the maximum container payload listed on the Safety Approval Plate. Under IMO's [International Convention for Safe Containers \(CSC\)](#), containers with a weight higher than the maximum payload will be prohibited from being loaded on board vessels.

11. Do I need to weigh my containers at a transshipment port?

No. Your containers will already have been VGM-declared at the port of origin, hence no further weighing is needed at the transshipment port.

V. Submitting VGM

1. How does the VGM data flow?

Under the SOLAS requirements, the shipper named on the bill of lading is the party responsible for providing the VGM data. When shipping with APL, your default data flow will be **shipper > APL > terminal**. Upon successfully receiving your declared VGM data, APL will transmit it to terminal operator on your behalf.

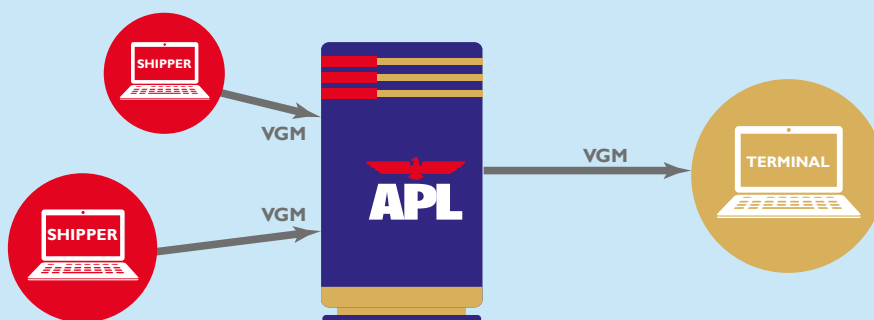


Figure 9. Default VGM Data Flow

Exceptions to the above flow include the following scenarios in which APL will accept VGM submissions from terminals:

- Where terminals' standard processes require all shippers to submit VGM directly to them or indirectly via a centralised port-wide platform; and
- Where U.S. terminal operators weigh containers moving through their truck gates and provide to APL gross container weights accepted by the U.S. Coast Guards as VGM equivalents. (Note: This exception does not apply to on-dock rail cargo.)

The latest set of VGM data received by APL against a packed container will always overwrite records from an earlier submission.

2. When do I need to submit VGM?

As specific requirements across governments, ports and terminals can differ, APL's VGM submission cut-off deadlines will vary from terminal to terminal. While addressing these external factors, we endeavour to keep each VGM submission cut-off as close to the respective Container Yard (CY) cut-off as it is operationally feasible.

You may look up the VGM submission cut-off for any terminal in APL's network using our interactive map tool at [APL.com/VGM](https://www.apl.com/VGM). In addition, we will inform you of the precise cut-off date and time for your shipment during your booking process.

V. Submitting VGM

3. How do I submit VGM to APL?

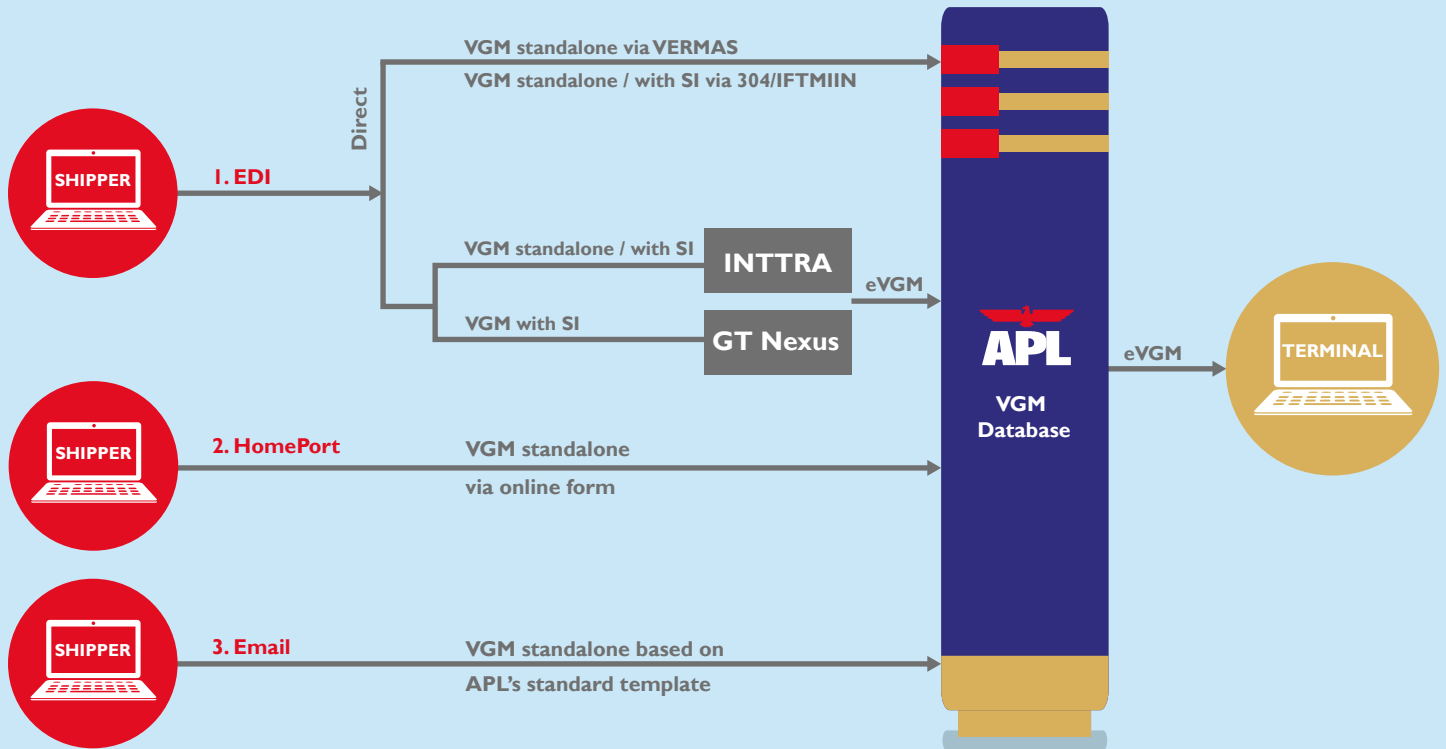


Figure 10. Channels to Submit VGM to APL

Shippers may submit VGM data to APL via any of the following channels:

- Direct EDI submission
- EDI/Online submission via third-party portals like INTTRA or GT Nexus
- Online submission via APL HomePort
- Submission via email

Refer to the next page for more details on each submission channel.

V. Submitting VGM

- **Direct EDI submission**

Shippers can also submit VGM via pre-existing EDIFACT IFTMIN or ANSI ASC X12 304 message types either separately or along with shipping instructions (SI). Additionally, APL also allows shippers to submit standalone VGM data using VERMAS, a new EDIFACT message type.

- **EDI/Online submission via third-party portals**

If you are subscribed to third-party portals like INTTRA and/or GT Nexus, you may rely on one of these platforms to submit your VGM data to APL electronically. APL will receive VGM data from such providers via EDI.

- **Online submission via APL HomePort**

You are able to submit via APL's online VGM form on our HomePort portal. Additionally, we are planning to enhance our SI submission form to give you the option of submitting VGM together with SI.

The screenshot displays the APL HomePort interface for submitting Verified Gross Mass (VGM) data. The left sidebar contains navigation links such as 'E-mail Scheduler', 'Bills of Lading', 'Verified Gross Mass (VGM)', 'View BL', 'BL Instructions', 'E-BL Print', and 'Bookings'. The main content area is titled 'Verified Gross Mass' and includes a 'Booking Number: 057654489'. The form fields are organized into two main sections: 'Responsible Party' and 'Weighing party'. The 'Responsible Party' section includes fields for 'Container#', 'Method' (with radio buttons for Method 1 and Method 2), 'VGM Weight*', 'Declaration Date', and 'Authorized Person*'. The 'Weighing party' section includes fields for 'Name', 'Address1', 'Address2', 'Address3', 'Phone', 'Email', and 'Reference#'. A 'Calculate VGM' button is located near the top right of the form, and a 'Save' button is at the bottom right.

Figure 11. Screen shot of VGM submission via HomePort

V. Submitting VGM

- **Submission via email**

Where VGM submission via EDI or portals is not possible, APL does accept submission via an email attachment based on APL's standard Microsoft Excel template. The form is available for download at [APL's SOLAS webpage](#) (under 'VGM Tools' section).

All VGM submissions in this format are to be sent as an attachment via email to APL_VGM@APL.com under the following Subject format:

Subject: VGM_<Booking No.>_<2-Letter Country Code>

'Booking No.' here refers to the cargo's booking number with APL, and '2-Letter Country Code' refers to the country of original loading (refer to [ISO convention](#) for the ISO 3166-1 alpha-2 country code list).

For example, an eligible subject would be 'VGM_APLU123456789_CN', in which the VGM data belongs to a cargo with the APL booking number APLU123456789, to be loaded at a port of origin in China.

As the VGM data submitted via this method is going to be read automatically by our system, it is important that your data and subject format strictly follow the above instructions in order not to put your cargo at risk of missing its shipment.

V. Submitting VGM

4. What information is needed during VGM submission?

Below are the fields to be filled during submission via any of the above method:

- ✎ • **Booking / Bill of Lading (BL) No.** (Mandatory)
- ✎ • **Container No.** (Mandatory)
- ✎ • **Verified Gross Mass (VGM)** (Mandatory)
- ✎ • **Unit of Measurement (KG or LB)** (Mandatory)
- ✎ • **Authorised Person's Signatory (in CAPITAL)** (Mandatory)
- ✎ • Responsible Party Name (Optional)
- ✎ • Date of Declaration (Optional)
- ✎ • Method of Weighing (1 or 2) (Optional)
- ✎ • Weighing Party Name (Optional)
- ✎ • Any additional mandatory/optional information as requested by local authorities (e.g. for UK, Weighing Party Certification No.)

Figure 12. VGM Submission Fields

It is worth noting that APL only requires the VGM information as stated above, not actual VGM supporting documents.

V. Submitting VGM

5. Must VGM be submitted before Gate-In?

Certain terminals will adopt a “No VGM, No Gate-In” policy, which will require shippers to submit VGM prior to gate-in.

It is therefore important to submit your VGM data early, to prevent truckers from being rejected at the gate and thus incurring unnecessary costs.

6. How do I know if I have submitted VGM successfully?

An online query tool will be made available at APL.com to enable you to track the status of your VGM submission against your container number or booking number.

7. What happens during a late submission of VGM?

Without exception, APL will not be able to load cargo if there is no declared VGM. This could result in a delay to your cargo delivery as the relevant container may be rolled to another vessel voyage. Shippers may also incur recovery cost.

As the responsible party for VGM submission, shippers will be liable for additional drayage costs if they have to move the box out of the terminal to get a VGM, etc.

8. Will I be able to amend my VGM after submission?

Yes. We will advise the process for amendment in due course.

Additional Resources

Click on each link below to get redirected to the respective information source.

1. [APL's SOLAS VGM page](#)
2. [IMO's SOLAS VGM page](#)
3. [IMO's full text on SOLAS amendments regarding VGM](#)
4. [IMO's associated guidelines regarding SOLAS VGM](#)
5. [WSC's SOLAS VGM page](#)
6. [WSC's SOLAS VGM Joint FAQs](#)
7. [WSC's summary on national legislations on SOLAS VGM](#)





**For more details, contact
your local APL representative
or visit APL.com/VGM**

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