There’s a common theme for non-vessel-operating common carriers and freight forwarders when it comes to an upcoming International Maritime Organization mandate requiring container weights be certified before loading on a vessel: a distinct lack of clarity.

As the July 1 deadline for the new global regulations looms, the NVO industry is getting by with a lot of shrugging, head-scratching, and general bemusement.

Put simply, most people in the container business (even longtime vets) just aren’t sure which way the wind will blow as the calendar inches closer to the deadline.
TRANSPORTATION

The regulations are meant to avoid situations where shippers misrepresent (intentionally or otherwise) the actual weight of their containers. And while it’s clear there is near unanimity that the goal of the regulations is worthwhile, people shake their heads at the muddled deployment of those regulations.

And it starts with the very language in the regulations, which is an amendment to the IMO’s decades-old Safety of Life at Sea convention (SOLAS). The SOLAS verified gross mass container weight mandate is as much a set of guidelines to achieve a hard and fast outcome as it is a set of strict instructions about how to get there.

What’s most striking about the regulations, in fact, is how little there is to them. One PDF page, three bullet points. And not much else.

What’s more, there is no explicit language about enforcement, or to be more precise, uniformity of enforcement. That’s left the industry to contend with a regulation that will most certainly be enforced differently in every nation.

Most experts interviewed by American Shipper on the subject said the fact that individual countries are granted license in how to enforce the regulations creates uncertainty in the short term, and potential complexity down the line.

This is especially pertinent for NVOs, since most of these businesses run import or export (or both) operations that touch dozens of countries. If the rules to enforce the container weight mandates differ greatly from country to country (think things like the threshold under which a container is still considered properly weighted, or which entity is licensed to certify the weight), that creates massive administrative burdens on service providers already on thin margins.

That is but the tip of the iceberg when it comes to all the facets of this thorny issue.

So let’s first try to clarify what the regulation broadly mandates, and then touch on specific points that the NVO industry and other service providers are left to grapple with.

The IMO regulations require that the master shipper (i.e. the one whose name appears on the bill of lading) certify the weight of the container prior to it being loaded on a vessel. That master shipper could be the beneficial cargo owner, or it could be an NVO, acting either on behalf of the shipper for full-container loads, or in a consolidated, less-than-container-load situation.

 Crucially, the regulation does not specify which entity is designated to certify the weight of the container, nor does it specify how the documentation pertaining to the certification is to be generated or conveyed to the carrier. Nor does it say who is primarily responsible for determining whether a container should be denied loading.

Into that void creeps a lot of speculation, but there are two broader themes that emerge: what are the practical implications of complying with the regulation, and who will pay the costs to comply with the mandate.

If that’s a crass interpretation of a law meant to protect crews and vessels, it’s the harsh reality of an industry that has seen many other mandates foisted upon it.

“It’s going to be a bit of a shakeout,” said trade and maritime attorney Richard Furman.

NVOs’ Responsibility. NVOs and forwarders won’t always be responsible for certifying the weight of a container, but there are some distinct situations where they will. For instance, NVOs may be in the position of conveying the certified weight to shipping lines, even when they aren’t involved in the packing of a container.

In those cases, the onus might not be on the NVO to actually weigh the container, but it will be the NVO’s responsibility to ensure the certification documentation is accurate and sent to the carrier and terminal in the proper timeframe.

Again, here’s where things get opaque. There is no timeframe delineated in the regulations that stipulate when the certification needs to be submitted to the terminal to avoid denial of loading. Is it one minute, one hour, or one day? That has yet to be decided.

What’s more, it could be one hour in one country and one day in another. Worse still, it could conceivably be one hour in one terminal and 30 minutes in another terminal in the same port.

But the scenario most fraught with peril is likely consolidation loads, where NVOs act as aggregators of LCL cargo. It’s not hard to picture where the problems may lie.

An LCL box may contain the cargo of, say, 16 different NVO customers. As the master shipper for that box, the NVO is responsible for certifying the weight of the container. So let’s recount the potential pitfalls.

First, the NVO must either weigh the packed container in its entirety, or calculate the weight of all the individual shipments, including dunnage, pallets, and other packing materials, and then add in the tare mass of the container itself. The first option is certainly preferable—as Tim Tudor, chief executive officer for the Americas for the NVO ECU-Line said, “it’s not only easier to manage, it’s also more accurate.

No Defined Process. This lack of definition for the actual weight certification process is causing many in the NVO industry consternation. Without a clear path forward, most NVOs are left to speculate about who will handle the certification.

“The end result is you’ve got to weigh containers before you load them. How you get there is still a work in progress.”

Tim Tudor, CEO for the Americas, ECU-Line

But that first method depends on there being a facility where the container can be accurately weighed. Most NVOs, like most shippers, simply don’t own or lease such facilities themselves. They could go to a third party weighing entity, or a container freight station, but truckers will be loathe to wait in one line to get their containers weighed, and then another line at the marine terminal in-gates, according to Michael Troy, CEO of Troy Container Line.

The other scenario, posited by a couple different NVOs, is that container terminals act as the weight certification entity. Many of the more modern terminals have weighing facilities at or near in-gates. The terminal could essentially just provide the certification of the weight upon entry to the terminal.

But, there are some complications to this approach. For one, not all terminals have those weighing facilities, and second, the mechanics of the certification process require that the certification is “signed by a person duly authorized by the shipper.” That means the weight certification document has to be signed by the shipper prior to it being loaded. If the terminal takes responsibility for weighing containers, it’s not hard to imagine a pileup of containers just past the in-gates awaiting shippers’ signatures, and that’s just for the containers that meet the certification requirements.

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“The end result is you’ve got to weigh containers before you load them.” Tudor said. “How you get there is still a work in progress. We’re listening more than speaking.”

Steve McMichael, vice president of ocean services at UPS Supply Chain Solutions, said the industry has been weighing freight for as long as there’s been cargo.

“We’ve been putting weights on the bill of lading for 100 years,” he said. “Our job...
is to ensure the VGM is complied with. We as a forwarder don’t touch freight. We move things container yard, so we’re simply managing the booking. The freight we do touch through consolidation still has to be weighed but not all facilities that handle cross-dock have weight facilities. We don’t own all those cross-docks. Some of these are public CFSs.

“As for the actual verification, this is about terminals and their gate-in process. What will be their ability to say ‘no load.’ How many terminals are ready for that capability?” McMichael said.

Focus on the regulation seemed to kick into high gear in December, when the reality of the deadline started closing in. It was no longer a “next year” issue. Moreover, where some in the industry thought the regulation might be reworked, or its implementation delayed, it became clear that the July 1 date was indeed fixed. An industry expert told American Shipper of a conversation with an IMO official who seemed incredulous that people would even ponder the idea that the regulation wouldn’t go into effect.

NVOs have been quietly preparing in the background, aware even more than shippers of how this might affect their operations. NVOs, of course, sit in a unique position, finding capacity for shippers and acting as customers to the shipping lines. It’s not lost on many NVOs that the container weight issue is largely about the act of conveying information from the shipper to the shipping line, and that they sit precisely in that space.

**Documentation Transmission.**

Some NVOs have designs on filling that breach, but another set of service providers have been casting their eyes on this problem as well: software companies.

The most public of these efforts has been developed by the ocean e-commerce platform INTTRA, which gathers data from about one-quarter of all container bookings globally. INTTRA’s bread and butter is providing tools for booking requests and shipping instructions, but the company has been developing an electronic tool it calls eVGM (electronic verified gross mass) to help the industry navigate the perplexing regulation.

“While technically there is no requirement by SOLAS for NVOs to collect VGM, they will likely be one of the primary submitters of VGM to [shipping lines],” said Inna Kuznetsova, president of INTTRA Marketplace. “To help them we explore a scenario for our solution that accounts for provisioning of the weight information from a third party to the submitter—often the NVO. Our service will be announced a bit later in the year and will enable the

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**Container Weight Verification Primer**

**What is the regulation?** An amendment to an existing International Maritime Organization rule requiring containers to be weighed. The Safety of Life at Sea (SOLAS) verified gross mass (VGM) amendment requires the master shipper on the bill of lading provide certification of the weight of the container. The regulation is often just referred to as SOLAS or VGM. The mandate is set to go into effect July 1.

**How will the weight be certified?** The regulation says container weights can be certified in one of two ways—either by weighing the entire laden container, or by totaling up the weights of all materials inside the container (both cargo and packing materials) and adding it to the tare weight of the container itself.

**Where will that verification actually happen?** Unclear at the moment, but the likeliest answers are either at third party weigh stations or marine terminals that have scales at or near in-gates.

**How will the weight certification be transmitted, and to whom?** The certification document is to be submitted to the ocean carrier by the shipper and must be signed by the shipper or shipper’s representative. It’s not clear whether the certification will be added to an existing document (like the bill of lading) or if it will be issued as a separate document. That will likely be left for the industry to decide.

**Who decides if a container is denied loading due to a lack of certification?** The regulation requires the certification be submitted “sufficiently in advance” to the carrier and terminal, and states the ultimate decision on whether to deny loading resides with the ship captain. The regulation does not, however, specify what “sufficiently in advance” means. That will likely be a commercial decision made separately by individual ports. It’s possible the advance timeframe for certification submission could vary by terminal within a port.

**Who will bear the cost of the verification process?** Also unclear. Given the low freight rate environment, it seems hard to imagine carriers will bear the cost, particularly since the previous SOLAS regulation that required containers be accurately weighed was basically not being adhered to. NVOs might struggle to pass through costs to their customers, but they might be able to make a VGM fee stick, such as those fees for advance manifest filings.

**Where do I turn for help?** NVOs looking for guidance on how to meet the regulation can look to technology providers like INTTRA, CargoSmart, Descartes, and GT Nexus, or to their ocean carrier partners for clarification. While some companies, like INTTRA, are pushing for a standardized electronic approach to meet the mandate, it is likely that individual compliance mechanisms will emerge between shippers, NVOs, carriers and technology providers.
submitters (often the NVO or consolidator) to collect the weight information from another party. It may be a weigher or a loader or a shipper/BCO, or even a terminal in a case of containers being packed there. Our solution will then provide for secure submission of the details to the carriers and receiving confirmations.”

INTTRA is not alone. The logistics software provider Descartes, which partners with INTTRA for booking requests for some customers, is helping its NVO and forwarder customers navigate the choppy waters. Eric Geerts, director of product management for Descartes, said one of the key issues to contend with is just adding an extra data point into the process. Sounds simple, but it may not be so.

“Some of these customers send us different formats than the carriers understand,” he said. “Adding a few extra data elements can have some impact.”

Also problematic, he said, is that “some NVOs don’t know” about the deadline.

“Our impression is that everyone is looking at each other, asking ‘what are you going to do?’” he said. “July is a very short period to be ready. That’s one of the main concerns for the NVO industry.”

Indeed, Tudor mentioned that awareness might be the most important part of the process at this point.

Ocean freight technology providers lie in a similar zone as NVOs in that they often have to cater to both shippers (including NVOs and forwarders) and the carriers. And that’s no different with the SOLAS amendment.

“Some customers, it seems like they just learned about this,” said Lionel Louie, chief commercial officer at shipment management provider CargoSmart. “They have no idea. They think of it as similar to the [United States’ Importer Security Filings] filings. We’ll leverage 3PLs to take care of it and we’ll be fine. This is one area we see. The other side is the carriers. When we talk to them, because of so much uncertainty on the other end, they come back to the very basics: ‘do I have the process to record the weights?’ They’re not thinking about how to streamline or collaborate a little more with their customers. It’s very basic at the moment.”

Alan Yip, an assistant product design manager at CargoSmart, said that with a lack of clarity in how the regulation will be implemented, his company has to be nimble.

“Each carrier has their own plan,” he said. “Whatever new idea they come up with, we’ll adapt with it. We talk regularly with key customers. Our platform will be ready whenever the new regulation is ready. We’re basically on standby to be ready for anything.”

That said, Louie noted that there are probably only four or five variations of how the regulation enforcement will play out, “not 50 or 60.”

Third Document? Another conundrum that touches every link in the chain is just how the certification document will be generated and submitted to carriers and terminals.

Will it be added to an existing document, such as the shipping instructions or booking request? Or will there be a separate, third document that only contains the weight verification? And what information will be required on that document aside from the shipper’s signature?

And finally, how will that document be transmitted? It seems almost churlish to suggest that it be transmitted in a format other than electronic, but practicalities may dictate a certification be generated in hard copy from time to time. Clearly, the most efficient way will be to submit the document directly to a carrier via their own receipt application, through a standardized portal like what INTTRA and CargoSmart offer their customers, or through some other customized solution that an NVO might provide.

There is no consensus here, though, and the reality is that there may be multiple ways for the certified weight to be conveyed to the carriers. This is causing some heartburn.

Adding a field in an existing document, or just merely requiring shippers and NVOs file another document, sounds simple in theory, but there are some ripple effects that could quickly build if things don’t go smoothly. It takes a brave NVO or shipper to believe that there won’t be any issues to iron out come July 1.

“The VGM will need to become a standardized document,” McMichael said. “UPS is ready to support that development as an industry. We will have our solution, but we will be ready to support any industry standard.”

Multifaceted Issue. The other striking element of this discussion is just how many facets there are to the container weight equation. While the industry seeks some uniformity in terms of enforcement and compliance, the reality is that each shipper and NVO’s unique situation brings different problems to the fore.

For instance, a shipper of wood products told American Shipper that one place her company sources heavily from has heavy rains in certain seasons, causing the wood the company ships to swell and become heavier. Might that heavier weight push a certain container beyond the weight tolerance for loading in that country?

An NVO mentioned that he was unsure who would make the final call on whether to deny loading for a container lacking weight verification—the carrier or the terminal? Common sense dictates it would be the shipping line that would make the call, since it’s their asset and their crew at stake. But the language in the regulation sort of makes it seem as if it’s initially the terminal’s call, even though it leaves the final decision to the ship captain.

And if it is the terminal’s call, that makes for an interesting potential conflict if the terminal is also the entity charging a fee for the weight verification process.

Who Bears The Cost? It may seem cynical to focus on cost when the VGM regulation is about ensuring vessel safety, but there is concern about how this mandate will be paid for.

NVOs universally told American Shipper they were skeptical that the cost to comply with the IMO rules could be passed on to their shipper customers—the competitive landscape is too fierce. It seems unlikely carriers and terminals would bear the brunt either, so NVOs naturally worry their bottom lines (both LCL and in situations where they take the responsibility for verifying the weight, such as at origin for import cargo) will take a hit.

So perhaps the question is to look at who will benefit financially? Will it be terminals that have weighing facilities, taking a VGM fee? Will it be third party weighing stations near the port? McMichael said it’s conceivable a fee could emerge like those related to advance manifest documentation and other ocean freight regulatory mandates.

Either way, McMichael said terminals should take a proactive role in the discussion.

“The issue of terminal congestion could get worse,” he said. “Ports and terminals need to talk about the efficiencies they need to deploy.”

“The reality is if the NVO is the master shipper on the bill of lading, in theory, they will be responsible for direct compliance.”

Richard Furman, trade and maritime attorney, Carroll McNulty Kull
The Legal Take. “The reality is if the NVO is the master shipper on the bill of lading, in theory, they will be responsible for direct compliance,” said Furman, a New York-based attorney with Carroll McNulty Kull. “The NVO is an agent for the shipper. In most instances they have not loaded the container and have no interest in the actual cargo, but the reality is they are in the direct line of fire. It’s going to be difficult for them to verify.”

Furman bemoaned the paucity of detail in the regulations: “There are little phrases in the new regs that beg ‘what do you mean by that?’

“The LCL loads bother me more than anything else,” he said. “God forbid you don’t get the correct information from each individual load.”

Furman ultimately invoked a quote from Teddy Roosevelt to describe the situation facing NVOs: “Do what you can, with what you have it, where you are.”

Should Carriers Lead? Amid all this uncertainty, there’s a school of thought that carriers should collectively take the lead in specifying how container weights should be certified, how and when the documentation should be transmitted, and whether or not the container should be denied loading if the certification is not produced.

It will be up to governments to specify who is responsible for enforcement, but carriers laying down specifics in line with those enforcement guidelines might at least let NVOs and shippers shoot at a stationary target.

There are a couple problems with this, though. For one, carriers are treading lightly themselves because they too don’t know the parameters that individual nations will decide upon in terms of enforcement. Second, the liner shipping business is not typically known for its success in standardizing processes, partly because carriers don’t like to work with competitors unless they have to, and partly because of other regulatory issues that prevent them from cooperating on certain processes.

Additionally, would the rest of the industry be amenable to carriers mandating a certain process for container weighing and documentation submission? Or should this be a decision where input comes from all sides?

A Reckoning. Another theory is that between now and the day the IMO regulation goes into effect, there will be an industry-led initiative to clarify, once and for all, how this regulation will practically affect the industry.

“I believe the industry will provide clarity before the deadline,” Tudor said. “We collectively have to decide what a certification is.”

For Tudor, the timing of this reckoning is instrumental because an NVO realistically needs to roll out its game plan to customers at least 30 days in advance.

“Maybe it’s that you move cut-offs up because of the documentation,” he said. “Whether everyone needs one day more or two days, that’s not clear. As a NVO, you need to cut off the edges in terms of transit times so you can position yourself to be competitive.”

And that gets back to the serious underlying issue—cost. Someone in the supply chain will bear the cost for meeting the container weight mandate. NVOs, operating as they do in a fiercely competitive environment and using a model in which they layer margin on top of very low ocean rates, are not in a great position. They can’t necessarily pass the cost through to shippers, nor can they expect carriers to eat some or all of the cost when carriers are often getting paid at or below operating costs.

As Furman put it, “the NVO is in a position where it has the least amount of control over the process and they’re potentially more vulnerable than even the shippers.”

“We will need to either weigh each individual shipment upon receipt at the CFS or weigh the loaded container at a certified scale en route to the carrier’s terminal,” said Charlie Brennan, executive chairman of the NVO Vanguard Logistics Services. “In both instances it will result in additional costs as well as lead time to facilitate and comply.

“NVOs of straight loads also take on additional liability under SOLAS. On full-container loads, the NVO in most cases will not have any control over the loading of the container, weighing of the container, as well as obtaining the VGM. However, we will be held liable as the shipper of record with the [vessel operator], without any control over the process, to obtain the VGM and provide it to the ocean carrier.”

Brennan did say NVOs could choose to take on the certification process.

“As NVOs we can look to offer the weighing of individual LCL shipments as a service. This would also apply to the weighing of full containers prior to delivery to a carrier’s terminal. In all cases I do believe this will result in additional costs and delays to the flow of commerce,” he said.

Uniform Enforcement. A common theme to emerge from conversations with entities on all sides is that the industry wants uniformity of enforcement when it comes to the weight certification mandate.

The way an NVO, shipper, IT vendor, or other service provider complies with the mandate might very well be tailored to specific situations. But the enforcement, ideally, should be as uniform as possible, particularly within an individual nation.

Yet, that uniformity might be hard to achieve. For example, at the time of writing this article, the U.S. Coast Guard said it was essentially leaving enforcement of the mandate up to individual ports. While that decision makes sense in one respect—ports might be best suited to determine how to handle the practical realities of container weighing at their own facilities—it leaves NVOs and shippers in a pickle.

Every port has slightly different weight certification parameters, that’s a lot of process variation to manage. As mentioned above, the technology providers are ready for that complexity, and NVOs will have to be as well.

But that doesn’t mean it couldn’t be made easier for NVOs and their customers to manage.

The final word goes to Dean Tracy, a former director of international transportation for the retailer Lowe’s and now head of his own consulting firm, Global Integrated Services.

“This is 10+2 all over again,” he said, in reference to U.S. Customs and Border Protection’s nearly decade-old Import Security Filing mandate that affected the industry deeply upon implementation. “It’s even C-TPAT (the Customs-Trade Partnership Against Terrorism trade facilitation program) all over again. Vendors stand to lose the most. The carrier loses because he doesn’t get paid the freight. The BCO loses because he doesn’t have product to sell. No one knows who to take direction from because there’s been no clear captain.”