



The 4,400 teu *MSC Napoli* accident in January 2007 gave investigators a unique opportunity to compare cargo details supplied by shippers with a container's actual contents. *Bloomberg*

# Top box lines join forces to cut cargo-related incidents

Information will be shared between carriers through new Cinsnet online database

JANET PORTER

TO paraphrase Donald Rumsfeld, there are known unknowns, as well as unknown unknowns.

And while the combative former US Defense Secretary was talking about weapons of mass destruction, his words could just as well have been referring to the somewhat more mundane world of container shipping — or rather, the mystery of what is really inside the millions of anonymous steel boxes shipped around the world each year.

That is not to say the industry is suspected of arms smuggling, but some cargoes are nevertheless potentially lethal if not stowed properly and declared accurately.

Ship operators know they are often given false cargo descriptions or the wrong container weights, although these misdeclarations are not necessarily deliberate.

Furthermore, their customers sometimes have little understanding of how to pack merchandise safely so loads do not shift during transit, possibly with deadly consequences.

But it is hard to tell the true extent of these malpractices. To make matters worse, there could also be risks of which the industry is as yet unaware.

It may not be until an accident has happened that the hazards associated with certain cargoes become fully apparent.

That was certainly the case a decade ago when container lines shipping calcium hypochloride, a bleaching agent mostly used to clean swimming pools, suffered a number of spectacular onboard explosions that hit the headlines.

Batteries are another case in point, potentially dangerous and yet not classified as hazardous.

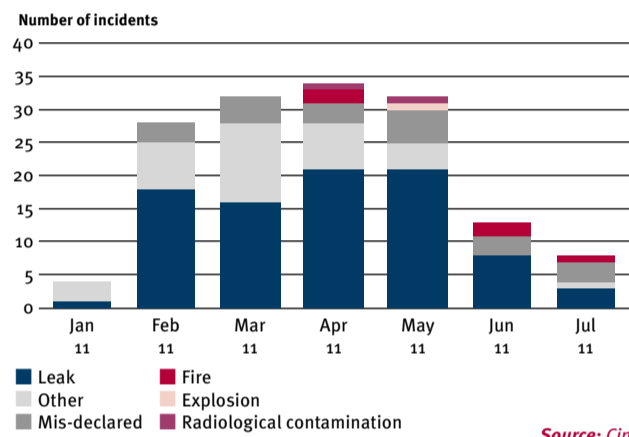
Unless there is loss of life or serious damage to a ship, most accidents go largely unreported or unnoticed, leaving those most in danger invariably in the dark about the threats that may be lurking and how to minimise the risks.

Not until the 4,400 teu *MSC Napoli* accident in January 2007, which gave investigators a unique opportunity to compare cargo details supplied by shippers with a container's actual contents, was the industry able to get some idea of the true extent of certain problems.

The findings were quite alarming, with the weight of 137 of the 660 containers on deck found to differ from the declared figure by more than three tonnes, resulting in a total deviation of 312 tonnes from the cargo manifest.

## CINSNET INCIDENTS

Data collected during trials



Source: Cinsnet

With hundreds of containerships with a nominal capacity of 10,000 teu or more now entering service and Maersk ordering 18,000 teu vessels, the potential for a massive breach of safe limits is increasing by the day.

Container weights are not the only problem. A few winters ago, there were numerous mishaps involving containers washed overboard. But only because some of the ships arriving in port with containers hanging over the side were caught on camera and other boxes washed ashore on north European beaches, did these losses capture public attention.

This has forced the industry to take action over something that had almost certainly been happening for years, but which had been largely ignored.

The International Maritime Organization estimates around 10,000 containers are damaged during transport each year, of which between 3,000 and 4,000 are lost at sea. As these would be containers stowed on deck, many are likely to contain dangerous cargoes that could cause harm either to those ashore or to the marine environment.

Different initiatives are now taking place to improve the safety of container transport, with the IT Club's risk management director Peregrine Storrs-Fox describing these as "exciting times" for all those campaigning to end unsafe practices and laxity along supply chains.

"The industry is moving away from tolerance and latitude to a more regulated approach to how things should be done," he says, in reference to moves by the IMO on mandatory weighing of containers, the International Labour Organization that is updating guidelines on the packing of containers and amendments to the International Maritime Dangerous Goods Code to ensure those handling hazardous cargoes are better trained.

However, one particular industry-led scheme has also caught the imagination. For while regulators have decided they need to get more involved, a number of lines themselves are working on a project designed to ensure that experiences and know-how are shared across the industry, with urgent safety-related information passed on as fast as possible.

Five of the world's largest ocean carriers — Maersk Line, Mediterranean Shipping Co, CMA CGM, Evergreen and Hapag-Lloyd — are piloting a network that will

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IUMI



John Leach, general manager, cargo management, Maersk Line, left, with Cins chairman Dirk Vande Velde, global manager for chemical transport, environmental and social business affairs for MSC.

enable the container shipping industry to build up a comprehensive database of cargo-related incidents and respond accordingly.

The fledgling Cargo Incident Notification System Network is scheduled to go live in September, with other ship operators and owners then invited to participate. The scheme may also be extended to the non-container sector, with some bulker and ro-ro operators already expressing interest.

The idea is to gather, collate and exchange all information related to potentially dangerous containerised freight, that poses a threat to lives or the environment, says John Leach, general manager, cargo management, Maersk Line.

That would enable container lines to be rapidly alerted in the case of a particularly worrying cargo-related safety matter, and for carriers to have a clearer idea of how widespread certain bad practices or risky situations are across the industry.

Those moving cargo will have instant access to information about an incident to which they may need to respond, rather than having to wait months for the result of a formal accident investigation or for an insurers' loss prevention circular to be published, says Cins Organisation chairman Dirk Vande Velde, global manager for chemical transport, environmental and social business affairs for MSC.

Speaking to Lloyd's List following a board meeting of Cins

founder members in London on Monday, Mr Vande Velde said he had been alarmed by some of the feedback during a few weeks of trials — and particularly by the number of fires reported, although leakage remains the single most widespread problem.

The project has already won praise from marine insurers who say the Cinsnet initiative deserves the fullest support.

"It will be of positive benefit to ship and cargo owners and to insurers, who are concerned about the rising number of dangerous containerised cargo incidents," said the International Union of Marine Insurance, which will focus on the issue of accidents caused by poorly-stowed containers or inaccurate weight declarations at its annual conference in Paris later this year.

Singapore-based Mike Davies of Zurich Insurance and chairman of IUMI's cargo committee, said as well as leading to the improvement of safety on board boxships, Cinsnet should also reduce the number of significant losses relating to hazardous cargo, poorly-stowed containers and inaccurate cargo data supplied to shipping lines — all of which have affected cargo underwriting results in recent years.

Protection and indemnity clubs are also enthusiastic about the scheme, since it will provide information about incidents that may not be reported to insurers.

From now on, they will know much more about accidents that may have gone under insurers' radar, according to Karl Lumbers, speaking on behalf of the International Group of P&I Clubs, which has been advising Cinsnet members. This will give a much more complete picture of safety matters and the level of risk.

By airing incidents across the industry and exchanging thoughts and ideas about how to tackle particular cargo-related problems, the Cinsnet founders hope container shipping will no longer be plagued by either known or unknown unknowns, and that greater shared knowledge will result in a far safer industry. ■

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## DSV checks aim to lift veil on weights

ANECDOTAL evidence about the number of misdeclared containers is plentiful, but accurate data is far harder to obtain, writes Janet Porter.

However, a pilot scheme being conducted in the UK by transport and logistics firm DSV concerning road freight could help to throw more light on the matter, giving shipping lines a better idea of the scale of the problem they also face.

Worried about the amount of wrong information it was receiving concerning both the size and weight of loads to be collected, DSV has started to scan cargo in one of its marshalling yards to check the dimensions.

Specially-designed overhead equipment has been installed which ensures there are no handling delays. Likewise, the forklift will check the weight of each scanned load as it is picked up.

"That gives us a lot of data in terms of whether cargo is being overdeclared or underdeclared," says Rene Falch Olesen, chief commercial officer of DSV Road and managing director of DSV Road UK.

With these new checks having started in early July, it is too soon to draw any firm conclusions about the extent of incorrect weight and volume declarations.

But manual checks carried out by DSV in the past found that, typically, incorrect weights were supplied for between 5% and 8% of loads, while volume was wrong for 10%-15% of cargoes.

Being given erroneous dimensions is a service issue, with freight possibly left behind at the end of the day if there is insufficient space on the truck because some loads were larger than advised. That may result in dissatisfied customers, but is not a threat to safety. However, heavier or lighter loads than declared poses a real risk for any mode of transport, on land, sea or air.

Mr Olesen does not believe



Olesen: the freight forwarding industry "is years behind" air cargo.

misdeclarations are being made deliberately, but says customers do not always have the facilities to provide accurate measures, so make do with estimates.

DSV hopes information it gathers from its new scanning and weighing kit will enable firms to make the necessary adjustments and compile scientifically-gathered data about discrepancies between customer declarations and actual dimensions and weight.

"If there is a genuine problem, that problem needs to be dealt with," says Mr Olesen, who expects the scheme to be rolled out gradually to other depots across the group if the early trials confirm misdeclarations are widespread.

He acknowledges the freight forwarding industry "is years behind" the air cargo and parcel transport sectors in terms of checking dimensions and weight, but says the new equipment commissioned by DSV is easy to use and does not cause any disruption to a business where time is of the essence.

What could emerge are some facts and figures that will give shipping lines as well as freight forwarders a much clearer idea of how serious the problem of misdeclarations really is. ■

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## Giant boxships pose new risks

THE latest generation of super-sized containerships could pose new cargo safety issues for the industry that have yet to be addressed, writes Janet Porter.

Jeroen De Haas of BMT De Beer, part of international engineering, science and technology consultancy BMT Group, has warned that even if containers complied with the 2005 standard, piling boxes 11

high "will exacerbate existing stacking and lashing issues".

In a recent article published by BMT's Focus newsletter, Mr De Haas says the firm's work on recent container casualties "has indicated that some of the current methodology might underestimate the forces acting on a container stack".

He cautions current design criteria are based on a 25-year

return period using data from 1980, but more recent research indicates actual wave heights, for example, are significantly higher and occur more frequently than design data suggests.

"If this is correct, then a fundamental rethink on how a 10-high container stack might be lashed and secured will be required," says Mr De Haas. ■

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