

## **ICHCA**

November 2020

**Press Clippings** 

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Press clippings relating to the following press release:

CTU Code 'Quick Guide' now available in Mandarin

Distributed on 25 November 2020



### CTU Code 'Quick Guide' now available in Mandarin

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Details

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The Cargo Integrity Group makes its recently published 'CTU Code – a Quick Guide' available in the Mandarin language to further its campaign for the adoption and implementation of crucial safety practices throughout the global supply chain.

The organisations, which comprise the Cargo Integrity Group (CIG), strongly believe that more widespread use of, and

adherence to, the IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU Code) and the packing practices and techniques it covers will dramatically increase the safety and security of the global container supply chain. Many incidences of container fires aboard ships, landside conflagrations, container stack failures, vehicle rollovers, train derailments, internal cargo collapses and incidents of invasive pest contamination, can be traced to poor packing practices.

The five international freight transport and cargo handling organisations that are collaborating under the Cargo Integrity banner are the Container Owners Association (COA), the Global Shippers Forum (GSF), ICHCA International, TT Club and the World Shipping Council (WSC). In September, the group published materials in English to provide ready guidance to the CTU Code, including a Checklist of actions and responsibilities of those undertaking the packing of cargoes in freight containers specifically. This is now also available in Mandarin Chinese HERE

The group recognised that the full CTU Code, together with its annexes and further 'informative material', comprises hundreds of pages of text. This comprehensive body of guidance provides all parties in the supply chain with information about their responsibilities, details of how to pack, secure packages and cargo items and takes account of diverse forces encountered during transport, load distribution and the capability to brace and secure effectively. It also places responsibility on the shipper to declare correctly the composition of the cargo. However, its sheer size and comprehensiveness militates against its easy usage and application to all cargo types. The Quick Guide aims to provide a ready route map for all actors in the supply chain.

It is important for the CTU Code to be as accessible as possible to as many operatives as possible and the aspiration is that this Quick Guide, which distils the Code into just thirteen well-illustrated pages, will encourage them to learn how the Code can be applied to their own particular needs.

It is the intention of the organisations in the Cargo Integrity Group to make the Quick Guide available in other languages as a key part of its dissemination programme and further translations are planned during 2021.

Source Cargo Integrity Group



## Cargo Integrity Group produces makes CTU Code 'Quick Guide' in Mandarin

26/11/2020 admin Uncategorized 0



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By Baibhav Mishra

November 26, 2020



(Image Courtesy: TT Club)

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Sea News, November 26



Other press coverage collated during the period

November 2020



## NCB Group joins ICHCA to strengthen ties with global cargo handling community

National Cargo Bureau (NCB), the New York-based cargo inspection company, and Exis Technologies, global leaders in IT solutions for shipping dangerous goods by sea, have announced that they have joined the International Cargo Handling Coordination Association (ICHCA) under a group corporate membership. Exis Technologies, which has been part of the NCB Group since April 2018, had previously been an individual member of ICHCA for over 10 years.

Exis Technologies and ICHCA have worked together on many joint projects over the past decade, including, with sponsorship from the TT Club, the CTU pack e-learning courses for those involved in container packing job roles and IMDG Code e-learning courses for shore-side staff handling and transporting dangerous goods by sea.

As part of the membership, Capt. Eric Rounds, Chief Surveyor NCB, will join the ICHCA Technical Panel alongside Mr Will Bartle, Compliance and Regulations Manager at Exis Technologies. The panel provides technical advice and publications on a wide range of practical cargo-handling issues and will allow NCB and Exis to be involved in the improvement of knowledge and best practice across the global cargo chain, highlighted a release.

Mr Richard Brough OBE, Head of ICHCA, commented, "We are delighted that the NCB Group have decided to join us under a group corporate membership. Together the companies bring a wealth of container and dangerous goods shipping experience. We have worked with Exis for many years on initiatives to improve cargo handling. We look forward to building on our relationship with Exis and NCB to develop more solutions for our members and the wider shipping community."

Source: Exim News Service: London, Nov. 1



# NCB Group engages with industry for dangerous goods white paper feedback

in International Shipping News 02/11/2020



New York based cargo inspection company National Cargo Bureau (NCB), and Group company Exis Technologies, based in the UK, have been engaging with industry on opinions relating to undeclared and misdeclared dangerous goods in the supply chain at several events following the release of <a href="NCB's White Paper">NCB's White Paper</a> A Comprehensive Holistic Approach to Enhance Safety and Address the Carriage of Undeclared, Misdeclared and Other Non-Compliant Dangerous Goods in July this year.

Feedback from events that the NCB Group have presented at including a training event organised by international insurance company Thomas Miller held on 4 August, the annual International Union of Marine Insurance (IUMI) Conference held 14-25 September, the NCB/International Vessel Operators Dangerous Goods Association (IVODGA) virtual meeting on October 6 and the Container News Cargo Integrity Seminar on 22 October have revealed that for those responding, involved in cargo claims, in summary:

- More than 80% of people responding have been involved in a cargo claim/incident involving an undeclared/misdeclared cargo
- 62% of people perceive that instances of undeclared/misdeclared cargo are increasing
- More than 90% of people responding agree that screening cargo bookings will help avoid undeclared/misdeclared cargo being placed into the supply chain. 51% of people strongly agree with the same statement.

The NCB/IVODGA virtual meeting to discuss and get feedback on the White Paper included IVODGA members, Council on Safe Transportation of Hazardous Articles (COSTHA) members, industry expert panelists from various industry sectors including container lines, port/ terminal operators, cargo insurers, vessel insurers, competent authorities, shipper and freight forwarders/logistics providers with a key role or interest in the safe transport of dangerous goods. A recording of the meeting can be seen here: https://www.youtube.com/watch?v=8a2byA7gL3o&feature=youtu.be

The White Paper was written in response to a recent Container Inspection Safety Initiative carried out by NCB. The inspection revealed an alarming number of containers carried by sea include misdeclared dangerous cargoes that represent a serious safety risk to crew, vessel and the environment. The white paper is calling for industry to adopt a comprehensive, holistic and coordinated approach to address this worrying trend with 12 recommendations including the incorporation of integrated digital tools like Hazcheck Detect, a new cargo screening tool for misdeclared and undeclared dangerous goods in containerised shipment developed by NCB and Exis Technologies. Maersk is the first container line signed to the tool.



A comprehensive holistic approach to enhance safety and address the carriage of undeclared, misdeclared and other non-compliant dangerous goods.

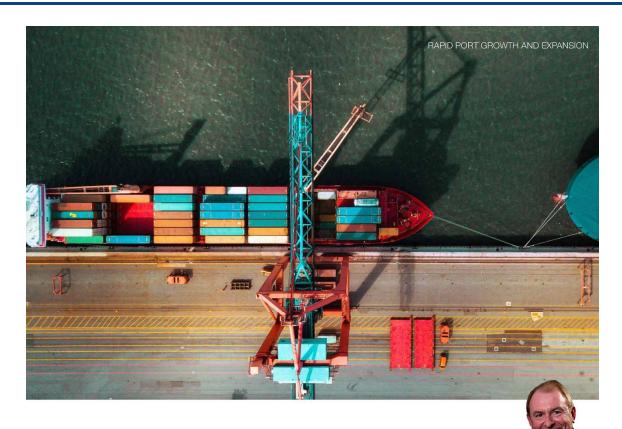


SAFELS OF LIFE AND CARGO AT SEA

Ian Lennard, President of NCB will be giving a presentation on dangerous goods in containerised shipments at the virtual Global Liner Shipping Conference on Tuesday, 3 November 2020. Ian will share information regarding the scale of the problem in the industry with insights gained through NCB's cargo inspections and explain how Hazcheck Detect will help to improve Safety of Life and Cargo at Sea.

Source: NCB Group





## CARGO HANDLING AND EQUIPMENT SUPPLY IN **MEGA-PORTS**

**ICHCA** 

Richard Brough, Head of the International Cargo Handling Coordination Association (ICHCA) International

As the name implies, "mega-ports" suggests modern terminals with multiple shipto-shore (STS) cranes and a myriad of other pieces of handling and servicing equipment.

Mega-ports have followed on from the massive increase in trade that the world has seen over recent decades. This prompted ship owners and operators to look for ever increasing economies of scale - the advent of the new era of "mega container vessels" of course, and this has resulted in mega-challenges for ports, terminals and their suppliers.

Coupled with uncertainties brought about by the COVID-19 Pandemic the industry has been overwhelmed to an extent as it was already facing a set of complex challenges such as:

- Decarbonisation
- Helping vessels meet their emissions
- Just in Time Deliveries

- Productivity increases
- Re-skilling the workforce to deal with emerging and innovative technologies

Disruption in trade brought about by the pandemic has made investment decisions even more difficult. Port and terminal operators are sometimes faced with having to invest in new plant and equipment with a return on investment (ROI) that has a longer duration then the concessional rights to run the terminal (if it is not their own) that they have been awarded by the port authority or owners.

Those investment decisions are further complicated by the nature of today's market and the solutions being offered. A new STS crane to service the new breed of mega-carrier, such as the MSC Gulsun class or HMM Algeciras class, is altogether a different prospect to what might have been specified and purchased just a decade ago.

To service a vessel with 24 TEU across and 12 TEU below and 12 TEU on deck requires a lift-height approaching approximately 60m, a boom of 80m and hoist and trolley speeds far in excess of anything required before. This consequently increases the costs significantly and creates a major headache for the operator and the maintenance teams.

#### **SOLUTIONS ON OFFER**

Of course, solutions exist, semi or full automation to assist the operator, or even remote operations from the control room. Sophisticated sensor networks in the machine itself monitoring all the potential failure points, gearbox, drives, hoist, gantry and trolley motors etc. and even "intelligent" hydraulic hoses that can tell the maintenance team when they are about to fail.

Solutions though, also bring their own challenges. Does the intelligence system in the crane interface with the terminals? Is there a requirement to install expensive middleware? Are the data sets compatible? Can the maintenance team understand the data provided so they can make the appropriate interventions? The suppliers of course tell us all this is possible and of

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course it is, but can you get all this from your OEM supplier or do you need multiple layers of solutions to make it all work, and better still improve your productivity and reduce your maintenance and whole of life costs for the equipment.

Faster, higher, stronger, longer generally means increased cost. Machine learning development and the greater use of artificial intelligence (AI) in services such as predictive maintenance will certainly help. The use of such intelligence to augment the operation will also lead to productivity improvements, but generally at greater cost.

Of course, this all requires new skills from the planning, operations and maintenance teams and a new way of thinking from the procurement team. Companies can no longer work in silos, the whole team need to be thinking as one, and that includes the IT department.

Suppliers need to adapt too, they need to be much more closely integrated with the end-user and try to understand exactly what it is that will be the right solution for that purchaser who may well be spending \$10 million or more on one piece of equipment.

#### THE REAL OPTION OF RETROFITTING

In some terminals it is simply not possible to install these new STS cranes, or even automated yard equipment. Therefore, retrofit solutions are necessary, i.e. heightening existing STS cranes to be able to take larger vessels but still operate within the confines of the available apron space and the quay loadings under the crane rails. One important factor that gets over-looked is that you simply cannot keep throwing more cranes into the vessel operation because you will be unable to get them all working together in the available length of the vessel and the hold configuration.

Getting the containers on and off the vessel is one thing but there must be an effective solution on the land side, both in the yard and the interface with the road and rail side. Not much point in discharging containers at 35+ per hour per crane and then you have a bottleneck in the stacking yard or a 4km queue of lorries waiting to collect, especially if they have come for just in time cargo.

As a result, a "total" solution is the name of the game and each component part of the system must work in harmony. The





## "FASTER, HIGHER, STRONGER, LONGER GENERALLY MEANS INCREASED COST."

piece-meal approach of buying different pieces of handling equipment and trying to make them all work together is a thing of the past.

Total whole-of-life solutions are also important. What is the life cycle of the equipment expected to be given the trade levels you are handling now and what they are expected to be as volumes will inevitably start increasing again once we are through the pandemic? They have already started increasing in China, but much will depend on the economic recovery in the rest of the world. Coupled with that is the move to more resilient supply chains that can react more quickly and be less affected by disruption on a global scale.

#### **DIFFICULT DECISIONS AND THINKING** DIFFERENTLY

These all make decisions difficult, so innovation and technological solutions to today's challenges will continue to develop. Ports themselves are becoming smart by the use of such technology, sensor networks throughout the port, the hinterland and the equipment played out in real time (or even in digital twins) offer serious advantages. Data collaboration through port call optimisation (PCO) and collaborative decision making unite the key entities together and will assist terminals become more efficient and enable vessels to meet their emissions targets.

Further, ports need to think about their own carbon footprint and the move to electrification in their purchasing decisions.

The challenge of Covid-19 has made suppliers think differently too. They are now investing serious money and time into remote- commissioning, remote surveys and maintenance. Some suppliers for instance are looking at augmented reality to help on-site engineers be supported by experts thousands of miles away. In addition, drone inspections of hard to reach structures are becoming commonplace especially as STS cranes can be up to 100m high.

Smart components are appearing to help engineers predict when maintenance or swap-out is required rather than suffer unexpected down-time. Coupled with the greater efficiency gained from ever more intelligent equipment, maybe users do not have to purchase the same amount of yard equipment today to achieve a greater throughput than they did yesterday.

What the new normal will be, we will realise in time, but the signs are already there, and we have touched upon many of them here. The future is in the hands of those who embrace the emerging and developing technologies and factor those considerations into the way they look at their operations, the expected and future cargo flows and the equipment they need to realise their full potential.

#### **ABOUT THE AUTHOR**

Captain Richard Brough OBE BA has had a career spanning over 50 years starting with the Merchant Navy in 1969. Previously he was MD of one of ABP's stevedoring companies. In 2004 he left to set-up his own company; Brough Marine Limited; offering professional advice to global companies involved in the Ports and Logistics sector. This led to him providing the Technical Advisory service to ICHCA International, becoming its CEO in 2013. He was awarded an OBE in HM The Queen's New Year's Honours List in 2011 for services to learning and skills in the industry.

#### **ABOUT THE ORGANIZATION**

ICHCA is an independent, not-for-profit organization dedicated to improving the safety, security, sustainability, productivity and efficiency of cargo handling and goods movement by all modes and through all phases of national and international supply chains.

ICHCA International operates through a series of autonomous national and regional chapters - including ICHCA Australia, ICHCA Japan and ICHCA Canarias/ Africa (CARC) – plus Correspondence and Working Groups to provide a focal point for informing, educating, networking, shaping and sharing industry views to improve knowledge and best practice across the global cargo chain.



## HANDLING DANGEROUS GOODS IN THE WAKE OF THE BEIRUT EXPLOSION

The blast that killed hundreds of people in the Lebanese port of Beirut earlier in August has left many wondering what could have been done to prevent the tragedy. **Adele Berti** finds out whether current regulations go far enough and what the shipping industry needs to do to ensure dangerous goods are handled safely.

n August 2015, two consecutive explosions in a container storage station at the Port of Tianjin in

China killed over 170 people, injuring almost 800 and causing major damage throughout the city. Fires triggered by the explosion kept on picking up throughout the weekend, causing eight smaller explosions days after the first and devastating the area almost beyond recovery.

"Everyone thought that what happened in Tianjin was never going to happen again," observes Richard Brough, director, technical adviser and observer at the International Cargo Handling Coordination Association (ICHCA).

"After Tianjin, there was an expectation that the evaluation of the risks could lead to change and impetus to bring about greater control and transparency on the handling of dangerous goods," adds Peregrine Storrs-Fox, risk management director at transport and logistics insurer TT Club.

And then Beirut happened. Almost exactly five years on from China's disaster, a blast at the Lebanese port of Beirut claimed almost 200 lives, injuring many more, tearing down properties and ultimately triggering a civil and economic crisis.

While aggravated by global concerns for the current coronavirus pandemic, the explosion reopened a long-standing debate on how freight forwarding industries like maritime approach dangerous goods and the role that national and international regulations are currently playing to prevent these disasters from happening ever again.

### **Lessons from Beirut**

Cases like Beirut are not exactly a rarity in the industry. "Incidents with materials like ammonium nitrate have been happening for over 100 years," comments Brough. "Ammonium nitrate is not inherently dangerous but it becomes unsafe if put in storage, often in a warehouse that is contaminated or where the storage parameters for the cargo are not being followed properly."

In the case of Beirut, the blast was caused by a number of malpractices that led to 2,750 tonnes of ammonium nitrate being left unattended at the port for seven years.

## People misdeclare dangerous goods for several reasons

This, Brough says, has happened before. From the Port of Texas City in 1947 to the MSC Flaminia container ship in 2012, through Tianjin and Beirut, dangerous cargo is often mishandled or misdeclared, on some occasions even proving fatal. "People misdeclare dangerous goods for several reasons," he

comments. "One is ignorance and another one is fraud, since for dangerous goods normally there is a premium that shippers charge for handling, or people do not want to pay the cost of compliance, which is another one.

"There's enough information out there about how to handle all dangerous goods - never mind ammonium nitrate - and the regulations and guidance are clear. Whether everybody is aware of them is another matter."



The Port of Tianjin, China.

### Limitations of the IMDG Code

Ships carrying dangerous materials currently fall under the jurisdiction of the International Maritime Organization's Dangerous Goods Code (IMDG Code), a product of the 1960 Safety for Life at Sea Convention, which extends to over 150 countries globally. This document provides indications on how to declare dangerous materials, store them on vessels and transport them. The latest version of the code came into force in January this year, though the IMO is already working on a new amendment slated to become effective in January 2021.

On top of these guides, which are not mandatory, are national laws. Following the Beirut explosion, governments including India and Sri Lanka were quick to inform the public of their commitment to the Code and that they were abiding by its regulations.

## The [IMDG] Code is a complex document and highly technical in a lot of places

However, the code has been previously criticised for lacking clarity and leaving some parts up for interpretation. "The [IMDG] Code is a complex document and highly technical in a lot of places," comments Storrs-Fox. "It's available in all six official UN languages but there inevitably remains room for interpretation 'on the ground'."

But Brough says this is merely an excuse for some governments to cherry-pick on how to enforce regulations. "Yes, you do get some errata and corrigenda on juridical terms from time to time in the translation of the language of the IMO," he argues, "but they check very carefully to make sure that there are no misinterpretations.

"There are some special provisions which do leave people an amount of wriggle room for various commodities, and we're concerned that those special provisions sometimes can be used for people as exemptions that help them avoid having to comply with certain parts of the code if you use a special permission to get around it."



The Port of Chittagong on the coastline of the Bay of Bengal.

## The lack of standardised regulations

With its latest update expected for the new year, Brough says that the Code will extensively cover all procedures that vessels need to follow when carrying dangerous goods. What is missing, however, is its full implementation in some countries as well as specific regulations for ports and terminals.

"You've got a mixture of international and national law at this point, which adds an interesting dynamic to the fact that you've also got the specific interface between the sea mode and land - in terms of ships coming alongside and what the expectation is when it comes to regulations," comments Storrs-Fox.

In other words, while regulation may be there, its potential openness to interpretation and the fact that it's not enforceable nationally gives individual states the power to decide how to do so. "Every aspect of the movement of cargo, its storage and regulation is fragmented; not just amongst the UN agencies, but also at national level, there are different interest groups focused on their particular activity and requirements," he adds.

"We need countries to enforce the regulations that exist, and they sadly don't," says Brough, citing as an example the inspection programmes for cargo transport units carrying dangerous goods, a practice also mandated by the IMO. "Out of the 174 maritime nations that are under it, this year only five reported their non-compliance," he explains.

"The US National Congress Bureau recently ran an exercise last year where they inspected 500 containers for different shipping lines and they found 60% non-compliance."

## We need countries to enforce the regulations that exist, and they sadly don't

The only global document covering the role of ports when it comes to dangerous goods dates as far back as 2007. This is known in the industry as Circular 1216, or the Revised Recommendations on the Safe Transport of Dangerous Cargoes and Related Activities in Port Areas.

"There is no standardised legislation for ports across the globe," says Brough. "The [Circular 1216 has] high-level recommendations that nation states are meant to adopt into their own legislation. He adds that while some countries - including the UK, US, Europe and Australia - continue to successfully enforce it, many others are however still failing to do so.

This inevitably has negative repercussions on the way ports handle dangerous goods - the explosions at Beirut and Tjanin were tragic examples. "I've been to terminals where I've seen dangerous goods being stored very badly and terminals that hadn't had a practice drill with the fire and rescue service in 40 years of operation, just a short distance away from urbanisation, and that is criminal," Brough adds.



There is no standardised legislation for dangerous goods handling at ports worldwide.

## Improving the inspection regime

ICHCA, TT Club and several other groups are currently lobbying to update Circular 1216 while also working on new papers and guidance that provide more clarity on best practice in ports and terminals. These efforts are also meant to raise awareness among members of the maritime and port communities of the need to carry out extensive on-site inspections and staff training.

As Brough explains, the frequency of inspections varies from country to country, though even in the most proactive ones these only tend to take place after an accident occurs. "The Chemical Distribution Institute typically comes and checks your terminal with its audit system, after which they give a certificate," he says. "We're currently encouraging more and more [hubs to go for] both a self-inspection and one done by an exterior body just to make sure that you're doing everything right. If nations aren't doing it, we're going to have to do it ourselves."

# With ICHCA, we're trying to put together an operational guidance looking to improve risk assessment and bringing in a better safety regime

Meanwhile, urgent changes are also needed to ensure that terminals are properly trained for emergencies. "A number of governments and port operators have spent a long time since the Beirut explosion reassessing what measures they had in place, how good their training is, whether they run drills, how aware they are of the cargo that is in transit as well as in long term storage and what the risks are," says Storr-Fox. "With ICHCA, we're trying to put together an operational guidance looking to improve risk assessment and bringing in a better safety regime even in the absence of national legislation."

The IMDG Code does include a section on training to handle dangerous goods, but as Brough explains, this only partially solves the problem. "Training companies may come and teach them how to understand every part of the IMDG Code but they don't need that," he concludes.

"What they need to know is the basic principles, particularly with recognising the hazards, knowing what to do when things go wrong, and how to deal with the rescue and emergency service when things do go wrong."