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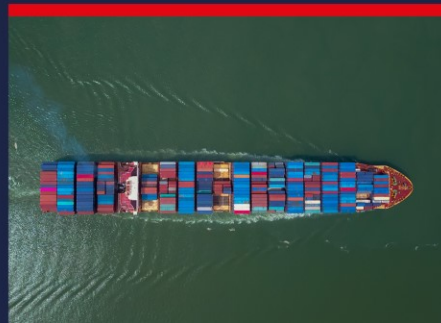
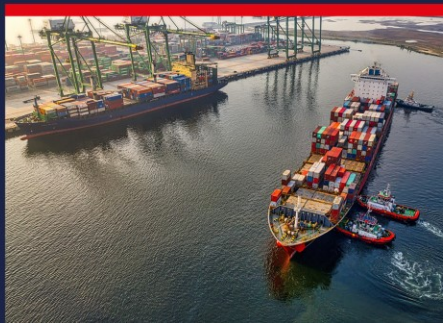
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# Smart Container Challenges CMA CGM

Ann-Christin Fröhmcke



# Smart Container Identification



CMA CGM Ann-Christin Fröhmcke: Smart containers and LNG

BIC Douglas Owen: Regulatory status update

EUROGATE Jasmin Dröner: Current process / challenges for the terminal

Open Discussion

# What's a smart container?

Just like smartphones, smart containers are containers that are smart. **Any normal container can be a smart container.** All you have to do is fit internet-connected devices and interconnected sensors that collect, collate, and transmit container data. These sensors and devices act like traditional data loggers. But you can view all the information (near) real-time anywhere across the globe. \*



\* [Smart Container | Advantages, Use Cases and Impact on Container Logistics \(container-xchange.com\)](https://www.container-xchange.com)

# Smart Container Identification



## Purpose

Build awareness

Give insight process and challenges: carrier/terminal; carrier / carrier

Highlight of process standard / agreement to exchange data

## Assumption

Regardless the regulatory status, agreement  
That there is a need to identify already today



**!!!! ONLY FLAG for Tracking Device outside the container considered as  
“SMC” today**

**PROCESS covered today: LOAD LIST , PRESTOW, LOADING CONFIRMATION**

# Smart Container Identification

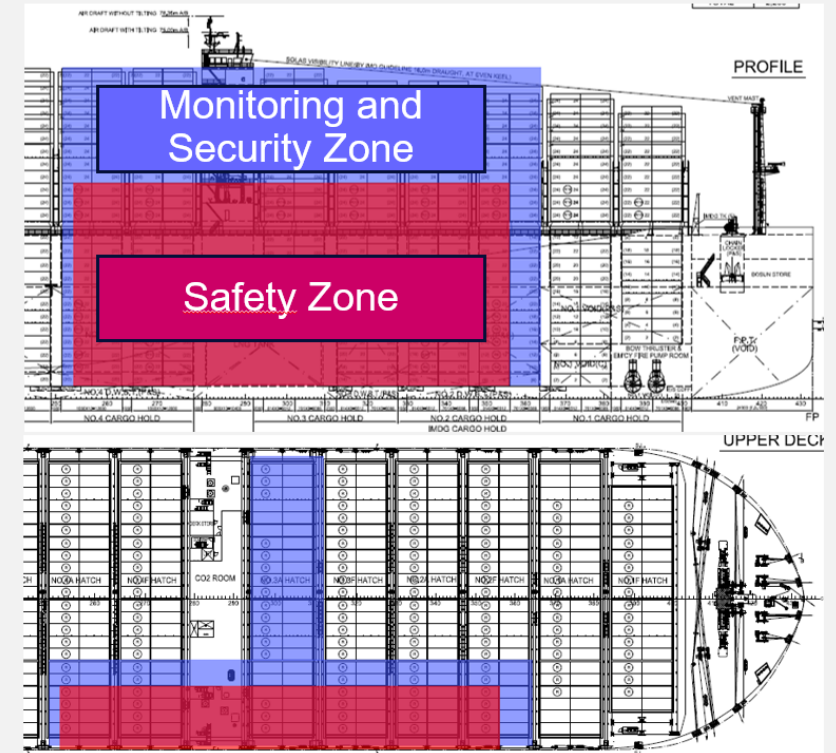


- Where are we coming from.....
- SMC and stowage constraints during SIMOPS on LNG vessels
- SMC must be identified

## Challenges:

- Semi-manual process to identify SMC
- No container number = no identification
- Identify, flag partner SMC, SOC
- Last minute empty repo..
- Distinguish “certified” and “not certified”

- No reefers powered during LNG bunkering
- No dangerous cargo in the area during LNG bunkering
- No smart containers during LNG bunkering



Illustrative: vessel xyz restricted areas

\*Smart containers (SMC): container equipped with IOT device outside the container



# Smart Container Identification



**Safety zone** - The safety zone is a zone around the bunkering facility, the bunkering station of the receiving ship and the LNG transfer system. The purpose of the zone is to set an area that is put in place during LNG bunkering and within which only essential authorised and qualified personnel are allowed and potential ignition sources are controlled.

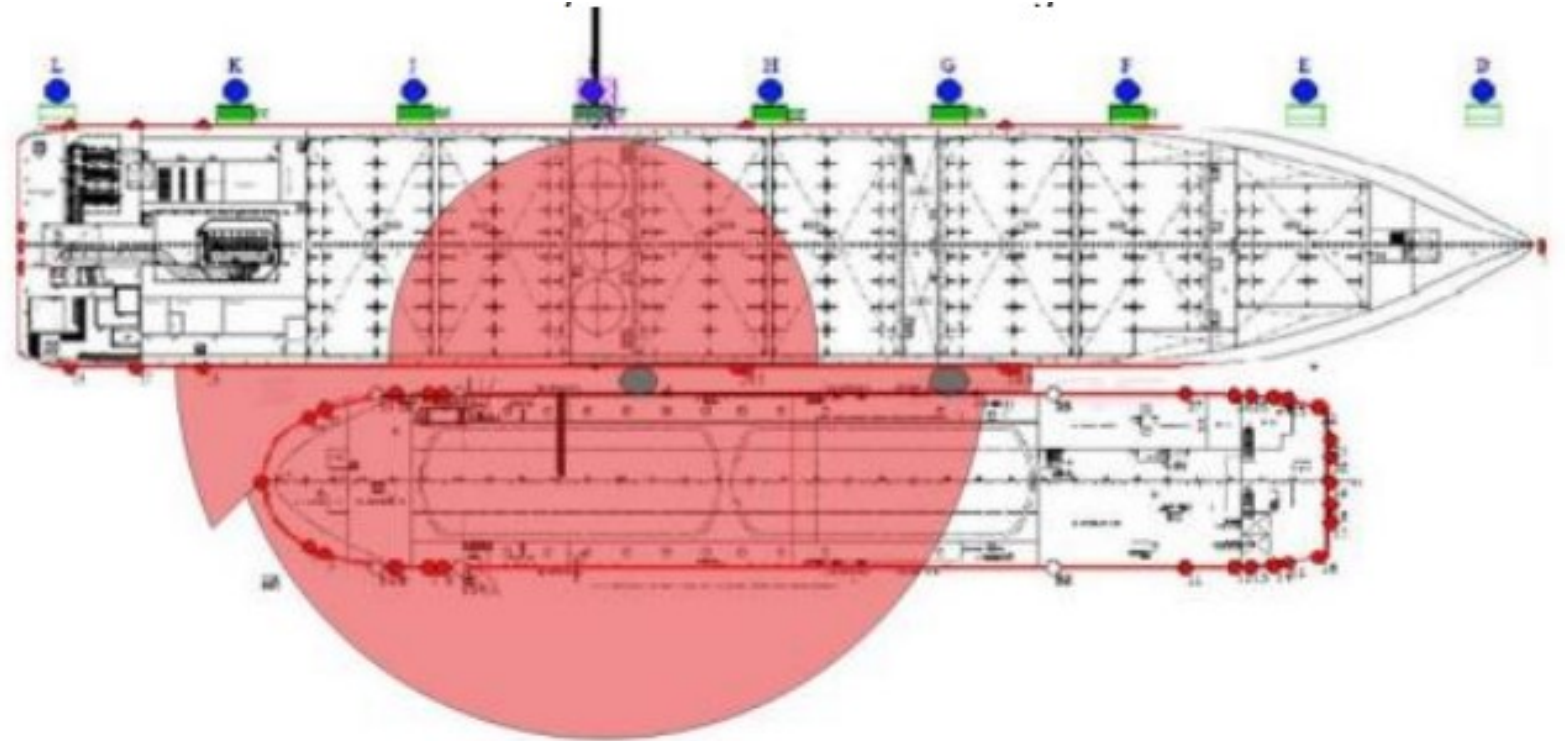


Figure 1. Horizontal Safety Zone

# Smart Container Identification



1. Identify SMC: *use attribute code as proposed by SMDG*
2. Ready to identify partner / SOC SMC
3. If needed, extend load list and Bayplan definitions / standards  
<https://dcsa.org/standards/load-list-and-bay-plan/>
4. Deep dive processes from Booking → Release → Load List

# Smart Container Identification



Questions / Comments





# Thank You

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**SMDG e.V.**

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