



Transparency and collaboration during port call operations and the role of the onboard stability program(CSP)

## WHO WE ARE?





## THE PROBLEM



- A call is an event in space and time.
- The vessel, terminal and carrier join temporarily to collaborate.
- For every call-event, the combination of vessel, terminal and carrier is different (and may repeat once per voyage).
- All work on a shared outcome: Create a "good" final vessel stow.
- All stakeholders use different tools creating different version of the truth.



# THE ROLE OF THE ONBOARD STABILITY PROGR

- Required according to SOLAS Chapter VI, Regulation 2
- Approved by classification authorities
- Ultimate reference for the seaworthiness of the vessel
- Central planners access via "office version" or Stowman
- Terminal access only via ships crew or central planner

#### Vessel related checks

- Stability
- Hull stress
- Visibility line
- Draught
- Region-specific checks

#### Stowage related checks

- Stack design
- Lashing forces
- DG segregation
- Handling instructions
- Cargo Data
- VGM



## ONBOARD STABILITY PROGRAM AND ADIC





## VESSEL DESCRIPTIONS AND FORMATS



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## VESSEL DESCRIPTIONS AN

SHPXNSD / NSTNative format of MACS3<br/>and StowmanNative format of N4 and<br/>Powerstow

#### ShipJSON

JSON-based vessel description Designed for web and browser applications Targeting internal use-cases Long-term replacement of legacy formats Basis for transformation from SHPX to NSD

_ 1		i
2		"\$schema": "http://json-schema.org/draft-07/schema#",
3		" <pre>\$id": "https://navis.com/schemas/v2.0.0-alpha-01/VesselProfile.json",</pre>
4		"description": "Data for one vessel or class",
5		"type": "object",
6	>	"properties": {…
71		},
72	>	"required": [
77		],
78		"definitionsGeometry": {
79	>	"Geometry": {···
453		
454	>	"GeneralInformation": {
628		}.
629	>	"CargoCapacity": {
648	1	}.
649	5	"Toppage": {
668	1	}.
669	5	"LoadLineDraft": {
603	1	
604	1	"WeightDistribution": J
712	1	1
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750		j) "DnoftMonk": [
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1055		ja "Ustala Caucalia - C
1056	2	HatchLover": {
1119		ja Bulleder er Tek Teller
1120	2	windagerable": {
1146		ja Bulla la se Concella - C
1147	>	"WindageCurve": {



## TRANSFORMATION OF CARGO DATA





# APIS FOR STABILITY, STRESS, LASH FORCES





## THE CHALLENGE

### Data Sensitivity

Vessel owners do not want the data to be openly available.

### Data Availability

Required inputs are not available to all interested parties (e.g., Tank status).

### Data Reliability

Ensuring that official vessel description with latest updates is used.

### Business Model

Costs of maintaining high quality vessel profiles.



## HOW EVERYTHING COMES TOGETHER





## A VISION: CARGO DATA EXCHANGE HUB



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Image: Several	Add Activity Show: All Artefacts Updates Comments add Comments Add Victor Planalot approved Stowage Instruction 22 May   15:07 CC Henrik Alfke proposed new Stowage instruct 22 May   14:37 Team, I've added a new version of the sto asked me to add due to the ipsum dolor a eros, mattis ac aliquet eget, euismod neo turpis urna dictum justo, ac.	Ballast       7894mt       Fuel       1277mt       Realiast       7894mt       Fuel       1277mt         Add       Edit       Publish       Add         Activity         Show:       All       Atterfacts       Updates       Comments         Image: Add definition of the stowage instructions version 2       222 May 15:07       Add       Image: Add definition of the stowage instructions         Image: Add definition of the stowage instructions       22 May 14:37       Team, I've added a new version of the stowage. this contains the udpdates that Dave Huffman asked me to add due to the ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque lacus eros, mattis ac aliquet eget, euismod nec diam. Integer aliquet, quam ac vestibulum bibendum, turpis urna dictum justo, ac.       Image: Dirat definition of the stowage is a store of the stowage is a stowage is a stowage is a store of the stowage is a store of the st	<ul> <li>MACX from 21 May 23</li> <li>Vessel</li> <li>9876543</li> <li>Hamburg Express</li> <li>Voyage/vessel visit Line</li> <li>0025E HLA</li> <li>Service</li> <li>Barge all (In 5685 - Out 5685)</li> <li>ETA ETD</li> <li>21 Dec   16:30 21 Dec   16:30</li> <li>af Discharge af Load</li> <li>83 containers</li> <li>93 containers</li> </ul>
Vessel name	<ul> <li>Victor Planalot added Arrival conditions 20 May   14:31</li> <li>This is the arrival conditions as confirmed</li> <li>Chloe Contenadore added a comment 19 May   08:27</li> <li>Hey team, I'm new at the central planning</li> <li>Chloe Contenadore added Michele Udon as a 19 May   06:21</li> </ul>	ed on 19 May. let Chloe know if you have any questions. Total Discharge Total Discharge Reefer 457 b $^{OOG}$ g office. Looking forward to working with you all! a collaborator	20 May   14:37 È Taff D Empty









Acceptance and approval workflow

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# **Thank You**

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	e Favorites	FC     Kaleris Cargo Data Exchange       To:     John Locke	
	Sent Item:	10. John Locke	2:24 PM
× Sharing setting	S Drafts	Victor Planalot (v.planalot@emg.co.uk) has invited you to collaborate on the Kaleris Cargo Data Exchange Hub Kaleris' Cargo Data Exchange is a platform for teams to collaborate on vessel stowage	2:19 PM
john.locke@navisCT.co.de Edit ▼ Terminal	✓ Invite	Vessel name	2:19 PM 2:13 PM
Invited people			1:58 PM 1:58 PM
Vessel Planner		Voyage/vesse     Operator     Service     Port     T Load     ETD       234E     EMG     AsiaEur     DEHAM     n.a.     14 Dec   11:30     Image: Compare the service	1:56 PM
VP Victor Planalot	Owner		1:56 PM 1:56 PM
Vessel Crew		Collaborate now	1:56 PM
Agent		← Reply → Forward	1:56 PM 1:56 PM
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