



NAPA SAFETY SUMMIT 2026

SAFETY · EFFICIENCY · AUTOMATION

# Easing Compliance as evolving regulation get more complex





## Lars Nickel

### Sales Director, Safety Solutions, NAPA

- Joined NAPA in 2015, Business Economist WAH Hamburg
- Over 10 years working at NAPA in various roles, lately as a Sales Director for NAPA Safety Solutions
- Passionate about working with our customers to improve processes on board and ashore through digitalization
- Passionate about cycling



## Andrea Viviani

### Product Owner, Anthony Veder

- Andrea is a Product Owner at Anthony Veder, specializing in data-driven product management and digital solutions. He leads cross-functional teams to deliver scalable products, leveraging analytics and business intelligence to guide decision-making and improve performance.
- With a strong background in data analysis and strategic planning, he focuses on translating complex insights into actionable product strategies that enhance efficiency and create value for both users and the business.

# Increasing reporting requirements



## Fuel Logging

Manual bunker records, tank soundings and consumption logs required multiple times daily



## Noon Reports

Position, speed, fuel burn, weather, cargo — completed by officers at noon every day at sea



## Port State Reporting

Arrival/departure declarations, waste records, ballast water logs on every port call



## Emissions Data Reports

IMO DCS, EU MRV and CII data inputs demand regular manual entries into multiple systems



## Maintenance Logs

Engine room records, planned maintenance systems (PMS) updates running parallel to voyage reporting



## Safety Checklists

SOLAS, ISM Code and STCW requirements add layers of mandatory checklists on top of commercial reporting

# Emission Related Reporting



Regime	Who	What	Frequency
<b>IMO DCS</b>	All ships >5,000 GT	Fuel consumption	Annual
<b>EU MRV</b>	Ships calling EU ports	CO <sub>2</sub> , fuel, cargo, distance	Annual
<b>EU ETS</b>	Ships calling EU ports	Carbon allowances (EUAs)	Annual
<b>CII Rating</b>	All ships >5,000 GT	Carbon intensity score (A–E)	Annual
<b>FuelEU Maritime</b>	Ships calling EU ports	Fuel GHG intensity	Annual

Note: Overlapping regimes require parallel reporting with different methodologies — a key operational challenge.

# Human Factors: What the Evidence Shows



# 75–96%

of maritime accidents involve human error as a contributing factor

# ~33%

of officer duty time on some vessels is now spent on administrative tasks

# 14 hrs

maximum permitted work in any 24hr period under STCW — routinely exceeded

## KEY HUMAN FACTORS TRIGGERED BY REPORTING OVERLOAD



### Fatigue

Cognitive performance degrades sharply — reduced situational awareness, slower reaction times



### Task Saturation

Officers juggling admin and other tasks simultaneously



### Stress & Anxiety

Fear of non-compliance penalties creates psychological pressure overriding safety instincts



### Communication Loss

Time spent on screens reduces bridge team communication

# Where Safety could be Compromised

01

## Watchkeeping Distraction

Officers on navigational watch are legally required to maintain a continuous lookout. Completing digital forms, updating noon reports or logging fuel data during watch is a direct violation of COLREGS Rule 5 and STCW requirements — yet it happens routinely.

02

## Fatigue Amplification

STCW rest hour requirements are already under pressure from lean crewing. Adding administrative reporting on top of operational duties pushes officers into chronic fatigue — a leading causal factor in maritime accidents according to the UK MAIB and Paris MOU data.

03

## Error-Prone Manual Entry

Tired, distracted crew entering data manually into multiple disconnected systems increases transcription errors. Incorrect fuel figures feed directly into CII ratings, EU ETS calculations and IMO DCS submissions — triggering non-compliance and audit risk.

04

## Safety Culture Erosion

When crew perceive that commercial and compliance reporting takes priority over safety tasks, the underlying safety culture is undermined. The ISM Code's core principle — that safety must come first — risks being overwhelmed by regulatory administrative demand.

# The Regulatory Tension: Compliance vs. Safety



COMPLIANCE DEMANDS
EU ETS allowance data must be accurate — financial penalties for errors
CII rating calculated from onboard-recorded fuel consumption
IMO DCS and EU MRV require verified annual submissions
FuelEU Maritime introduces fuel GHG intensity tracking from 2025
Port State Control inspections audit onboard records in detail

VS

SAFETY REQUIREMENTS
COLREGS Rule 5: continuous proper lookout by sight and hearing at all times
STCW: mandatory rest hours — max 14hrs work/24hrs, 72hrs/week
ISM Code: safety management must take precedence over commercial tasks
Bridge Resource Management: undivided attention required during navigation
SOLAS Chapter V: navigational watchkeeping standards are non-negotiable

# The Closing the Gap: Practical Solutions



01

## Automate Data Capture

Flow meters, engine monitoring systems and AIS feeds should automatically populate reporting platforms — reducing manual entry during watchkeeping hours entirely. The crew's role becomes exception management, not data transcription.

02

## (Shore-Based) Data Management Teams

Distribute administrative burden ashore. Gives officers more time to focus on the safe operation of the vessel.

03

## (Single) Unified Reporting System

One integrated platform feeding IMO DCS, EU MRV, CII and ETS simultaneously from a single data entry point. Reducing duplicate systems removes the crew's biggest time burden and error risk.

04

## Policy: No Admin During Active Watch

Shipowners and operators should establish a clear company policy — endorsed under the ISM SMS — that prohibits non-safety administrative tasks during navigational watchkeeping. Compliance tasks must be scheduled outside watch hours.

05

## Crew Workload Monitoring

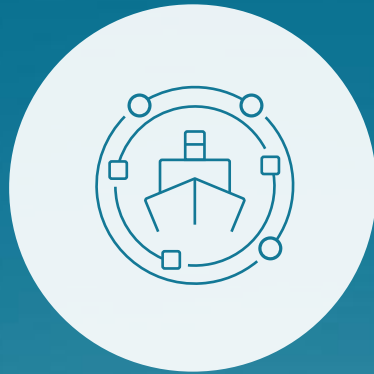
Integrate rest hour management tools with reporting workload tracking. Flag when combined watch + admin burden exceeds safe thresholds. Include reporting workload in pre-voyage risk assessments.

# The Bottom Line

Regulatory compliance must never be allowed to compromise the safety of the ship, its crew or the marine environment



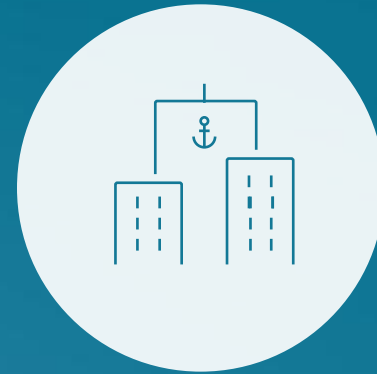
Regulatory bodies must address the administrative burden on crews — not just individual regimes in isolation



Shipowners need to balance the compliance workload and the safety responsibilities



Technology can support in this journey



The ISM Code obligation to maintain a safety culture must be actively reinforced against the pressure of commercial compliance

# A practical case study

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31.3.2026

NAPA Safety Summit 2026

# Navigating the Regulatory Wave

How Anthony Veder and NAPA Turned  
Compliance into a Streamlined Asset

Andrea Viviani



ANTHONY VEDER



# Andrea Viviani



AV  
since  
2024

Product  
Owner

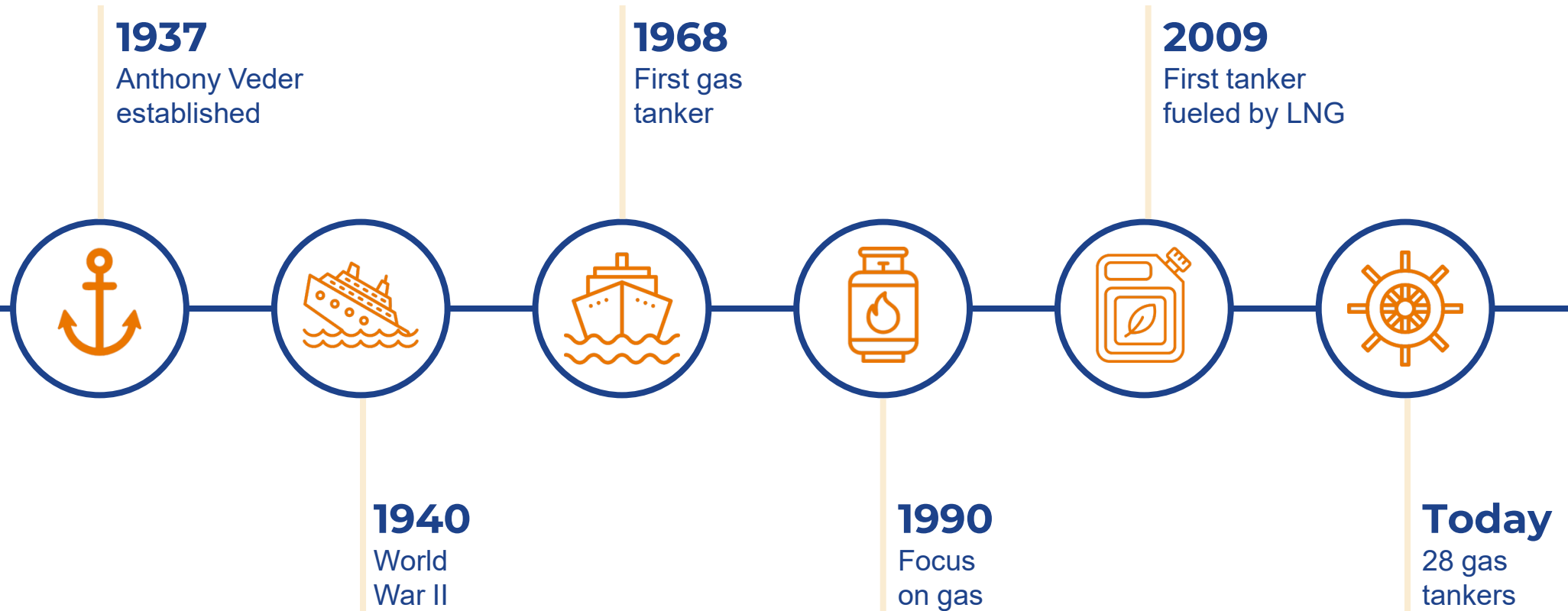
The "Pizza  
Compliance"  
Officer



# Agenda

- **Introduction:** Who is Anthony Veder?
- **The Partnership:** Long-term collaboration with NAPA
- **The Problem:** Why the old "Financial Tool" approach failed for emissions
- **The Solution:** The "Effortless MRV" Project Architecture
- **Results:** Efficiency gains and direct API verification
- **Future Outlook:** Scaling for FuelEU Maritime and beyond.

# Anthony Veder



# Segments

## Petrochemical / LPG



## LNG



# Integrated Shipowner



**People**

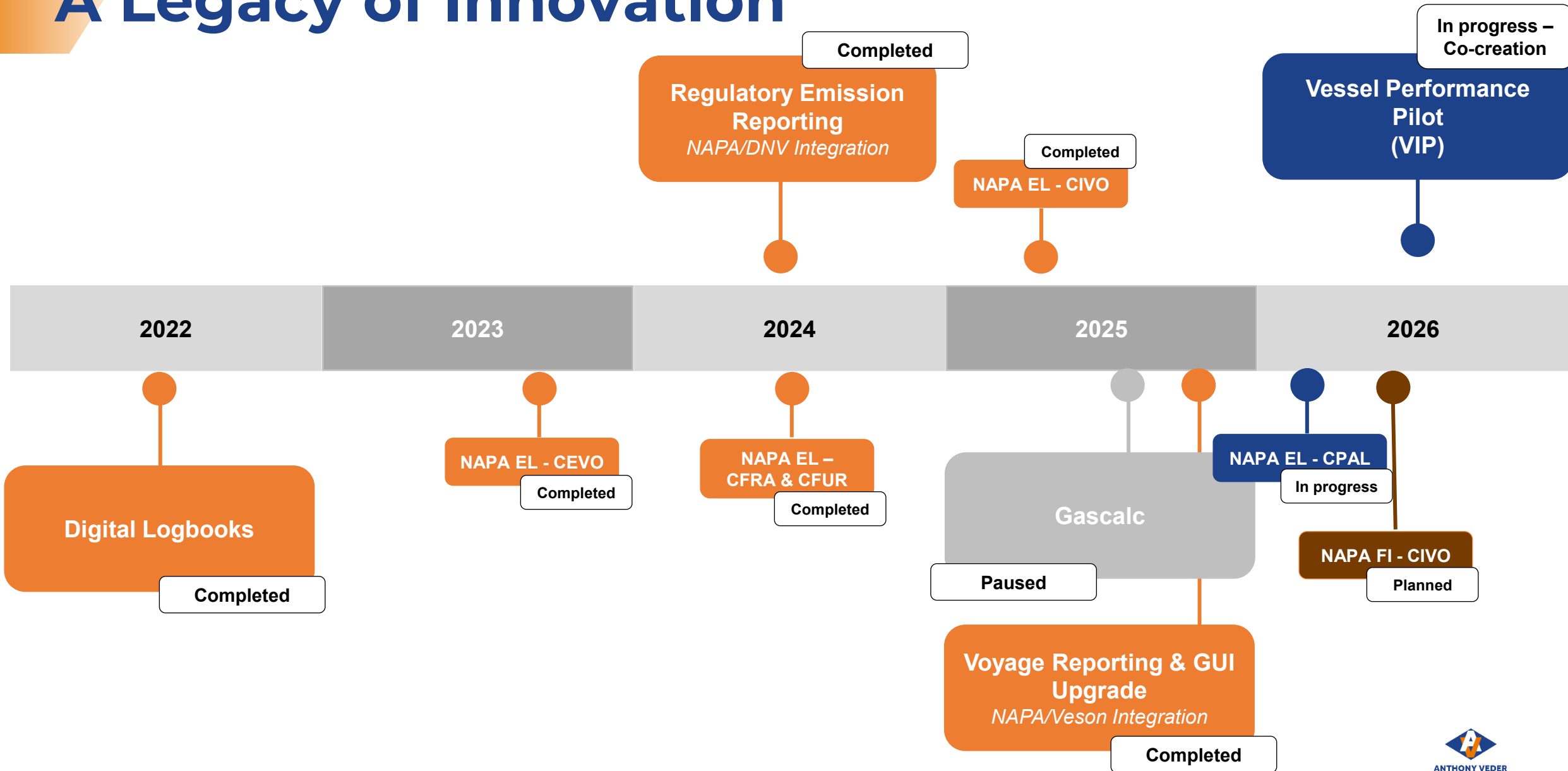


**Commercial operation**

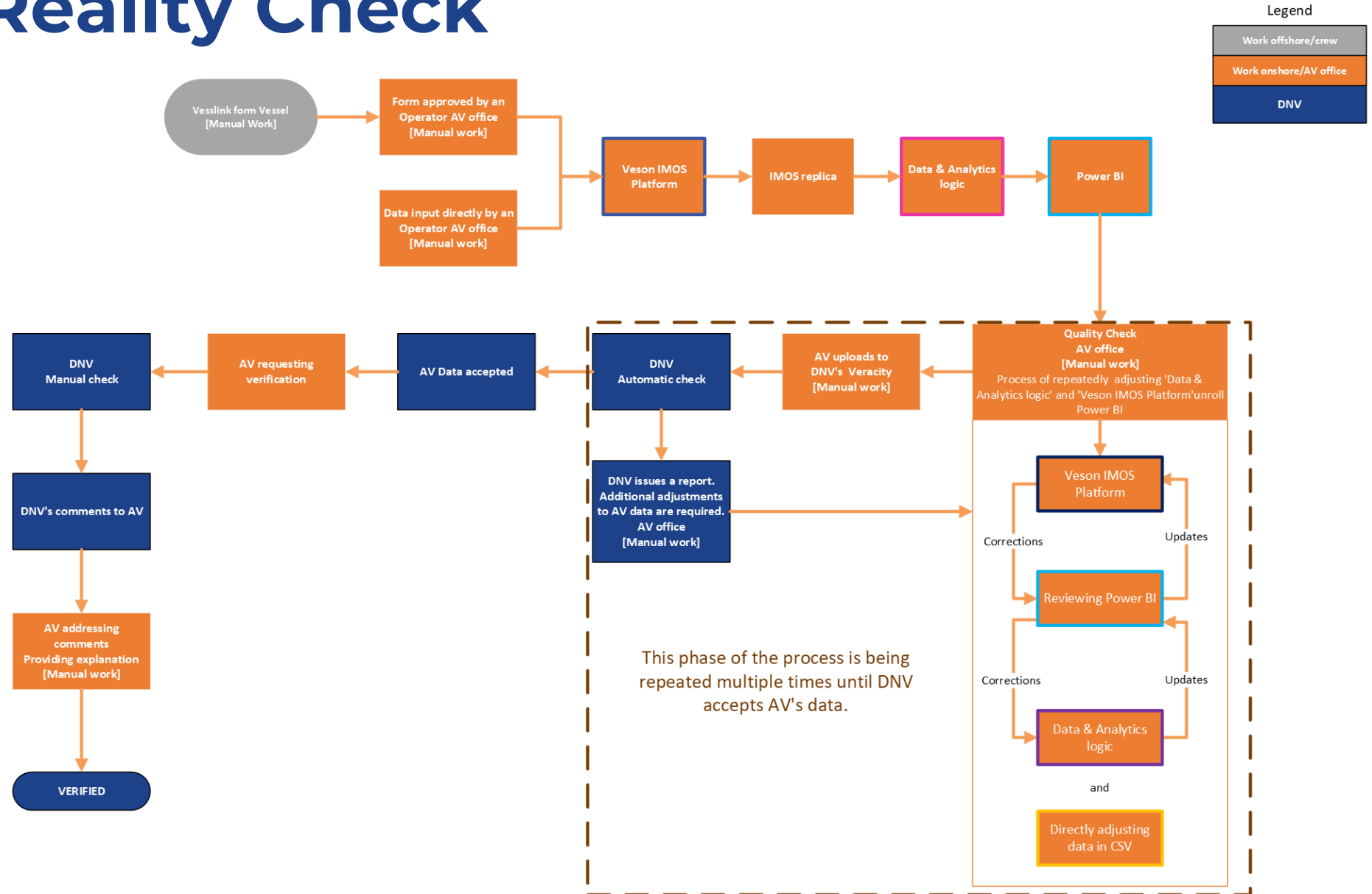


**Technical operation**

# A Legacy of Innovation



# The Reality Check



# Time spent on emission reporting

Department	Hours per week	Hours per year	Costs per year (1 hour = \$60)
Data & Analytics <i>Michiel</i>	19	1.000	\$ 60.000
Operations & Sustainability <i>Lily, Jolanda &amp; Jim</i>	48	2.496	\$ 149.760
<b>Total</b>	<b>67</b>	<b>3.496</b>	<b>\$ 209.760</b>

**16**  
hours/week  
832 hours/year =  
~ \$ 50.000

8 hours/week all vessels with NAPA  
+  
8 hours/week for vessels without NAPA

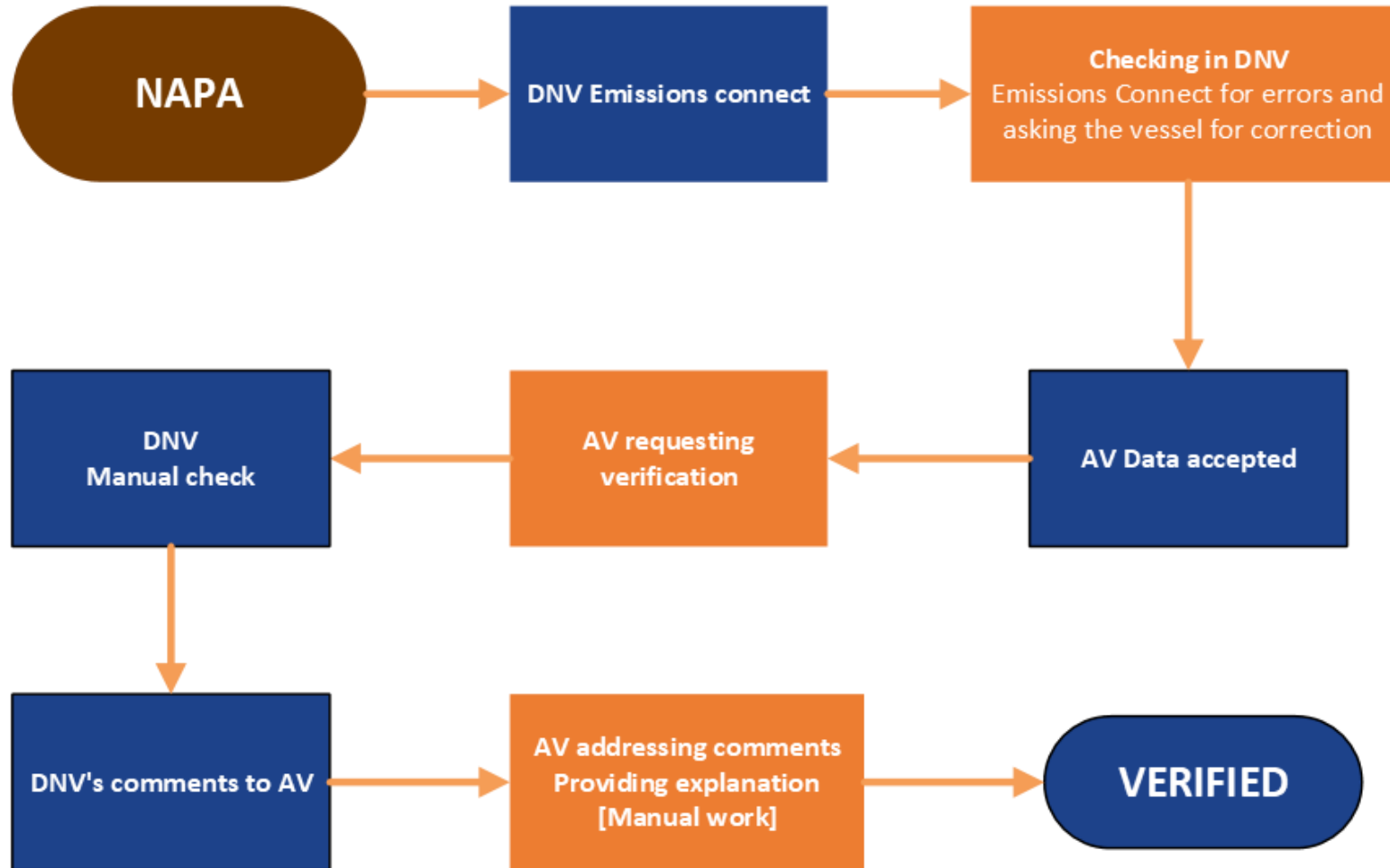
Goal = 66% saving in time & \$

# The "Effortless MRV" Solution



- The Foundation: Using NAPA Electronic Logbooks as the primary data source.
- Precision: 21+ new regulatory fields added to capture every event (Arrival, Departure, Bunkerings).
- Reduced Burden: "State-of-Fact" reporting replaces manual, repetitive Excel/Noon sheets.
- The Hub: Data flows automatically into NAPA Fleet Intelligence (FI).
- Single Source of Truth: Centralized database for 24+ vessels, ensuring data consistency.
- Normalization: Automated checks to ensure data is clean and compliance-ready before it leaves the company.
- Direct Integration: System-to-system API link with DNV's Emissions Connect.
- Zero Manual Entry: No more uploading files or manual typing into verifier portals.
- Real-Time Status: Immediate visibility into verification progress and any potential data gaps.

# The Technical Flow



## Legend



# Results & Impacts

## Drastic Reduction in Manual Workload

- Eliminated "laborious and lengthy" manual verification processes.
- Direct API transfer to DNV removes the need for manual file uploads or portal data entry.

## A "Single Source of Truth"

- Unified data from 24+ vessels into one dashboard (NAPA FI).
- Removed data gaps caused by using non-specialized tools.

## Improved Data Integrity

- Normalized data across the entire fleet for consistent reporting.
- Automatic validation checks minimize the risk of "Late-Report" penalties or EU ETS audit failures.



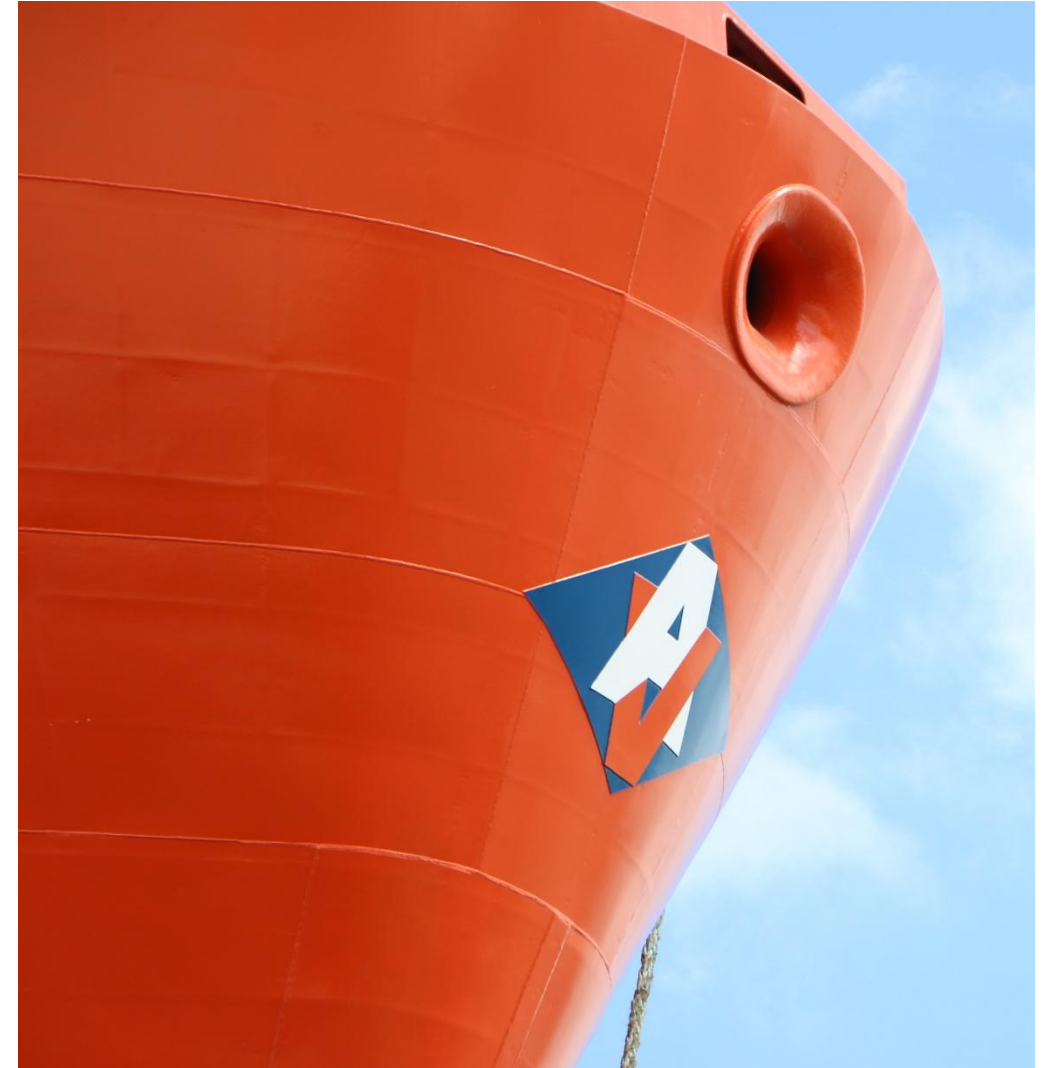
# Results & Impacts

## Operational Streamlining

- Identified and removed redundant reporting fields in secondary systems (e.g., Veslink).
- Crew can focus on vessel performance rather than administrative duplication.

## Audit Readiness

- Real-time visibility of compliance status for IMO DCS, EU MRV, and CII.



# Ready for the Next Horizon

- **Adaptability to New Regulations**
- **Expansion of the Digital Twin**
- **Fleet-Wide Scalability**
- **Data-Driven Decision Making**





SWL 80T

Thanks for  
your attention

## Thank you!

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