

Outcome from industry consultation on OVD

October 2026

Prepared by BIMCO
on behalf
of
Tripartite Joint Industry Working Group

Executive summary

This consultation received 22 responses from a broad range of stakeholders across the maritime industry, including shipowners, ship managers, software providers, classification societies, verifiers and industry organisations. The responses demonstrate strong support for the development of a common framework for the exchange of operational vessel data and a high degree of alignment on the key issues that must be addressed to enable successful industry adoption.

There is broad support for using Operational Vessel Data (OVD) as the baseline for a common industry framework. Respondents generally regard OVD as the most mature and practical foundation currently available and recognise its potential to reduce duplicate reporting, improve data consistency and facilitate digital interoperability across the maritime value chain. A common framework is expected to support the principle of "capture once, use many times", allowing operational data to be reused for regulatory reporting, verification, commercial processes and performance management.

Support for OVD is nevertheless conditional on further development of the framework. Respondents consistently highlighted the need for clear and standardised data definitions, reporting boundaries, validation rules and governance arrangements. Particular attention is required to ensure consistent interpretation of operational events and voyage reporting concepts across different stakeholders, systems and regulatory frameworks. The consultation also identified a need for clearer processes related to data quality, corrections, version control and auditability.

Respondents emphasised that the framework must remain aligned with existing and emerging regulations, including IMO DCS, EU MRV, FuelEU Maritime, EU ETS and UK MRV. At the same time, implementation should reduce rather than increase administrative burden. A recurring theme throughout the consultation was that operational data should be captured through existing workflows and reused across multiple purposes without creating additional manual reporting requirements for shipboard personnel.

The consultation also highlighted the need to ensure that the framework supports a wide range of vessel types, operational profiles and fuel pathways. While OVD is considered suitable for conventional merchant shipping operations, respondents identified areas requiring further development, including offshore and project vessels, tanker operations, alternative fuels and BDN-based fuel reporting methodologies.

Governance emerged as a critical success factor. Stakeholders expressed a clear preference for a vendor-neutral, industry-led framework with transparent decision-making, formal change-management processes and strong alignment with existing international standards. Long-term stability, backward compatibility and clear implementation guidance will be important to support confidence and encourage widespread adoption.

Finally, the consultation suggests that priority should remain on establishing a robust and widely adopted operational data framework before pursuing further standardisation of downstream Vessel Emission Reports (VERs). Many respondents viewed OVD as the essential data layer upon which consistent emissions reporting can subsequently be built. The overall feedback therefore supports continued development of OVD while focusing future work on governance, data quality, regulatory alignment, implementation guidance and broader operational coverage.

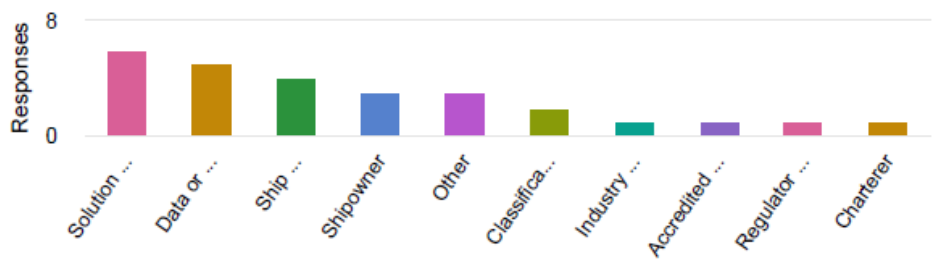
Key findings

- **Strong support for OVD as the foundation for a common industry standard.** Respondents generally regard OVD as the most mature and practical framework currently available and support its use as the baseline for a common operational vessel data exchange framework.
- **A single, interoperable framework is needed to enable “capture once, use many times”.** The principal benefits identified were reduced duplicate reporting, improved consistency, better interoperability between stakeholders, and the ability to reuse the same operational data for regulatory, verification, commercial and performance-management purposes.
- **Support is conditional on clear definitions, standards and data quality processes.** Respondents consistently called for standardised definitions, operational events, reporting boundaries, validation rules, data ownership responsibilities, correction procedures and quality assurance mechanisms to ensure consistent implementation and interpretation.
- **Alignment with existing and future regulations is essential.** The framework must remain compatible with IMO DCS, EU MRV, EU ETS, FuelEU Maritime, UK MRV and other evolving regulatory requirements, while maintaining consistency with the IMO Compendium and related international data initiatives.
- **Priority should remain on standardising the operational data layer before developing standardised reporting outputs.** Respondents generally supported future development of standardised Vessel Emission Reports (VERs), but stressed that the immediate priority should be establishing a robust, widely adopted and interoperable OVD framework. Once operational data definitions, exchange processes and governance are mature, the same trusted data can be reused to generate consistent emissions reports for regulatory, verification and commercial purposes.
- **Need for standardisation, clarity and governance,** including clear definitions, units, enumerations, mandatory/optional fields, data ownership, data validation, treatment of corrections and missing data, version control, schema management, quality KPIs, quality assurance processes and long-term governance by an independent multi-stakeholder body aligned with the IMO Compendium.
- **Implementation should reduce, not increase, administrative burden.** Respondents stressed that OVD must integrate with existing systems and workflows, minimise manual intervention, avoid additional workload for shipboard personnel and remain practical to implement across the industry.
- **The framework must be flexible enough to accommodate different vessel types, operations and fuel pathways.** Particular attention is needed for offshore and project vessels, tanker and STS operations, LNG and alternative-fuel use cases, and reporting scenarios that fall outside conventional voyage-based shipping operations.
- **Governance, ownership and future maintenance are critical to adoption.** Respondents strongly favoured an independent, vendor-neutral governance model with transparent decision-making, clear ownership arrangements, version control, predictable change management and strong backward compatibility.
- **Further implementation support and guidance will be required.** Stakeholders highlighted the need for practical guidance, worked examples, validation tools, standard APIs, technical documentation and testing environments to support consistent adoption across platforms and organisations.

1. Overall position

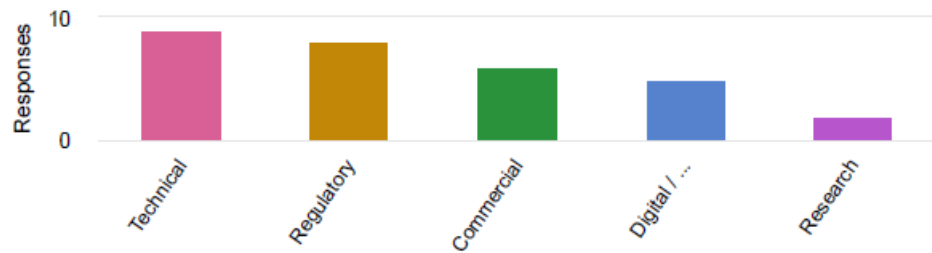
1.1 What best describes your company's role? (select all that apply)

- Shipowner
- Ship manager
- Commercial operator
- Crewing manager
- Crewing agent
- Charterer
- Classification Society
- Accredited verifier or Recognized Organization
- Shipyard
- Solution provider / Software vendor
- Data or analytics provider
- Regulator / Authority
- Industry Association
- Other



1.2 Primary role in the maritime value chain (select all that apply)

- Commercial
- Technical
- Regulatory
- Digital / IT
- Research
- Other

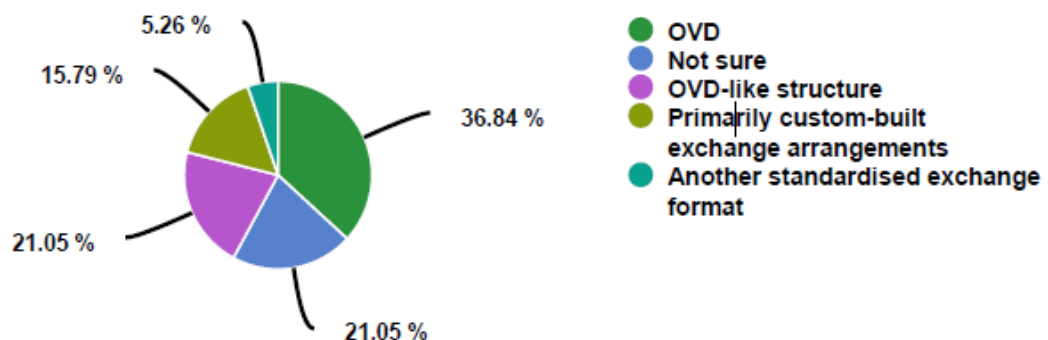


1.3 Level of involvement in the topic (select all that apply)

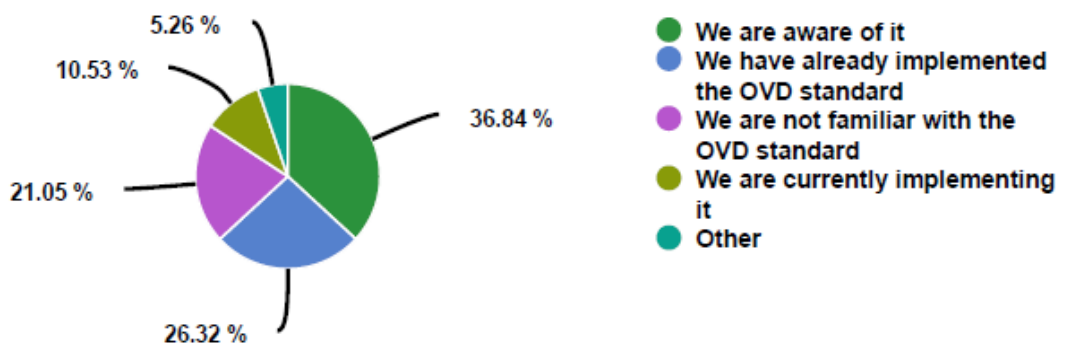
- Operational
- Technical
- Strategic
- Research
- Other



1.4 Does your organisation currently use OVD, OVD-like structures, or another standardised exchange format?

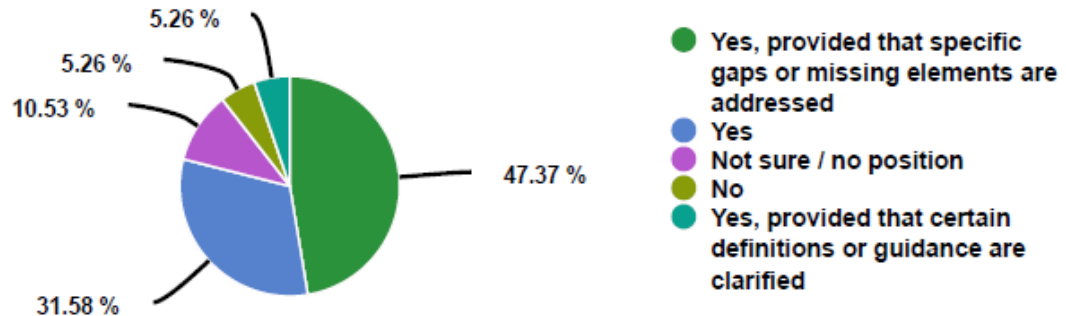


1.5 How familiar is your organisation with the OVD standard?



2. Overall position

2.1 Do you support the use of OVD as the baseline for a common framework for exchanging log abstract and noon report data for GHG reporting?



2.2 Reasons for your answer, including any conditions or reservations

Comments	Assessment
We support the use of OVD as the baseline for a common framework for exchanging operational vessel data, as it has the potential to reduce duplicate reporting, improve data consistency and facilitate digital integration between ship managers, owners, charterers, software providers and verifiers. However, clear guidance should be provided on data definitions, responsibilities for data ownership and validation, treatment of missing or corrected data, and alignment with existing regulatory reporting requirements such as EU MRV, FuelEU Maritime, IMO DCS and UK MRV.	
OVD methodology is the way to go but few elements need to be defined clarified: Cloud repository, Approval of data quality software and process, Quality KPIs definitions.	
From our perspective, the current volume of manually exchanged vessel data is limited. At present, only one company provides IMO DCS-related data directly to us. We have asked the company to provide the information in a copyable PDF format, allowing the data to be transferred into GISIS without manual retyping and thereby reducing the risk of transcription errors. However, more detailed reporting requirements, including reporting by fuel consumer, may increase the amount of data to be handled and the associated administrative work. A common framework could therefore become more useful as reporting becomes more granular, but its implementation should remain proportionate to the actual volume of data exchanged and should not itself create an additional reporting burden.	
Transition from fuel type style to bdn style is overcomplicated and creates a lot of unneeded development/support. Limitations on bnds quantity to report consumptions.	
Pragmatism is essential given the mounting compliance deadlines. Starting from DNV's Operational Vessel Data (OVD) framework is the correct operational choice because it is already tested in production and deployed. However, an incumbent's operational baseline is not yet a neutral industry standard. Support is conditioned on three structural transitions (1) Decoupling the data specification entirely from proprietary platform infrastructure. Which I believe is largely understood but worth flagging. (2) Transferring long-term governance and schema custody to an independent, multi-stakeholder body aligned with the IMO Compendium. (3) Expanding the data ontology beyond conventional merchant cargo operations to accommodate non-standard segments and emerging fuel supply chains (e.g., offshore construction, and alternative fuel mass balancing)	
For eg a lot of resolution around ETS settlements are based on TC contracts where delivery /redelivery is based on COSP or EOSP where as the regulation for eg under the EU ETS looks at all fast and departure berth	

OVD to be support for the Owner, I can not accept if OVS requires some more action by Crew. OVS is suitable only if can be fully integrated in the Company procedure. It can not be accepted to change one more time the Compnay procedure and add more activities on Crew account	
Data inconsistency between OVD standardized reporting form (e.g Noon Fuel Consumptions based on flowmeters) vs BDN & Sounding ROB's chosen method for fuel consumption reporting.	
One standard is needed.	
It's important to have a standardized framework across the industry, OVD seems to work well and already be the most adopted standard	
We do support the OVD data framework, however we do have our own data framework which we continuously expand.	
Inform-D supports the principle of a common, vendor-neutral framework for exchanging emissions-relevant operational vessel data. Our principal reservation concerns its application to specialised offshore and project vessels. Offshore construction vessels can perform multiple materially different activities within a single reporting period, often while remaining within the same project area. The framework should therefore accommodate operational profiles and sufficient time granularity to distinguish between vessel operational states and the activities being performed. This is important both for emissions reporting and for the wider commercial reuse of operational data.	
A unified format is more straightforward than using separate ones for each Verifier. For vessels that change management and the new manager changes Verifier, it is often confusing for the one manager to understand what the previous one reported.	
Key consideration should be to maintain human readability. Several existing use-cases include sharing of data to view in excel-like formats for humans to process. The BDN based reporting need guidance and best practice instructions to maintain readability (see below for more details).	
I think this is a good starting point to bring the industry together. I support the use of a common standard, whether developed under DNV/BIMCO or through other initiatives.	
There are some missing elements to have the comprehensive data set, which can be used among different ship types performing wide variety of operations, covering all regulatory requirements	
BSM supports the development of OVD as a common industry framework for the exchange of emissions-relevant operational vessel data. The approach recognises that shipboard personnel record operational events rather than regulatory reporting outputs, which aligns with existing operational practices onboard ships. However, successful adoption will depend on clear and consistent definitions for operational events, activities and reporting boundaries. It is also important that OVD can be implemented efficiently within existing maritime software ecosystems, allowing operational data to be captured once and reused across multiple reporting, compliance and performance management processes without increasing the administrative burden on Masters and Chief Engineers.	
We believe it is the most mature and complete industry standard available	
I believe OVD provides a strong baseline for a common framework for the exchange of log abstract and noon report data for GHG reporting. Its comprehensive and granular data structure allows the information required across the main maritime GHG regulatory frameworks to be consolidated within a single format, reducing the need for separate reporting structures and supporting greater consistency and interoperability across the industry. A key condition would be to ensure that the framework remains adaptable to evolving regulatory requirements and that clear governance and versioning processes are maintained as new reporting requirements emerge. In addition, data definitions, units, enumerations and mandatory/optional fields should be clearly standardized to ensure consistent implementation and interpretation across different reporting systems, data providers and verification bodies.	
The framework is mature, supports all mandatory information for regulatory compliance while being simple at the same time. It is also sharable with third parties and extractable for cases that intelligent data management is not possible (e.g. attached as xls to an email).	

2.3 What are the principal benefits of establishing a common industry framework for the exchange of emissions-relevant operational vessel data?

Comments	Assessment
Reduced duplication of data submissions to multiple stakeholders. Improved consistency and quality of emissions-related operational data. Easier integration between onboard systems, shore-based platforms and verification bodies. Lower administrative workload and reduced risk of manual reporting errors. Greater interoperability between software providers and reporting platforms.	
Standardization, Quality control	
The principal benefits would be improved consistency and comparability of data, reduced risk of errors in data transfer and reporting, and easier identification of possible errors or inconsistencies in the reported data.	
Easier support	
Operational efficiency gains from reduction of manual, ad hoc data collection and transfers between internal departments and externally to verifiers. Improved reliability of data which impacts on commercial gains as emissions come with a price tag and benefits for commercial contracts if there is an agreed accepted baseline in place.	
Make it easier to resolve difference, cut down on multiple reports, streamline for the ship staff and shore staff	
Faste and easier that now to change vessel management/Owner	
Harmonization & Consistency of reporting between Operators, Charterers & Regulators.	
Avoid multiple reporting schemes	
Easy integration across solutions, easy data sharing and comparing between stakeholders (owner vs charterer), less debates and more transparency	
It should be easier for everyone to gather all rekevant information	
A common framework can reduce duplicate reporting and bespoke system-to-system mappings, improve consistency and traceability of operational data, and facilitate interoperability between onboard systems, operational reporting platforms, vessel owners, charterers, clients, verifiers and analytics providers. Standardisation may also allow the same underlying operational data to be reused for regulatory reporting and commercial analysis rather than being collected separately for each purpose.	
Unified interpretations, consistency between Verifiers,	
Fewer data-integrations to set up and maintain, and a common interpretation of definitions.	
In my case, this is essential: companies receive data from different reporting systems that don't communicate with each other, and these systems sometimes produce different results. When we then need to compile joint reports, we have to align many different formats. Having a common language to work with is essential.	
Effective and easier data exchange with increased quality of reported data, ensured by clear definitions and common interpretation	
Standardisation of operational vessel data across the maritime industry. Reduction in duplicate reporting and manual data entry. Improved consistency and quality of emissions-related reporting. Greater interoperability between shipboard systems, ERP platforms, verifiers, class societies and regulators. Ability to capture operational data once and reuse it across multiple reporting obligations and business processes. Reduced burden on shipboard personnel by hiding regulatory complexity behind standardised operational reporting.	
Less maintenance to update different standards when change happens	
A common industry framework would promote greater standardization and consistency in the exchange of emissions-relevant operational vessel data across shipowners, managers, data providers, verification bodies and other stakeholders. By establishing a common data structure, terminology and set of definitions, it could reduce the need for multiple mappings and reporting formats, minimize duplication of effort and facilitate more efficient system to system data exchange.	

Furthermore, a sufficiently comprehensive common framework could enable the same underlying vessel data to support multiple regulatory and emissions-reporting requirements, simplifying data management and helping the industry adapt more efficiently as regulatory requirements evolve.	

2.4 What are the principal risks, concerns or barriers associated with the proposed framework?

Comments	Assessment
Ambiguity in data definitions leading to inconsistent implementation. Additional implementation costs for companies with existing reporting systems. Data ownership, confidentiality and cybersecurity considerations when exchanging operational data between multiple parties. Potential divergence between the OVD framework and future regulatory reporting requirements if governance is not maintained.	
Control of the repository data cloud, Data property, Verification of data ownership and the chain of custody.	
The consultation material does not yet provide sufficient detail on the proposed implementation to assess all potential risks and barriers. One important consideration is how the framework would be integrated into existing commercial processes rather than becoming an additional reporting layer. If incorporated into commonly used charter-party arrangements and related data exchange requirements, the framework could potentially achieve relatively rapid industry uptake. It may also be useful to consider the data needs of shippers and their customers, including the use of maritime emissions data for Scope 3 reporting. At the same time, the framework should have sufficiently clear boundaries to avoid creating additional or overlapping reporting requirements.	
The risk that OVD is treated by the market as inseparable from DNV's Veracity ecosystem, deterring competing classification societies, verifiers, and independent software vendors from adopting it natively. Take the example in 2018 where Maersk and IBM launched TradeLens to standardize digital shipping docs - despite technical maturity rival carriers wouldn't adopt it. The cargo-centric bias (noon report structure versus dynamic operational profiles in offshore work). Sufficient governance.	
more to do it with validation points in the organizations systems	
One more activities on Crew account. Due to different Charterer, for Tanker ships, Crew is full of report to create for each lag/voyage. Since last upgrading of MRV, ETS, FuelUE report increase much more. Crew has to report same info in several different platform for different scope. One more is not acceptable.	
Inconsistency with the various GHG schemes reporting requirements (voyage definitions and fuel consumption reporting methodology).	
The main risk lies in the underlying technology. From a technical standpoint, a flat CSV file is the worst possible choice. There is no nesting possible within a CSV and this could be done far more better within a JSON. While one might justify it for the few users who actually rely on an Excel-based solution, that approach has long been barely feasible given the underlying regulations. JSON would resolve the many limitations associated with CSV.	
A principal risk is that a framework primarily developed around conventional shipping and voyage/noon-reporting concepts may not adequately represent specialised offshore operations. Offshore construction vessels may alternate between transit, manoeuvring/positioning, active project operations, weather standby, technical standby, client standby and other states several times within one reporting day. Excessive aggregation could remove operational context that is important for interpreting fuel consumption and emissions. At the same time, excessive mandatory granularity could create an unnecessary reporting burden. The framework should therefore allow appropriate operational profiles and levels of granularity for different vessel segments.	
That key use-cases are not covered and it ends up being just an additional exchange format.	
I would like the Center to participate in a gap analysis to explore how this standard could be made broader for vessel performance purposes. At the moment, my understanding is that it is oriented primarily toward emissions reporting.	

Establishing clear governance.	
Inconsistent interpretation of operational events and definitions between organisations and software providers. Additional reporting burden if OVD requirements are not integrated seamlessly into existing workflows. Variations in software implementation leading to different outcomes from the same operational event. Governance uncertainty and the need for long-term industry ownership and maintenance of the framework. Potential duplication if OVD develops separately from existing reporting and operational systems already deployed onboard vessels.	
The ownership if one company. Our main support on this topic arises from an independent development of the standard	
The principal challenges are likely to relate to implementation and consistent adoption across the industry. Existing systems and reporting processes may use different data structures, terminology, calculation methodologies and levels of granularity, meaning that transitioning to a common framework could require significant mapping, system development and, potentially, data migration efforts. Another key consideration is ensuring that data fields, definitions, units, calculation methodologies and reporting rules are sufficiently clear and standardized to avoid different interpretations or implementations of the same framework across stakeholders. The framework would also need appropriate governance and version control to remain aligned with evolving regulatory requirements while avoiding frequent or disruptive changes for implementing parties. Finally, broad industry adoption will be important. The benefits of a common framework may be limited if different verifiers, regulatory reporting solutions or other stakeholders continue to require additional proprietary formats or data fields alongside the common standard.	
We have seen that as digitalization evolves in maritime sector data exchange between multiple parties becomes a necessity. A common framework would make the data exchange process simpler, faster and more reliable.	

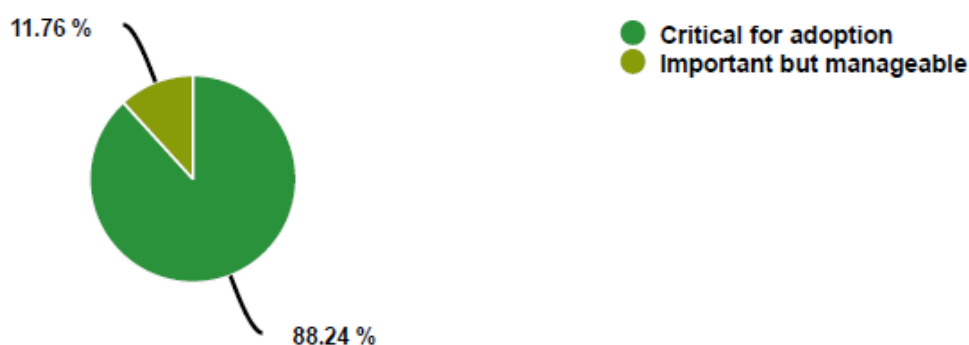
2.4.1 First important issue:

Comments	Criticality	Assessment
Alignment with regulatory requirements The framework should remain fully aligned with IMO DCS, EU MRV, FuelEU Maritime, UK MRV and future regulations to avoid duplicate reporting or conflicting data requirements.	Critical for adoption	
! - Standardization of data definitions, calculation methodologies and reporting boundaries: A common framework will only be effective if all stakeholders interpret and report operational and emissions-related data consistently. Ambiguities in definitions (e.g., fuel consumption categories, voyage events, emissions factors, treatment of off-hire periods, and regulatory reporting boundaries) can lead to inconsistent reporting, reduced data comparability, and potential compliance risks. Clear governance and guidance are essential to ensure trust in the exchanged data.	Critical for adoption	
Practical integration and proportionality: The framework should integrate smoothly with existing regulatory and commercial reporting processes and should not create an additional reporting layer. At present, the volume of data exchanged directly with our organisation is limited, but more granular requirements, such as reporting by fuel consumer, may increase the amount of data and associated administrative work. The framework should therefore	Important but manageable	

provide clear practical benefits, particularly by reducing manual data transfer and the risk of errors, while remaining proportionate to the actual reporting needs.		
Transition from fuel type style to bdn style is overcomplicated ('init' bdn)	Critical for adoption	
The framework must guarantee that any shipowner can export, validate, and submit an OVD-compliant dataset to any organisation they wish without the pressure to maintain a commercial account with specific third-party.	Critical for adoption	
Common reference points or events	Critical for adoption	
One more activities on Crew account. Due to different Charterer, for Tanker ships, Crew is full of report to create for each lag/voyage. Since last upgrading of MRV, ETS, FuelUE report increase much more. Crew has to report same info in several different platform for different scope. One more is not acceptable.	Critical for adoption	
Gap analysis between OVD & GHG schemes reporting requirements.	Critical for adoption	
That government organization, on all levels, are backing this and do not ask for more than what the standard covers	Critical for adoption	
From a data and technology point: this is the CSV structure, which is hard to maintain as every change is a breaking change from a technology standpoint. A change or additional solution would be the most important point.	Critical for adoption	
Define an appropriate operational reporting profile for offshore and specialised project vessels which reflects the materially different activities undertaken during offshore operations, rather than relying predominantly on conventional voyage and port-call concepts.	Critical for adoption	
Ensuring consistency - that each field will correspond to the same exact thing across all Verifiers' platforms, such as CII corrections or which cells are considered "mandatory"	Important but manageable	
Key consideration should be to maintain human readability. BDN -based reporting can quickly become very difficult to read when blends of blends are utilized for fossil fuels. Typically, when reporting on "fuel type method" the vessel reports their total ROB on a fuel type, and when a bunkering is done, they update the total ROB for that fuel type. Example: Vessel has 1000 mt of MGO onboard. When they have 200 mt remaining they bunker 800 mt and update their total ROB to be 1000 mt, and this process continues. We have observed similar implementation when using BDN-based reporting: Vessel has initial BDN of MGO onboard. When they have 200 mt remaining they bunker 800 mt, and blend this new bdn with the old bdn and the resulting blend ROB is 1000 mt. The benefit from this (instead of reporting on each separate BDN) is that it matches what many vessels are used to reporting. The issue with this is that a BDN is never closed out. So if a vessel does 10 bunkering a year, and blends the new BDN with the existing blend every time, the previous BDNs are diluted every bunkering, but they are never closed out. This means	Critical for adoption	

that a reported consumption at the end of the year will reference all 10 BDNs (very little from the first ones, but still something). So if you are exchanging data from a voyage in December, you would need to also exchange all the bunkering for the year. This is feasible (but annoying) for a system-to-system transfer, but it is very poor in terms of human readability, as you will have to work your way back 10 bunkerings to get an understanding of what was consumed. Guidelines addressing this, and establishing a best practice should be prioritized. Alternatively, with the current regulations, recommended use of mixed reporting could be suggested for sake of human readability. (Fuel type reporting for fossil fuels, and bdn based for alternative/bio fuels). As regulations evolve, this recommendation might change.		
1. Clarification on API integration. It is important for us to understand how the standard will integrate with existing systems via API, since this directly affects how easily it can be adopted and implemented in practice.	Critical for adoption	
Establishing clear, neutral governance.	Critical for adoption	
Standardised definitions and event logic	Critical for adoption	
Independant development	Critical for adoption	
Integration with existing systems and data models: Adoption of the framework may require mapping and development changes across existing data ingestion, processing and reporting workflows to ensure compatibility with the standardized structure.	Important but manageable	

Please also indicate whether this is critical :



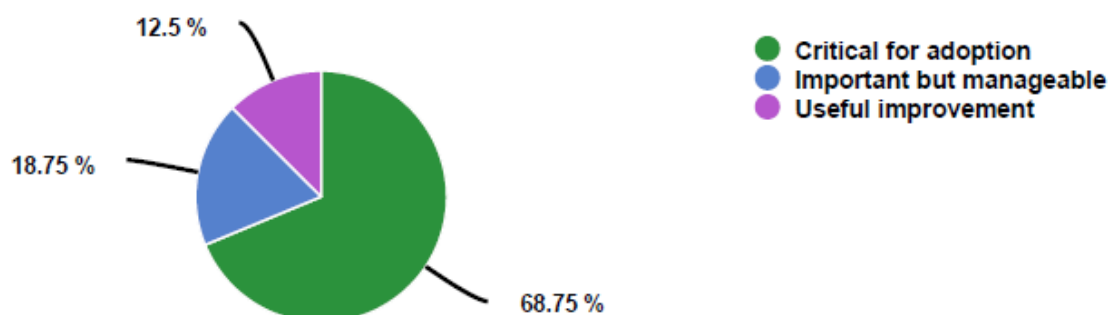
2.4.2 Second important issue:

Comments	Criticality	Assessment
Standardised definitions and validation rules All data fields should have clear definitions, units, calculation methods and validation rules to ensure consistent implementation by different software providers and verification bodies.	Critical for adoption	

2- Data quality assurance, validation and verification processes: As emissions data increasingly supports regulatory compliance, commercial decisions, and sustainability reporting, users must have confidence in its accuracy and integrity. The framework should include clear validation rules, data-quality controls, auditability, and mechanisms for handling data corrections and discrepancies. Without robust quality assurance, adoption may be limited and stakeholders may continue relying on proprietary processes.	Critical for adoption	
Clear definitions and consistent data structure: The framework should use clear and consistent definitions, data fields and units. A standardised structure should reduce the risk of manual transcription and data-entry errors when information is transferred between companies and reporting systems. It should also make errors, inconsistencies and missing data easier to identify during review.	Important but manageable	
Limitation of bdn quantity	Critical for adoption	
For implementation and continuity, market actors will likely have to invest resources into supporting maintenance and release cycles as adoption ramps up. To facilitate this investment ensuring that there is confidence in the neutral governance of the standard is key.	Critical for adoption	
Management of OVD and it's standards once it is put on a open framework	Critical for adoption	
Electronic record book missing for Italian Flag Administration, that missing obliged Crew to scan vessel book for each lag , that is one more activities for the crew that reduce time for maintenance and board activities.	Important but manageable	
Voyage Definition (i.e. different voyage interpretation between regulations & operational/commercial practices).	Critical for adoption	
RO needs to agree	Useful improvement	
There needs to be a good communication upfront about every change in regards to OVD (again, with a JSON changes this would not be critical)	Critical for adoption	
The framework should allow multiple timestamped operational states or activities within a reporting period. For offshore construction vessels, a single daily/noon classification may not adequately represent operational reality or the corresponding energy consumption.	Important but manageable	
Updating the OVD standard and every platform's exports/outputs every time a new regulation is published	Useful improvement	
Continue separating mandatory/optional requirements for log abstracts/bunker reports. The mandatory requirements should only consider the "must haves" for regulatory compliance to ensure easier implementation and increased adoption. The fewer changes that have to be made to existing systems and processes, the more likely adoption becomes.	Critical for adoption	
2. Reduction in the number of onboard reporting solutions. One of our key goals with this standard is to reduce the number of separate reporting systems installed onboard. We need clarity on whether adopting this framework will		

actually help consolidate reporting tools, rather than adding another layer on top of existing ones.		
Inclusion of missing elements, like total consumption (available together with consumption per consumer type), input for mass of passengers' vehicles (EN 16258), reporting of actual methane slip values, UK ETS excluded activities, CII correction F _{electrical} as direct input of fuel (not kWh), LNG nitrogen corrections for CII	Critical for adoption	
Software integration and workflow design	Critical for adoption	
Clear wording/implementation	Critical for adoption	
Clarity and consistency of required data definitions: Clear definitions, units and reporting rules are essential to ensure that the framework is interpreted and implemented correctly across stakeholders.	Critical for adoption	

Please also indicate whether this is critical :



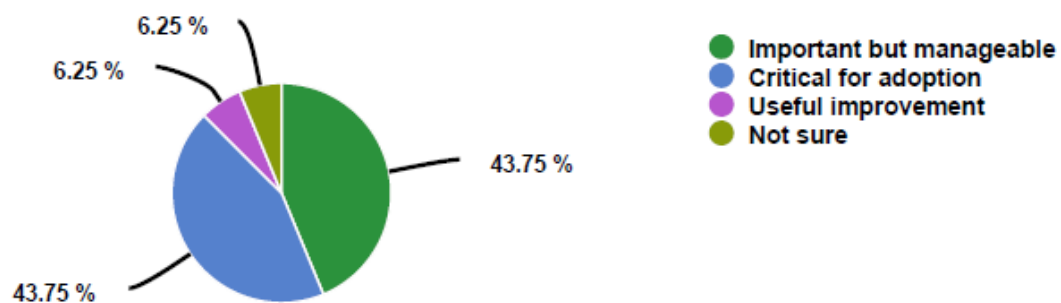
2.4.3 Third important issue:

Comments	Criticality	Assessment
Data governance and ownership Responsibilities regarding data ownership, access rights, confidentiality, correction procedures and version control should be clearly defined to ensure trust among owners, managers, charterers and service providers.	Important but manageable	
3- Interoperability, implementation burden and cybersecurity: The framework should be capable of integrating with existing shipboard, shore-based, and third-party systems without requiring extensive customization. Industry adoption will depend on practical implementation costs, scalability across different vessel types and fleets, and confidence that commercially sensitive operational data is protected. Clear data ownership, access controls, and cybersecurity requirements will help encourage broader participation.	Important but manageable	
Usability for customers and comparability across transport modes: The framework should consider how emissions data can also support the reporting needs of shippers and other transport customers, including their Scope 3	Critical for adoption	

emissions. Where possible, the data structure should facilitate meaningful comparison of transport emissions across different modes, such as maritime and air transport. This would increase the wider usability of the framework beyond regulatory reporting and could support broader industry adoption.		
CSV format is outdated and should be replaced with more modern and dynamic (json, for example)	Important but manageable	
The data model must accommodate sub-noon event boundaries, dynamic engine modes, and alternative fuel tracking (biofuel blend ratios, lower heating values, and Proof of Sustainability chains of custody) to support EU ETS and FuelEU Maritime audits.	Important but manageable	
Crew training. Our department spent 1,5 year to make training for the crew to use Sertica, despite that it is necessary to monitor every day reports	Critical for adoption	
Commitment by all parties.	Critical for adoption	
Avoid unnecessary bureaucracy. Today we have a level of documentation requirements that are supposed to help data quality that is absolutely insane. Typically called Monitoring Plans. This must be avoided for all costs	Critical for adoption	
Common definitions are needed for key states such as transit, manoeuvring/positioning, active operations and different forms of standby. The structure should remain extensible so that specialised activities can be represented without creating incompatible vessel-specific data models	Important but manageable	
Updating API connections that are already functioning properly with the previous formats	Useful improvement	
Create supporting guidelines/best practice for LNG Nitrogen deduction. Currently different approaches are applied which results in different GHG-emission/regulatory calculations. Some assign all nitrogen deduction on the arrival report, some apply a prorated deduction to each report (allows for better slicing and dicing of data). Then there is the allocation of nitrogen deduction to the energy converter type: Some assign all to main engine, some apply a 50/50 split between main engine and aux engine, and some prorate based on each consumers ratio of total consumption (seems most correct).	Important but manageable	
3. Readiness for vessel performance use cases, and quality process. It is not yet clear whether the standard is mature enough to be used for vessel performance purposes, as it currently appears oriented mainly toward emissions reporting. In addition, we need clarity on how quality checks will be carried out, since this affects the reliability and trustworthiness of the data for our operations.	Critical for adoption	
Alignment on definitions, interpretations	Critical for adoption	
Long-term governance and industry ownership	Important but manageable	
Cover all regulatory attributes	Critical for adoption	
Framework governance and regulatory evolution: The framework will need to accommodate evolving GHG regulatory requirements through clear versioning, backward compatibility and appropriate implementation	Important but manageable	

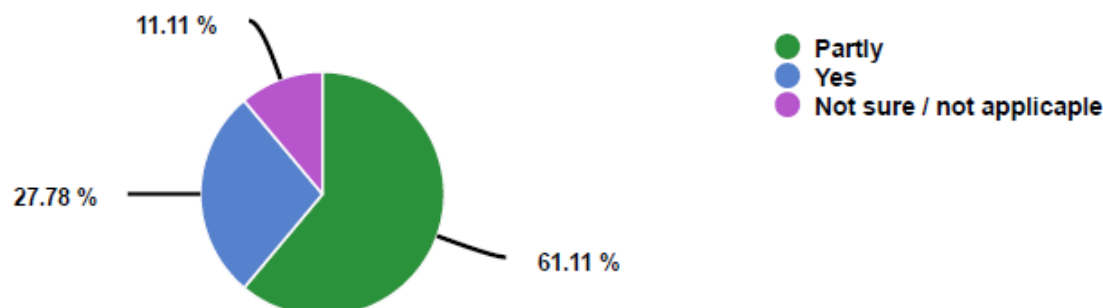
timelines, while minimizing disruption to existing systems and processes.		

Please also indicate whether this is critical :



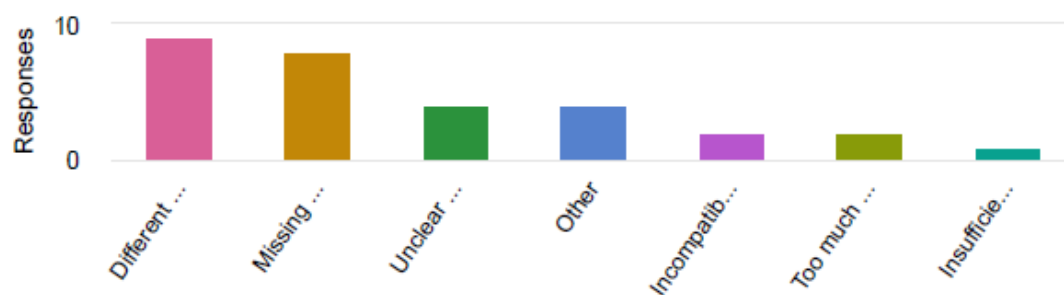
3. Operational suitability

3.1 Does OVD adequately reflect the operational data that is actually collected and exchanged in your organisation today?



If partly or no, please identify the main issue(s):

- Missing data elements
- Unclear definitions
- Different event or boundary interpretation
- Incompatibility with existing systems
- Too much detail or burdensome data requirements
- Insufficient granularity
- No issues



Other comments

Comments	Assessment
Need for standardised event structures across multiple software platforms and reporting processes.	
Weather condition	
Our organisation mainly receives aggregated data for regulatory reporting purposes.	
Too much detail or burdensome data requirements; Missing data elements; Unclear definitions; Different event or boundary interpretation; Incompatibility with existing systems	

3.2 Please explain and provide concrete examples where possible.

Comments	Assessment
OVD reflects most of the operational data currently collected through our noon reporting and voyage reporting systems. However, further clarification is required regarding data definitions, reporting boundaries and responsibilities for data validation. The framework should also ensure alignment with regulatory reporting requirements, including IMO DCS, EU MRV, UK MRV and FuelEU Maritime, to minimise duplicate reporting and manual data reconciliation.	
Limited direct exchange of operational vessel data with the administration.	
Clearly define mandatory requirements	
On our end we need to aggregate data as with only one row per entry some data is not able to fit into it.	
Inform-D develops and operates a digital Operations Reporting Platform (ORP) used for project-based offshore operations. Our experience is therefore primarily with specialised offshore construction/project vessels rather than conventional cargo shipping. A vessel may undertake multiple operational activities within a single reporting day, for example: transit → positioning → active project operation → weather standby → positioning → active project operation → client standby. For meaningful interpretation of the resulting operational and emissions data, it can be important to retain the time boundaries between these activities rather than aggregate the entire period into a single vessel state. We therefore see value in distinguishing between (i) vessel operational state, and (ii) the activity being performed. Where commercially relevant, an optional reference to the associated project or work scope could provide additional context without making project-specific information a mandatory part of OVD.	
Missing some data elements. We collect some more activity/operation information, but it is not critical for exchange purposes.	
Missing data elements total consumption (available together with consumption per consumer type), input for mass of passengers' vehicles (EN 16258), reporting of actual methane slip values, UK ETS excluded activities, CII correction Fcelectrical as direct input of fuel (not kWh), LNG nitrogen corrections for CII. Exclusion of offhire reason "LaidUp" for MRV and ETS - what is the legal basis?	
BSM collects and exchanges a significant proportion of the operational data represented within OVD through vessel reporting, noon reports, operational logs and environmental reporting processes. However, some operational events and reporting boundaries remain subject to different interpretations across industry stakeholders, software platforms, commercial reporting requirements and regulatory frameworks. Examples include the determination of arrival and departure events, voyage boundaries, STS operations, anchorage periods and the treatment of port-related activities. From our perspective, the greatest challenge is not the availability of data but ensuring that operational events are defined consistently and captured in a manner that allows the information to be reused across multiple applications, including electronic logbooks, voyage management, performance monitoring, emissions reporting and verifier interfaces.	
OVD adequately covers a significant portion of the operational data relevant to our organisation. However, the main challenge lies in the variability of the source data currently collected and exchanged through different noon reporting systems. These systems differ in their data structures, level of granularity and reporting practices, meaning that the information required to populate the OVD format may not always be available or captured at the necessary level of detail. This becomes particularly challenging as regulatory requirements evolve and introduce additional or more granular data requirements.	
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3.3 Ship types, trading patterns, operational scenarios or business models for which the framework may be less suitable or incomplete?

Comments	Assessment
Yes. Additional guidance would be beneficial for tanker-specific operations, including cargo loading and discharge, tank cleaning, crude oil washing (where applicable), inert gas operations, cargo heating, STS operations, waiting at anchorage, dry-docking and off-hire periods. These operational activities can affect fuel consumption, emissions allocation and reporting boundaries and should be consistently defined.	
Ice navigation should be appropriately reflected in the framework. Voyages in ice conditions and ice-classed ships are already recognised to some extent in existing regulatory frameworks. The operational data structure should therefore be capable of identifying relevant ice conditions and ice-navigation activities so that these regulatory distinctions can also be applied consistently in emissions reporting.	
Unsure	
FPSOs/Shuttle Tanker voyages, LNG Carriers when consume cargo for their fuel consumption.	
LNG tanker, vessels which consume their own cargo are not clear on how to handle.	
Specialised offshore/project vessels, including offshore construction vessels, heavy-lift vessels, cable-laying and cable-repair vessels, dredgers, rock installation vessels, installation vessels and other vessels performing prolonged project operations within a defined offshore work area. These vessels may spend extended periods without conventional port-to-port voyages while repeatedly changing operational activity and energy demand within the same geographical area.	
No, provided that missing elements are included	
Tankers engaged in STS operations. Chemical tankers conducting multiple parcel operations within a single voyage. Offshore and shuttle tanker activities. Vessels undertaking frequent short voyages with multiple port calls. LNG and gas carriers where operational and cargo handling activities may require additional granularity. Operations involving prolonged anchorage, drifting, waiting-for-orders or other non-standard voyage activities.	
Yes. Additional guidance would be beneficial for tanker-specific operations, including cargo loading and discharge, tank cleaning, crude oil washing (where applicable), inert gas operations, cargo heating, STS operations, waiting at anchorage, dry-docking and off-hire periods. These operational activities can affect fuel consumption, emissions allocation and reporting boundaries and should be consistently defined.	

3.4 Would it be useful for the framework to define a limited number of operational reporting profiles or schemes, with agreed minimum levels of granularity for different ship types, trading patterns or operational scenarios?

Comments	Assessment
Yes. Standard reporting profiles would facilitate consistent implementation while accommodating different operational patterns. Profiles for tanker operations, dry bulk operations and conventional ocean-going voyages would be beneficial. Voyage-leg reporting should remain the minimum reporting level, with the flexibility to report event-level data where required by regulatory or commercial obligations.	
The minimum data reporting should be defined by the regulatory compliance (IMO DCS, EU MRV, EU ETS...) All other operational data should be left to the operator to define the level of granularity depending on the vessel type, type of operation and commercial obligations. The framework should define the process and data quality not which data to be extracted.	

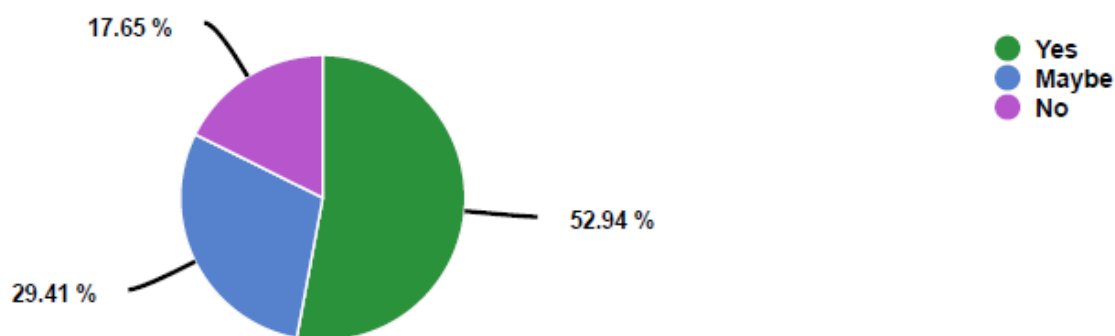
Yes. The most relevant profiles for our organisation would include frequent short voyages and ice navigation, including icebreaker-assisted operations. The framework should also be able to identify exceptional operational situations, such as temporary overriding of engine or shaft power limitations and other special operating modes where these may materially affect fuel consumption or emissions data. For these cases, sufficient event-level information should be retained so that the circumstances affecting the reported data can be identified, while regulatory reporting could still be based on the required aggregated reporting period.	
no it isn't	
frequent short voyages, STS operations, shuttle/offshore activity, LNG/gas carrier operations. event-level, berth call, port call, voyage leg, voyage, reporting period.	
as little as possible, and limit consumption to key reports	
In the end the regulatory is describing the level	
Yes. An offshore/project vessel profile would be particularly useful. The appropriate minimum granularity should be event/activity-based where operational states materially change, rather than being limited to a noon-to-noon or daily aggregation. At minimum, the framework should be capable of representing timestamped changes between relevant states such as transit, manoeuvring/positioning, active project operation and standby. Where practicable, standby should allow meaningful differentiation (for example weather, technical, operational/client-related), as these states may have different operational and commercial interpretations. A flexible activity reference could then allow more specialised activities such as lifting, dredging, cable operations or rock installation to be represented without requiring an exhaustive universal list of offshore activities.	
Profiles relevant for us are conventional trading, frequent short voyages, tanker operations, STS operations, shuttle/offshore activity, LNG/gas carrier operations. Would prefer to have it on a noon/daily report basis (with corresponding event reports). Not sure what this question proposes. If it is what type of information/data point to include, then yes, but should still be separated in mandatory and optional data-points.	
For our purposes, particularly vessel performance analysis — we would need granularity at least at the voyage leg level, and ideally event-level data where possible. Given that our work spans multiple vessel segments and decarbonisation pathways, we would benefit from profiles covering a broad range of operations rather than a single trading pattern — including conventional trading, tanker operations, and chemical tanker parcel operations, as well as other ship types relevant to our ongoing performance and emissions research.	
A limited number of standardised reporting profiles would support greater consistency whilst avoiding unnecessary complexity. Relevant profiles for BSM: Conventional trading Frequent short voyages Tanker operations STS operations Chemical tanker parcel operations LNG/gas carrier operations Minimum granularity required: Event-level reporting Port call level Voyage leg level Voyage level The framework should allow detailed event-level information to be aggregated into higher reporting levels without requiring duplicate data entry.	
For STS operations, the current OVD framework requires users to identify the applicable voyage scenario to be excluded, based on the six scenarios defined in the SEEMP/CII Implementation Guidelines No. 175. This places a degree of reliance on users and reporting systems to correctly interpret and classify each STS scenario. Since Arrival STS and Departure STS are already available as event types within the Events reporting structure, there may be an opportunity to use these events, potentially in combination with other reported voyage information, to support a more automated determination of the applicable STS scenario. This could reduce reliance on manual classification, improve consistency across reporting systems, and minimize the risk of incorrect scenario selection.	

3.5 Which operational events or reporting boundaries most often lead to inconsistent interpretation or divergent reporting outcomes?

Comments	Assessment
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Port arrival and departure events, commencement and completion of cargo operations, STS operations, anchorage, drifting, waiting for berth, dry-docking, off-hire periods and periods involving cargo heating or tank cleaning are the operational events most likely to result in different reporting interpretations.	
Definition of voyages and calls. Frequency data vs Noon reports. Calculated/processed data vs measurement data (Flow Counter, level gages...)	
Relevant operational events and conditions include entry into and exit from ice conditions, periods of receiving icebreaker assistance, overriding and resetting engine or shaft power limitations, ballast voyages, and cargo operations that change the amount of cargo carried, including lightering or STS cargo transfers. These operational conditions or events may affect how emissions and transport work data are interpreted or aggregated and should therefore be clearly identifiable in the underlying data.	
Last line / back loading / loading in the same port for the next voyage etc	
Bunkering operations.	
Unclarity around HFO vs LFO consumption, year changes	
Limitations on data entries	
For offshore project vessels, ambiguity can arise around the transition between transit and project operations, positioning/manoeuvring and active operations, active operations and standby, and between different categories of standby. Reporting-day boundaries can also artificially divide an activity which continues uninterrupted across midnight. Event/activity timestamps should therefore remain distinguishable from administrative reporting-period boundaries.	
Possibly consecutive STS operations or bunkering operations, however this is an issue regardless of the OVD standard due to the extremely high volume of voyage legs and applicable corrections	
Arrival/Departure Within/outside port limits (port clearance, coast guard) First all fast/last cast off can be confusing for different operations, and does not always match with operational expectation, nor commercial expectation. Example: -Vessel arrives at berth to bunker. -Then leaves berth and waits at anchorage (within port limits) -Then goes back to berth within same port to load. Then the all fast at berth to bunker is to be used for arrival (first all fast). But if the vessel did: -Vessel arrives at berth to bunker -Then leaves berth and waits at anchorage (within port limits) -Then goes to berth at neighboring port to load Then there should be arrival/departure for the bunkering berth, and new arrival/departure for the loading berth. The second one is intuitive and follows the natural reporting flow, the first one does not. Within and outside port limits also results in confusion, as there is no official list of port limits to compare against. See different stakeholders reporting similar operation with different within port limits / outside port limits.	
timestamps	
Arrivals in terms of EU MRV port of call definition and BOSP/EOSP events for IMO DCS reporting	
Arrival and departure definitions. Berth versus port arrival. Anchorage and customary anchorage boundaries. STS commencement and completion. Pilot station arrival/departure. Port limits versus berth limits. Cargo operation commencement and completion. Voyage leg commencement and completion. Waiting-for-orders and drifting periods. BOSP/EOSP reporting points.	
STS operations	

3.6 Do different voyage, leg, port call or reporting boundary definitions create practical difficulties when using the same operational data for different regulatory, commercial, charterparty, verifier or reporting purposes?



3.7 If yes, please describe the definitions or boundary points that most often lead to inconsistency, such as berth-to-berth, pilot station, sea buoy, customary anchorage, port limits, cargo operation period, charterparty voyage, regulatory reporting period?

Comments	Assessment
Different reporting boundary definitions between regulatory frameworks and commercial reporting requirements often require manual interpretation and reconciliation. Harmonised definitions would improve consistency and reduce administrative effort.	
If the definitions are aligned between the regulations and the industry best practices, then there is no issue. Otherwise, there will be discrepancies.	
Different reporting purposes may require different operational boundaries or additional information on particular operating conditions. Relevant examples include the points of entering and leaving ice conditions, periods of icebreaker assistance, and the start and end of an engine or shaft power limitation override. It should also remain possible to identify whether a voyage is laden or in ballast and whether the cargo quantity changes during a voyage, for example through lightering or STS operations. EU MRV/THETIS-MRV already allows the distance travelled and time spent navigating through ice to be recorded separately, while ice class is also relevant for specific EU ETS provisions. This illustrates the importance of retaining sufficiently detailed operational data so that the same underlying data can be aggregated correctly for different reporting purposes.	
The voyage concept for MRV scenario is completely different from Charter party and commercial voyage, so the two systems are incompatible. MRV voyage starts from standby engine on departure port and finishes on finish with engine at arrival berth; on commercial point of view, voyage starts on NOR and finishes after disconnection of manifold.	
berth-to-berth, pilot station, sea buoy, customary anchorage, port limits, cargo operation period, charterparty voyage & port of call definition (i.e. for FPSOs without assigned UNLOCODE).	
Conventional voyage and port-call boundaries do not always correspond well with offshore project operations. A vessel may remain within an offshore project area for days or weeks while performing numerous distinct activities. For such vessels, commencement/completion of a project activity or change of operational state may be a more meaningful operational boundary than a port call or conventional voyage leg. OVD should therefore permit operational/event boundaries to coexist with regulatory voyage and reporting-period boundaries.	
Yes, All fast/cast off does not always match with commercial definitions. However, have seen all fast/cast off becoming more accepted, or at least a more pragmatic approach on how to agree has developed. This strengthens the need for sharing log abstracts/per report basis and not just legs, to facilitate the different starts/stops that apply.	
Clear distinction between offshore and regulatory exclusions is needed. Charterparty voyage and voyage in the understanding of EU MRV regulation and clear reporting of voyages under EU MRV regulation is crucial	
The most common areas of inconsistency relate to: Berth-to-berth versus port-to-port definitions. Pilot station boundaries. Sea buoy boundaries. Customary anchorage definitions. Port limits.	

Commencement and completion of cargo operations. STS operational boundaries. Voyage definitions used within charterparties. Regulatory reporting periods.	
Different boundary definitions across regulatory and commercial frameworks are a significant source of inconsistency. For example, IMO requirements generally distinguish the “not under way” period using EOSP/BOSP boundaries, whereas EU requirements rely on berth/unberth events for certain reporting purposes. When these are combined with additional commercial and charterparty requirements, different boundary points and levels of granularity may be required for the same vessel operation. This makes it inherently challenging for a single reporting system to capture all required boundary points consistently and ensure that the necessary data is readily available for each emissions/reporting use case. Where these events are not captured directly and systematically, information may need to be retrieved from supporting documents or other sources and supplemented manually, increasing both operational effort and the potential for inconsistencies.	

4. Content, definitions & structure

4.1 Are the current OVD data elements, concepts and definitions sufficiently clear for practical implementation?-

Comments	Assessment
Partly. The overall structure is appropriate; however, additional guidance is required for key operational definitions, reporting boundaries and data validation rules to ensure consistent implementation across ship managers, software providers and verification bodies.	
"Yes, provided that additional guidance and clarification are developed for consistent implementation across different operators, vessel types, digital systems, and regulatory reporting schemes. To elaborate further: The current OVD data elements and overall structure provide a strong foundation for the exchange of emissions-related operational vessel data. However, some concepts and definitions would benefit from further clarification to ensure consistent interpretation and implementation across the industry. Areas where additional guidance would be particularly valuable include: •	
Maybe... The general structure and purpose appear clear, but further clarification would be useful for operational conditions that may affect emissions reporting, such as navigation in ice, icebreaker assistance, voyages in ballast, power limitation overrides and exceptional cargo operations. It should be clear how these conditions and events are identified and timestamped.	
'init' bunkerings are redundant.	
Partly. The OVD definitions are sufficient for merchant operations using conventional fossil fuels, however coherence reduces when it comes to definitions for distinguishing physical fuel consumption from the biogenic/synthetic component attribution e.g. biofuel blends. Also Core event concepts like Departure, BOSP, EOSP, and Arrival are clear for cargo transit, but ambiguous for non-transport activities such as dynamic positioning, offshore standby, and heavy-lift operations.	
Not sure	
No	
The mandatory fields/definitions for reporting shall be distinguished.	
Rina MRV reporting template is close, but still a bit off	
The CSV format is also outdated and should at least be extended to facilitate easier implementation. In the future, software will become increasingly important for simplifying the work of crews, therefore, the necessary technological prerequisites must be in place.	
From our offshore/project-vessel perspective, additional guidance would be beneficial regarding the distinction between vessel operational state, operational activity and reporting boundary, particularly where several activities occur during a single reporting period.	
Yes	
Yes	
I cant have full access to it	
offhire reporting mixed with regulatory exclusions, LaidUp period excluded under MRV and ETS with no legal basis	
partially, The current framework provides a strong foundation and many of the data elements are already familiar to vessel operators through existing noon reporting and operational reporting practices. However, further clarification would be beneficial for certain operational events, reporting boundaries and event relationships to ensure consistent implementation across operators, software providers, verifiers and other stakeholders. Particular attention should be given to events such as arrivals, departures, anchoring, STS operations, port activities, voyage segmentation and the relationship between vessel operational events and reporting periods. Clear definitions and interpretation guidance will be essential to achieving consistent outcomes across the industry.	
Mostly yes. There are some detailed topics we need to get clarified on an ongoing basis with the OVD Support team	

Yes, Documentation is available	
One area that could benefit from further clarity is the distinction and transition between fuel based and BDN based reporting. BDN based reporting is currently required for reporting biofuels and fuel blends, which introduces additional implementation complexity compared with conventional fuel based reporting. In particular, the level of information required for biofuel blends may not always be readily available within existing vessel reporting systems. As a result, users and data providers may need to supplement the required information manually or establish additional data collection and integration processes specifically to support BDN based reporting. Further guidance on the expected reporting approach, particularly for biofuels and blends, and on how fuel-based and BDN based reporting should coexist would support more consistent implementation across different reporting systems.	

4.2 Are there any material data elements that are missing from the current framework for common emissions-related exchange purposes?

Comments	Assessment
The framework should ensure adequate support for FuelEU Maritime requirements, including fuel pathway information, sustainability documentation references, actual lower heating values where applicable, emission factors, correction procedures when supporting documentation becomes available after bunkering, and clear identification of regulatory reporting boundaries.	
"No major emissions-related data categories appear to be missing; however, several additional data elements could strengthen the framework as regulatory and commercial reporting requirements continue to evolve. To elaborate further: The current framework appears to provide a solid foundation for the exchange of emissions-related operational vessel data. However, consideration could be given to the inclusion or further development of the following data elements: •	
We cannot assess whether these elements are currently missing from the detailed OVD specification, but we consider it important that the framework can clearly identify navigation in ice, periods of icebreaker assistance, voyages in ballast, overriding and resetting of engine or shaft power limitations, and exceptional cargo operations such as lightering or STS operations. Sufficient information on fuel consumption by fuel consumer may also become increasingly relevant for regulatory reporting.	
Yes. Again specific indicators for offshore operations. Elements are needed to support Onshore Power Supply - electricity consumed, grid emission factors, and OPS meter IDs. For OCCS - captured mass of CO2, storage tank conditions, discharge volumes to shore transfer stations.	
Not sure	
N.C.	
None identified, however several data points/definitions might be missing from our own noon reporting system.	
don't think so, merely naming and definitions	
no	
We suggest considering whether the framework provides sufficient capability to associate fuel/consumable use with timestamped operational states or activities. In our operational reporting platform, consumables such as MGO, HFO, lubricating oils and additives can be recorded together with configurable emission factors. This allows consumption and associated emissions to subsequently be analysed against project, activity and other operational context. OVD does not necessarily need to prescribe this analytical logic, but its structure should preserve sufficient identifiers and timestamps to enable such relationships in consuming systems.	
No	
Again, with reference to the human readability, an "In Port" column in addition to "Voyage From" and "Voyage To" would be helpful. Currently observe different applications on what to populate in "Voyage From" and "Voyage To" between arrival/departure.	

total consumption (from all fuel consumers together), mass of passengers' vehicles (EN 16258), actual methane slip values, CII correction F _{electrical} as direct input of fuel, LNG nitrogen corrections for CII	
The current framework appears comprehensive for common emissions-related exchange purposes. However, consideration should be given to ensuring sufficient flexibility for: Complex tanker and chemical tanker operations. STS activities. Waiting-for-orders and prolonged anchorage scenarios. Cargo-related operational events that may influence voyage segmentation and emissions allocation. Future regulatory requirements that may require additional operational qualifiers or event attributes. It is important that the framework remains adaptable without becoming excessively complex.	
No major emissions-related data elements have been identified as missing at this stage, as the current OVD framework is relatively comprehensive. However, as regulatory requirements evolve, additional operational context or granularity may be required to support specific use cases.	

4.3 Does the framework provide sufficient structure for reporting alternative fuels, biofuels, fuel blends and related supporting evidence?

Comments	Assessment
The framework should allow reporting of blended fuels, sustainability certification references, Proof of Sustainability (PoS), chain-of-custody documentation, actual lower heating values, emission factors and subsequent corrections where documentation is received after fuel consumption has already been reported. This flexibility will support FuelEU Maritime implementation and future alternative fuel uptake.	
"Partially. The framework appears to provide a good foundation for reporting alternative fuels, biofuels and fuel blends, but additional structure and guidance would be beneficial to support consistent implementation, verification and regulatory compliance as the use of low- and zero-carbon fuels increases. To elaborate further: The framework should support not only the reporting of fuel quantities consumed, but also the associated attributes that increasingly determine the regulatory and commercial treatment of those fuels. In particular, the framework would benefit from clear and standardized treatment of: •	
Partly: The framework should be able to distinguish the physical fuel data from the regulatory status and supporting evidence associated with the fuel. For alternative fuels and blends, it should support fuel type and individual blend components, quantities, relevant emission factors and lower heating values, as well as references to sustainability certification and Proof of Sustainability documentation where applicable. It should also accommodate situations where supporting documentation becomes available only after the fuel has been bunkered or consumed, allowing the evidence status and related emissions data to be subsequently corrected or reconciled with a clear audit trail.	
Yes, it is sufficient.	
No. As mentioned there are gaps for alternative fuel deployment - for example a B30 blend needs to be decoupled into its fossil and biogenic fractions each with its own LHV and GHG intensity. The bunker report schema needs to be extended to include formal certification fields - certification scheme identifier, PoS, feedstock classification, mass balance reference ID. The schema should carry these physical and certification properties as data attributes without embedding regulatory compliance logic, ensuring downstream calculation engines can evaluate statutory liabilities consistently.	
Not sure	
Yes, sufficient.	
Sufficient for the main emission calculations, but it would be great if more fuel/POS details could be added to be bunker report if available (e.g. bunker port, feedstock, POS date)	
For a bunker based reporting everything is there, except for IGS ect, which at the moment need to be reported as AE.	

No specific comment based on our current operational experience.	
Yes	
Unsure about RFNBOs under FuelEU. The BDN report currently ask for “E-value” but not the “Eu” value as referenced in the FuelEU regulation when calculating WTT. Initial interpretation was that Eu = TTW CO2e according to the emission factors in FuelEU. However, the examples provided in FuelEU guidance document for calculations includes examples where the Eu is different from the calculated TTW CO2e. Needs to be addressed on how to calculate, and whether also the Eu value must be collected from the PoS.	
yes	
alternative fuels and increasing regulatory reliance on sustainability-related documentation, additional guidance may be beneficial. Particular consideration should be given to: Fuel blend ratios. Lower Heating Value (LHV). Emission factors. Sustainability certification references. Proof of Sustainability (PoS) documentation. Chain-of-custody information. Situations where sustainability documentation is received after fuel consumption has already occurred. Mechanisms to allow later correction, validation or reconciliation of previously submitted data. The framework should support situations where operational data is recorded onboard before the associated certification documentation becomes available from fuel suppliers or other stakeholders.	
yes	
yes	
The framework provides a relatively comprehensive structure for reporting alternative fuels, biofuels and fuel blends, particularly through BDN based reporting. However, for biofuel blends in particular, information such as blend composition, sustainability characteristics, emission factors and supporting certification may not be captured directly within existing vessel or noon reporting systems and may instead originate from BDNs, Proof of Sustainability documentation or other external sources. In some cases, supporting documentation may also become available only after or even much later than the initial operational data has been reported. It would therefore be important for the framework to clearly support the association of operational fuel consumption with the relevant BDN and supporting evidence, as well as subsequent correction or reconciliation when final sustainability or fuel information becomes available. Clear guidance on how such updates should be handled would support consistent implementation across reporting systems.	

4.4 Are there any data elements that appear unnecessary, duplicative, too burdensome, or difficult to populate consistently in practice?

Comments	Assessment
The framework should avoid requiring the same operational information to be reported multiple times under different field names. Existing noon report and logbook data should be reusable wherever possible, minimising manual data entry and reducing the risk of inconsistencies.	
"No major data elements appear unnecessary; however, some elements may be difficult to populate consistently across fleets, vessel types, and reporting systems without additional guidance. Care should be taken to balance data granularity with practicality to avoid creating unnecessary reporting burdens. To elaborate further: The primary challenge is not the inclusion of specific data elements, but rather ensuring that they can be collected, interpreted, and exchanged consistently across the industry. Areas that may be difficult to populate uniformly include: •	
We do not currently have sufficient practical experience with OVD to identify specific unnecessary or duplicative data elements. However, data elements that are only relevant to particular ship types, operations or reporting schemes should, where possible, be optional or included through appropriate reporting profiles rather than being mandatory for all users.	
Not sure	
It might be too difficult to integrate this detailed reporting required for OVD format.	

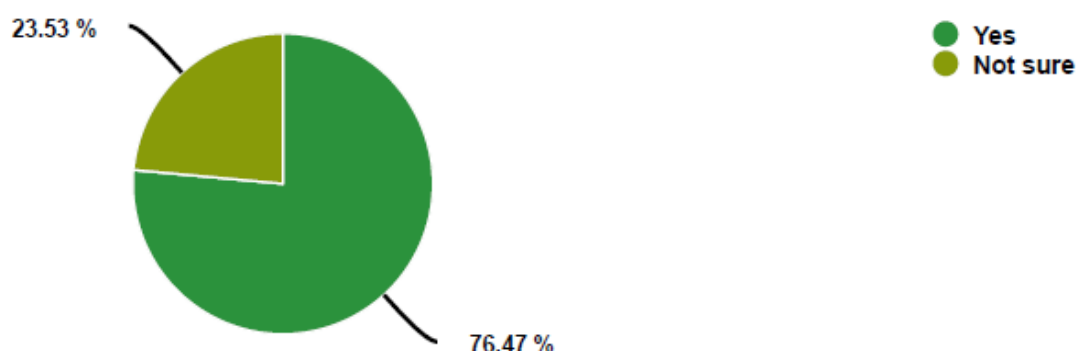
No specific elements identified. In general, however, additional offshore operational granularity should preferably be conditionally applicable through an offshore/project vessel profile rather than becoming mandatory for vessel types where it provides limited value	
Many columns are only relevant for specific ship types, specific fuel types, or different monitoring methods. However, this does not create any difficulties in reporting since it is clear which fields are mandatory.	
LNG Nitrogen (as addressed above). BDN-based reporting with blends of blends (as addressed above).	
no	
At present, no major data elements appear unnecessary. However, BSM would caution against introducing fields that require shipboard personnel to manually determine regulatory classifications or reporting outcomes where these can instead be derived automatically from operational data. The framework should focus on capturing operational facts and events that Masters and Chief Engineers can readily identify. Regulatory calculations, aggregation and reporting outputs should wherever possible be generated automatically by software systems rather than relying on additional manual inputs from ships.	
There are old deprecated fields that were deprecated a while ago but are still reflected in the description.	
No specific data elements have been identified as unnecessary at this stage.	
Since we manage only bulk carrier many elements seem irrelevant but we understand their use in other vessel types	

4.5 Would additional implementation guidance, worked examples or interpretation notes be useful? If so, please identify where such guidance would be most valuable.

Comments	Assessment
Yes. Worked examples covering tanker operations, port calls, anchorage, STS operations, cargo operations, voyage boundaries, data corrections and validation procedures would promote consistent implementation across the industry.	
Yes. Additional implementation guidance, worked examples, and interpretation notes would be highly valuable and would likely be important for achieving consistent industry adoption and data interoperability. To elaborate further: While the framework provides a strong starting point, consistent implementation across shipowners, charterers, managers, technology providers, verifiers, and regulators will require a common understanding of key concepts, definitions, and reporting expectations. Additional guidance would be particularly valuable in the following areas: Operational event definitions and voyage phases, including the classification of steaming, maneuvering, waiting, anchorage, drifting, port stays, cargo operations, and exceptional circumstances. Consistent interpretation of these events is critical to achieving comparable emissions and operational data across fleets. Fuel reporting for alternative fuels, biofuels, and fuel blends, including worked examples covering blend ratios, lower heating values, emission factors, sustainability attributes, chain-of-custody information, and treatment of situations where supporting documentation is received after fuel consumption has occurred. Data quality, estimation, and correction procedures, including guidance on handling missing data, estimated values, sensor failures, manual inputs, and the process for updating or reconciling records when more accurate information becomes available. Verification and assurance expectations, including examples showing how data should be recorded and exchanged to support acceptance by different verifiers, charterers, counterparties, and regulatory reporting schemes. Data ownership, auditability, and version control, particularly where records may be amended after initial submission due to revised fuel documentation, sustainability certifications, or emissions factors. Interoperability and digital implementation, including sample data exchanges, standardized data mappings, reference architectures, and practical examples demonstrating how the framework can be integrated with existing shipboard and shore-based systems. Worked examples based on common operational scenarios would be especially useful, as they would help reduce differing	

interpretations and improve consistency across the industry. A combination of implementation guidance, use cases, and frequently asked questions would likely accelerate adoption and increase confidence in the framework among all stakeholders.	
Yes. Guidance and worked examples would be particularly useful for operational event and reporting boundaries, navigation in ice and icebreaker assistance, voyages in ballast, power limitation overrides, exceptional cargo operations, and the treatment of alternative fuels and fuel blends. Examples showing how corrections and subsequently received supporting documentation should be handled would also be useful.	
Drop-in biofuel bunkering and delayed certification, multi-operational offshore profiles	
OVD to be for Owner support; Owner can not change procedure to satisfy OVD requirement.	
Worked examples would be helpful.	
Yes. Worked examples for specialised offshore/project vessels would be particularly valuable, showing how multiple operational activities within one reporting period should be represented and how these relate to fuel consumption and regulatory reporting boundaries.	
Yes, BDN-based reporting for fossil fuels, and the best practice for blends of blends (as addressed above). Arrival/Departure for different berth sequences best practice (as addressed above).	
BDN-based reporting, interpretation notes for boundry points	
Additional guidance would be particularly valuable for: Arrival and departure definitions. Voyage and voyage-leg boundaries. STS operations. Anchoring and customary anchorage events. Port call definitions. BOSP/EOSP events. Data correction and amendment processes. Alternative fuel reporting and sustainability documentation. Relationships between operational events and reporting periods. Worked examples covering common tanker, bulk carrier and gas carrier operations would greatly assist implementation and improve consistency across the industry.	
I would be very helpful to have some worked examples and interpretation notes. For more "niche" situations, it would be helpful to have examples (Reporting of CII exemption for emergency situation, LNG boil off reporting for example)	
Definitely examples for how users should fill in either Fuel Based or BDN Based reporting, examples on how CII exclusions per vessel type should be filled in	

4.6 Would common interpretation guidance be needed for key operational events and parameters to support consistent verification, assurance or acceptance of data by different verifiers, charterers, counterparties or reporting schemes?



5. Business process & exchange protocol

5.1 What practical steps are needed to ensure that emissions-related operational data can be exchanged reliably between different parties and systems?

Comments	Assessment
Standardised APIs, common validation rules, version control, clear error handling and correction procedures, confirmation of successful data transfer, and complete audit trails should be established. The framework should support automated exchange while maintaining traceability of all data revisions.	
Reliable exchange of emissions-related operational data will depend not only on common data standards, but also on robust governance, validation, and data-management processes throughout the data lifecycle. Key practical steps include: Standardized data validation rules to ensure that data is complete, internally consistent, and submitted in the correct format before it is exchanged. Validation should include checks for missing values, unit consistency, logical relationships between data fields, and out-of-range values. Clear correction and amendment procedures to allow errors, omissions, or subsequently received information (such as fuel sustainability documentation or revised emissions factors) to be incorporated in a controlled and transparent manner. All amendments should be traceable to the original submission. Version control mechanisms that assign unique identifiers and revision histories to exchanged records. Users should be able to determine which version is the current authoritative record and understand what changes have been made over time. Confirmation of receipt and processing status notifications so that both sending and receiving parties have confidence that data has been successfully transmitted, received, and accepted for processing. Automated acknowledgements would help reduce disputes and operational uncertainty. Structured reconciliation processes to identify and resolve discrepancies between data held by different parties, including shipowners, managers, charterers, fuel suppliers, verifiers, and regulators. Common procedures for resolving inconsistencies and updating records would support confidence in the exchanged data. Comprehensive audit trails that record when data was created, modified, transmitted, received, validated, corrected, and approved. Auditability will be essential to support regulatory compliance, third-party verification, commercial transparency, and stakeholder trust. Common data governance and ownership principles, including clarity regarding who is responsible for creating, validating, updating, approving, and retaining specific data elements throughout the reporting process. Standardized APIs, exchange protocols, and reference formats to promote interoperability across shipboard systems, fleet management platforms, charterer systems, verifier platforms, and regulatory reporting tools. Ultimately, reliable data exchange requires a combination of standardized data structures, robust quality controls, transparent change management, and end-to-end traceability. These elements will help ensure that emissions-related operational data can be trusted and accepted across different organizations, reporting schemes, and digital systems.	
The process should support pre-population of recurring information and retrieval of previously reported data, use agreed standard units and formats, and avoid unnecessary conversions and manual re-entry. Automated pre-validation should identify missing information, inconsistent values, incorrect units and other obvious errors before submission. Clear version control, correction handling and traceability should also be maintained.	
Building Trust... you had Stolt on your panel and they refuse to share their data when their ship is Charterered, when we require the data specifically as Charterers to meet our Scope 3 obligations!	
There should be a clear protocol that will define the process for treating the data validation, correction handling, version control, confirmation of receipt, reconciliation of differences, and audit trail.	
one standard reporting system that is easy enough. A unified data validation rule set should also be applied	
We see many cases where the consumed amount is higher than the reported bunker amount on the BDN. This is an example of a validation step that should be added. We also quite often see misreported WTW factors and LCVs outside the expected bounds.	

All of these would be easier to track and to handle with a state of the art architecture instead a CSV	
Clear data definitions, stable identifiers, timestamps, validation rules, version control and correction history are important. The framework should also allow traceability to the originating operational record while distinguishing source data from subsequently calculated or enriched information.	
A unified format will solve this issue.	
Each report should have a user-set unique id (that is available in the data-extract and exposed in the API) to facilitate for updates (and not just combination of IMO+Date/time which can change). It should also include a version-id, or updated date or similar.	
data validation: rules and thresholds should be in place. Correction handling: standardised process for issuing and tracking correction. Version control:each dataset or report should carry a clear version identifier:	
version control	
A common exchange framework should support: Standardised operational event definitions and validation rules. Unique identifiers for datasets, voyages, port calls and events. Robust version control and change management. Clear correction and resubmission processes. Full audit trails showing how and when data has been amended. Confirmation of receipt and processing by receiving systems. Reconciliation mechanisms where discrepancies are identified. Open APIs and system-to-system integration standards. Consistent governance arrangements and implementation guidance. The objective should be to allow operational data to be captured once and then reused throughout the reporting chain without repeated manual intervention.	
Reconciliation of difference and correction handling	
Reliable exchange requires common processes for data validation, correction handling and reconciliation between the parties involved. Validation rules should be consistently defined and, where possible, made available to all relevant stakeholders so that they can also be implemented directly within noon reporting systems. This would allow errors to be identified and corrected as close to the source as possible, rather than being discovered during downstream validation or year-end emissions reporting. Where errors are identified during the data exchange process, the framework should provide a clear indication of the validation error and sufficient information to support its correction. Ideally, the error should be corrected at source before the updated data is resubmitted, whether through API exchange or manual upload. The exchange process should also include confirmation of successful receipt and processing, appropriate version control and a clear audit trail, ensuring that corrections and resubmissions remain traceable and that all parties can identify the latest accepted version of the data.	
Some data exchange record should be added for each entry/report indicating the time of exchange and the timestamp entry was last updated	

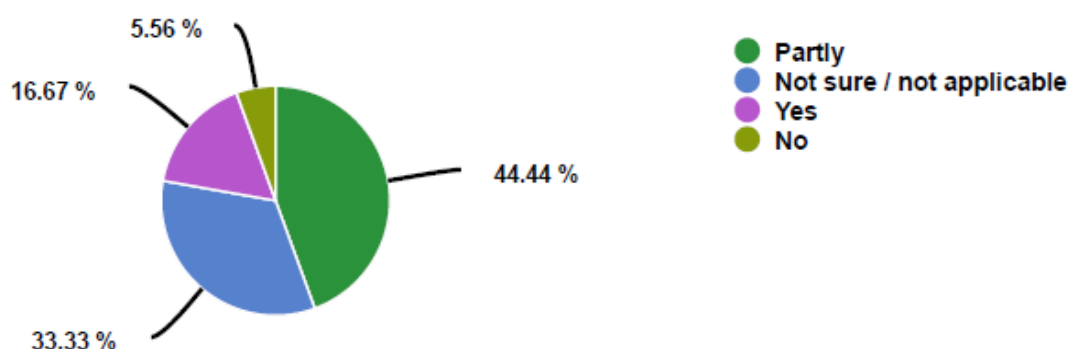
5.2 At what stages in the current exchange process (the process you currently have in place for exchanging environmental data) do you experience the greatest friction or inefficiency?

Comments	Assessment
The greatest challenges occur during data mapping between different systems, reconciliation of corrections after voyage completion, verifier requests for clarifications, and reporting to multiple regulatory and commercial platforms using different data structures.	
The greatest sources of friction and inefficiency typically occur at the interfaces between data creation, validation, verification, and external stakeholder exchange rather than in the collection of operational data itself. Specifically: Data standardization and normalization: Operational and emissions-related data is often received from multiple shipboard systems, fleet management platforms, fuel suppliers, and third-party service providers, each using different formats, definitions, and quality controls. Considerable effort can be required to harmonize data before it can be used for reporting, analytics, compliance, or exchange with external parties. Data validation and quality assurance: A significant challenge is identifying and resolving incomplete, inconsistent, or	

anomalous data. Manual review and follow-up may be required when reported values do not align with expected operational patterns, fuel records, voyage data, or other supporting information. Fuel and sustainability documentation management: For alternative fuels, biofuels, and fuel blends, supporting documentation such as Proof of Sustainability (PoS), certification records, chain-of-custody evidence, and fuel quality information may not always be available at the same time as operational data. This can create delays in verification, emissions calculations, and compliance reporting. Data reconciliation and correction handling: Differences may arise between records maintained by ship operators, charterers, fuel suppliers, technology providers, verifiers, and regulatory reporting systems. Reconciling these differences and managing corrections or amended submissions can be resource-intensive, particularly when updates occur after initial reporting. Verification and assurance processes: Multiple stakeholders may apply different interpretations, validation criteria, or reporting requirements. The absence of common interpretation guidance can increase the effort needed to demonstrate data accuracy and obtain acceptance across different reporting schemes and counterparties. System-to-system interoperability: Integration between shipboard data sources, shore-based systems, regulatory platforms, and third-party applications remains an area where manual intervention is often required. Greater standardization of data models, APIs, and exchange protocols would reduce administrative burden and improve efficiency. Overall, the highest friction points are generally associated with data quality management, reconciliation of information across multiple parties, delayed availability of supporting evidence, and interoperability between different digital systems. Addressing these areas through standardized definitions, automated validation, common exchange protocols, and robust governance processes would provide the greatest improvement in efficiency and reliability.	
Our current direct exchange of operational emissions data is limited. The main practical friction arises where data received from a company must be manually transferred into a regulatory reporting system. We have, for example, requested data in a copyable PDF format to avoid manual retyping when entering information into IMO GISIS and thereby reduce transcription errors. More granular reporting, including reporting by fuel consumer, may increase this workload in the future.	
BDN style upload, when data changes in previous year - need to reupload data starting from date of change.	
Friction - on negotiation TC's. Commercial & Legal have little understanding of it works in practice! and I speak from a commercial angle not a technical angle	
Verificator requirement to check validate date in the sertica system: a lot of scan to be supplied as official support to report.	
Data Validation & correction where needed.	
Especially re. biofuels there is a lot of manual follow-up involved (receiving the POS, manually entering the details, etc.)	
Again CSV, every change of data within the CSV breaks the current system, this would not be with a nested solution. The instant error handling shows rows instead of date time or any otehr information which could be used for the end user.	
Mapping differently structured operational datasets between contractors, vessel operators, clients and reporting/analytics systems, particularly where similar operational events use different terminology or levels of granularity	
Submission of the data to the Verifiers, since each platform has its own format and requirements.	
Updates of reports.	
we see this as a necessary step rather than a reason to avoid adoption — one of our main goals is precisely to reduce the number of separate reporting systems onboard, and a well designed standard should help move in that direction	
definitions and interpretations, data validation	
The greatest inefficiencies typically arise when: The same operational data is required by multiple systems in different formats. Operational data needs to be reconciled with verifier or regulatory requirements. Corrections are made after data has already been exchanged with third parties. Fuel and sustainability documentation is received after operational reporting has been completed. Data must be manually validated or re-entered between systems. For ship operators, friction often	

occurs not because data is unavailable, but because different parties require the same information structured in different ways.	
For more niche situations, the implementation can be unclear. For this we need to dive into the OVD description, other sources and communicate / discuss with other partners in the chain	
The greatest friction is experienced during data ingestion, mapping and validation, particularly due to differences between vessel reporting systems in terms of data structures, terminology and level of granularity.	

5.3 Would implementation of an OVD-based exchange framework create practical integration challenges with existing onboard systems, shore-based systems, commercial platforms, verifier platforms, charterparty reporting tools or regulatory reporting solutions?



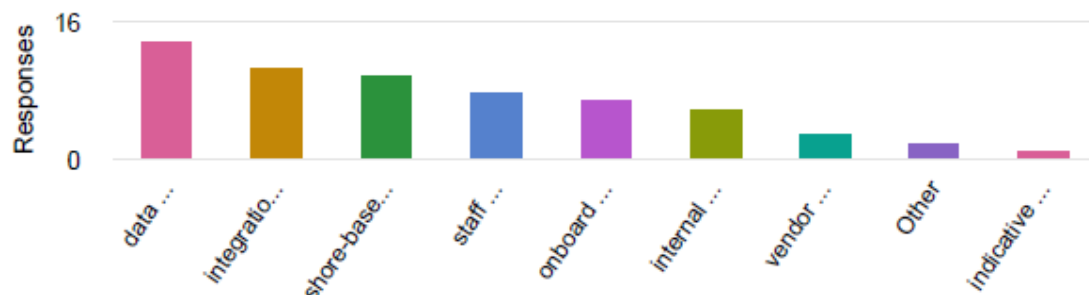
If yes or partly, please describe the main challenges

Comments	Assessment
Existing onboard and shore-based systems would require mapping to the OVD structure. API modifications, data mapping, validation rules and alignment with existing reporting platforms would be required. The objective should be to avoid duplicate reporting and minimise changes to existing operational workflows.	
The main issue from our perspective would be integration with existing regulatory reporting solutions. If OVD data cannot be imported directly into systems such as GISIS or relevant EU reporting systems, an additional exchange format could create another mapping or manual transfer step rather than reduce work. The benefits would therefore depend considerably on interoperability with existing regulatory systems and workflows	
API	
Mapping between systems, API requirements, duplication of reporting, workflow changes, replacement or adaptation of existing platforms.	
A little is impossible to avoid	
In the entire chain more data validation is needed. Ideally that happens in the systems furthers upstream where data entry happens, but the OVD format could play a role by adding a thorough layer of validation and flagging data issues.	
Existing systems use different operational taxonomies and levels of granularity. Initial mapping would therefore be required. A well-defined and stable OVD structure could, however, reduce this integration burden over time by replacing repeated bespoke mappings with a common interface.	
Depends of the intention. If it is to both receive and send while maintaining all data and reference, then yes (as the current process would be receive OVD then map to existing structure, and then from existing structure map to OVD. Not sure if this use-case will be too frequent). The OVD-standard includes a lot of data-points, but these data points are not necessarily directly reported from the vessel, but they might be derived numbers. For example, many vessels do not specifically	

report “time at anchor”, but they report anchor down/ anchor brought up, and the time at anchor is derived. Similarly with time maneuvering.	
Mapping and adaptation of existing platforms to the OVD	
The principal challenge is likely to be alignment of existing data models and event structures rather than collection of new data. Potential challenges include: Mapping existing operational events to OVD definitions. Integration between onboard and shore-based applications. API development and maintenance. Avoiding duplicate reporting requirements. Managing corrections after data has been exchanged. Ensuring consistent interpretation across software vendors and reporting platforms. Legacy systems that may not have been designed around a common operational event framework. Successful implementation will require close collaboration between ship operators, software providers, verifiers and other stakeholders.	
The main challenge is that the mapping must be done.	
The main integration challenge would be mapping existing data structures and reporting practices to the OVD framework. Different onboard and shore-based reporting systems currently collect operational data using different structures, terminology and levels of granularity. As a result, implementing OVD may require significant mapping effort and, in some cases, changes to the underlying data collection processes where the required information is not currently captured. System-to-system exchange would also require alignment on API specifications, validation rules, error handling and correction/resubmission workflows. Existing platforms may therefore require development or adaptation to generate, receive and process OVD-compliant data consistently. Another consideration is the potential duplication of reporting during implementation or where different stakeholders continue to require their own formats. To deliver the intended benefits, an OVD-based framework should, where possible, enable existing data to be mapped and reused rather than requiring users to maintain parallel reporting processes or enter the same information multiple times.	

5.5 What level of implementation effort, cost or organisational change would your organisation expect if the framework were adopted more widely?

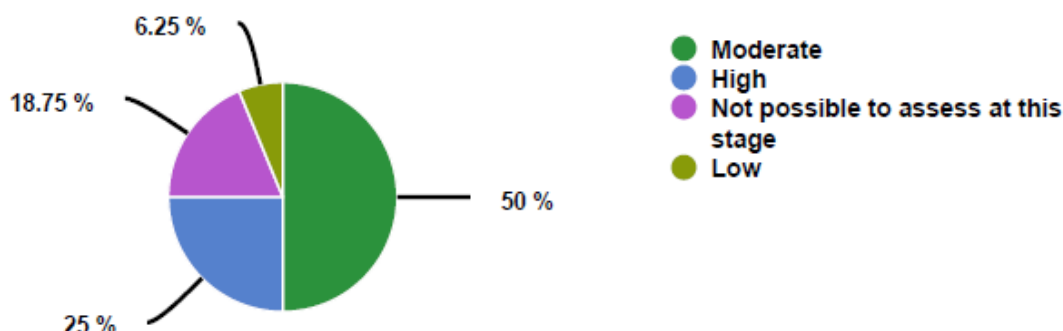
- onboard system changes
- shore-based system changes
- integration with commercial, verifier or regulatory reporting platforms
- internal workflow changes
- staff training
- data mapping and validation
- vendor dependency or reliance on specific service providers
- indicative cost or resource implications, if known
- Other (5)



If other:

Comments	Assessment
Review and harmonisation of operational event definitions and reporting workflows across systems.	
We don't want to implement effort /cost	

5.6 How significant do you expect the implementation burden to be?



Please explain:

Comments	Assessment
Our organisation already exchanges operational and emissions-related data through established digital systems. Implementation of an OVD-based framework is therefore expected to require mainly data mapping, API enhancements, validation rules and workflow adjustments rather than fundamental changes to onboard reporting processes.	
The implementation burden would depend largely on how the framework interfaces with existing regulatory reporting systems. If OVD data can be directly imported or mapped into existing systems, the burden for the administration could be relatively limited. If separate interfaces, manual conversion or new systems are required, the implementation effort could be considerably higher. The current consultation does not provide sufficient detail to assess this.	
Already explained in the previous pages	
Considering the multiple required organizational changes, it is evident that OVD adoption at full stage will be challenging.	
This is already a pain	

We do already support OVD, however every verifier may implement this differently technology wise.	
Implementation would require initial mapping of existing operational data structures and terminology to the OVD framework, together with development of system interfaces, validation and testing. For a smaller software provider, production-ready implementation and continued maintenance of the standard may also require additional dedicated software development capacity. However, we would expect this primarily to be an integration and data-mapping exercise rather than a fundamental change to the underlying operational reporting process.	
Learning a new format may be a challenge for some at first, but will make things more understandable and consistent in the long run.	
Depends on the use-cases, mandatory data points, and requirements for also "hard"-storing received data (and the internal namings etc) when mapping between systems. We currently have an active and working OVD-mapping, both for sending and receiving data. But this will be subject to work depending on changes/updates and requirements for the potential new OVD standard.	
Mapping between our standard and OVD is possible, however requires covering some gaps and developing additional solutions where missalignments were spotted	
The operational data required by the framework is already collected by most organisations. As a result, the primary effort will be system alignment rather than new data collection. The greatest implementation effort is expected to arise from: System integration. Event mapping. Workflow redesign. Data quality assurance. Testing and validation. User training. Longer term, the framework should reduce administrative burden by improving interoperability and reducing duplicate reporting requirements.	
We have already adopted all our internal procedures/reporting/systems to use OVD as primary data input so there is no further action needed. We could adopt from day one with zero effort.	

5.7 What information should accompany each exchanged dataset to make it clear where the data comes from, which version it is, and how it can be checked or reconciled?

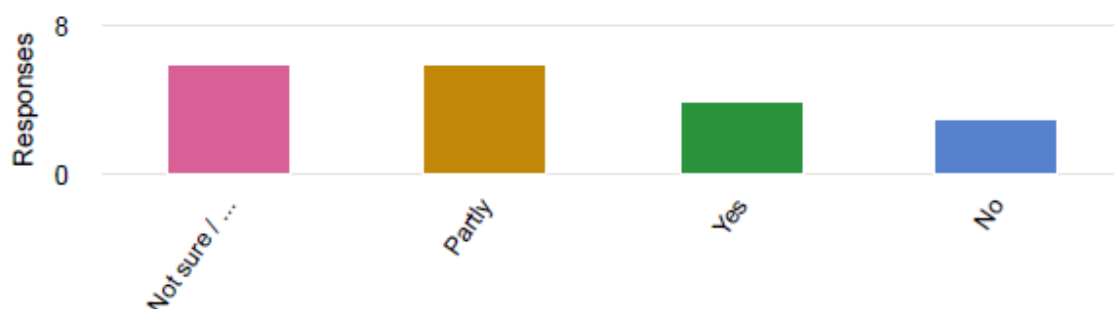
Comments	Assessment
Each dataset should include a unique dataset identifier, vessel IMO number, voyage and reporting period, source system, date and time of submission, version number, correction history, data status (original/revised/final), references to supporting documents where applicable, and an audit trail identifying when and by whom changes were made.	
To support reliable exchange, verification, and reconciliation of emissions-related operational data, each dataset should be accompanied by a standardized set of metadata that provides transparency regarding the origin, status, and traceability of the information. Key information should include: Unique dataset identifier to ensure that each data exchange package can be uniquely referenced, tracked, and reconciled across different systems and stakeholders. Reporting period and timestamp information, including the reporting start and end dates, data extraction date, submission date, and any subsequent update dates. Vessel identifiers, such as vessel name, IMO number, and, where relevant, fleet or company identifiers, to ensure unambiguous attribution of the data. Voyage and operational references, including voyage number, port call identifiers, voyage leg references, or other operational identifiers that enable users to connect emissions data to specific operational activities. Version number and dataset status, clearly indicating whether the dataset is an original submission, revision, correction, or final approved version. Correction and amendment history, documenting what changes were made, when they were made, by whom, and the reason for the update. This is particularly important where fuel documentation, emissions factors, or sustainability evidence become available after the initial submission. Source system information, identifying the originating software, platform, or data source, and where appropriate indicating whether the data was generated automatically, manually entered, estimated, or calculated. Data quality and validation status, including confirmation that validation checks have been completed, identification of any estimated values, and notification of any known data limitations or exceptions. References to supporting documents, including bunker delivery notes,	

Proof of Sustainability (PoS) documentation, sustainability certificates, chain-of-custody records, emissions-factor references, and other relevant evidence supporting the reported values. References to underlying records, enabling traceability back to source data such as noon reports, log abstracts, fuel monitoring systems, sensor data, voyage records, or other primary operational sources. Audit trail information, recording creation, modification, approval, transmission, receipt, and processing events throughout the dataset lifecycle. Sender and recipient identification, including the organization responsible for creating the dataset and, where appropriate, the intended recipient or reporting scheme. Collectively, this metadata would provide the traceability, transparency, version control, and auditability needed to support efficient data exchange, discrepancy resolution, regulatory compliance, and third-party verification. It would also help ensure that all parties are working from a common and clearly identifiable version of the data throughout its lifecycle.	
Each dataset should include a unique dataset identifier, vessel IMO number, flag State, gross tonnage (GT), ship type, relevant reporting period and voyage or leg reference where applicable, version number and status, date and time of creation, source system or data provider, and a clear correction history. It should also include relevant regulatory scope or applicability information, for example whether the vessel or voyage falls within EU, UK or other applicable emissions-reporting regimes. References to supporting documents and underlying records should be retained where relevant. It should also be possible to identify whether the dataset is original, corrected, validated or verified.	
Verifier should accept complete BDN style upload for the period. How verifier deals with data storage on it's side, should be sollay verifiers problem (not as now - data provider problem)	
Using IA for checkig documents in a shared folder	
All the above should be added in order to identify the data source.	
as little as possible.	
There should be a OVD version applied to the data automatically, so it can be indetified which OVD data set was used for that data.	
Source system, vessel/asset identifier, reporting period, timestamps, dataset/version identifier, correction history and appropriate traceability to the underlying operational records.	
Unique id per report (not just IMO and time/date, and this unique_id should be available in datasets and exposed in the API), version number/updated date. Correction history should exist, but should not be part of each exchange (could result in confusion and significant data increase). Reporting period will be visible through the reports included. Voyage reference could be included as it is today, however, different companies typically have different internal reference for the same voyage.	
version of the OVD interface used. Many others are already present in the dataset - no need for duplication	
Each exchanged dataset should include: Unique dataset identifier. Vessel IMO number. Vessel name. Reporting period. Voyage, voyage leg and port call references where applicable. Source system. Date and time of creation. Version number. Amendment and correction history. Validation status. Supporting document references. Links to underlying operational records where appropriate. Submitting organisation. User or system responsible for submission. This information is necessary to support traceability, auditability and reconciliation.	
Each dataset should include a unique dataset identifier, vessel IMO number, voyage and reporting period, source system, date and time of submission, version number, correction history, data status (original/revised/final), references to supporting documents where applicable, and an audit trail identifying when and by whom changes were made.	
To support reliable exchange, verification, and reconciliation of emissions-related operational data, each dataset should be accompanied by a standardized set of metadata that provides transparency regarding the origin, status, and traceability of the information. Key information should include: Unique dataset identifier to ensure that each data exchange package can be uniquely referenced, tracked, and reconciled across different systems and stakeholders. Reporting period and timestamp information, including the reporting start and end dates, data extraction date, submission date, and any subsequent update dates. Vessel identifiers, such as vessel name, IMO	

number, and, where relevant, fleet or company identifiers, to ensure unambiguous attribution of the data. Voyage and operational references, including voyage number, port call identifiers, voyage leg references, or other operational identifiers that enable users to connect emissions data to specific operational activities. Version number and dataset status, clearly indicating whether the dataset is an original submission, revision, correction, or final approved version. Correction and amendment history, documenting what changes were made, when they were made, by whom, and the reason for the update. This is particularly important where fuel documentation, emissions factors, or sustainability evidence become available after the initial submission. Source system information, identifying the originating software, platform, or data source, and where appropriate indicating whether the data was generated automatically, manually entered, estimated, or calculated. Data quality and validation status, including confirmation that validation checks have been completed, identification of any estimated values, and notification of any known data limitations or exceptions. References to supporting documents, including bunker delivery notes, Proof of Sustainability (PoS) documentation, sustainability certificates, chain-of-custody records, emissions-factor references, and other relevant evidence supporting the reported values. References to underlying records, enabling traceability back to source data such as noon reports, log abstracts, fuel monitoring systems, sensor data, voyage records, or other primary operational sources. Audit trail information, recording creation, modification, approval, transmission, receipt, and processing events throughout the dataset lifecycle. Sender and recipient identification, including the organization responsible for creating the dataset and, where appropriate, the intended recipient or reporting scheme. Collectively, this metadata would provide the traceability, transparency, version control, and auditability needed to support efficient data exchange, discrepancy resolution, regulatory compliance, and third-party verification. It would also help ensure that all parties are working from a common and clearly identifiable version of the data throughout its lifecycle.	
Vessel name and IMO, Reporting period, version number, if applicable corrections or supporting documents needed, dataset identifier (is it bunker details, is it daily data etc.)	
We believe that this process should be done on an event basis allowing changes in individual reports to be identified. So at each event some additional elements should be recorded indicating when it was last updated, when it was last validated and when it was last exchanged.	

5.8 Are there any concerns regarding data ownership, access rights, commercial confidentiality or onwardsharing of data under the proposed OVD framework?

- Yes
- Partly
- No
- Not sure / not applicable



5.9 If yes or partly, please describe the main concerns, including who should be able to access the data, for what purpose, under which conditions, and whether restrictions are needed for onward sharing, commercial use, charterparty settlement, ETS / FuelEU cost allocation, verifier access, benchmarking, other downstream use?

Comments	Assessment
Operational data should remain under the control of the data owner and only be shared with authorised parties for agreed regulatory or commercial purposes. Access rights, onward sharing, data retention and confidentiality should be clearly defined. The framework should also ensure that commercially sensitive operational data are not disclosed or reused beyond the purpose for which they were originally shared without the owner's explicit consent.	
While a common OVD framework has the potential to improve efficiency, transparency, and interoperability, careful consideration should be given to data ownership, access rights, commercial confidentiality, and controls on onward sharing of data. These issues are important to ensure trust and encourage broad industry participation. The framework should clearly establish that participation in data exchange does not alter existing rights regarding data ownership. The party generating or providing the data should retain clear ownership or stewardship rights, unless otherwise agreed contractually. Key considerations include: Data ownership and responsibility: Clear governance is needed to define who owns, controls, maintains, and authorizes the distribution of exchanged data, particularly when multiple parties contribute to the dataset (e.g., shipowners, managers, charterers, fuel suppliers, technology providers, and verifiers). Access rights and role-based permissions: Different stakeholders may require access to different subsets of information. The framework should support granular access controls to ensure that users receive only the data necessary for their legitimate operational, commercial, or regulatory purposes. Commercial confidentiality: Certain operational data may have commercial sensitivity, including voyage patterns, port activities, fuel procurement information, cargo-related data, operational performance metrics, and other business-sensitive information. The framework should ensure that only emissions-relevant information is exchanged and that commercially sensitive information is appropriately protected. Onward sharing and secondary use of data: Clear rules should govern whether exchanged data may be shared with third parties, reused for purposes beyond the original intent, aggregated for benchmarking, or incorporated into other systems or services. Data providers should have visibility into how their data may be used and by whom. Data security and cybersecurity: Appropriate safeguards should be implemented to protect exchanged data from unauthorized access, modification, or disclosure throughout its lifecycle. Auditability and transparency: The framework should provide visibility regarding who has accessed data, when it was shared, how it has been used, and whether it has been modified. This will help build confidence among participants and support compliance with contractual and regulatory obligations. Regulatory versus commercial use cases: The framework should distinguish between data exchanged for compliance purposes and data exchanged for commercial purposes, as these may require different access controls, retention requirements, and confidentiality protections. Overall, these concerns are manageable provided that the framework incorporates clear governance, robust access controls, transparency regarding data use, and explicit protections for commercially sensitive information. Addressing these considerations from the outset will be important to ensuring industry trust and widespread adoption of the OVD framework.	
A common data format should not in itself create additional rights to access, use or onward-share the underlying operational data. Access should remain purpose-specific and limited to the information required for the relevant regulatory, verification, contractual or commercial purpose. Particular care may be needed where the same dataset is subsequently used for charterparty settlement, ETS or FuelEU cost allocation, commercial benchmarking or other purposes beyond the original reporting purpose.	
The framework must maintain a strict architectural separation between data structure and data custody. Operational data belongs exclusively to the shipowner/operator. Downstream aggregators or exchange layers must be contractually and technically restricted from using raw operational data	

for secondary commercial purposes (e.g. benchmarking, market indexing, or derivative commercial products) without explicit bilateral agreement.	
Data should be accessed primarily by Owner/Manager & Verifier - before verification and all other parties should be access the data upon reviewing & approval/verification.	
Offshore operational data can contain commercially sensitive project information. Detailed activity, production, standby and project-scope data may reveal vessel performance, contractor productivity, weather sensitivity, downtime or contractual circumstances.	
The new standard itself does not introduce new concerns, unless it is intended that data reported under the OVD standard is supposed to be public information.	
It is a subject of contractual agreements between parties exchanging information in the OVD format	
The framework should clearly define: Data ownership. Authorised users. Permitted uses of exchanged data. Data retention requirements. Conditions for onward sharing. Ship operators should retain appropriate control over how operational data is used beyond its original reporting purpose. Particular consideration should be given to: Commercially sensitive voyage information. Charterparty-related data. ETS and FuelEU cost allocation information. Benchmarking activities. Third-party commercial use of operational datasets. Access to data should be limited to parties with a legitimate operational, contractual, regulatory or verification requirement. Any onward sharing or secondary commercial use of data should be transparent and subject to appropriate controls and permissions.	
During the validation and verification process access to the raw data should be available to the shipowner/manager and the verifier tasked with validating the emissions reports.	

6. Governance & maintenance

6.1 What governance model would give you sufficient confidence to adopt and rely on the framework over time?

Comments	Assessment
The framework should be governed by an independent industry body with balanced representation from shipowners, managers, charterers, software providers, classification societies, verifiers and regulators. Governance should be transparent, with documented decision-making processes, regular stakeholder consultation and controlled change management.	
A governance model that would provide confidence for long-term adoption should be industry-led, transparent, inclusive, and sufficiently independent, while maintaining the flexibility needed to adapt to evolving regulatory and market requirements. Key characteristics should include: Multi-stakeholder representation, including shipowners, operators, charterers, fuel suppliers, technology providers, classification societies, verifiers, and industry associations. Broad representation will help ensure that decisions reflect practical operational realities and the needs of different users of the framework. A clear and transparent decision-making process, including documented procedures for proposing, evaluating, approving, and implementing changes. Stakeholders should have visibility into how decisions are made and opportunities to provide input before significant changes are adopted. Technical and governance oversight committees, with clearly defined responsibilities. A technical working group could manage data definitions, standards, interoperability, and implementation guidance, while a governance body provides strategic oversight and ensures alignment with industry needs. Independence and neutrality, ensuring that no single stakeholder group, commercial interest, or technology provider exerts disproportionate influence over the framework's development or evolution. The framework should be perceived as an industry asset rather than a proprietary solution. Formal change-management procedures, including impact assessments, consultation periods, publication of proposed changes, version control, and reasonable implementation timelines. This is essential to avoid disruption to existing systems and reporting processes. Transparency of framework maintenance and updates, including publicly available documentation, change logs, implementation guidance, and rationale for significant decisions. Balance between stability and flexibility, with core data definitions and exchange standards remaining stable enough to support long-term system investments, while allowing periodic updates to address new fuels, emerging regulations, evolving emissions methodologies, and technological advances. Structured dispute-resolution and interpretation processes, enabling stakeholders to raise questions regarding definitions, implementation issues, or inconsistent interpretations and receive authoritative guidance. Regular review cycles, ensuring that the framework remains relevant as industry practices and regulatory requirements evolve, without introducing unnecessary complexity or frequent disruptive changes. Overall, confidence would be strongest in a governance model that combines broad industry participation, transparent and independent decision-making, robust change management, and a commitment to maintaining both consistency and future adaptability. This approach would help ensure that the framework remains trusted, relevant, and widely adopted over time.	
An open, transparent and vendor-neutral governance model with broad stakeholder representation would provide the greatest confidence. The governance structure should include industry users, technical providers, verifiers and relevant regulatory perspectives, particularly where the framework is intended to support regulatory reporting. Responsibilities for maintaining definitions, schemas and interpretation guidance should be clearly assigned. The framework and its technical specifications should remain publicly accessible and should not become dependent on a single commercial provider or platform.	
A model inspired by successful cross-industry neutral standards bodies—such as the Digital Container Shipping Association (DCSA) in container logistics, IATA ONE Record in aviation, or the Open Footprint Forum in energy carbon accounting. Operational management transitioned from DNV to an industry-backed secretariat. Equal voting representation across shipowners, competing classification societies/verifiers, and independent software vendors.	

Balance between stability and flexibility	
In the end for us, the end user decides which verification will be used and then the system has to adopt. So if a lot of verifiers use OVD this would simplify the adoption from our end.	
A transparent industry-led governance structure with representation from different vessel segments, operators, software/data providers, verifiers and relevant regulatory stakeholders. Specialist vessel segments, including offshore/project vessels, should be represented when changes affecting operational profiles are considered.	
Communication between different Verifiers based on each one's experience with their Clients.	
Sufficient stakeholder representation. Clear mandate and priority (to avoid too large scope expansion). Transparency in evaluation and decision on new changes.	
the framework needs to be stable enough that companies can invest in integrating it with confidence, but flexible enough to evolve as industry needs change. decision-making should include input not only from classification societies and standard-setters, but also from shipowners, operators, charterers and verifiers	
consortium-based governance	
BSM would support a governance model that is industry-led, transparent and representative of all key stakeholders involved in the creation, exchange, verification and use of operational vessel data. The framework should remain an open industry standard and should not evolve into a commercial certification or licensing exercise. While implementation, maintenance and software development will naturally involve costs, the primary objective should remain interoperability, consistency and efficiency across the maritime industry rather than the creation of new revenue-generating mechanisms for governance bodies, service providers or software vendors.	
Stakeholder representation. It must be independent from one company.	
Where changes are required due to evolving regulatory requirements or the introduction of new regulations, proposed updates to the framework should be published for consultation and reviewed within a defined consultation period by users, maritime experts and other relevant industry stakeholders. Feedback should be assessed before changes are finalized and incorporated into a new version of the framework. Once agreed, changes should be communicated through a structured release and versioning process, clearly identifying what has changed, the reason for the change, its impact on existing implementations and the expected implementation timeline. Sufficient lead time should be provided where changes require system development, mapping or workflow adaptations. Communication of updates is particularly important. Users should be able to subscribe to notifications, such as a dedicated newsletter or mailing list, to receive information on proposed consultations, approved changes, new framework versions and relevant implementation deadlines. A centralized location containing the latest specification, previous versions, release notes and implementation guidance would also support consistent adoption.	

6.2 How should changes to the framework be proposed, reviewed, agreed and communicated?- Please consider, where relevant, change proposal mechanisms, consultation processes, versioning and release cycles, stakeholder involvement, and communication of updates.

Comments	Assessment
Changes should follow a formal consultation process with sufficient industry review before adoption. New versions should be published with release notes, implementation guidance and transition periods, allowing software providers and users adequate time to implement changes.	
Changes to the framework should be managed through a formal, transparent, and predictable change-management process that balances industry stability with the ability to respond to evolving regulatory, operational, and technological requirements. Key elements should include: Open change proposal mechanism, allowing stakeholders to submit enhancement requests, clarifications,	

corrections, or new requirements through a standardized process. Each proposal should include a clear rationale, expected benefits, implementation impacts, and any potential interoperability considerations. Technical review and impact assessment, conducted by an appropriately constituted technical working group. Proposed changes should be evaluated for consistency with the framework's objectives, implementation complexity, backward compatibility, regulatory implications, and effects on existing users and systems. Structured industry consultation, particularly for material changes affecting data definitions, exchange protocols, governance arrangements, or reporting requirements. Stakeholders should be given sufficient opportunity to review proposals, provide feedback, and identify practical implementation concerns. Multi-stakeholder decision-making, ensuring that shipowners, operators, charterers, technology providers, classification societies, verifiers, and other relevant parties are appropriately represented in the approval process. Major changes should require broad consensus rather than approval by a single stakeholder group. Clear versioning methodology, with documented version numbers, change logs, and identification of whether updates are major, minor, or editorial in nature. This will help users understand the significance of each release and manage implementation appropriately. Predictable release cycles, such as annual or semi-annual scheduled releases for most changes, supplemented by exceptional releases when urgent regulatory, security, or technical issues need to be addressed. This approach promotes stability and reduces implementation burden. Defined transition periods, allowing organizations adequate time to update systems, processes, integrations, and training materials before new requirements become mandatory. Backward compatibility should be maintained where practical. Comprehensive communication of updates, including publication of revised specifications, implementation guidance, change summaries, impact assessments, FAQs, and worked examples. Stakeholders should be clearly informed of what changed, why it changed, and what actions are required. Accessible historical records, including archived versions of the framework, change histories, and decision documentation, ensuring transparency and enabling users to reconcile historical datasets generated under previous versions. Formal feedback and issue-resolution mechanisms, allowing stakeholders to report implementation challenges, request clarifications, and suggest future improvements based on operational experience. Overall, the framework should adopt a governance model similar to well-established international technical standards: open proposal submission, expert review, industry consultation, consensus-based approval, controlled release management, and transparent communication. This approach would provide confidence that the framework can evolve over time without creating unnecessary disruption for users or undermining interoperability.	
Changes should follow a transparent change-control process, with published proposals, stakeholder consultation and an assessment of the impact on existing implementations. Regular updates should preferably follow predictable release cycles, while an accelerated procedure may be needed where changes in IMO, EU or other relevant regulatory requirements require timely adaptation. Each release should include a clear change log, version number, effective date and migration guidance.	
Backwards compatibility is a must.	
Change proposal mechanisms, versioning and release cycles and communication of updates.	
it should be avoided. only	
Most important would be the communication. Please consider that there will be stakeholders not involved within the review and agreement and still need to stay compliant with their solution, so at least 3 months prior to adapt changes an information would be needed.	
Published change proposals, stakeholder consultation for material changes, clear versioning and predictable release cycles.	
Verifier seminars or emails/circulars.	
Changes, evaluation, and updates should be publicly available.	
Changes to the framework should be proposed and reviewed through broad consultation — not only with class societies, but with the wider group of stakeholders who will rely on the standard in practice. This is especially important if the standard is meant to eventually expand and become independent from DNV or BIMCO: it will need enough credibility on its own merits	
Standardized application form for changes with rolling submission, reviewed and agreed by consortium members in agreed time intervals (twice a year or more frequently depending on the	

needs?) and/or at regulation(s) updates. Clear publications, versioning and release notes available for proper traceability	
Changes should follow a structured and transparent process consisting of: Formal submission of change proposals. Technical review by working groups and subject matter experts. Industry consultation before adoption of significant changes. Assessment of operational, technical and commercial impacts. Publication of revision histories and supporting rationale. Clearly defined release cycles with advance notification. Software providers should be actively involved in the review process as they are responsible for implementing the framework within operational systems used onboard vessels and ashore. Adequate notice periods should be provided before changes become effective to allow time for software development, testing, training and implementation.	
Consultation processes	

6.3 What level of backward compatibility would be necessary for your organisation to implement the OVD framework with confidence?

Comments	Assessment
High backward compatibility is important. Breaking changes should be minimised and introduced only after appropriate transition periods. Previous versions should remain supported for a defined period, with clear migration guidance to facilitate implementation.	
A high degree of backward compatibility would be important to support confident implementation of the OVD framework, particularly for organizations that have existing digital reporting systems, historical data repositories, regulatory reporting workflows, and integrations with multiple external stakeholders. From our perspective: Breaking changes should be minimized and introduced only when clearly justified. Core data definitions, identifiers, and exchange structures should remain stable wherever possible to avoid costly system modifications and disruption to established reporting processes. Backward compatibility should be maintained across minor and routine releases. Existing implementations should continue to operate without significant redevelopment when enhancements, clarifications, optional fields, or additional capabilities are introduced. Version coexistence should be supported for a defined transition period. Organizations should be allowed sufficient time to adopt new versions while continuing to exchange data using prior supported versions. This is particularly important given the diversity of fleet systems, service providers, and reporting platforms across the maritime industry. Adequate transition periods should be provided for major changes. Where breaking changes are unavoidable, stakeholders should receive advance notice together with clear implementation timelines. Sufficient lead times are necessary to allow system development, testing, validation, training, and coordination with counterparties. Comprehensive migration guidance should accompany all significant updates. This should include change logs, impact assessments, field mappings, worked examples, implementation guidance, and recommendations for handling historical data and ongoing reporting obligations. Historical data should remain interpretable and traceable across framework versions. Organizations should be able to understand and reconcile data exchanged under previous versions without requiring extensive reprocessing or manual intervention. Clear deprecation policies should be established, identifying when legacy elements will no longer be supported and providing sufficient notice before retirement. Overall, we would support a governance approach in which the default assumption is backward compatibility, with breaking changes occurring only when necessary to address significant regulatory, technical, or operational requirements. A combination of stable core standards, controlled release cycles, version coexistence, and well-documented migration paths would provide the confidence needed for long-term adoption and investment in the OVD framework.	
A high degree of backward compatibility would be important. Existing datasets should remain readable and interpretable after new versions are introduced, and breaking changes should be avoided wherever possible. Where breaking changes are unavoidable, old and new versions should be allowed to coexist for a reasonable transition period, preferably covering at least one reporting cycle, with clear migration guidance and mapping between versions.	

New changes should not break previously implemented stuff. It's verifier responsibility to map old data to new structures.	
Tolerance for breaking changes, transition periods, version coexistence, and the availability of migration guidance shall be applicable for a short-term period till full implementation which will have to fully integrate from the beginning of a new reporting period.	
nothing	
Get a JSON or at least XML structure and most of the changes would be easy to handle.	
High importance. Existing integrations should not be unnecessarily broken by revisions. Where breaking changes are unavoidable, clear migration guidance and an appropriate transition/coexistence period should be provided.	
N/A, already implemented	
Backward compatibility should be a high priority.	
A high degree of backward compatibility is desirable. Where changes are necessary, the framework should provide: Clearly controlled version management. Defined transition periods. Support for coexistence of multiple versions during implementation. Migration guidance and mapping documentation. Advance notice of changes affecting integrations or reporting outputs. Breaking changes should be minimised wherever possible, as ship operators and software providers may have multiple interconnected systems relying upon established data structures and interfaces.	
Transition periods is key for us. It is burdensome if a new OVD version is released one day and the next day some old structure is broken.	
High backward compatibility is important. Breaking changes should be minimised and introduced only after appropriate transition periods. Previous versions should remain supported for a defined period, with clear migration guidance to facilitate implementation.	
A high degree of backward compatibility would be important to support confident implementation of the OVD framework, particularly for organizations that have existing digital reporting systems, historical data repositories, regulatory reporting workflows, and integrations with multiple external stakeholders. From our perspective: Breaking changes should be minimized and introduced only when clearly justified. Core data definitions, identifiers, and exchange structures should remain stable wherever possible to avoid costly system modifications and disruption to established reporting processes. Backward compatibility should be maintained across minor and routine releases. Existing implementations should continue to operate without significant redevelopment when enhancements, clarifications, optional fields, or additional capabilities are introduced. Version coexistence should be supported for a defined transition period. Organizations should be allowed sufficient time to adopt new versions while continuing to exchange data using prior supported versions. This is particularly important given the diversity of fleet systems, service providers, and reporting platforms across the maritime industry. Adequate transition periods should be provided for major changes. Where breaking changes are unavoidable, stakeholders should receive advance notice together with clear implementation timelines. Sufficient lead times are necessary to allow system development, testing, validation, training, and coordination with counterparties. Comprehensive migration guidance should accompany all significant updates. This should include change logs, impact assessments, field mappings, worked examples, implementation guidance, and recommendations for handling historical data and ongoing reporting obligations. Historical data should remain interpretable and traceable across framework versions. Organizations should be able to understand and reconcile data exchanged under previous versions without requiring extensive reprocessing or manual intervention. Clear deprecation policies should be established, identifying when legacy elements will no longer be supported and providing sufficient notice before retirement. Overall, we would support a governance approach in which the default assumption is backward compatibility, with breaking changes occurring only when necessary to address significant regulatory, technical, or operational requirements. A combination of stable core standards, controlled release cycles, version coexistence, and well-documented migration paths would provide the confidence needed for long-term adoption and investment in the OVD framework.	
A high degree of backward compatibility would be important. Existing datasets should remain readable and interpretable after new versions are introduced, and breaking changes should be	

avoided wherever possible. Where breaking changes are unavoidable, old and new versions should be allowed to coexist for a reasonable transition period, preferably covering at least one reporting cycle, with clear migration guidance and mapping between versions.	
Since we use OVD data as baseline for our internal business intelligence platform and company reporting, any changes should be communicated beforehand and reasonable timeframe should be given to adapt. There should be also transition period where both old and new formats would be available for testing.	

6.4 What practical support would help your organisation implement the framework in a consistent and reliable way?

Comments	Assessment
Practical implementation guidance should include technical specifications, data dictionaries, reference datasets, worked examples, validation rules, API specifications, testing environments, migration guidance and a dedicated support channel for technical and operational questions.	
Successful implementation of the framework will depend not only on the technical specification itself, but also on the availability of practical guidance, tools, and support mechanisms that promote consistent interpretation and application across different organizations and systems. The following forms of support would be particularly valuable: Comprehensive implementation guidance, including detailed data definitions, business rules, data flow diagrams, and explanations of expected reporting practices. Guidance should clarify how the framework should be applied in common operational and reporting scenarios. Worked examples and use cases, covering typical as well as more complex situations such as alternative fuels, biofuel blends, fuel sustainability documentation, voyage amendments, data corrections, and reconciliation processes. Practical examples will help reduce differing interpretations among stakeholders. Reference datasets and sample exchange files, allowing organizations to test mappings, integrations, and data-processing workflows against a common benchmark. Validation tools and rule sets, including standard validation checks that can be applied before data exchange to identify missing fields, format errors, inconsistencies, and other data-quality issues. Common validation criteria would improve interoperability and reduce exceptions during data exchange. Testing and certification procedures, including conformance testing, interoperability testing, and optional certification programs that demonstrate a system's ability to exchange OVD-compliant data reliably and consistently. Implementation checklists and migration guidance, helping organizations transition from existing reporting processes and data models while minimizing implementation risk and disruption. Training materials and educational resources, including webinars, user guides, FAQs, e-learning modules, and workshops tailored to different stakeholder groups such as shipowners, operators, charterers, technology providers, verifiers, and regulators. Common interpretation guidance, providing authoritative clarification on operational events, emissions calculations, fuel reporting, data corrections, and other areas where inconsistencies may arise between organizations. Accessible support and clarification channels, such as a helpdesk, user forum, technical working group, or formal inquiry process through which stakeholders can seek guidance and obtain consistent answers to implementation questions. Regular communication of updates and lessons learned, including implementation bulletins, change summaries, emerging best practices, and frequently encountered issues identified through industry experience. Overall, the combination of clear implementation guidance, practical examples, validation tools, conformance testing, training resources, and readily available expert support would significantly improve consistency, reduce implementation burden, and increase confidence in the framework across the maritime industry.	
Clear implementation guidance, worked examples, mapping tables and automated validation tools would be particularly useful. Reference examples should cover both conventional cases and more specific operational situations, such as navigation in ice, icebreaker assistance, ballast voyages, power limitation overrides and alternative fuels. Guidance on mapping OVD data to existing regulatory reporting requirements and systems, including IMO and EU reporting, would also be valuable. Machine-readable schemas, sample datasets and automated pre-validation tools should	

allow users to check units, mandatory fields, data formats and obvious inconsistencies before submission.	
training material	
Implementation guidance, reference examples, validation tools, testing procedures, training material, and access to clarifications or support channels.	
A sandbox/early access to changes would be good	
Implementation guidance, machine-readable specifications, validation tools and worked examples covering different vessel profiles. An offshore/project vessel implementation example would be particularly valuable.	
N/A, already implemented	
Implementation guideline, especially referencing edge cases, worked examples and a “sandbox” where changes can be tested and validated for implementation purposes.	
access to clarifications, practical processing of data in reference to the regulatory requirements	
We support OVD because it should allow operational data to be captured once and reused many times. We do not support creating a new layer of commercial certification, licensing, subscriptions or gatekeepers around that data exchange	
Reference examples. Testing procedures and implementation guidance	
Practical implementation guidance should include technical specifications, data dictionaries, reference datasets, worked examples, validation rules, API specifications, testing environments, migration guidance and a dedicated support channel for technical and operational questions.	

7. Alignment & future use

7.1 Does the proposed framework appear sufficiently aligned with international maritime regulation related to environmental reporting?

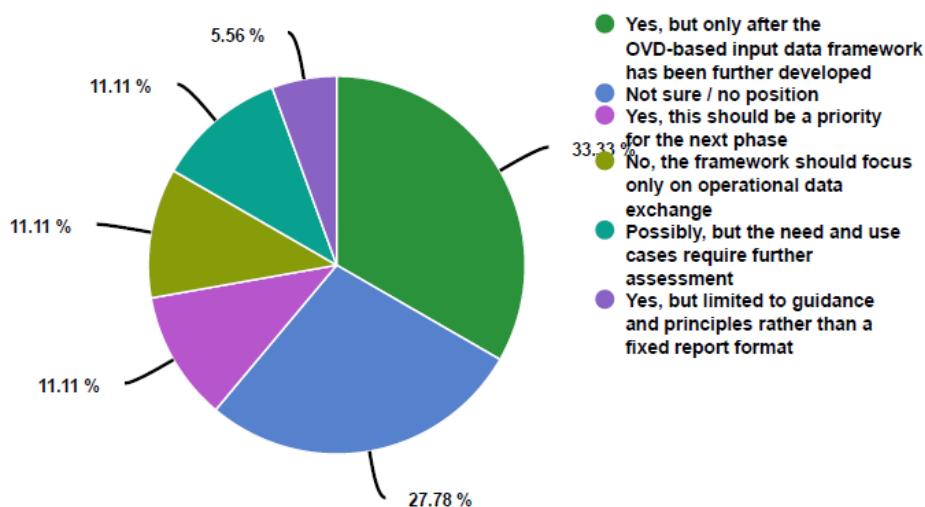
Comments	Assessment
The proposed framework is generally aligned with current regulatory reporting objectives. Continued alignment should be maintained as IMO, EU and national environmental reporting requirements evolve, ensuring that new regulatory requirements can be incorporated without creating duplicate reporting obligations.	
Yes, the proposed framework appears broadly aligned with current international maritime environmental reporting requirements and provides a solid foundation for supporting emissions-related data exchange. However, continued monitoring and periodic updates will be necessary to ensure alignment with evolving regulatory requirements and emerging fuels.	
The framework appears broadly compatible with the direction of current international maritime emissions reporting, but its practical alignment should be assessed against the detailed requirements and definitions of the individual regulatory schemes. Particular attention should be given to reporting boundaries, fuel and fuel-consumer data, ice navigation and ice-class related provisions, and the treatment of alternative fuels and supporting evidence.	
Yes, but only after the OVD-based input data framework has been further developed.	
Mostly yes, but requires further definitions and clarifications.	
Yes	
yes	
Seems to work	
No specific comment / not independently assessed by Inform-D.	
Yes	
Yes	
Yes, the proposed framework appears sufficiently aligned with international maritime regulation related to environmental reporting. However, our interest goes beyond this specific use case	
In most parts yes, however there are areas for improvement described in previous points	
The framework appears broadly aligned with the direction of international environmental reporting requirements by focusing on operational vessel data as the foundation for emissions reporting. This approach supports the principle that operational information should be recorded once and subsequently reused across multiple regulatory and reporting requirements. Continued review will be necessary as IMO and regional regulatory frameworks continue to develop.	
Yes	
So far yes	
Yes	

7.2 Does the proposed framework appear sufficiently aligned with the IMO Compendium and related international data structuring efforts?

Comments	Assessment
The framework should remain closely aligned with the IMO Compendium and other recognised international standards wherever practical. This will promote interoperability, reduce duplication and facilitate implementation across software providers, verification bodies and regulatory reporting platforms.	
Yes, the proposed framework appears broadly aligned with the objectives and principles of the IMO Compendium and related international maritime data standardization initiatives. The focus on common definitions, structured data exchange, interoperability, and digital reporting is consistent with the broader direction of international efforts to standardize maritime data. To be more elaborative: The framework appears to complement the IMO Compendium's objective of promoting	

standardized electronic information exchange through the use of common data elements, harmonized definitions, and structured information flows. The emphasis on operational vessel data, digital interoperability, and machine-readable data exchange is consistent with ongoing efforts to improve data quality, reduce duplication, and support more efficient reporting processes across the maritime industry. Key areas of alignment include: Use of standardized data elements and definitions, which supports consistency across stakeholders and reduces the risk of differing interpretations. Structured digital data exchange, enabling improved interoperability between shipboard systems, shoreside platforms, service providers, charterers, verifiers, and regulatory authorities. Support for data traceability, validation, and auditability, which aligns with the increasing need for reliable and verifiable information in environmental reporting and compliance activities. Reduction of duplicate reporting requirements, which is a common objective of both the IMO Compendium and other international digitalization initiatives. However, continued alignment should remain a priority as the framework evolves. In particular: Data definitions, identifiers, code lists, and reference data should be mapped to corresponding IMO Compendium elements wherever possible. Any new data elements introduced for emissions reporting should be assessed for consistency with existing international standards before adoption. Ongoing coordination with IMO and other maritime digitalization initiatives would help minimize the risk of divergence and reduce implementation complexity for industry participants. The framework should remain flexible enough to accommodate future updates to the IMO Compendium and emerging international data standards. Overall, the proposed framework appears sufficiently aligned to serve as a practical extension of existing international data structuring efforts while addressing the specific needs of emissions-related operational data exchange. Continued governance, periodic review, and formal mapping to relevant international standards would further strengthen interoperability and encourage broader industry adoption.	
Not sure. The overall approach appears aligned, but we are not in a position to assess the detailed mapping of all OVD data elements against the IMO Compendium. Clear and maintained mappings between the two would be valuable.	
The Tripartite JIWG should be commended for identifying a mature operational baseline rather than delaying progress. The measure of this initiative's ultimate success will not be whether OVD was technically sound in 2026, but how cleanly and transparently it transitions into a shared, vendor-neutral digital utility for the global maritime industry. Prioritizing open governance, reference validation tooling, and multi-segment operational profiles will secure the industry consensus required for universal adoption	
Not certain.	
Yes	
yes	
No specific comment / not independently assessed by Inform-D.	
Yes	
Alignment with IMO Compendium is possible in further steps	
The framework appears consistent with broader industry objectives to standardise maritime data structures and improve interoperability between systems. Alignment with existing and future IMO data structuring initiatives should remain a key objective to minimise duplication and support long-term industry adoption. Where possible, OVD should complement rather than compete with other recognised international maritime data standards.	
Yes	

7.3 In your view, should the framework also support downstream output structures such as standardised Vessel Emission Reports (VER), and if so, what should be the priority for future work in this area?

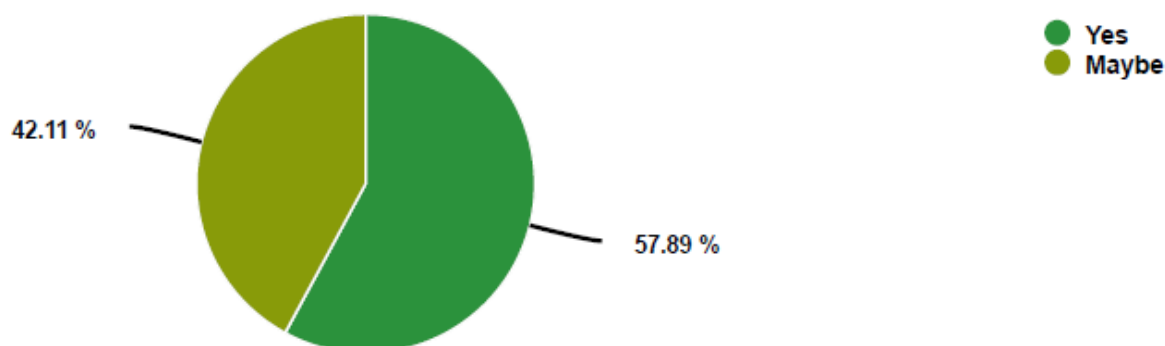


7.4 Please explain your answer, including which VER-related use cases, data fields, assurance status or reporting boundaries should be prioritised, if any.

Comments	Assessment
The priority should be establishing a robust and widely adopted operational data exchange framework. Once consistent input data and common definitions have been achieved, development of standardised Vessel Emission Reports could further improve interoperability between ship managers, owners, charterers, verifiers and regulatory reporting systems while reducing duplicate reporting.	
Standardised output structures could provide significant additional value, but the priority should first be to establish a stable, sufficiently clear and interoperable framework for the underlying operational data. Once the input structure is mature, standardised outputs could reduce duplication and manual processing when the same underlying data are used for different regulatory, verification and commercial purposes. Future VER work should preferably support different reporting profiles rather than assume that one fixed report can meet all purposes. Priority use cases could include IMO and EU emissions reporting, verifier exchange, charterparty-related reporting and emissions information provided to transport customers. The output should clearly identify the applicable reporting scope, vessel and reporting period, calculation or aggregation boundaries, fuel and fuel-consumer information where relevant, and the assurance status of the data, for example whether information is reported, corrected, validated or verified.-	
The different reporting boundaries between the various GHG schemes Vessel Emissions Reports shall be prioritised.	
Priority should first be given to establishing a robust, interoperable underlying operational dataset. Once this is sufficiently mature across different vessel profiles, including specialised offshore vessels, standardised downstream reporting outputs can be developed without compromising the principle of collecting and structuring the underlying data once for multiple uses.	
It would be useful to have a clear definition on reporting boundaries, and how FuelEU allocation is applied (see differences between year, voyage, period). Assurance status would also be valuable (yearly verification done, or if it is validated numbers throughout the year). Whereas how much of underlying data/information to be included should perhaps be out of scope. We see quite different requirements, where some want it on the higher levels, whereas others require significantly more underlying information to feel confident.	
Ongoing work on VER has reasonable and sufficient scope	
The immediate priority should remain the establishment of a reliable, consistent and widely adopted operational data exchange framework. If operational events, data definitions and	

exchange protocols are standardised first, the development of standardised Vessel Emission Reports can follow more effectively. Attempting to standardise reporting outputs before achieving consistency in underlying operational data may introduce unnecessary complexity and implementation challenges. Future VER development should focus on: Reuse of validated operational data. Transparent reporting methodologies. Clear assurance and verification status indicators. Consistent treatment of reporting boundaries. Support for multiple regulatory and commercial reporting requirements. The industry should first establish confidence in the quality and consistency of the operational data layer.	
VER structure is defined by the regulation	
Mostly emissions for the various regulations (CII, ETS, FuelEU, UK ETS, GFI once developed, etc)	

7.5 Would your organisation be interested in participating in further workshops, pilot activities or practical implementation discussions following the consultation?



7.6 General feedback Please provide any final comments, including suggested priorities for next steps after the consultation closes.

Comments	Assessment
We support the development of a common industry framework for operational emissions-related data exchange. Future work should focus on maintaining alignment with evolving international regulations, minimising additional reporting burden, ensuring compatibility with existing digital reporting systems, and providing clear implementation guidance to support consistent adoption across the maritime industry.	
Three areas may deserve particular attention in further development of the framework. First, navigation in ice should be adequately represented, including the ability to identify relevant ice-navigation periods and circumstances where these affect regulatory reporting. Second, the framework should capture the operational status of the vessel with sufficient granularity, including situations such as ballast voyages, laden operation, icebreaker assistance, power limitation overrides and other exceptional operating conditions that may affect emissions data or its interpretation. Third, consideration should be given to the needs of the end customer of the transport service, including the potential use of the same underlying data for customers' Scope 3 emissions reporting and, where feasible, meaningful comparison between maritime transport and other transport modes.	
If we want the whole market to adopt this, the next phase has to focus on three things: independent governance that gives competitors confidence to buy in, practical event structures for non-cargo segments like offshore, and a sensible way to reconcile alternative fuel certs that arrive weeks after the fuel is burned	

No further comments.	
From a technic perspective the workshop was a great disappointment, from the alignment of data it was good.	
Inform-D supports the objective of establishing a common, vendor-neutral foundation for the exchange of operational vessel data. We particularly encourage the JIWG to include specialised offshore/project vessels in the further development and testing of OVD. Their operational profiles differ materially from conventional port-to-port shipping: vessels may remain within a project area for extended periods while repeatedly transitioning between transit, positioning, active project operations and different forms of standby. In our experience, maintaining the relationship between time, vessel operational state, operational activity and fuel/consumable use provides valuable context for interpreting operational performance and associated emissions. We therefore recommend developing and testing an offshore/project vessel reporting profile with appropriate event-based granularity, while keeping project-specific commercial information optional and maintaining clear separation between standardised data exchange and the rights to access or use that data. Inform-D would be interested in contributing to further discussions or practical testing relating to specialised offshore vessel operational data.	
BSM supports the objective of establishing a common industry framework for exchanging operational vessel data relevant to emissions reporting. The greatest opportunity presented by OVD is not the standardisation of emissions calculations, but the standardisation of operational vessel events and related data. Success will depend on ensuring that Masters and Chief Engineers record operational information once, with that information subsequently reused throughout the wider reporting, compliance, verification and performance management ecosystem. Future work should prioritise: Clear and consistent operational event definitions. Common interpretation guidance. Practical implementation support for software providers and vessel operators. Open and transparent governance arrangements. Industry-wide interoperability without creating unnecessary administrative burden. BSM also believes the framework should remain an open industry standard focused on interoperability and data exchange. While software development, maintenance and implementation naturally involve costs, the framework should not evolve into a commercial certification, licensing or revenue-generating exercise. Its primary purpose should remain the efficient and consistent exchange of operational vessel data across the maritime industry.	

7.7 A virtual workshop to follow up on the consultation will take place on Thursday October 15, 2026. Please save the date - more information will follow.

 **I'm interested in this event**

