

Supporting Document: Strengthening Traceability Systems: Critical Tracking Events (CTE) and associated Key Data Elements (KDE)

CTE / KDE Matrix

Background to new proposed requirements: Traceability data, known as key data elements (KDE), requirements for a certificate holder within the MSC CoC Standard will depend on the critical tracking events (CTEs) and the position of the organisation in the supply chain. Certified organisations purchasing product directly from a certified fishery or farm - a *group of certificate holders that are effectively the first actor in the CoC supply chain* - have a pivotal role to enable and facilitate fishery or farm level traceability data / KDEs being available to the rest of the supply chain.

The two proposed revisions to the MSC Chain of Custody (CoC) Standard that require certificate holders to record or access Key Data Elements (KDEs) are the "Internal Traceback Exercise" (section F of the survey) and "Traceability – Product and Supplier Level KDEs" (section G of the survey).

Both support MSC's intention of strengthening traceability across MSC programs by improving the quality and availability of fishery/farm and product-level information for all CoC certificate holders.

To achieve MSC's intent, the MSC is seeking feedback on the feasibility of the following requirements:

1. CoC certificate holders at the start of the Chain of Custody (*First Buyer/Point of Landing*) must be able to access KDEs related to Fishing (from the vessel) or Harvest (from the farm), Transshipment (where applicable) and Landing.
2. all CoC certificate holders to provide fishery-level information via the ability to access wild catch KDEs for MSC-certified seafood products.
3. all CoC certificate holders to provide fishery level information via the ability to access MSC Fishery Reference Codes (MSC Fishery Certificate number OR MSC Fishery Unit of Certification code) for MSC certified products.
4. all CoC certificate holders must be able to access KDEs related to incoming (receiving) and outgoing (shipping) certified product within the scope of their certification.
5. all CoC certificate holders must complete an internal traceback exercise using an MSC-provided template for a single product or ingredient, capturing KDEs related to the CTEs within the organisation's operations.

This document provides additional information about KDEs (Key Data Elements) and their relationship to CTEs (Critical Tracking Events) in Seafood Supply Chains.

Critical Tracking Events (CTE) / Key Data Element (KDE) matrix

Definitions

Critical Tracking Events (CTEs)	Specific points in a supply chain where data capture is necessary to maintain traceability. These typically occur when a product is moved between locations, undergoes transformation, or changes ownership.
Key Data Elements (KDEs)	Critical piece of information or a data point that is needed to trace a product and/or its ingredients through all relevant Critical Tracking Events.

Critical Tracking Events (CTE) definitions

Critical Tracking Event (CTE)	Definition
Fishing Event	The event where wild-caught product for consumption is first captured.
Harvest Events (farm only):	The event where seafood product for consumption has been harvested from an aquaculture facility.
Transshipment Events	The event where products are moved from one VESSEL to a receiving VESSEL prior to the Offload/Landing event.
Landing Events	A product harvested from the wild is transferred for the first time from a VESSEL to LAND.
Processing Events (on land or at sea)	Processing step where product change or transformation occurs. Includes processing on land or on-vessel processing.
Incoming/receiving events	Denotes a specific activity within a business process that indicates that an object is being received at a location and is added to the receiver's inventory. The use of receiving is mutually exclusive from the use of arriving and accepting.
Aggregation events	An event in which products are grouped together. Incorporating child IDs into a parent ID (e.g., cases loaded/combined onto a pallet).
Disaggregation events	An event in which previously grouped products are separated Disincorporation of child IDs from parent ID. (e.g., breaking down a pallet into cases).
Outgoing/shipping events	Denotes a specific activity within a business process that indicates that an object is being moved (or shipped) to another location, especially in change of ownership.
Storage Events	This refers to product being held in a storage area before processing, distributing or selling and after processing.

Table: CTE/KDE Matrix

The proposed **KDE / CTE matrix** is designed to help organisations understand which data must be accessible at each step of the supply chain to support traceability. It does this by linking the Critical Tracking Events with the Key Data Elements.

Please note that not every CoC certificate holder is expected to be able to access all of the KDEs listed within this table, only those that are relevant to their operations, e.g. a trader may only need to access KDEs relating to “Incoming” and “Outgoing” CTEs, a processor may need to access KDEs relating to “Processing”, “Aggregate”, “Incoming”, “Outgoing” and “Storage” events. CoC Certificate holders at the start of the CoC will be required to demonstrate the ability to access fishery or farm level KDEs, the specific KDEs to be able to access will relate to the certified product and the certificate holders’ operations but it could be the KDEs under “Fishing” and “Transshipment” CTEs, as an example.

KDE	Definition	FISHERY/FARM LEVEL				PRODUCT AND SUPPLIER LEVEL			
		Fishing Events	Harvest Events (Farm only)	Transshipment Events	Landing Events	Processing Events (on land or at sea)	Aggregation & Disaggregation Events	Incoming (receiving) & Outgoing (shipping) Events	Storage Events
Buyer ID (new possessor)	Identifiers for the legal entity buying the product; importer [GSI PGLN]				X	X		X	
Seller ID (old possessor)	A unique identifier for the legal entity selling the product; supplier/ exporter/re-exporter. [GSI PGLN]	X	X		X	X		X	
Customer Type	The type of buyer who is purchasing the products [GSI PGLN]				X	X		X	
Species	ASFIS FAO 3 alpha code OR scientific (Latin binomial) name of the species	X	X	X	X	X	X	X	X
Product ID [for Product IN & OUT]	Identifiers for each product in the organisation; required for the source/parent product (Product IN) & the product created or child product (Product OUT). [Item/SKU/UPC/ GS1 GTIN]	X	X	X	X	X		X	X
Lot/Batch Number	A unique identifier assigned to each lot/batch of a specific product in the event.	X	X	X	X	X	X	X	X

KDE	Definition	FISHERY/FARM LEVEL				PRODUCT AND SUPPLIER LEVEL			
		Fishing Events	Harvest Events (Farm only)	Transshipment Events	Landing Events	Processing Events (on land or at sea)	Aggregation & Disaggregation Events	Incoming (receiving) & Outgoing (shipping) Events	Storage Events
Product Form	A code that specifies the physical form of the product; indicates the degree of transformation from the original living form.	X	X	X	X	X	X	X	X
Quantity (Unit of Measure)	The unit of measurement used to express product quantity [kg, mt, lb, pieces]; required per species.	X	X	X	X	X	X	X	X
Event ID	Identifier for a specific supply chain event which must not be reused across different events.	X	X	X	X	X	X	X	X
Location ID	Identifier for the location where the event occurred (e.g. address + country code, GS1 GLN).	X	X	X	X	X	X	X	X
MSC reference	Chain of Custody Certificate code Fishery Certificate number Fishery Unit of Certification (UoC) code	X		X	X	X	X	X	X
ASC reference	Chain of Custody Certificate code Farm Certificate number Farm Unit of Certification (UoC) code		X			X	X	X	X

Common Unique Identifiers (Unique IDs) in digital traceability systems, referenced within the KDE definitions are outlined below.

- Global Location Numbers (GLNs) - GS1 identifier used to identify a party and/or location in a supply chain. GLNs can be assigned to physical locations, organisations, and even business units or departments within organizations.
- The term "PGLN" likely refers to a "party" GLN, which is used to identify the "who" of a transaction
- Global Trade Item Number (GTIN) - GS1 identifier used by a company to identify a specific trade item or product. GS1 GTINs are universally unique and function as globally recognised product codes.