UC-SSF-0402: Catches caught and kept on board & discards

> ⚠ **Warning**
>
> As we are currently in the planning phase, please be aware that there may be changes to the use cases. Adjustments or revisions may occur as the project progresses.

1. Use Case Description

The "encode catch details" **use case provides a detailed framework for the fishers to report their catches** using mobile application. Data will be used for stock assessment and regulatory compliance by FMC of respective MS.

1.1. Goal

This use case involves the process by which a fisher uses a mobile application to report their daily catch. The goal of this use case is to describe the activities performed by fisher to input information about the species caught, the quantity, the location and time of the catch.

1.2. Pre-conditions

1. Fisher has ended the fishing operation for which catches need to be added.
2. Fisher can select the fishing operation from the list to enter catch information.

1.3. Post-conditions

1. Fisher has **searched and selected the species.**
2. Fisher has marked the **selected species as discards** if required.
3. Fisher has **added class, weight and FAO 3-alpha species code** of caught species and discarded weight for the discarded species.
4. Fisher has successfully encoded the catch details.

1.4. Trigger Event(s)

1.5. Primary Actor:

1. Fisher

1.6. Secondary Actor(s):

1. Reference Data
2. Application

2. Use Case Details
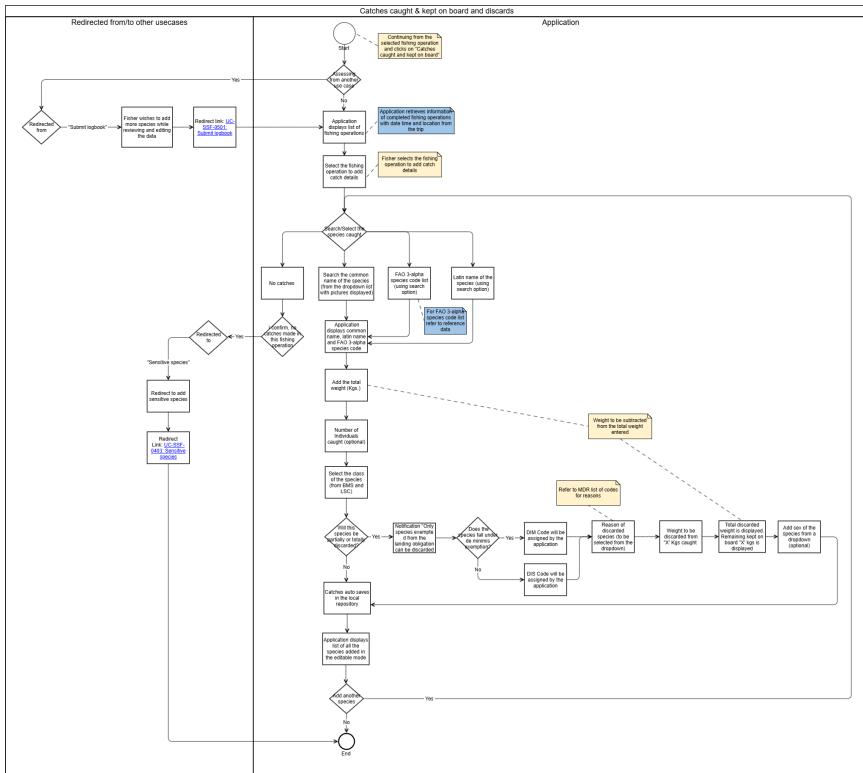
> ⓘ **In the activity diagram below:**
>
> References form other use cases are marked in "BLUE"
>
> Action is taken or can be taken during this activity are marked in "YELLOW"

2.1. Activity Diagram

2.2. Primary Path

Step ID	Actor	Action	Notes and References
PF-1	Fisher	The flow is triggered when, fisher clicks on "Catches caught and kept on board and discards".	
PF-2	Application	The application opens the "catches caught and kept on board" interface and allows fisher to add details one species at a time.	
PF-3	Application	Checks if this use case "Catches caught and kept on board and discards" is accessing from another use case, if no.	**EF-1: Accessing from another usecase to add more species**
PF-4	Application	Displays the list of fishing operations.(Retrieves information of completed fishing operations with date time and location).	
PF-5	Fisher	Selects the fishing operation to add catch details.	
PF-6	Application	Asks fisher to **search and select the species caught** either from: a. FAO 3-alpha species code list (refer to the reference data) or b. Search the common name of the species from the dropdown list which displays picture of the species or. c. Latin name of the species (using the search option). d. No catches	**AF-1: Search and Select the caught species** **For FAO 3-alpha species code list refer to reference data** **AF-2: Latin name of the species (using the search option).** **AF-3: No catches**
PF-7	Fisher	Selects option (a) and **enters FAO 3-alpha species code.**	
PF-8	Application	**Displays the common name of species, latin name** and **FAO 3-alpha species code**.	
PF-9	Fisher	Selects the species and proceed to enter the information of selected species.	
PF-10	Application	Asks to **add the total weight** of the species (unit of the weight is in Kgs) or number of individuals caught.	
PF-11	Fisher	Adds the total weight of the species in Kgs or number of individuals caught.	
PF-12	Application	Asks to **add the number of individuals caught** (as an optional field).	
PF-13	Fisher	Adds number of individuals caught.	
PF-14	Application	Asks fisher to **select the class of the species** i.e. BMS and LSC.	
PF-15	Fisher	Selects the class of the species.	
PF-16	Application	Asks will this species be partially or totally discarded?	**AF-4: Will this species be partially or totally discarded?**
PF-17	Fisher	Selects no, as selected species are not discards.	
PF-18	Application	Auto saves the catches in the local repository.	

PF-19	Application	Displays the list of species added (in editable mode).	
PF-20	Application	Applications asks to **add another species caught**, if no then flow ends.	**AF-6: Add another species**

2.3. Alternative Path(s)

2.3.1 AF-1: Search and Select the caught species choosing option (b)

Step ID	Actor	Action	Notes and References
AF-A1		The entry point is 6 of the primary flow.	
AF-A2	Fisher	This alternative flow is executed if fisher select option (b) Search the common name of the species from the dropdown list which displays picture of the species and enters the common name of the species.	
AF-A3	Application	Returns to step PF-8 of primary path, all the steps are followed and flow ends.	**PF-8 of primary path.**

2.3.2 AF-2: Search and Select the caught species choosing option (c)

Step ID	Actor	Action	Notes and References
AF-A1		The entry point is 6 of the primary flow.	
AF-A2	Fisher	This alternative flow is executed if fisher select option (c) Latin name of the species (using the search option) and enters the latin name of the species.	
AF-A3	Application	Returns to step PF-8 of primary path, all the steps are followed and flow ends.	**PF-8 of primary path**
Step ID	Actor	Action	Notes and References
AF-A1		The entry point is 6 of the primary flow.	
AF-A2	Fisher	This alternative flow is executed if fisher select option (c) Latin name of the species (using the search option) and enters the latin name of the species.	
AF-A3	Application	Returns to step PF-8 of primary path, all the steps are followed and flow ends.	**PF-8 of primary path**

2.3.3 AF-3: No catches choosing option (d)

Step ID	Actor	Action	Notes and References
AF-A1		The entry point is 6 of the primary flow.	
AF-A2	Fisher	This alternative flow is executed if fisher did not caught any species throughout the trip and select option (d) no catches.	
AF-A3	Application	Asks to **confirm no catches made** in this fishing operation.	
AF-A4	Fisher	Fisher confirms no catches and selects yes.	
AF-A5	Application	Redirects to next use case sensitive species (UC-SSF-0403: Sensitive species).	**Refer to UC-SSF-0403: Sensitive species**

2.3.4 AF-4: Will this species be partially or totally discarded?

Step ID	Actor	Action	Notes and References
AF-A1		The entry point is 16 of the primary flow.	
AF-A2	Fisher	This alternative flow is executed if species are partially or totally discarded.	
AF-A3	Application	Displays notification "Only species exempted from landing obligation can be discarded".	
AF-A4	Application	Application ask if the **species fall under de minimis exemption.**	**AF-5: If the species does not fall under de minimis exemption.**
AF-A5	Fisher	Fisher selects yes.	
AF-A6	Application	**Assigns DIM Code.**	
AF-A7	Application	Asks fisher to **select the reason** of the discarded species from the dropdown list.	
AF-A8	Fisher	Fisher selects the reason of discard from the dropdown list.	
AF-A9	Application	Asks weight to be discarded from "X' kgs caught.	
AF-A10	Fisher	Enters the weight to be discarded.	
AF-A11	Application	Displays the total discarded weight and remaining kept on board "X" kgs.	
AF-A12	Application	Asks to add sex of the species from dropdown (optional).	
AF-A13	Fisher	Selects the sex of the species.	
AF-A14	Application	Then application returns to step 18 of primary path, all the steps of primary path are followed and flow ends.	**PF-18 of primary path**

AF-5: Species does not fall under de minimis exemption

Step ID	Actor	Action	Notes and References
AF-A1		The entry point is step AF-A4 of alternate flow AF-4.	
AF-A3	Fisher	Selects no as the species does not fall under de minimis exemption.	
AF-A4	Application	**Assigns DIS Code.**	
AF-A5	Application	Then application returns to step AF-A7 of alternate path AF-4, all the steps of alternate path is followed and flow ends.	**AF-A7 of alternate path AF-4**

AF-6: Add another species
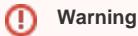
Step ID	Actor	Action	Notes and References
AF-A1		The entry point is step PF-20 of primary flow	
AF-A2	Fisher	This alternative flow is executed if fisher has added catch details of one species and wishes to add another species.	
AF-A3	Application	Asks to **add another species caught** by the fisher.	
AF-A4	Fisher	Wishes to add more species and selects yes.	
AF-A5	Application	Then application returns to step PF-6 of primary path, all the steps of primary path will be followed and flow ends.	**PF-6 of primary path.**

2.4. Exception Path(s)

2.4.1 EF-1: EF-1: Accessing from another use case to add more species

Step ID	Actor	Action	Notes and References
EF-A1	Fisher	This exception path is executed if fisher clicks on add more species while reviewing the summary to submit the logbook.(PF-3 of primary path)	
EF-A2	Application	Redirects from submit logbook use case to "Catches caught and kept on board" use case.	**Refer to UC-SSF-0701: Submit logbook**
EF-A3	Application	Then application returns to step PF-4 of primary flow, all the steps of primary path will be followed and flow ends.	**PF-4 of primary path.**

3. Use Case Realisation

> ⊘ **Warning**
>
> As we see some changes in the use cases, same will be reflected in the data attributes. It is still in planning phase and are subjected to change.

3.1. Data Attributes

Entity/Field Name	DataType	Description	Attributes	Remarks
Type	Code	A code describing the type of Fishing_ Activity	listID=FLUX_FA_TYPE value=FISHING_OPERATION	
Occurrence	DateTime	UTC Start date and time of the operation		
Vessel Related Activity	Code	The code specifying the main activity of the vessel in the reported period	listID=VESSEL_ACTIVITY	
Operations	Quantity	The number of operations for this fishing activity.		
Fishery_ Type	Code	The code specifying a type of fishery for this fishing activity, such as pelagic fisheries	listID=FA_FISHERY	Optional.
Species_ Target	Code	The code specifying a species targeted for this fishing activity.	listID=FAO_SPECIES Species code, as defined in FAO, for reported catch.	Optional
Identification	Identifier	An identifier for this fishing activity.		Optional
SpecifiedFishing _ Trip	Assoc.	The reference to the trip in which this activity took place. The code specifying the type of trip for this activity	SchemeID= EU_TRIP_ID (Unique indentifier) ListID= FISHING_TRIP_TYPE	The format is described in MDR code list FA_TRIP_ID_TYPE

RelatedFLUX_ Location	Ass oc.	A FLUX_ Location related to this fishing activity	ListID=FLUX_LOCATION_TYPE The identifier of a country schemeID=TE RRITORY listID=FLUX_LOCATION_CHARACTER ISTIC **Area:** schemeID=FAO_AREA schemeID=STAT_RECTANGLE schemeID=EFFORT_ZONE schemeID=MANAGEMENT_AREA **Port:** schemeID=LOCATION schemeID=FARM **RFMO:** listID=RFMO	Use Type= POSITION to report catches or activities at a certain geographical location (fisheries under ICCAT or GFCM rules). Use Type= AREA (to report catches per relevant geographical area)
SpecifiedFA_ Catch	Ass oc.	The catch caught and kept on board the vessel and the discards, if part of the fishing operation	Use **FA_Catch entity** in case catches were taken (Which includes following attributes) listID=FA_CATCH_TYPE (Eg: retained on board) listID=FAO_SPECIES Number_of _Individuals FLUX_UNIT = KGM listID=WEIGHT_MEANS (Mandatory if S peciesCode = BFT) **Specified FLUX_ Location** i.e. FLUX_Location **DestinationFLUX_Location** For **SpecifiedSize_distribution** ListID= FISH_SIZE_CLASS *ListID*= FA_BFT_SIZE_CATEGORY **Related fishing_trip** (to be used if the catches are on-board,) SchemeID= EU_TRIP_ID (Unique identifier for the trip) FA_TRIP_ID_TYPE **UsedFishing_ Gear** (defined in next column) **AppliedAAP_Process** **ApplicableFLUX_Characteristic** FA_CHARACTERISTIC "DISCARD_REASON	Use type=ONBOARD for catches kept onboard. Use type=KEPT_IN_NET for catches kept in the nets
RelatedVessel_ Transport Means	Ass oc.	The (other) vessel involved in this fishing operation		Use in case of fishing operations with more than one vessel involved (eg. pair fishing). Specify the role of the related vessel
RelatedFishing_ Activity	Ass oc.	A fishing activity related to this fishing activity.		For defining sub-activities, such as gear set, gear retrieved within one fishing operation. For static gear (gillnets and entangling nets) use a sub-activity for setting or re-setting and retrieving the gear (one per fleet).
SpecifiedFishing _ Gear	Ass oc.	A fishing gear specified for this fishing activity.	listID= GEAR_TYPE listID=FA_GEAR_ROLE UsedFishing_ Gear value=DEPLOYED; Type=FISHING_OPERATION value=ONBOARD when the FishingActi vity Type=DEPARTURE, ARRIVAL	Mandatory in case of gear deployment if - No sub-activity is declared - The sub-activity has no gear (deployment) details specified for the operation See data elements and attributes in Table 39.

SpecifiedGear_Problem	Assoc.	A gear problem specified for this fishing activity.	ListID=FA_GEAR_PROBLEM Number of gears affected Measure: *ListID*=FA_GEAR_RECOVERY FLUX_Location	Mandatory in case a gear problem occurred.
Specified Delimited_Period	Assoc.	A delimited period specified for this fishing activity.	Start DateTime End DateTime FLUX_UNIT	Use to specify the total fishing time for this fishing activity.

3.2. Data Model

3.3. Pseudocode

3.4. User Interface

4. Impact and Risks

4.1. Impact

4.2. Risks

5. Test Cases