



Global Record

HLR3 Search: Detailed Requirements

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Table of Contents

1	Introduction	4
1.1	Document purpose	4
1.2	Intended audience	5
1.3	Background	5
1.4	Definitions and Acronyms	6
2	HLR3: Search	7
2.1	Detailed Requirements	7

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1 Introduction

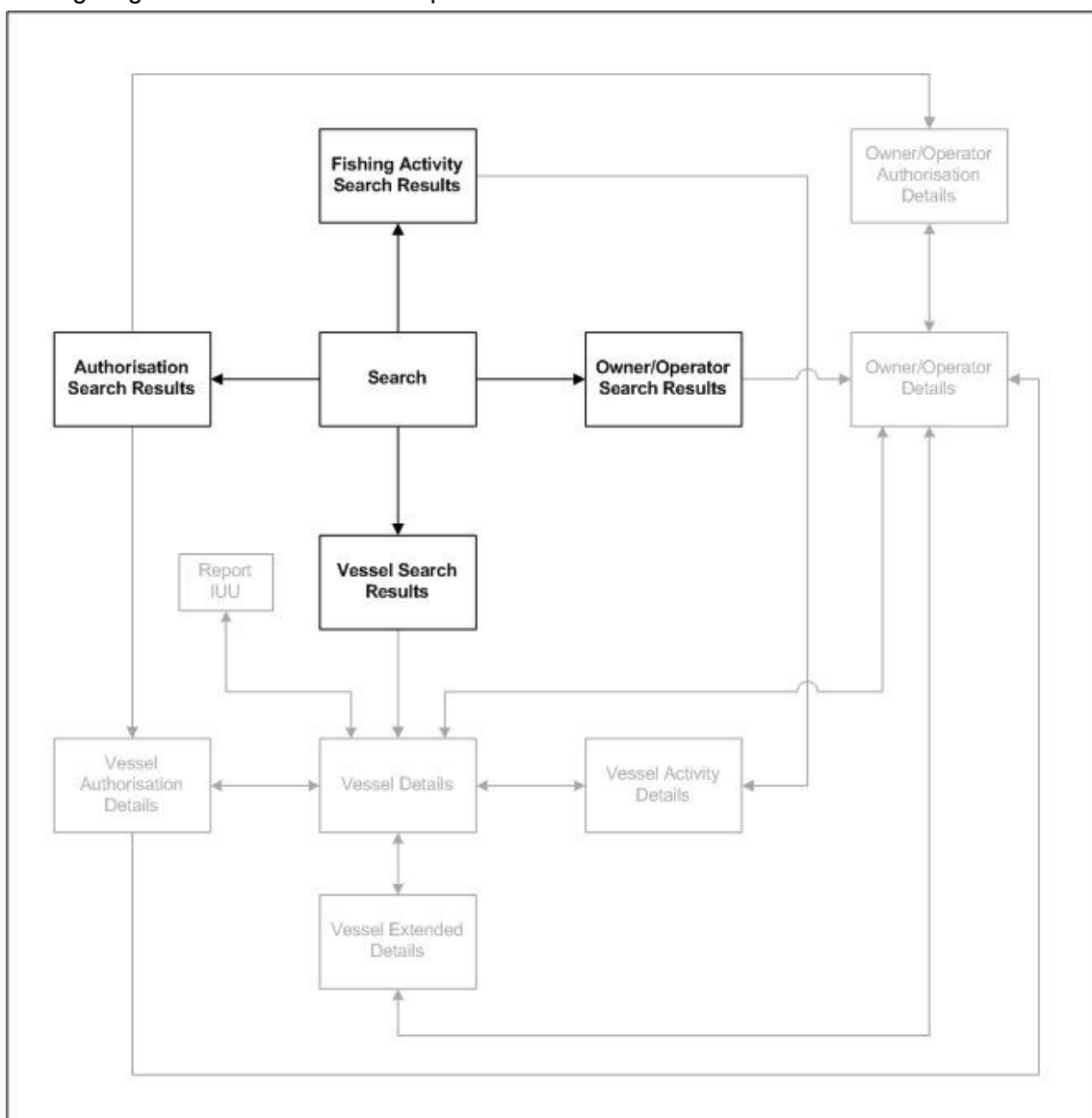
1.1 Document purpose

The purpose of this detailed requirements document is to further define the expectations of the GR in respect to the high level requirement for Searching. The detailed requirements identified identify the functionality that is required to support this HLR and a clear indication of what must be developed as part of the GR.

The reporting area of the GR is intended to provide information to an end user that may be used in the analysis of many aspects of the data held in the GR and provide a mechanism to make this data directly available to user in a format that may be used off-line.

The requirement that the system provide the ability to perform searches goes without question, however the attributes that user would like to search on and the data that should be returned from a search need to be confirmed with an end user group. At this stage we have developed requirements based on our current understanding of the data that will be available in the GR and those attributes that we have identified as being useful based on our fisheries management experience.

The following diagram illustrates which components of the GR are covered within this document:¹



¹ It is important to note that whilst the diagram illustrates the types of information modules that may be attached to the vessel record in future, it is by no means a definitive list, nor is it an approved list at this stage.

1.2 Intended audience

The audience for this document includes:

- *FAO*
- *Global record stakeholders*

1.3 Background

The need for a Comprehensive Global Record of Fishing Vessels was acknowledged as far back as 2002 in the implementation guidelines for the International Plan of Action to Prevent Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) where it was acknowledged that the lack of such a tool produced a situation that undoubtedly creates opportunities for IUU vessels to escape detection. Subsequently, in the Rome Declaration on IUU Fishing, ministers called for the development of a comprehensive global record of fishing vessels within FAO, including refrigerated transport vessels and supply vessels. Following this, Proposal 2 of the Final Report “Closing the Net” produced by the High Seas Task Force (HSTF) promotes the establishment of a global information system on high seas fishing vessels. The purpose of this system is to combat the lack of access to transparent and authoritative information about the ownership, control and movements of fishing vessels. Provision of this information to Fisheries Management Organisations, Port States, Fisheries Enforcement and MCS authorities and other interested parties will enable actions to be undertaken to restrict and expose Illegal, Unregulated and Unreported (IUU) fishing activity.

It is widely recognized that one of the significant barriers to eliminating IUU fishing is a lack of transparency and traceability in the global fishing sector. States implement individual measures without the benefit of any sort of global information picture and there is no single source where useful and relevant information can be collated, stored and displayed. One of the major enablers of IUU fishing is the lack of information about the global fishing fleet or the wide range of information associated with vessel activity. To make matters worse, fishing vessels frequently change flag, ownership, registration, and fishing authorizations, enabling them to act with impunity if they choose.

The Global Record, which is being planned as an integrated global data base, offers a solution as it is intended to fill this information void. It will make available the essential information to enhance the effectiveness of regional and national monitoring, control and surveillance (MCS) tools and in particular, to support vessel inspection and surveillance programs, investigations, traceability initiatives and resource prioritization decisions, through the effective sharing of information—something that is not currently possible. The development of a GR would improve transparency and traceability of vessels, products, owners, operators, flags, authorisations and registration. It would facilitate risk assessment for industry, RFMOs and Governments and improve decision making including on fleet capacity, size and structure, management, safety, pollution, security and statistics and more.

The importance of the GR is underscored by new and growing market demands for ecolabels and other forms of product certification which require product traceability. Market forces and incentives could stimulate compliance by countries to provide information to the GR prior to any mandatory legal requirement being imposed.

The GR would support existing binding and non binding instruments to prevent, deter and eliminate IUU fishing and increase the effectiveness of port state measures and MCS activities.

This document seeks to define at a high level the requirements of the GR that will allow it to meet these goals.

1.4 Definitions and Acronyms

FAO	The Food and Agriculture Organisation of the United Nations
GR	Global Record
UVI	Unique Vessel Identifier
MCS	Monitoring Control and Surveillance
RFMO	Regional Fisheries Management Organisation
UNGA	United Nations General Assembly
FAO	Food and Agriculture Organisation of the UN
NGO	Non-governmental organisation
COFI	Committee on Fisheries
UN	United Nations
FishVIS	High Seas Fishing Vessel Information System
FINNZ	FishServe Innovations New Zealand Limited
HSTF	High Seas Task Force
MU	High Seas Fishing Vessel Information System Management Unit
TU	High Seas Fishing Vessel Information System Technical Unit
IUU	Illegal, Unregulated and Unreported Fishing Activity
IHS Fairplay	IHS Fairplay
CFR	Community Fleet Register
EMSA	European Maritime Safety Agency

2 HLR3: Search

The search screens provide an easy access point to the data held in the GR. The search criteria and the results sets are intended to be broad in nature but also allow specific pin point searching of various identifiers.

From the search results a user may navigate to the specific viewing screens for each type of record.

2.1 Detailed Requirements

Requirement No.:	3.1.0 Select Search Type
Requirement:	The GR must provide the user with the ability to choose the type of search they wish to perform. The type of search which are to be available include: <ul style="list-style-type: none"> • Vessels • Fishing Authorisations • Activity • Owner/Operators
Rationale:	Each search will have different criteria for which the user may use to search on. The result set for each is also quite different
Business Value:	High
Business Rules:	
Related Reqs:	
Assumptions:	All GR users can select one of the Search types
Revisions:	

Requirement No.:	3.2.0 Vessel Search Criteria
Requirement:	The vessel search screen will contain the following criteria fields: <ul style="list-style-type: none"> • Vessel Name • Call Sign • IMO Number • Vessel Flag * • Vessel Type * • Vessel Regional Registration Number • Vessel National Registration Number • Fishing Methods * • Owner/Operator Name • IUU Reported Vessel (Yes/No/All options only) • Length • Gross Registered Tonnage • Hull Colour * • Superstructure Colour * • As at Date
Rationale:	A broad selection of search criteria should allow for easier vessel identification. Additionally, the As at Date criterion provides an easy method of identifying a vessel whose distinguishing features may have since been altered.

Business Value:	High
Business Rules:	<ul style="list-style-type: none"> • * Indicates that these search fields comprise system-generated drop-down values. • All free text fields other than Length and Gross Tonnage must have more than 3 characters entered. If not the solution should inform the user of this and identify the violating field(s). • When a valid As at Date is entered, the system is to identify those vessels which match the criteria on that date. • If the supplied search criteria only elicit one search result then the user will go directly to that vessel's details page. • Any search criterion that matches upon an equivalent NULL vessel value within the GR will treat it as an exact match. • Where a date has not been entered, the system is to return unique vessels (based on IMO number) that match current data and also vessels that previously held the value matching the criteria (i.e. those vessels that have since changed). The results set will display those vessels for which the current data matches first, followed by those vessels whose searched criteria have hit upon historical values. • The system will indicate whether or not the match is based on historical data. • When searching on the Owner/Operator the system will search on all of the following vessel-related fields: <ul style="list-style-type: none"> ○ Registered Owner/Operator ○ Parent Company Registered Owner ○ Group Beneficial Owner ○ Registered Owner's Parent Company Name
Related Reqs:	
Assumptions:	All GR users can select one of the Search types
Revisions:	

Requirement No.:	3.3.0 View Search Results - Vessels
Requirement:	<p>The following fields will display within the vessels search results grid:</p> <ul style="list-style-type: none"> • IMO Number and GR UVI (if different) • Vessel Name • Registered Owner/Operator • Flag State • Port of Registry • International Radio Call Sign (IRCS) • VMS (Type and number) • Vessel Type • Hull Colour • Superstructure Colour • Ship Status • IUU Status
Rationale:	<p>The search results provide the user with a summary of filtered results from which to access the associated details page.</p> <p>An IUU flag is displayed as a quick visual identification for the user when the vessel in the results set has had IUU activity recorded against it.</p>
Business Value:	High
Business Rules:	<ul style="list-style-type: none"> • If no search criteria match upon an existing vessel within the GR then display an appropriate message informing the user. • If a Snapshot Date value was supplied in the search criteria then display the date supplied within a message reminding the user that search results are as at YYYY/MM/DD. • If the previously-supplied search criteria only elicit one search result then the user will go directly to that vessel's details page. • IUU Status - if any IUU activity instances have been associated with any vessels within the search results then indicate this with a red-flag within the IUU Status column. Selecting this will take the user to the IUU activity grid of the Vessel Details page.. • From here the user is able to navigate to: <ul style="list-style-type: none"> ○ Owner/Operator Details ○ Vessel Details
Related Req's:	
Assumptions:	
Revisions:	

Requirement No.:	3.4.0 Fishing Authorisations Search Criteria
Requirement:	<p>The following search criteria will be available for a fishing authorisations search:</p> <ul style="list-style-type: none"> • IMO Number and GR UVI (if different) • Vessel Name • Owner/Operator Name • RFMO Authorisation ID • Authorisation Flag State * • Authorisation Type * • <i>Authorisation Issue Period</i> <ul style="list-style-type: none"> ○ From ○ To • RFMO Catch Area * • Issuing Organisation * • Authorised Fishing Method * • Target Species * • Master's Name
Rationale:	For the GR to enable user's filtered access to fishing authorisation information, a search mechanism is required.
Business Value:	High
Business Rules:	<ul style="list-style-type: none"> • Any search criterion that matches upon an equivalent NULL vessel value within the GR will treat it as an exact match. • * Indicates that these search fields comprise system-generated drop-down values. • RFMO Catch Area will comprise a drop-down of all RFMOs captured within the Inspecting Authority field submitted within the PSM Vessel Inspection reports. This is required because a standardised geographical notation is not used by all RFMOs reporting catch area information.
Related Req's:	
Assumptions:	
Revisions:	

Requirement No.:	3.5.0 View Search Results - Fishing Authorisations
Requirement:	<p>The following fields will display within the fishing authorisations search results grid:</p> <ul style="list-style-type: none"> • IMO Number and GR UVI (if different) • Vessel Name • Owner/Operator Name • RFMO Authorisation ID • Authorisation Flag State • Authorisation Type • Authorisation Issue Period • RFMO Catch Area • Authorised Fishing Method • Target Species
Rationale:	The search results provide the user with a summary of filtered results from which to access the associated details page.
Business Value:	High
Business Rules:	<ul style="list-style-type: none"> • All highlighted fields will be populated via drop-down lists. • Authorisation Issue Period will include both the From and To date values within the same field. • Where it is viable (i.e. captured within the GR) to link to an external website containing an authorisation instance's RFMO-held details the RFMO Authorisation ID field will be hypertext. • From here the user is able to navigate to: <ul style="list-style-type: none"> ○ Vessel Details ○ Owner/Operator Authorisation Details ○ Vessel Authorisation Details
Related Req's:	3.4.0
Assumptions:	
Revisions:	

Requirement No.:	3.6.0 Fishing Activity Search Criteria
Requirement:	<p>The following search criteria will be available for a fishing activity search:</p> <ul style="list-style-type: none"> • Activity Type * • <i>Activity Criteria</i> <ul style="list-style-type: none"> ○ Identifier e.g. PSM number (context based on activity type selected) ○ Port * ○ <i>Activity Date</i> <ul style="list-style-type: none"> ▪ From ▪ To • <i>Vessel Identification Criteria</i> <ul style="list-style-type: none"> ○ GR UVI Number ○ Vessel Name ○ Flag State * ○ Vessel Type * ○ International Radio Call Sign ○ Certificate of Registry ID ○ IMO Number ○ Port of Registry * • Species * • Fishing Gear Used *
Rationale:	<p>For the GR to enable users filtered access to fishing activity details, a search mechanism is required.</p> <p>Allowing different activity types to be searched upon provides the user with access to far broader range of activity data.</p>
Business Value:	High
Business Rules:	<ul style="list-style-type: none"> • * Indicates that these search fields comprise system-generated drop-down values. • Any search criterion that matches upon an equivalent NULL vessel value within the GR will treat it as an exact match. • Activity search criteria will change depending on the Activity Type selected, however as there is not yet a definitive list of all potential activity types that the GR will store, exact criteria for each cannot be determined. • An 'All' Activity Type will exist which, if selected, will provide search criteria that is applicable across all activity types. • Species, if submitted as a search criterion, will search upon all following fishing activity-related species fields including, but not restricted to: <ul style="list-style-type: none"> ○ Offloaded Species ○ RFMO Catch Area ○ Retained Species • The Identifier field refers to the identification number originally assigned to the activity type instance upon initial capture of the data. It is therefore not necessarily unique within the GR. • port state to either an uploaded Port Entry Request or Vessel Inspection Report instance. • Where it is viable to link to an external website containing an authorisation instance's RFMO-held details the PSM Identifier field will be hypertext.
Related Req's:	

Assumptions:	<ul style="list-style-type: none">• A comprehensive set of search criteria cannot be fully determined until a definitive set of activity file types has been decided and though by no means definitive, potential activity types include:<ul style="list-style-type: none">○ PSM○ Vessel inspections and sightings○ Offending history and prosecution results○ Vessel detention○ IUU activity
Revisions:	<ul style="list-style-type: none">• Additions made to allow for other activity types.

Requirement No.:	3.7.0 View Search Results - Fishing/IUU Activity
Requirement:	<p>The following fields will display within the fishing activities search results grid:</p> <ul style="list-style-type: none"> • Activity Type • IUU? • IMO Number • Vessel Name • Local Authority • Port Flag State • Port • Offloaded Species • Catch Area • <i>Activity Date</i> <ul style="list-style-type: none"> ○ From ○ To
Rationale:	The search results provide the user with a summary of filtered results from which to access the associated details page.
Business Value:	High
Business Rules:	<ul style="list-style-type: none"> • The IUU field will provide a visual indication to mark search results that are IUU-confirmed instances. • If no search criteria match upon an existing vessel within the GR then display an appropriate message informing the user. • If the previously-supplied search criteria only elicits one search result then the user will go directly to that fishing activity's details page. • Vessel Name will be a hypertext link allowing users to drill down to associated vessel's details page. • Activity Date, if supplied as search criteria, will search upon the following activity-related fields: <ul style="list-style-type: none"> ○ Commencement of Inspection (for PSM-sourced data) ○ Completion of Inspection (for PSM-sourced data) ○ Date of Activity (for other activity types) • From here the user is able to navigate to: <ul style="list-style-type: none"> ○ Vessel Activity Details ○ Vessel Details
Related Req's:	3.6.0
Assumptions:	Again, until a conclusive set of activity types to be captured within the GR has been decided, it is not yet possible to list search results criteria that are common across each type.
Revisions:	

Requirement No.:	3.8.0 Owner/Operator Search Criteria
Requirement:	<p>The following search criteria will be available for a fishing authorisations search:</p> <ul style="list-style-type: none"> • Master • Owner/Company Name • IMO Number • Country * • Vessel Name
Rationale:	The data variance across each of the above entities necessitates each having its own search criteria.
Business Value:	High
Business Rules:	<ul style="list-style-type: none"> • * Indicates that these search fields comprise system-generated drop-down values. • Any search criterion that matches upon an equivalent NULL vessel value within the GR will treat it as an exact match. • Vessel Name, if submitted as a search criterion, will search upon all instances of a vessel's name, both current and historical.
Related Req's:	
Assumptions:	<ul style="list-style-type: none"> • Master, as a criteria upon which to search, will link to the individual vessels they have skippered, as opposed to an individual Master entity, which the GR does not capture.
Revisions:	

Requirement No.:	3.9.0 View Search Results - Owner/Operator
Requirement:	<p>The following fields will display within the fishing activities search results grid:</p> <ul style="list-style-type: none"> • Individual/Company (Boolean) • Owner/Company Full Name (Varchar) • IMO Number (Varchar) • Vessel Name • Country of Company Registration (Datetime) • Registered Owner's Parent Company Name (Varchar)
Rationale:	The search results provide the user with a summary of filtered results from which to access the associated details page.
Business Value:	High
Business Rules:	<ul style="list-style-type: none"> • If no search criteria match upon an existing vessel within the GR then display an appropriate message informing the user. • If the previously-supplied search criteria only elicits one search result then the user will go directly to that fishing activity details page. • Any previously-supplied search criterion that matches upon an equivalent NULL fishing activity value within the GR will treat it as an exact match. • Owner/Company Full Name will be a hypertext value enabling the user to drill down to the associated owner/operator details page. • From here the user is able to navigate to: <ul style="list-style-type: none"> ○ Owner/Operator Details ○ Vessel Details
Related Req's:	3.8.0
Assumptions:	
Revisions:	