

Fisheries Intelligence Report

16 December 2022

Vessel Report - LU RONG YUAN YU 715

Report number	JAC-007
Report type	Risk Alert
Report subject	LU RONG YUAN YU 715 (IMO 8786583) using multiple MMSIs (412331284 and 150400453) and changing name (FU YUAN YU 715) when moving between Atlantic and Pacific squid fishing grounds.
Issue date	16 December 2022
Security notes	No confidential information

Summary

LU RONG YUAN YU 715 is a Chinese-flagged fishing vessel authorized to fish for squid within the [NPFC](#) and [SPRFMO](#) RFMO areas. Since January 2021 the LU RONG YUAN YU 715 has operated within the South Pacific squid grounds off the coast of Ecuador, Peru, and Chile, as well as the South Atlantic squid grounds off the coast of Argentina. At the time of generating this report the vessel was still transmitting on AIS, transiting south through the EEZ of Chile, en route from the Pacific squid grounds. The vessel is reporting principally on MMSI 412331284 (the official Chinese MMSI for the LU RONG YUAN YU 715); whilst also reporting intermittently on MMSI: 150400453. The name LU RONG YUAN YU 715 is at this time being reported on both MMSIs.

In February 2022, the LU RONG YUAN YU 715 was photographed in the South Atlantic squid fishing grounds by a Sea Shepherd vessel. Analysis of photos taken at the time demonstrates that the LU RONG YUAN YU 715 had changed the name on its hull from LU RONG YUAN YU 715 to FU YUAN YU 715. The vessel was also observed to be transmitting simultaneously on the same two MMSIs: MMSI 412331284 (the official Chinese MMSI); and MMSI: 150400453 as FU YUAN YU 715. Analysis suggests the vessel transmits its name as FU YUAN YU 715 when operating in the Atlantic squid grounds and as LU RONG YUAN YU 715 in the Pacific squid grounds. The reason for this identity

likely falsification is undetermined, however the JAC is providing this risk alert to relevant coastal states and RFMOs to allow for an understanding of the potential risk and to promote any opportunity to inspect the vessel to investigate the identity and the legality of its activities.

Analysis

Vessel identity

Key identity and ownership details of the LU RONG YUAN YU 715 are given in the table below. The vessel is owned by the Shidao Group and is part of a large fleet of squid vessels with the same ownership that operates out of Shidaozhen (Weihai), China.



Vessel Details: LU RONG YUAN YU 715	
Name	LU RONG YUAN YU 715
Flag	China
IMO	8786583
Call Sign	BCLN4
MMSI	412331284
Vessel Type	Fishing vessel
Gear Type	Handlines and hand-operated pole-and-lines
Owner	Shidao Group / Rongcheng Huadong Fishery Co Ltd
Operator	Shidao Group
Authorisations	NPFC: 02/08/2019 - 01/08/2024 - Neon flying squid SPRFMO: 23/04/2019 - 31/03/2099



Source: NPFC [LURONGYUANYU715](#) | NPFC

Photo analysis

Gear type: The most recent image of the LU RONG YUAN YU 715 does not show the vessel configured for squid jigging. This is at odds with being authorized as a handline vessel by NPFC and SPRFMO. The removal of the conveyors or racks that are common on squid jigging vessels (and can be seen in the LU RONG YUAN YU 715 image taken in 2020 - Left image in below table), and the addition of a forward boom/crane in the recent images (Right image in below table) suggests that the vessel is now using a type of trawl set up, where they set and hoist the net using the boom/crane near the bow of the vessel.

LU RONG YUAN YU 715 configuration	
	
<p>Source: Marine Traffic</p> <p>Location: Punta Arenas, Chile¹ - 09Jun2020</p> <p>Features: Conveyors evident, no front crane</p>	<p>Source: Marine Traffic</p> <p>Location: Punta Arenas, Chile² - 25Nov2021</p> <p>Features: no conveyors evident, front crane</p>

This is consistent with reported sightings of vessels in the South Atlantic squid fishing ground fishing with this method. This change in gear type reflects a broader trend that has seen an increase in multipurpose vessels (ie. vessels designed to operate using multiple gear types) in the Chinese fleet. Multipurpose vessels can present an MCS challenge as different gear types may be subject to different regulations or present different risks in relation to bycatch, including of other commercial species³. Monitoring vessels' gear types can also present a significant challenge - illustrated by the fact that the vessel depicted here is listed as a line vessel in RFMO-authorized vessel lists.

Identification challenges: In February 2022, a Sea Shepherd vessel photographed the LU RONG YUAN YU 715 in the south Atlantic squid grounds. Photographs show that the name displayed on the vessel's starboard side had been altered from LU RONG YUAN YU 715 to FU YUAN YU 715 (Figure 1). When it was sighted, the vessel was transmitting the name FU YUAN YU 715 on both MMSI 412331284, the official MMSI associated with the LU RONG YUAN YU 715, as well as the unofficial MMSI 150400453.

¹ <https://www.marinetraffic.com/en/photos/of/ships/shipid:5304898>

² <https://www.marinetraffic.com/en/photos/of/ships/shipid:5304898>

³ See <https://www.tm-tracking.org/post/new-analysis-squid-fishing-north-west-indian-ocean-clear-as-ink>



Figure 1: Close-up on the bow of the vessel transmitting in the South Atlantic in February 2022 as FU YUAN YU 715 (original image on left) and annotated image on right showing the Chinese characters for “LU RONG” (black characters - added to the image) and the area where the character 鲁 (LU) can still be seen (yellow circle) despite having been painted over - Source: Sea Shepherd.

Vessel Activity

Overview: The LU RONG YUAN YU 715 departed the port of Busan, South Korea on 14 September 2021 travelling east across the Pacific. The vessel operated in the Pacific squid grounds off Peru for a couple of days in November 2021, then transited through the Strait of Magellan to operate in the Atlantic squid grounds from late November 2021 to July 2022. In late July 2022, the vessel transited back through the Strait of Magellan to operate in the Pacific squid grounds off Peru, where it operated from August 2022 until departing the fishing grounds on 9 December 2022.

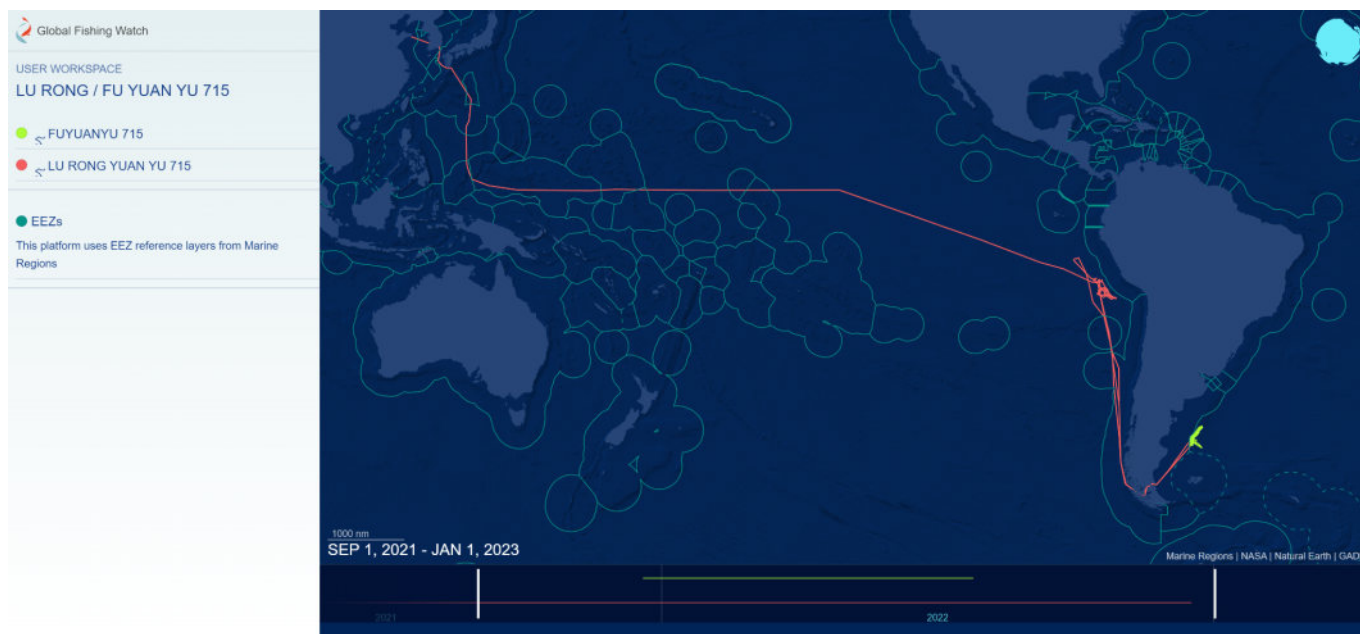


Figure 2: Overview of AIS activity of the LU RONG YUAN YU 715 since the vessel departed port from Busan, South Korea on 14 September 2021. The overview is of AIS transmissions from the official MMSI 150400453 with the vessel's track displayed in red when transmitting the name LU RONG YUAN YU 715 and green when transmitting the name FU YUAN YU 715. The vessel last transmitted on the 16 December 2022 in the Chilean EEZ. Link to GFW [workspace](#).

Change in identity: The LU RONG YUAN YU 715 has consistently transmitted on two AIS units while operating since the vessel departed port in Busan, South Korea on 14 September 2021. One AIS unit transmits on MMSI 412331284, which is the official MMSI for LU RONG YUAN YU 715, and the second unit transmits on the unofficial MMSI 150400453. Both MMSIs transmit the same AIS identity information, including consistent name change timings. The consistent identity information, combined with AIS positional analysis indicates both sets of AIS transmissions are almost certain to be coming from the same vessel. This is reinforced by the observation from the Sea Shepherd patrol vessel which observed AIS transmissions from both MMSIs coming from the FU YUAN YU 715 when it was photographed in February 2022 (Figure 1).

Based on data analysed from the vessel's last departure from Busan in September 2021, the vessel transmits the name LU RONG YUAN YU 715 when transiting across the Pacific; whilst operating in the Pacific squid grounds; and when transiting through the Chilean and Argentinian EEZs to access the Atlantic Squid grounds. When the vessel was operating in the Atlantic squid grounds it changed its name, initially to HAI HANG 3 for a couple of weeks, then consistently transmitted with the name FU YUAN YU 715 (Figure 3). These alternate vessel names were only utilised whilst in the High Seas of the Atlantic Squid grounds. The name change to FU YUAN YU 715 was coupled with a change in hull vessel markings, although it's not clear on what date this change occurred.

Date	MMSI 412331284	MMSI 150400453	Location
14 September 2021 - 30 November 2021	LURONGYUANYU715	LURONGYUANYU 715	Transit from Busan to Pacific Squid grounds; Fishing in Pacific Squid grounds; Transit to Atlantic Squid grounds
30 November 2021 - 03 December 2021	LURONGYUANYU715	HAIHANG3	Atlantic Squid Grounds
04 December 2021 - 19 December 2021	HAIHNG3	HAIHANG3	Atlantic Squid Grounds
19 December 2021 - 25 July 2022	FUYUANYU715	FUYUANYU 715	Atlantic Squid Grounds
25 July 2022 - Present	LURONGYUANYU715	LURONGYUANYU 715	Transit to Pacific Squid grounds through Argentinian EEZ, Chile EEZ; Operating in Pacific squid grounds

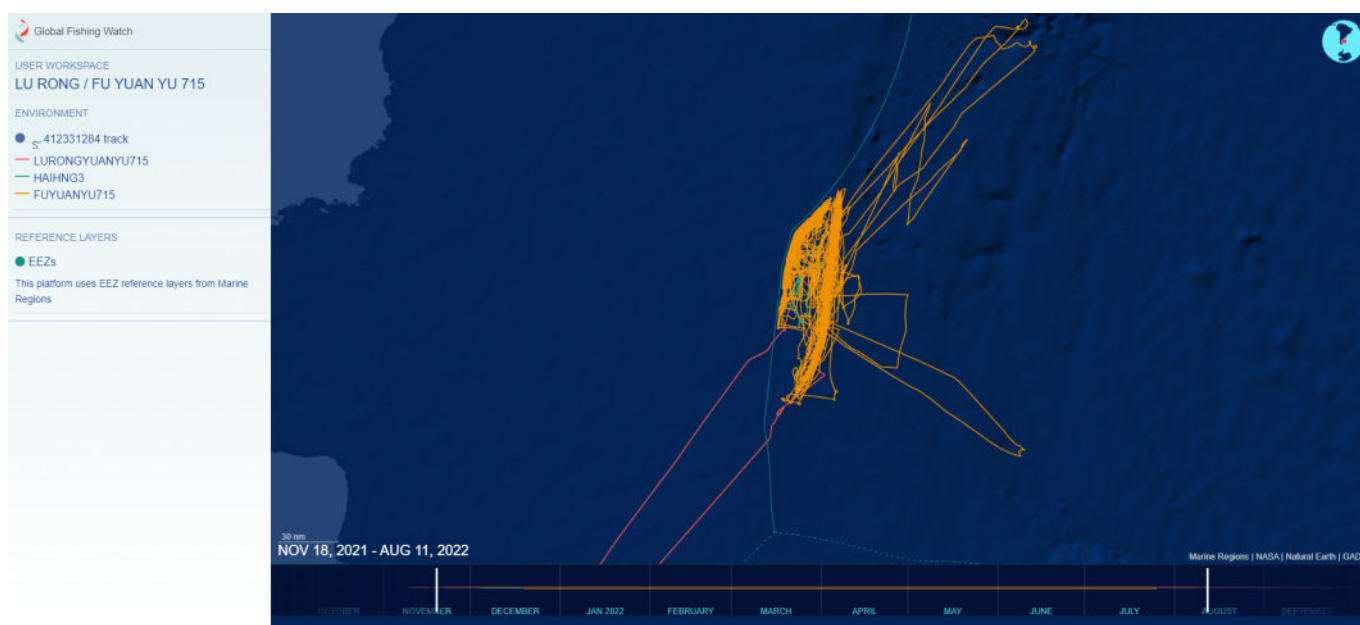


Figure 3: Change in vessel identity of LU RONG YUAN YU 715 in the Atlantic squid grounds shown with MMSI 412331284, which is displayed in red when transmitting the name LU RONG YUAN YU 715, green when transmitting the name HAI HANG 3 and orange when transmitting the name FU YUAN YU 715. The same pattern of name changes was observed on MMSI 150400453. [Link to GFW workspace.](#)

Change in gear: The pattern of the LU RONG YUAN YU 715 activity on AIS appears different in the South Atlantic Squid grounds to the Pacific squid grounds suggesting the vessel may be using different gear in each location (Figure 4, Figure 5). In the Atlantic squid grounds the vessel operates in a relatively discrete area which extends over 100 nautical miles parallel to the Argentinian EEZ boundary (Figure 4). In this area the vessels fishing activity is characterised by: speeds of 3-4 knots for 5 to 10 hours; then a short period of speeds less than 2 knots, during which they may be retrieving gear; followed by a short period of high speed, greater than 5 knots, to relocate the vessel (Figure 4). This pattern activity is assessed as consistent with behaviour displayed by trawl vessels. In the Pacific squid grounds the vessel operates in a very wide area around 850 nautical miles long outside the Peruvian EEZ (Figure 5). In this area the vessel's fishing activity is characterised by: speeds of 0.5-1 knots for periods of 6 to 48 hours; followed by a short period of high speed, to relocate the vessel. This pattern is consistent with squid handline or jig fishing.

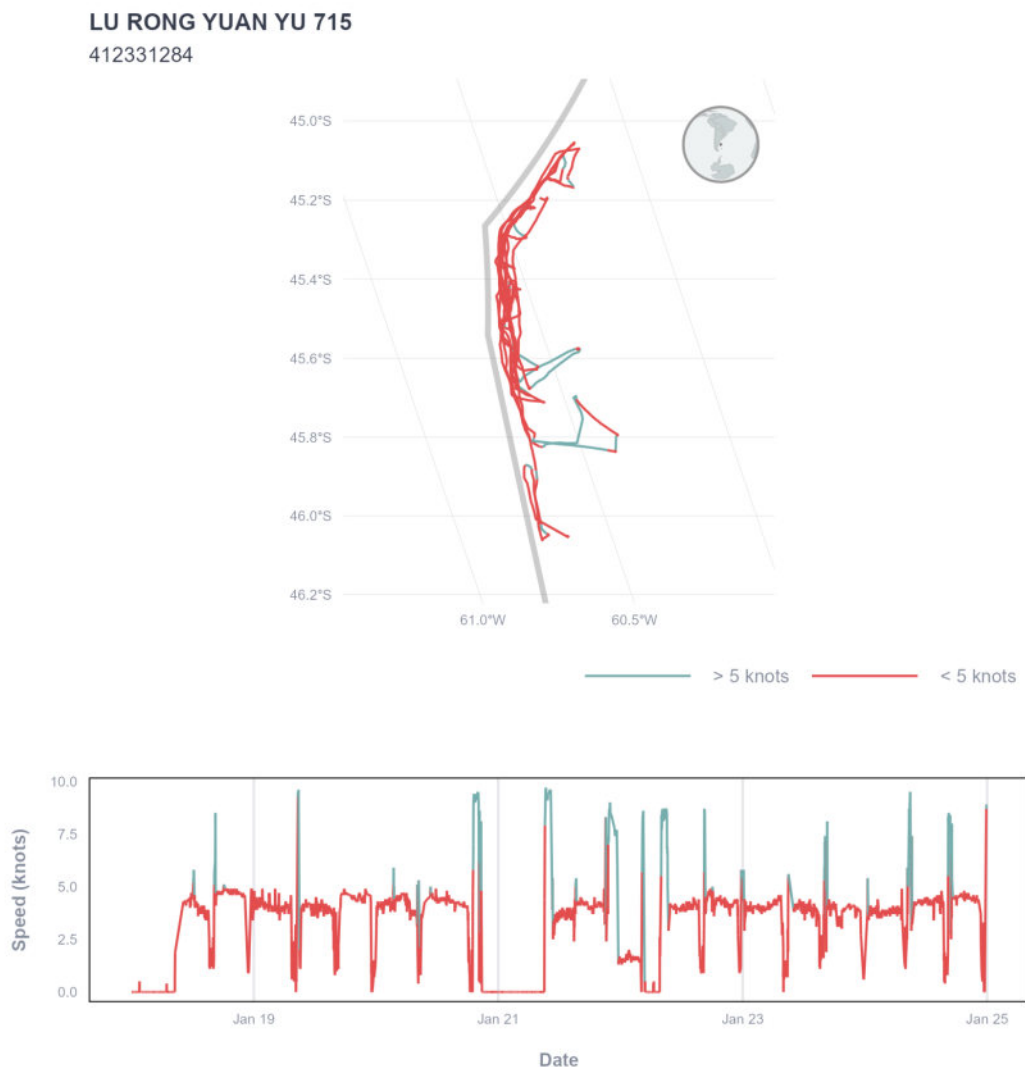


Figure 4: Map and speed profile example of one week of fishing activity by the LU RONG YUAN YU 715 when operating in the Atlantic squid fishing grounds between 18 January 2022 and 24 January 2022. The vessel's track is coloured red when below 5 knots and green when above 5 knots.

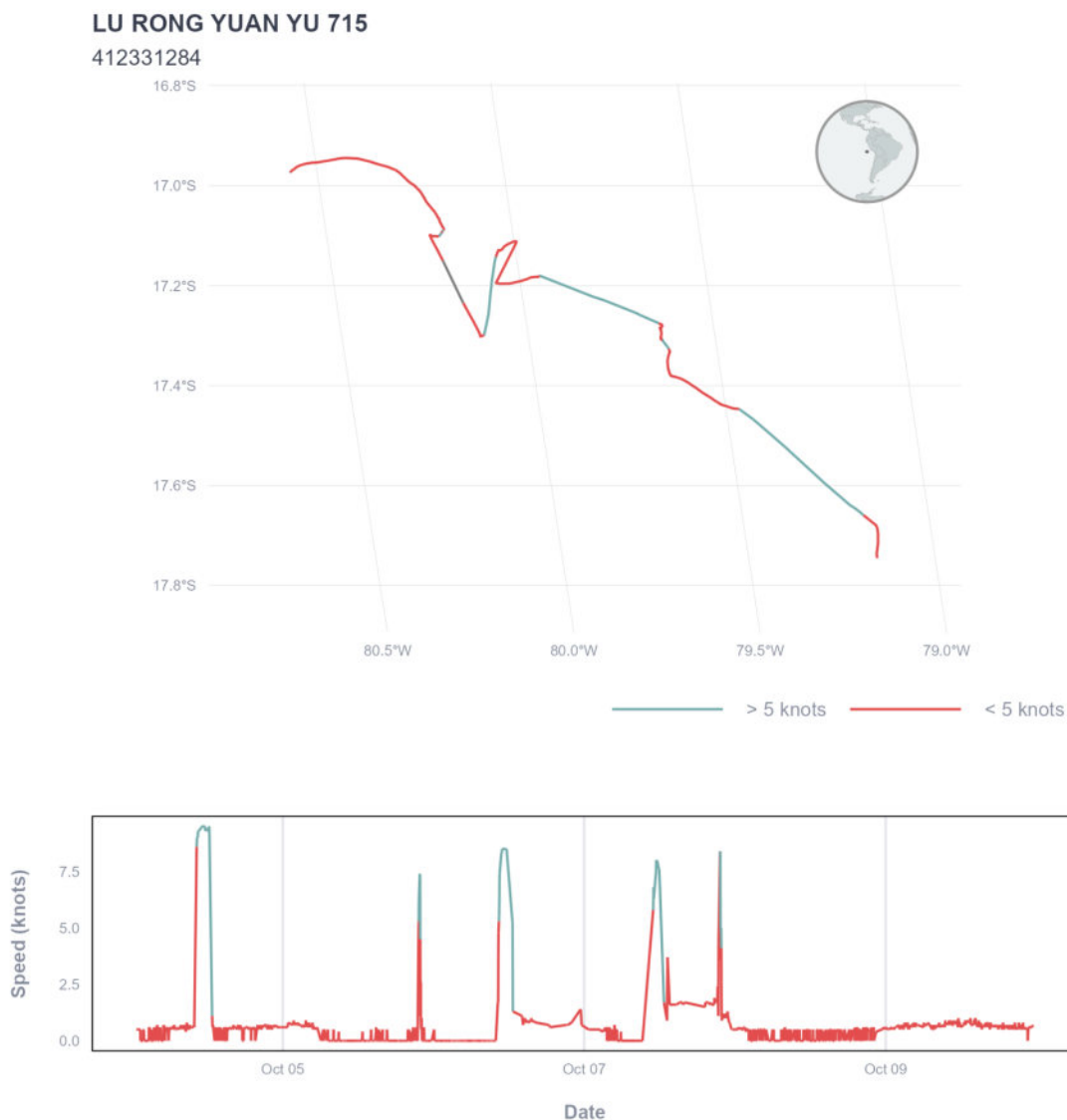


Figure 5: Map and speed profile example of one week of fishing activity of the LU RONG YUAN YU 715 when operating in the Atlantic squid fishing grounds between 04 October 2022 and 10 October 2022. The vessels track is coloured red when below 5 knots and green when above 5 knots.

The LU RONG YUAN YU 715 appears to be obscuring its identity by changing the name on the hull and transmitting different names on AIS depending on its location. The LU RONG YUAN YU 715 appears to be using its official identity in coastal states, and within the SPRFMO Convention Area, where its AIS may receive heightened scrutiny. The vessel is then using the identity FU YUAN YU 715 when operating in the less regulated south Atlantic squid grounds. This has been coupled with an apparent change of gear in the Atlantic ocean that doesn't align with its RFMO authorizations in the SPRFMO region. The vessel name FU YUAN YU 715 is not authorized with any RFMO, although there are many vessels with

the name beginning FU YUAN YU, followed by a number, authorized by both SPRFMO and NPFC⁴ making the name appear credible. This obscuring of identity points to a risk of vessel identity fraud (swapping and sharing of identities between vessels) and may be an indicator of other nefarious activity.

Recommendations

The observed behaviour of the LU RONG YUAN YU 715 is considered high risk because it serves to falsify the vessel identity, including: transmission over multiple MMSIs, changes to transmitted name, the transmission of names that are not associated with any known or RFMO authorised vessel and changing the name visible on the vessel's hull; as well as the suspected change in gear away from its RFMO authorised gear. Specifically [SPRFMO CMM 19-2021](#) requires fishing vessels to have the name marked on the hull and for vessels, from the imagery taken in the South Atlantic in February 2022 the vessel appears to be at the least in contravention of this regulation.

On that basis, it is strongly recommended that the LU RONG YUAN YU 715 (or FU YUAN YU 715) are inspected should they seek to enter a port, with a particular focus on confirming its identity and nationality, including through verification of vessel documents and confirmation of the AIS transponders onboard.

Additionally we recommend that the SPRFMO secretariate confirms the vessel is transmitting VMS, authorising transshipments and reporting catch in the SPRFMO area in 2022 and ensure that no other vessel is reporting on this identity and the VMS matches the same location as the AIS being transmitted by MMSI 412331284.

We encourage any partners that inspect the vessel/s to share with the Joint Analytical Cell any information gained or results of their inspection so that our assessment may be updated. Assistance with the analysis of any findings from an inspection can also be provided.

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⁴ Aside from vessel flag, no clear links have been able to be established between the LU RONG YUAN YU 715 and the authorised FU YUAN YU vessels. Most of the NPFC and SPRFMO registered FU YUAN YU vessels have a home port of Fuzhou, China. The LU RONG YUAN YU 715 and other vessels in this fleet operate out of Shidao, China.

JOINT ANALYTICAL CELL



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