

**INFORMATION ON THE IOTC ELECTRONIC
MONITORING AND REPORTING INFORMATION
SYSTEM (e-MARIS)
CONSULTATION WORKSHOP**

Cape Town, South Africa

25 to 27 October 2017

NPFC DIRECT ENTRY VESSEL REGISTRY

Background:

The North Pacific Fisheries Commission (NPFC), headquartered in Tokyo, Japan is one of the newer Regional Fisheries Management Organizations addressing issues in the world's oceans. After nine years of negotiation processes the NPFC Convention was adopted on 24 February 2012 and came into force on 19 July 2015. The objective of the Convention is to “ensure the long-term conservation and sustainable use of the fisheries resources in the Convention Area while protecting the marine ecosystems of the North Pacific Ocean in which these resources occur”¹. The current Members of the NPFC include: Canada, China, Japan, Republic of Korea, the Russian Federation, Chinese Taipei, the United States of America and the Republic of Vanuatu. The NPFC serves to bridge the gap for the management of the non-highly migratory and non-anadromous fisheries in the North Pacific Ocean, in essence management of those species not covered by any other regional or global organization.

The Executive Secretary, Dr. Dae-Yeon Moon of Korea was selected on 3 September 2015 and the two professional staff; the Science Manager, Dr. Zavolokin of Russia and Compliance Manager, myself, a Canadian, were in place by 1 April 2016. As a new RFMO, NPFC is still in its early developmental stage, but it is notable that with the cooperation of the Members, we have adopted several conservation and management measures (CMMs) addressing: the vessel registration, listing of IUU fishing activities, interim transshipment procedures, addressing vessels without nationality, measures for the management of bottom fisheries and protection of vulnerable marine ecosystems (VMEs) in both the Northwestern and Northeastern Pacific Oceans, on limitations of fishing effort for Pacific saury; limitation on fishing effort for chub mackerel; and high seas boarding and inspection procedures. Key to the successful use of all these CMMs in the operational sense for both science and compliance will be the data management scheme, which is why I am here today. NPFC is very interested in the progress IOTC has made in the development of its e-MARIS.

On the side, in this paper I am taking the opportunity to share our initiative, which is copying a page out of the WCPFC and CCAMLR data books, to develop a web-based direct online vessel registry system for our Members who authorize approximately 1000 fishing vessels to fish each year in our Convention Area.

¹ Article 2, *Convention on the Conservation and Management of High Seas Fisheries Resources in the North Pacific Ocean*

Why select a Members' direct entry vessel registry system?

NPFC keeps a vessel registry for all Member-flagged fishing vessels as well as an interim non-Member carrier vessel register. Our current CMM for the vessel registries requires a full update of all vessels and all details, including photographs, every year before the end of February. This is a rather onerous task for some Members, and has the potential of creating a gap in information regarding vessels authorized in January of the current year that may not appear on the regional register until end February of that year.

A further reason to move to a direct entry system is that it is the responsibility of the Member to provide clear, accurate and complete information for the regional registry. The double entry by the Secretariat without any substantiating original documents can cause errors in posting that could possibly result in complications for the Member and vessel if there were legal proceedings involving identification of the vessel or other similar vessels.

For these two reasons, NPFC decided to follow the practices of WCPFC and CCAMLR and move to a longer term, Members' direct entry vessel registration system, whereby after the vessels is first entered, only updates need to be made, thus eliminating the annual glut in workload for Members, and also the large volume of incoming information to the Secretariat to re-enter all the information for each vessel at the end of February, much of the information being unchanged from the previous year. Further, such a Members' direct entry system brings the responsibility to the Members to keep their vessel information up to date for compliance purposes, and errors, if any, are minimized.

How the system works

Identification or Players

1. Members identify their individual Vessel Registry Data Entry Officers;
2. The Secretariat Vessel Registry Administrator issues a separate ID and password for each of the Members' Vessel Registry Data Entry Officers;

Mandatory minimum data elements

3. The 27 data elements to be entered for each vessel are common to all RFMOs and are detailed in our CMM 2016-01 On Information Requirements for Vessel Registration. Attached is an excel sheet noting the elements. All elements are required for compliance purposes², BUT to facilitate timely registration and operations of the vessel, NPFC has determined a list of mandatory minimum elements required for the registry to accept and upload the vessel. These are identified in the system by a red asterisk (*), said mandatory minimum list of data elements noted in the initial list by the same method.

Preparatory to vessel roll-over to new system

4. NPFC is presently assisting Members to update current vessel lists so that all vessels have the mandatory minimum data elements completed and the system can be rolled

² Member's compliance will be determined based on the entry of **all** required data, consequently it is not sufficient for Members to only enter the mandatory minimum information to meet compliance requirements.

into a training server for use for the next six months, or more. This will alleviate the need for another full entry of all data with possible double entry errors.

Assignment of UVI

5. At the time of rolling over of the current the vessel data, the system will assign a unique vessel identifier to each vessel which will stay with the vessel at all times while on the register, regardless of flag changes or disabling of the vessel from the data base³.

Training

6. The system developer, 80 Options of Australia, have developed clear step-by-step instruction manuals for each Members' Vessel Registry Data Entry Officer and the NPFC Secretariat will be conducting WEBEX training sessions with Members to enable them to become familiar with the new system, and enter their own vessel data. The Secretariat is of course always available to assist Members should problems occur.

How the system operates

7. Upon completion of the vessel entry, or changes, the Officer uploads the changes and it rests in the depository until verified by the Secretariat after which it is uploaded to the system. If minimum data elements are not met, then the system will not upload the vessel.
8. If there is simply a change in data elements for the vessel, the Member data entry officer can simply enter the UVI for the vessel and all the information for the vessel is uploaded for his/her revision.
9. There are built-in alerts to both the Secretariat and the Member respecting a vessel's authorization period prior to it becoming invalid. If the vessel authorization period has become invalid the Secretariat shall seek clarification with the appropriate Member before disabling the vessel from the system.
10. A Member may enter more than one authorization period, e.g., if a vessels is authorized to fish squid and also overlapping in the period, is also authorized to fish mackerel, this can be accommodated in the new registry with accompanying authorization numbers and dates for each fishery.
11. Members may delete or disable a vessel from the system, however they only have the authority to revise, disable or delete one of their own flag vessels, or a non-Member vessel which they authorized. Disabling the vessel removes it from the list, but it can be recalled at any time for revision and re-activation by entering the UVI. If a vessel is deleted, it will be removed from the register, but not from the database and it can be retrieved and the page re-populated using the UVI.
12. A further advantage to the new system is that it will record all actions, times and identify the individual who made the changes, which will provide a full history of events regarding that vessel. This allows for checking whether a vessel was registered at a previous point in time, or how many registered vessels of different types there have been over time. Also, having the history of vessel owners, operators, etc. may be useful

³ The IMO number could not be used due to the fact that agreement and mechanisms for its widespread use for all fishing vessels has not yet been completed at the time of writing this paper, however it is expected that IMO will agree with changes to enable a vessel 12m or greater that fishes outside its national jurisdiction to be issued an IMO number regardless of its construction materials.

when assessing draft IUU listings, and it might also be useful for sharing information between RFMOs.

13. We are working on a bulk upload facility, e.g., to upload several changes in authorization periods simultaneously, but if they come with different authorization numbers for each vessel, we may have to resort to a CSV upload, which we would prefer not to use due to its unique complexities.
14. The system also has a function for migrating an existing list of vessels from a registry provided the mandatory minimum data elements are present for each vessel.

In this manner, Members truly become responsible for the data accuracy of their fleets on the RFMO vessel registry and the Secretariat serves in its appropriate support role as overseer.