## French Polynesia is 'OnBoard': implementation of an electronic logsheet application for longline fishing vessels



Captain Taura Tehahe is using the OnBoard app. on his fishing vessel Vini Vini 9 (image: Malo Hosken).

In 2016, the Oceanic Fisheries Programme (OFP) of the Pacific Community (SPC) developed the Android application 'OnBoard'. This application allows captains of tuna longline-fishing vessels to electronically fill in and send a report of their effort and catch data, which is commonly known as the logsheet, to their fisheries authorities. The application works offline while the vessel is at sea. The data is easily transmitted once in the reach of connectivity when back in port. OnBoard data integrates with the tuna data management system TUFMAN2 that is used by all the fisheries authorities in the Pacific Island countries and territories (PICTs).

Initial field tests were successfully carried out in collaboration with a vessel captain in New Caledonia who was equipped with a ruggedised tablet and OnBoard. Regular feedback from the captain allowed SPC to improve the application.

In French Polynesia, the fisheries authorities (*Direction des Resources Marines et Minières* – DRMM) manage the activities of 61 domestic longline vessels, including the collection of vessels' logsheets.

In July 2017, in collaboration with SPC, DRMM launched a four-vessel trial. Starting the trial with only four vessels allowed DRMM staff to familiarise themselves with this new tool in order to be able to provide technical support to captains when returning from their fishing trips. The trials were carried out with success and with all four vessels submitting all their logsheets electronically during the remainder of 2017. The success of the trials is also attributed to DRMM taking sufficient time to meet and collaborate with vessels' owners and captains.

In January 2018, after the success of the first trials, DRMM decided to roll out OnBoard to the entire

fleet of longline vessels; again, through a collaborative approach with the fishing industry. In March 2018, two SPC agents assisted DRMM staff in beginning the full-scale implementation.

DRMM purchased 21 tablets to this effect and signed letters of agreements with the vessel operators, which explained the conditions under which a tablet is lent to a fishing vessel for the purpose of using OnBoard. The roll out to the 21 vessels is incremental in order to ensure DRMM staff can provide timely and quality support to the new users. A third roll out will be introduced later in 2018 to finish the implementation.

So why did French Polynesia decide to implement OnBoard to its entire fleet of 61 tuna longline vessels? It comes down to major efficiency gains:

Efficiency of the new logsheet collection process. With paper logsheets, it used to require significant efforts by DRMM staff members to track down the captains or vessel owners to collect the data. With OnBoard, the electronic logsheets are sent to the database system on the same day that the vessels return to port. Efficiency in data quality. OnBoard features data entry checks that ensure that captains enter data more accurately. Captains can still make mistakes, but the DRMM staff members have more time at hand to check for those mistakes, since they no longer need to transcribe the logsheet data into the database.

How did French Polynesia successfully implement OnBoard? It was essential to have a well-planned trial phase, which included good collaboration between all parties. The investment of DRMM staff time into providing quality training and support to vessel captains was likely the key ingredient of this successful implementation recipe.

Moeana Jo-Ann Pere, from DRMM, provides insight into the training and support aspect of the implementation:

Given our experience from the trials, we held the training sessions in a comfortable location, where it was possible for the captains to concentrate and still be relatively close to their vessels. Holding the trainings on their vessels was not ideal because their owners were regularly disturbed. On average, a training session lasted one and a half or even up to two hours. During the training, it was important to pay attention to the degree of ease with which the captains used the tablet and OnBoard so that the speed and details of the training could be adjusted. It was also important to listen to the captains' questions and stories. The training also included a species identification booklet and a colour printed OnBoard's user manual. We have close relations with our captains, based on mutual respect. We don't hesitate to take time to meet with them in person as soon as they return to port. Those approaches have helped create a real feeling of ownership of the OnBoard project by the captains.

Current regulations require the submission of a hard-copy logsheet that is signed by the captain. This was a challenge in this electronic transition. To overcome this, SPC developed 'Export OnBoard' – a feature that allows one to export the electronic logsheet into a printable format. When the captains upload their electronic logsheets, they validate them through signing by using the tablet's stylus. The signature can then be transposed to the printable version.

Captain Tauraa Tehahe is widely recognised as the best offshore fisher in French Polynesia. Accustomed to electronic tools, he was eager to try this new tool that he had been hearing about. He has already submitted two logsheets since his training in March of this year and he is 'OnBoard' with this progress! He is so keen that he uses OnBoard on a tablet but has also installed it on his own smartphone. It is always good to have a backup when using electronic equipment.

In conclusion, Vaiana Joufouques who is in charge of this project at DRMM says:

The implementation of OnBoard in French Polynesia is a major project for the country and we hope it will also have echoing effects in the region. OnBoard saves us data collection time and also allows us to integrate logsheet data with other fisheries data for making timely and informed management decisions. We are very happy to have benefited from the assistance of SPC staff during OnBoard's roll-out and we encourage our fellow member countries to consider this new tool and to create a collaborative environment to allow for its successful implementation.

## For more information:

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OnBoard training – Left to right: Bruno Deprez (SPC), Moeana Jo-Ann Pere (DRMM), Captain Mataiva Arai and Teremoana Taioho-Aumeran (DRMM) (image: Malo Hosken).