

Vessel Day Scheme

South Pacific Forum Fisheries Agency (FFA)



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Parties to the Nauru Agreement (PNA)



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Current Parties:

Federated States of Micronesia, Kiribati,
Marshall Islands, Nauru, Palau, Solomon
Islands, Papua New Guinea, and Tuvalu.

Key Facts

- Vessel Day Scheme (VDS) developed to allocate fishing days
- Operated jointly by FFA & PNA Secretariats
- PNA controls 25% of the world's Skipjack tuna supply
- PNA Waters cover 14.3 million sq. km
- 1000+ Ships Reporting
- 40,000+ fishing days reported per year

Project Overview

Implemented as a reporting function of the Forum Fisheries Agency vessel monitoring system, the Vessel Day Scheme (VDS) allows vessel owners to purchase and trade days fishing at sea, in places subject to the Nauru Agreement (see map).

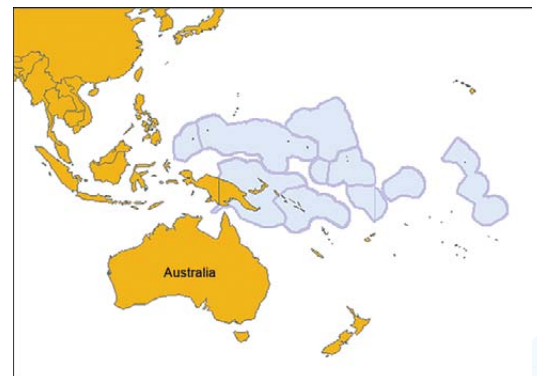
Fishing Days are derived from the hourly GPS positions reported to the Forum Fisheries Agency vessel monitoring system, and apportioned based on the Exclusive Economic Zone of each PNA Member.

Access to reports is via Absolute Software's on-line Fleet Information System (appropriate security restrictions limit all access to sensitive information). VDS Trip Details are already generated for all vessels; so the system can support any future extension to cover high-seas reporting and/or inclusion of additional vessel types (beyond Purse Seiners).

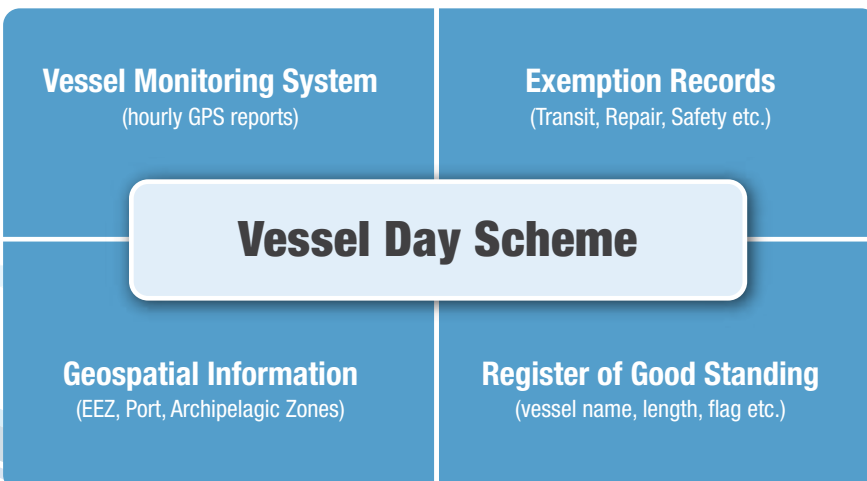
New features include an on-line process for recording and viewing VDS Exemptions, and additional reporting options for ad-hoc queries.



Approximately 1.2 million metric tonnes of tuna are caught in PNA waters annually.

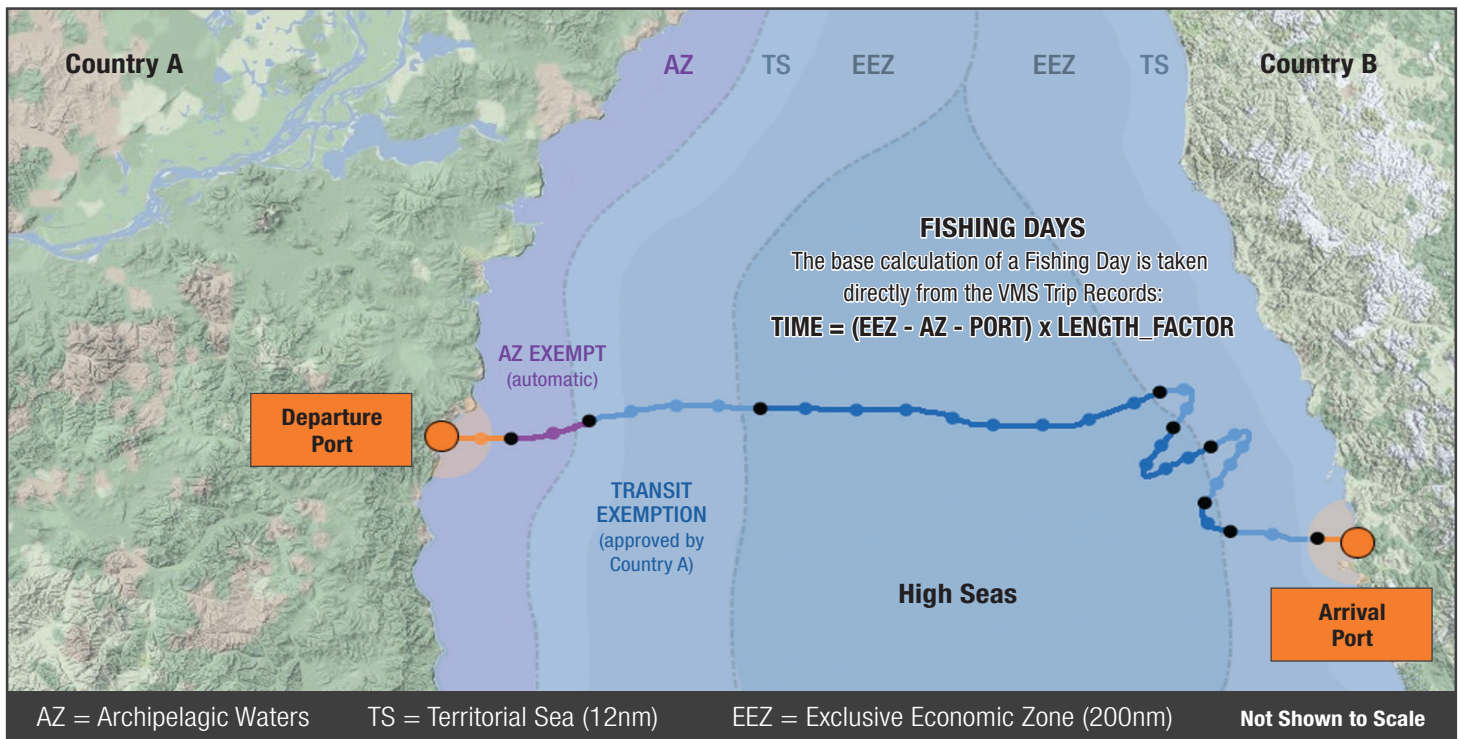


Blue Areas indicate the extent of the Exclusive Economic Zones (EEZs) for Parties to the Nauru Agreement (PNA Members) operating the Vessel Day Scheme (VDS).



The VDS initially considers all activity within an EEZ as part of a Fishing Day. Exemptions to portions of this activity are then applied. Automatic Exemptions are performed by the system. Manual Exemptions must be requested by the vessel operator.

Below is an example of a hypothetical fishing trip from a departure port in Country "A", through exemption areas and high seas, to an arrival port in Country "B". The black circles indicate the timing of each Trip Segment based on the VMS position reports received.



The Vessel Day Scheme relies on these sources to accurately calculate Fishing Days:

Vessel Monitoring System

The VMS takes GPS position data and generates Trips as follows:

- Each entry to an area triggers a Trip Start
- Each exit from an area triggers a Trip Stop
- Five area types are relevant to the VDS program (High Seas, EEZ, AZ, TS, PORT)

Trips are timed on a 'first-in' to 'first-out' reporting basis:

- Although there is an inherent margin-of-error when timing individual trips (due to the hourly VMS reporting interval), these timing errors average towards zero
- The 'first-in/first-out' trip-timing algorithm yields highly accurate results over a large dataset

Exemptions

Automatic Exemptions apply to the following:

- Time spent within designated Port Areas
- Time spent within Archipelagic Waters and/or Territorial Seas
- Exempt activities under specified treaties

Manual Exemptions can also be requested. These are processed as follows:

- Transit (non-fishing), repair, health & safety related reasons
- The vessel operator must request the exemption directly from the relevant PNA Member(s)
- Following approval, the exemption is entered into VDS

Geospatial Information

The Vessel Day Scheme relies upon polygons defining:

- PORTS - Designated VDS Port Areas (buffered to a distance of 3 nautical miles)
- AZ/TS - Archipelagic Waters (where applicable) & Territorial Seas
- EEZs - Entire Exclusive Economic Zone (encompassing all TS and AZ areas also)

Incorporating data supplied by the *Pacific Islands Applied Geosciences Commission* (<http://www.sopac.org>)

The Register of Good Standing

The Vessel Day Scheme relies on vessel details recorded on the Register of Good Standing. To ensure accurate VDS calculations, it is essential that all vessel details are up-to-date. Any changes should be promptly reported to FFA through the Good Standing Application process. VDS Reports will then incorporate any corrections (usually by the next monthly reporting cycle).