

**DRAFT MINIMUM STANDARDS FOR AUTOMATIC LOCATION  
COMMUNICATORS (ALCs) USED IN THE COMMISSION VESSEL  
MONITORING SYSTEM**

Pursuant to Article 24 (8) of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (Convention), the Commission hereby establishes the following minimum standards for ALCs:

1. The ALC shall automatically and independently of any intervention on the vessel communicate the following data:
  - (i) ALC static unique identifier;
  - (ii) the current geographical position (latitude and longitude) of the vessel; and
  - (iii) the date and time (expressed in Universal Time Constant [UTC]) of the fixing of the position of the vessel in paragraph 1 (ii) above.
2. The data referred to in paragraphs 1 (ii) and 1 (iii) shall be obtained from a satellite-based positioning system.
3. ALCs fitted to fishing vessels must be capable of transmitting data referred to in paragraph 1, hourly.
4. The data referred to paragraph 1 shall be received by the Commission within 90 minutes of being generated by the ALC, under normal operating conditions.
5. ALCs fitted to fishing vessels must be protected so as to preserve the security and integrity of data referred to in paragraph 1.
6. Storage of information within the ALC must be safe, secure and integrated under normal operating conditions.
7. It must not be reasonably possible for anyone other than the monitoring authority to alter any of that authority's data stored in the ALC, including the frequency of position reporting to that authority.
8. Any features built into the ALC or terminal software to assist with servicing shall not allow unauthorized access to any areas of the ALC that could potentially compromise the operation of the VMS.
9. ALCs shall be installed on vessels in accordance with their manufacturer's specifications and applicable standards.
10. Under normal satellite navigation operating conditions, positions derived from the data forwarded must be accurate to within 100 metre<sup>2</sup> Distance Root Mean Squared (DRMS), i.e. 98 per cent of the positions must be within this range.
11. The ALC and/or forwarding service provider must be able to support the ability for data to be sent to multiple independent destinations.
12. The satellite navigation decoder and transmitter shall be fully integrated and housed in the same physical enclosure.
13. In the case that the antenna is mounted separately from the physical enclosure, a single common antenna shall be used for both satellite navigation decoder and transmitter, and the physical enclosure shall be connected using a single length of unbroken cable to the antenna.