



E-reporting and E-monitoring Intersessional Working Group

Agreed Minimum Standards of the WCPFC EM Program Audit Questionnaire

9 September 2026

Discussion paper submitted by the ERandEM IWG Chair

As referenced in [Circular 2026/86](#), These agreed minimum standards are part of the Commission Audit process for the WCPFC Electronic Monitoring Program (EMP); questions related to the standards are asked during the audit process to determine if a program is fulfilling the required standard, or whether the program may need assistance to help achieve the required standards. The majority of the agreed minimum standards for the WCPFC EMP were generated and discussed during the *ERandEMIWG9/TCC20/WCPFC21*.

To assist auditors in understanding the context of each program, EMPs should provide a comprehensive, high-level description of their EM program. As appropriate, this description could include:

- program scope (e.g., covered vessels, fisheries, and program objectives);
- Operating model (e.g., regulatory or voluntary framework, roles of technology providers and service partners, and footage review procedures);
- Technology architecture (e.g., wireless versus hard-drive data transfer, cloud-based versus local storage, and the use of artificial intelligence or automated tools);
- Coverage and review rates; and Compliance, enforcement, and independence mechanisms (e.g., organizational separation of functions, conflict-of-interest safeguards, and measures to maintain the independence of data review and analysis processes).

Providing this information will help auditors better understand the design and implementation of each program and support a more effective and consistent assessment against the agreed minimum standards.

If the Secretariat finds a deficiency during the program audit regarding compliance with one or more of the minimum standards, the CCM or sub-regional program shall be contacted and notified of the deficiencies. The CCM or sub-regional program will work with the Secretariat

to correct the deficiencies within 90 days or some other time frame determined by the Secretariat in consultation with CCM or sub-region program concerned.

All authorized EMPs and sub-regional programs will be reviewed every **X (TBD)** year in order to ensure they continue to meet the Commission’s minimum standards. CCMs shall ensure EMPs and sub-regional programs are refined, as necessary, and within the agreed upon time frame, to meet any further standards adopted by the Commission.

This questionnaire includes questions that would be asked during an interview. If a question is not relevant to your program N/A should be placed in the comments area. If there are any further questions or clarifications required, please contact the **[WCPFC EMP Audit & Training Consultant] PLACEHOLDER**

Name of person/s and positions attending the interview/ filling out the questionnaire -

Name of Program-

EM Programme Description overview - How Onboard EM Systems meet Minimum Standards

[EMP to insert text describing how they meet the Onboard EM System Component SSP minimum standards]

FMS= fully meets standard, SMS = substantially meets standard, BS= below standard

EM System Component	EM Standard (Mandatory Requirements)	Auditor Question (Programme-Level)	Examples of processes and controls that could support demonstrating SSPs are being met	Auditor Comments / Findings	FMS	SMS	BS	N/A
Control Centre SSP 1(a)-(d), (g)-(h)	EM systems must control onboard EM hardware, maintain operation from vessel power, store system health information, provide sufficient storage capacity for EM records, support secure storage/transmission/access of EM records, and store records in formats compatible with DRC review systems.	Can the EMP demonstrate that documented processes and controls are established and implemented to ensure SSP1(a)-(d)-(g)(h) is being met?	Examples include: equipment specifications; solution design documents; manufacturer's technical manuals; program requirements; contractual requirements for technology provider;		☐	☐	☐	☐

	Link to standard		system health logs; hardware specifications listing hard drive capacity; secure file transfer procedures					
User Interface SSP 2(a)-(c)	EM systems must include an onboard display, provide visibility of system health status and camera imagery, and restrict configuration changes to authorised users. Link to standard	Can the EMP demonstrate that documented processes and controls are established and implemented to ensure EM systems provide those on board with visibility of system status and camera operation, while maintaining appropriate controls over system configuration and user access, in accordance with SSP 2(a)-(c)?	Examples include: user interface specifications; access control management policy defining authorized roles and permissions; system manuals.		☐	☐	☐	☐
Cameras SSP 3(a)-(c)-(e)-(f)	EM systems must include cameras capable of capturing required fishing activity, with sufficient coverage, minimum image quality standards, minimum frame rate (5 fps where species identification is required), minimum resolution (720p where species identification is required),	Can the EMP demonstrate that documented processes and controls are established and implemented to ensure EM systems can collect imagery and associated data of sufficient quality and coverage to support monitoring and review requirements, in accordance with SSP 3(a)-(c)-(e)-(f)?	Examples include: camera specifications; camera placement standards and processes to re-assess placement appropriateness; camera footage screenshots; imagery quality standards;		☐	☐	☐	☐

	appropriate recording formats, and required metadata.		acceptance testing using checklists or recorded footage to verify complete field of view and mandatory metadata fields.					
Geolocation Device SSP 4(a)-(b)	EM systems must record vessel location, date and time information in a format capable of integration with EM records and ensure devices are installed in accordance with manufacturer requirements. Link to standard	Can the EMP demonstrate that documented processes and controls are established and implemented to ensure EM systems capture and integrate vessel position and time data with EM records, and that installation requirements are consistent with manufacturer specifications, in accordance with SSP 4(a)-(b)?	Examples include: geolocation specifications; approved equipment lists; installation procedures; data validation procedures confirming metadata accompany each recording.		☐	☐	☐	☐
Weather Resistance SSP7	EM equipment installed on deck must be rugged enough to withstand harsh marine conditions, including exposure to water, dust, salt, impacts, and vibration, so it continues to operate reliably during normal fishing activities.	Can the EMP demonstrate that documented processes and controls are established and implemented to ensure EM cameras and sensors installed on deck are weatherproof and durable enough to keep working reliably despite rain, seawater,	Examples include: technical standards and equipment specifications; installation records; routine inspections; program performance records; corrective action processes.		☐	☐	☐	☐

	Link to standard	dust, rough handling, and vessel vibration?						
Tamper Resistant and Tamper Evident SSP8 (a)	EM equipment must be built to resist damage or interference and include features that make any tampering or unauthorized changes easy to detect. Link to standard	Can the EMP demonstrate documented processes and controls are established and implemented to ensure EM systems are robust and tamper evident.	Examples include: technical standards and equipment specifications; system health monitoring procedures requiring review of fault and alarm logs; incident reporting procedures; routine inspections.		☐	☐	☐	☐
Compatibility with Other onboard Equipment SSP9	The EM system must be installed and operated so that it does not interfere with other vessel equipment, and other electrical equipment does not disrupt the EM system's ability to collect and store reliable data.	Can the EMP demonstrate that processes, controls, and documented procedures are established and implemented to ensure EM systems work properly alongside other equipment on the vessel without interference with other electrical systems onboard.	Examples include: technical installation standards; processes to respond to interference issues.		☐	☐	☐	☐

	Link to standard							
Compatibility with DRC Review Software SSP10	EM data must be saved in a format that can be opened and reviewed by the required analysis software, or it must be easily converted into a format the software can use. Link to standard	Can the EMP demonstrate that processes, controls, and documented procedures are established and implemented to ensure EM systems store records in a way that allows reviewers to access, analyse, and use the data without compatibility problems.	Examples include: technical standards defining approved video, data, and metadata formats compatible with the designated EM review software; acceptance testing.		☐	☐	☐	☐
System Health Status SSP12	The EM system must clearly show on the onboard display whether it is working properly, and it must keep a record of its own health and performance so the monitoring program can check that it is operating correctly. Link to standard	Can the EMP demonstrate that documented processes, controls, and procedures are established and implemented to ensure EM systems provide visible operational status indicators and maintain system health logs that identify equipment performance issues, faults, or failures?	Examples include: system requirements; system manuals.		☐	☐	☐	☐

EM system installation SSP13	The vessel owner or designated representative must provide the EM Service Provider with information on the vessel's configuration and systems necessary to facilitate EM system installation and ensure the vessel and appropriate personnel (e.g., engineers, fishing master, and multilingual staff) are available. The vessel owner or representative must also provide the EM Service Provider with unrestricted access to the vessel, including access to the ship's power supply, as necessary to complete the EM system installation. Link to standard	Can the EMP demonstrate that processes, controls, and documented procedures are established and implemented to ensure the vessel owner cooperates with the EM installer by providing vessel information, allowing access to the ship and its systems, and making sure the right people are available to help complete the installation.	Examples include: documentation, records, monitoring activities, and compliance assurance processes that demonstrate approved Vessel Monitoring Plans (VMPs); installation standards or installation processes.		☐	☐	☐	☐
Vessel Monitoring Plan (VMP) SSP14	Each vessel must have an approved VMP that explains how the EM system is installed, operated, maintained, and supported. The VMP must be updated when changes occur, and provide details on vessel information, EM equipment setup, camera locations, operating procedures,	Can the EMP demonstrate that processes, controls, and documented procedures are established and implemented to ensure that each vessel has a current and approved VMP and how compliance with this requirement is verified and documented?	Examples include: approved VMP; version control and review procedures; audit or inspection reports; corrective action records;		☐	☐	☐	☐

	maintenance responsibilities, system faults, and data submission processes. Link to standard							
Field and Technical Support Services SSP15	The vessel owner/operator must follow the responsibilities outlined in the VMP, including taking care of the EM system, reporting any problems quickly, and following the required steps when equipment failures occur. The EM Program must clearly define what actions the vessel should take for different types of system problems. Link to standard	Can the EMP demonstrate that there are documented procedures in the VMP that define vessel responsibilities for various EM system failure scenarios and that tracking and compliance controls are in place to monitor and verify vessel owner/operator adherence to VMP requirements?	Examples include: EM regulation; EM enforcement processes and penalties; monitoring processes.		☐	☐	☐	☐

EM Analysis Software SSP16	The EM analysis software must be compatible with the types of files and data produced by EM systems, allowing reviewers to extract reliable EM data and export it in a format that meets agreed data requirements for WCPFC reporting and databases. Link to standard	Can the EMP demonstrate that documented systems, controls, and procedures are established and implemented to ensure that DRC EM analysis software is compatible with EM record formats, supports accurate data extraction, and generates EM data that meets the required standards for integration into WCPFC databases?	Examples include: acceptance testing; documented tests of exported EM data files confirming they meet required structure, fields, and formatting requirements; records of successful data transfers		☐	☐	☐	☐
EM Analysis Workstations SSP17	The DRC must provide EM analysts with suitable workstations that allow them to efficiently review EM records and produce accurate EM data. Workstations must have the necessary hardware, software or cloud-based tools, reliable internet and data transfer capabilities, secure storage and access to EM records, an ergonomic workspace that supports analyst health and productivity, and safeguards to protect commercially sensitive and confidential information.	Can the EMP demonstrate that systems and controls are established and implemented to ensure the DRC maintains EM analysis workstations with appropriate hardware, software, network capability, security controls, and ergonomic design to support efficient EM record review, accurate data analysis, and the protection of confidential information?	Examples include: EM analysis software version and licensing records; workstation requirements; information security processes; internal audit reports and corrective action processes.		☐	☐	☐	☐

	Link to standard							
EM Analysts SSP18	EM records must be reviewed by trained EM analysts who have the knowledge and skills to accurately analyze fishing activities. Analysts must complete approved training and be independent, with no conflicts of interest, such as working for a fishing company involved in the fishery they are reviewing. Link to standard	Can the EMP demonstrate that documented systems, controls, and procedures are established and implemented to ensure EM analysts are appropriately trained, competent to analyse EM records, and free from actual or perceived conflicts of interest that could compromise the independence and integrity of EM data review?	Examples include: EM analyst qualification requirements; training records; competency assessment results; refresher training records; conflict of interest and confidentiality declarations.		☐	☐	☐	☐

New Storage of EM records and EM data SSP20	EM records and associated EM data must be retained for a period of [1 year after the Annual Report Part 1 deadline] and in accordance with any WCPFC data confidentiality and data storage requirements. Link to standard	Can the EMP demonstrate that documented systems, controls, and procedures are established and implemented to ensure EM records and associated EM data adhere to the retention standard and in accordance with any WCPFC data requirements?	Examples include: standard operating procedures for data lifecycle management; database records showing trip ingestion dates, and scheduled purge eligibility dates; binding contracts with third-party EM service providers that explicitly mandate the retention clause.		☐	☐	☐	☐
New EM Records Analysis and Development of EM Data SSP21 (a)-(b)	The EM Programme and its analysts must process EM records according to Flag State data field standards while adhering to WCPFC-mandated coverage and analysis rates. Link to standard	Can the EMP demonstrate that documented systems, controls, and procedures are established and implemented to ensure EM analysts are reviewing EM records to generate EM Data to Flag State data field standards while adhering to WCPFC-mandated coverage and analysis rates?	Examples include: Standard Operating Procedures provided to EM analysts, explicitly referencing the Flag State Minimum Data Field Standards; contracts with EM service providers that legally bind them to perform reviews according to Flag State specifications and WCPFC coverage targets; protocols		☐	☐	☐	☐

			demonstrating how trips/sets are systematically or randomly chosen for analysis.					
New EM Data Quality Review for Quality Assurance SSP22 (a)	The EM programme must establish a data quality review process, and the EM data quality review must be conducted by a person other than the primary EM analyst. Link to standard	Can the EMP demonstrate that documented systems, controls, and procedures are established and implemented to ensure a data quality review process is established and the EM data quality review is conducted by a person other than the primary EM analyst?	Examples include: official QA/QC protocols explicitly mandating data quality reviews, outlining selection criteria and prohibiting primary analysts from reviewing their own work; workflows illustrating the two-tier review pipeline; sample evaluation reports and accuracy scoring sheets comparing primary vs. secondary reviewer outputs for individual trips.		☐	☐	☐	☐