Western and Central Pacific Fisheries Commission

9th E-Reporting and E-Monitoring Intersessional Working Group Meeting

16 June 2026

Online

10:00am - 2:00pm (Pohnpei time)

Agreed Minimum Standards of the WCPFC EM Program Audit Questionnaire

ERandEMIWG9-2026-03_suppl_Rev01[1]

15 June 2026

[1] This version includes additional feedback received after initial posting.

Agreed Minimum Standards of the WCPFC EM Program Audit Questionnaire

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 *ERandEMIWG 9/TCC22/WCPFC23.*

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 kept under continuous review by the Secretariat 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 is an example of 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 attending the interview/ filling out the questionnaire -

Position-

Name of Program-

Commented [USA1]: We would like to confirm that the questions contained in the document are the actual questions that would be asked during an audit, or just examples?

It would also be helpful to include information as to whom should be filling out the answers and comment fields- is it the Secretariat staff based on the interview with the CCM program lead, or is it the CCM program lead themselves?

A general comment is also to add numbering to sections and questions so they can be easily referenced.

Authorization Process Authorization process is the standards required to obtain authorization to be part of the WCPFC EMP. The process of gaining authorization is to be carried out following an audit of the program to ensure that standards are in place or are being developed.	**Standard Required** The Secretariat will authorize national EM programs rather than individual vessels; this is consistent with the Convention text. *ERandEMIWG9/TCC22/WCPFC23.* **WCPFC EMP expectation on the authorization process.** CCMs seeking authorization to have their national EMP included in the Commission EMP shall submit an application to the Secretariat declaring that their EMP meets the minimum standards adopted by the Commission, along with supporting documentation demonstrating compliance with those standards. Relevant CCMs may also nominate sub-regional EMPs for inclusion in the Commission's EMP through this application process. All such programs will be required to: ~~1. Provide manuals used by the EM analyst to review EM records~~ ~~2.~~1. Provide one Vessel Monitoring Plan for each vessel size class ~~3.~~2. Provide a comprehensive, high-level description of the EM program, including its scope (e.g., covered vessels and objectives); operating model (e.g., regulatory or voluntary framework, role of technology partners, and footage review procedures); technology stack (e.g., wireless vs. hard drive uploads, cloud vs. local storage, and use of AI); coverage and review rates; enforcement mechanisms and maintenance of independence of DRC such as Organizational separation and conflict-of-interest. ~~4.~~3. Sample of image stills or screenshots of video footage being annotated by EM data records analysts
1. Has the program supplied all ~~3~~ of the deliverables above to the Secretariat? Yes ☐ No ☐	
Comment	
~~What is the process in place to ensure vessels in the EM program meet all of the Minimum Standards Technical Standards required by the Commission?~~ 2. What process is in place to verify that all vessels participating in the EM program comply with the Commission's Minimum Technical Standards, including requirements for equipment, ~~data quality~~, installation, and operational performance? Please provide examples or supporting documentation demonstrating how the CMM tracks, monitors, and manages participating vessels to ensure compliance with the Commission's Minimum Technical Standards. This may include procedures, vessel compliance records, installation and testing documentation, compliance reviews, corrective action records, audit reports, monitoring logs, or other verifiable records that demonstrate compliance is being systematically tracked, verified, and maintained.	
Comment	

Commented [JFA2]: Japan would like to clarify the reason why providing VMPs for each size class is required in the authorization process. Can any other categorizations other than size class (e.g., fresh or frozen) be considered depending on flag states?

Commented [A3]: ISSF: and how they will collect minimum data requirements.

Commented [JFA4]: These elements depend on what kinds of EM programs are authorized by WCPFC, which should be discussed not in the audit questionnaire but from a broader perspective (in agenda item 2.a). Hence, this part should be removed from the questionnaire at this point.

Commented [LH5R4]: Could sit outside these boxes.

Commented [JFA6]: Is sample annotated data treated as confidential data?
Despite being sample, we still suggest that these data should be confidential because some EM prividers will require to do so for their data.

Commented [LH7]: The revised framing of audit questions are in response to suggestion from Pew to better reflect the nature of a program-level audit and ensure that the questionnaire captures the ongoing operational capacity of each program rather than a snapshot in time.

Commented [LH8R7]: More refinement of audit questions to focuses on the existence of documented evidence and verifiable records, allowing the auditor to determine conformance based on objective evidence rather than making a subjective judgment about the adequacy of the EM programs processes.

Commented [JFA9]: We would like to clarify what should be verified in this question.

ITEM **On-board EM System Component**	**General Description**
	Onboard EM Systems comprise all vessel components supporting the acquisition of and reporting of EM Records. Onboard EM Systems MUST be configured such that they allow generation of the data fields set out in the EM data requirements. The core EM System components covered in these Specifications, Standards, and Procedures (SSPs) are: control center, user interface, cameras, geolocation device, uninterruptible power supply, sensors, and communication system. Together, these components ensure that required information is collected, including system health status, to support fisheries management and enforcement objectives.
	WCPFC EMP expectation on the following On-board System Components
Geolocation Data and Device A device that is used to capture information on vessel position that can also be used to determine vessel speed and heading.	Geolocation Data and Device a. A geolocation device MUST record vessel location coordinates and the associated date and time in a format capable of integration with EM Records b. The geolocation device MUST be installed and remain in a location in accordance with the manufacturer's guidelines such that the device can reliably function.
Tamper Resistant and Tamper Evident The entire system and its data must be designed to be tamper-resistant (difficult to modify without authorization) and tamper-evident (any attempts at unauthorized modification are clear and easily detectable).	Tamper Resistant and Tamper Evident a. The onboard hardware MUST be robust and tamper evident to mitigate the risk of intentional sabotage or malfunctions. This MUST include physical and/or software features.
System Health Status The system needs self-monitoring capabilities to detect and report issues such	System Health Status a. The system SHOULD execute a system health test either automatically or when initiated by user and MUST provide a visual signal on the display that the system is operational (i.e., it should

Commented [USA10]: Since this is a "MUST", we suggest a question/comment section be added right below this "general description" section that asks about the process in place to ensure the EM system generates a log file.

Commented [LH11R10]: Added question #5

as power failures, sensor malfunctions, camera outages, or tampering attempts. This information is often transmitted to the data review center, allowing managers to confirm the system is operational and the data is reliable.	be obvious, simply by looking at the display, whether or not the system is working properly). b. The EM system MUST be able to generate a log file that allows an EM program to determine the operational health status of the system. The log file SHOULD include details of EM system processes, including, but not limited to: i. System power up ii. System shutdown planned iii. System shutdown unplanned (e.g., power cut) iv. Camera connectivity v. Camera recording start and stop times (planned) vi. Camera recording error vii. Available hard drive space viii. Sensor connectivity, if applicable ix. Sensor recording start and stop times (planned), if applicable x. Sensor recording error, if applicable xi. Activation and deactivation of recording triggers (e.g., vessel speed, drum rotation sensors, geofencing, and time scheduled), if applicable System SHOULD undertake regular system health checks throughout the duration of the fishing trip at a frequency defined by the EM Program and MUST show malfunction alerts (errors and warnings) on the display of the user interface (Onboard User Interface) of the control centre. The EM system COULD be able to capture and store single frame images from each onboard camera on a regular basis (e.g., timed intervals, such as hourly, or on event triggers such as geofences) to show that cameras are operational, not obstructed, obscured, or displaced.
Comment	
~~HOLD for GPS audit question~~3.How does the program verify and document that geolocation devices (i) continuously capture accurate position, date, and time data in a format fully integrated with EM records, and (ii) are installed and maintained in accordance with manufacturer guidelines to ensure reliable performance, including any procedures for inspection, validation, and corrective action? Please provide examples or supporting documentation demonstrating how the CCM tracks, monitors, and manages vessel compliance with these requirements. This may include installation records, commissioning and validation reports, maintenance logs, inspection records, data quality checks, compliance monitoring reports, corrective action records, or other documented records that demonstrate ongoing verification and compliance.	

Comment
~~Describe the system in place to receive log files to document the operational health status of the system~~ 4. What controls are in place to ensure routine system testing and maintenance, mechanisms for detecting, reporting, and responding to system failures or interference? Please provide examples or supporting documentation demonstrating how the CCM tracks, monitors, and manages compliance with these requirements. This may include testing and maintenance schedules, inspection records, system performance reports, incident and failure logs, interference investigations, corrective action records, communication records, or other documented records that demonstrate ongoing verification, response, and compliance.
Comment
5. How does the program verify that the EM system generates and retains a log file that enables assessment of the system's operational health, and how the log file records, as applicable, system events including power-up, planned and unplanned shutdowns, camera and sensor connectivity status, recording start/stop times, recording errors, available hard drive space, and the activation/deactivation of recording triggers? Please provide examples or supporting documentation demonstrating how the CCM tracks, monitors, and verifies compliance with these requirements. This may include system specifications, log file samples, monitoring records, validation or inspection reports, corrective action records, or other documented records that demonstrate log file functionality, review, and ongoing compliance.
Comment

Item	**General Description**
Installation, Operation, and Service of onboard EM Systems	EM systems are installed by qualified technicians following manufacturer and program requirements, including camera placement for key activity areas, sensor integration, system calibration, and functionality testing to ensure proper operation and tamper resistance. During trips, EM systems record video, sensor, and positional data as configured. Operators must ensure systems are powered, unobstructed, and functioning, conduct basic checks, and report any malfunctions in line with program protocols.
	WCPFC EMP expectation on the Installation, Operation, and Service of onboard EM Systems:

EM system Installation The process of physically mounting cameras, GPS, and other sensors on a fishing vessel. Vessel Monitoring Plan A document that details how fishing activities and the EM system will operate on a specific vessel.	EM system installation CCMs SHOULD ensure that their EM Service Provider or their designated installer complies with the relevant EM standards. To this end, CCMs are encouraged to refer to Annex 1 (voluntary guidelines for EM system installation). The vessel owner or their designated representative: a. MUST provide information describing the vessel configuration and systems to facilitate EM system installation. b. MUST make the vessel and appropriate personnel (such as engineers, fishing master, multilingual staff, etc.) available and provide the EM Service Provider unfettered access, including to the ship's power supply, to complete EM system installation. Vessel Monitoring Plan a. Vessel owner or EM Service Provider MUST complete a Vessel Monitoring Plan and submit it to the CCMs DRC for approval. b. A copy of the approved Vessel Monitoring Plan SHOULD be maintained aboard the vessel at all times during fishing operations. c. Vessel Monitoring Plans MUST be updated and submitted to the EM Program at a frequency determined by the EM Program and anytime changes are made to information or requirements outlined in the VMP (e.g., new vessel contact information, change in EM System configuration, change in catch handling guidelines). d. The Vessel Monitoring Plan: i. MUST include contact information for the EM Service Provider, vessel owner(s), and vessel operator(s), and base manager(s) (if applicable). ii. MUST include general vessel information as specified in the EM data requirements. iii. MUST include a diagram, description, and photo(s) of the vessel layout that identifies where key fishing activities will occur on the vessel (e.g., hauling, sorting, discarding) and COULD include measurements of all items, tools, or areas on the vessel that EM to support estimation of lengths of fish caught. iv. A description of the EM setup: o MUST include the number and location of cameras including images of their installation location and an image from camera's perspective, and include nighttime images, as appropriate, to demonstrate sufficient lighting. o MUST include a description and image of the location of all other components of the installed EM system (e.g., geolocations system, EM control system, sensors, power supply). o MUST include relevant details of system configuration settings, including:

Commented [A12]: ISSF: maybe the WCPFC could develop a template VMP for use by CPCs

And then the auditor request a copy of the VMP to ensure that all elements (of the template/standards) are included

	• Camera configuration settings (e.g., frame rates, resolution, bitrate) • Sensor units and threshold values, if applicable • Data recording frequencies and/or sensor triggers for recording, if applicable • Software and Firmware versions • Spatial calibration settings, if applicable v. MUST include any catch handling procedures required to ensure that EM Records allow collection of the data fields set out in the EM data requirements (e.g., handling in view of cameras, allowable discard locations). See Annex 2 for references to existing catch handling procedures. vi. MUST include vessel duty of care responsibilities to prevent system malfunctions and ensure effective operation of the system, such as: • Verifying system functionality at the beginning and at regular intervals throughout the duration of each trip
6. What systems and controls are in place to ensure that each vessel has a current and approved VMP, and how is compliance with this requirement verified and documented? Please provide examples or supporting documentation demonstrating how the CCM monitors and manages compliance with this requirement. This may include VMP approval records, version control and review procedures, vessel compliance registers, audit or inspection reports, compliance monitoring records, corrective action records, or other documented records that demonstrate that current and approved VMPs are maintained and verified for all participating vessels.	
Comment	
7. ~~Describe the processes in place to ensure that when changes are made to information or requirements, updated VMPs are submitted to the EM Program?~~ What processes, controls, and documented procedures are in place to ensure that updated Vessel Monitoring Plans (VMPs) are submitted to the EM Program whenever changes occur to vessel information, EM system configurations, operational practices, or other applicable program requirements? How are such changes identified, tracked, communicated, and verified to ensure that approved VMPs remain current and accurate? Please provide examples or supporting documentation demonstrating how the CCM monitors and manages compliance with this requirement. This may include change management procedures, VMP revision and approval records, notification and communication records, version control documentation, compliance monitoring reports, corrective action records, or other documented records that demonstrate updated VMPs are submitted, reviewed, and maintained when changes occur.	
Comment	
Item	**General Description**

Commented [A13]: ISSF: maybe include the requirement to submit to auditors a sample of data that is being collected using that specification so as to verify that minimum data requirements are achieved/completed

Commented [LH14R13]:

Data Review Center Analyzation of EM Records to generate EM Data.	The standard for the data review center (DRC) is an entity with access to supporting EM analysis software used by EM analysts to analyze EM Records and generate EM Data DRC **WCPFC Expectation on the analyzation of EM Records to generate EM Data**

Commented [LH15]: Update interim standards to potentially include language regarding operational independence and impartiality of DRC including safeguards against conflicts of interest, independent oversight or auditing, and documented procedures for identifying, reporting, and addressing potential bias or undue influence.

Commented [USA16R15]: Suggest adding a question/comment section in the "Data Review Center" section to ensure the EM analysis software meets the compatibility requirements of the standards

EM Analysis Software The DRC EM analysis software to facilitate the generation of EM Data from EM Records.	EM Analysis Software The EM analysis software: a. MUST be compatible with the file types, data structures, syntax, and semantics of EM Records that will be analyzed with the software. b. MUST be able to produce EM Data into a format compatible (or that can easily made compatible) with agreed EM data requirements for incorporation into WCPFC databases.
EM Analysis Workstations DRC workstation(s) where EM Analysts will use EM analysis software to generate EM Data from EM Records.	EM Analysis Workstations a. MUST have hardware and software, or cloud-based platforms that enable effective EM analysis b. MUST have reliable data transmission capabilities sufficient for efficient streaming or download/upload of data required for EM Records analysis, reporting of EM Data, and storage of EM Records. c. MUST have proper ergonomics that support analyst well-being, quality, and efficiency. d. MUST be designed to minimize the risks to commercially sensitive information. Records analysis, reporting of EM Data, and storage of EM Records.
EM Analysts Reviews video footage using EM software to generate EM Data from EM Records and data collected from onboard camera systems to verify fishing activities, species identification and ensure compliance with fishery regulations.	The EM Analysts a. The standard for qualification of an EM analyst is that analysts will be experienced in fishery matters and that CCMs will prepare qualifications for an EM analyst, available for review by the Secretariat. b. MUST complete an appropriate training program which covers materials including (but not limited to): species ID, basic fishing practices, and EM review processes). c. EM analysts MUST not be employees of a fishing company involved in the monitored fishery or have other direct conflicts of interest.
Storage of EM records and EM data	Storage of EM records and EM data EM records and associated EM data MUST be retained in accordance with any WCPFC audit requirements.
8. What EM software is used to facilitate the generation of EM Data from EM Records, and how does it ensure compliance with the requirements outlined above. Please provide examples or supporting documentation demonstrating how the CCM verifies and documents compliance with these requirements. This may include system specifications, software validation or certification records, data format mapping documentation, interoperability testing results, integration reports, configuration settings, data export samples, or other documented records	

Commented [LH17]: Include standards for AI in updated interim standards and include in audit

that demonstrate software capability, compatibility, and successful data exchange with WCPFC systems.
~~What EM software is used to facilitate the generation of EM Data from EM Records?~~

Comment

~~Does the program have reliable data transmission capabilities sufficient for efficient streaming or download/upload of data required for EM? Describe the processes and controls in place to ensure the program maintains reliable data transmission capabilities sufficient to support efficient streaming, downloading, and uploading of data required for EM activities.~~ 9. What hardware, software, or cloud-based platforms are used to support EM analysis, and how do these systems meet the requirement to enable effective EM analysis?
Please provide available documentation or supporting evidence describing how this requirement is met in practice. This may include system architecture descriptions, technical specifications, platform documentation, configuration details, validation or testing results, performance assessments, user or operational manuals, or other records demonstrating that the hardware, software, or cloud-based solutions are suitable and effectively support EM analysis activities.

~~Yes ☐ No☐~~

Comment

~~Are the work stations designed to minimize the risks to commercially sensitive information? Records analysis, reporting of EM Data, and storage of EM Records?How are workstations designed and controlled to minimize risks to commercially sensitive information during records analysis, EM data reporting, and the storage of EM records?~~10. What processes, systems, and controls are in place to ensure that personnel complete an appropriate training program covering, at a minimum, species identification, basic fishing practices, and EM review processes?
Please provide examples or supporting documentation describing how training completion and competency are verified and recorded. This may include training curricula, attendance or completion records, certification or competency assessments, refresher training schedules, training provider documentation, learning management system records, audit or evaluation reports, or other documented evidence demonstrating that training requirements are consistently met and maintained.

~~Yes ☐ No☐~~

Comment

~~10. What national or sub-regional training standards exist for EM analysts, and how does the program ensure compliance with those standards?Does the program have national or sub-regional training standards for EM analysts?~~ 11. What policies, procedures, and controls are in place to ensure that EM analysts are independent and do not have employment relationships with fishing companies involved in the monitored fishery, nor any other direct conflicts of interest?
Please provide examples or supporting documentation demonstrating how independence and conflict-of-interest requirements are identified, assessed, declared, and managed in practice. This may include conflict-of-interest policies, declarations of interest, HR or contractor screening

procedures, independence attestations, review or approval processes, audit records, or other documented evidence demonstrating that EM analyst independence is maintained.	
Comment	
12. Place holder for EM records retention	
Comment	
Item **EM Record Analysis~~nnotation~~**	**General Description** To ensure analysts are **harmonized** (i.e., applying the same standards and making consistent decisions), a minimum review program should include calibration, quality control, and documented decision criteria.~~The standard for EM Record Annotation is that there is a system for annotating EM Records in place and documentation describing the annotation process and is available to the Secretariat IWGROP2/TCC4/WCPFC5 UPDATE TO REFLECT EM~~ **WCPFC EMP Expectation on EM Record Annotation** ~~Annotation~~Analysis Protocols EM annotations should be carried out by an authorized, trained EM analyst • The EM reviewer ~~EM annotation procedures~~ should follow a standardized analysis~~annotation~~ guide or manual. • ~~Annotation of critical incidents should be reported immediately to the relevant authorities~~ ~~Secondary Data review Quality PLACEHOLDER~~
Item **Data Fields** Data Fields and Minimum Data Standards are defined as Minimum Data Fields approved by the WCPFC for collection by national and sub-regional EMP programs.	**Standard Required** National and sub-regional EMPs will ensure the Commission minimum data standard fields are collected by the EM analyst conducting EM record annotation. ~~WCPFC EM data should be submitted to the Secretariat or SPC, where possible, within 120 days of longline vessel offloading TCC9/WCPFC10 UPDATE TO EM~~

Commented [LH18]: This could be a future audit question once the EM record retention standard is defined

Commented [JFA19]: Since the term of "standardized annotation guide or manual" is not defined in the minimum standards, clarification is requested as to what this term refers to.

Commented [LH20R19]:

	WCPFC EMP expectation on the collection of EMP Data Minimum Standard
	An~~notated EM data collected by national or sub-regional EMPs will be sent to the Commission designated data provider (SPC) or to the Commission Secretariat as soon as practical after the return of a vessel from their trip.~~ All WCPFC EMP data is confidential and may not be distributed or given to any unauthorized organization or person without going through the Commission data access procedures and approval of the Executive Director of the WCPFC.
15. Does the program's data fields include all ~~program have included in their data format all~~ the Minimum Standards Data Fields required by the Commission? Please provide examples or supporting documentation demonstrating how the CCM ensures all minimum data standard fields are available in the annotation system. This could include data field configuration, data standards documentation and a sample of data output. Yes ☐ No ☐	
Comment	
16. If 'No" to the question above, describe the process or ~~does the national or subregional electronic monitoring programs have in place a~~ system in place to ensure the Commission Minimum Standard Data Fields are supplied? Yes ☐ No ☐ N/A ☐	
Comment	
Item **EM Coverage** EM coverage is determined by the Commission.	**Standard Required** ~~UPDATE for EM CMM~~
	WCPFC EMP expectations on EM coverage TBD
What metric does the program use to work out coverage on long liners? Trips: ☐ Number of EM sea days ☐ Observed fishing days; ☐ Hook Numbers ☐ Observed Sets ☐ Other (Specify) ☐	

Commented [JFA21]: Submitting EM data to the Secretariat or SPC for checking may require additional budget/burden for the Secretariat, which in turn would increase regular contributions of each CCMs. This procedure needs further discussion and should be deleted from the audit questionnaire at this point.

Commented [JFA22]: Would like to clalify that this rule is incorporated into the Commission's Rules and Procedures for data confidentiality?

Commented [LH23R22]: Rules and Procedures for the Protection, Access to, and Dissemination of Data Compiled by the Commission

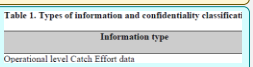
Table 1. Types of information and confidentiality classificati

Information type
Operational level Catch Effort data

Commented [LH24R22]:

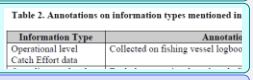
Table 2. Annotations on information types mentioned in

Information Type	Annotatio
Operational level Catch Effort data	Collected on fishing vessel logboo

Commented [A25]: ISSF: again a sample of the data collected (EM records) and the data outputs (EM data) to verify that minimum data standards are achieved would be worth requesting

Commented [USA26]: Suggested some language changes.

Commented [LH27]: Provide sample to auditor

Commented [USA28]: Suggested some language changes.

Commented [LH29]: This be a future audit question once EM coverage is determined

Comment

Table 2: Outstanding areas for agreement on the WCPFC EMP Audit and Data Quality Assurance Framework based on the Chairs paper draft considered at IWG8 incorporating recent comments received from SPC, Japan, IATTC EM Chair, ICCAT, TNC, Chinese Taipei and New Zealand

Matter	Feedback received	Chair's comments
Retention of EM records and associated EM data duration	**SPC** This may be a national requirement, but presumably to meet the WCPFC Min Data Standards and Processes. The records may have a different lifespan to the data. But data may need to be given a life span in raw versus aggregated form. **Japan** Consistent with ICCAT and IOTC, retention periods should defer to national regulations. EM footage requires significant storage capacity, so flexibility is important, while processed EM data can be kept longer. **IATTC EM Chair** SPRFMO just adopted an accreditation procedure based on its observer procedure. SPRFMO noted that the evaluator could audit records but did not mandate retention times, though SPRFMO also has language that explicitly allows SPRFMO to set records retention times in the future. **TNC** Recommend that data be retained for at least 1 year; be aligned with any timelines that may be stipulated in the RFMO compliance process; or aligned with national food safety requirements. **Chinese Taipei** If this is for audit purposes, then the period between audits could be considered. **NZ** Difficult to have a one size fits all policy given variety of programs covered. Question really involves round footage given potential costs. I would question whether we need to include retention policies in the standards (I note that the recently agreed SPRFMO standards left it	**ICCAT** mandates, "Once footage is reviewed, it shall be stored for at least 3 years, except if national data retention regulations require a shorter period. When the system is to be used for enforcement purposes, the data collected by the EMS shall be stored for as long as necessary until the possible infringement proceedings have been finalized."

Commented [LC30]: China suggests that raw EM records, particularly video footage, and fisheries data generated from EM analysis should not necessarily have the same retention period. EM video requires substantial storage capacity and may contain personal information, operational details and commercially sensitive information. Therefore, flexibility is essential.
China suggests that the retention period for raw EM video should be determined by the flag State or national/sub-regional EM programme, taking into account domestic regulations, management needs and practical capacity. For EM data, a distinction should also be made between raw data and analysed data. Analysed, cleaned and standardized EM data may be retained for a longer period for scientific assessment, fisheries management and compliance purposes, for example one year and, where necessary, up to three years. Records or data related to potential infringements, disputes or ongoing investigations may be retained until the relevant procedure is completed.

	to members to determine) however if consensus is to include then I would certainly lean to shorter rather than longer EU- As regards table 2 (page 14), on the issue of 'Retention of EM records and associated EM data duration', we support the comment made by Japan and propose to follow the ICCAT model. Allowing some flexibility to take into account potential national regulations (which may be difficult to amend) could be important. If this approach is followed, retention periods must be specified in national EM programmes, and these must be adapted (and audited) to ensure that retention periods do not adversely affect analysis and any potential necessary follow-up.	
Remote virtual vs In-person audit	**SPC** Perhaps to audit DRC SSPs **TNC** Suggest that this can take a hybrid approach, allowing in-person reviews when deemed necessary or on a set timeline. **NZ** As discussed previously, I see very few occasions when an in-person audit would represent value given cost and complexity involved. However, recognize utility of enabling this should it be required (e.g. if questionnaire is incomplete or ambiguous) – perhaps framework could include some language to this effect?	*Recognizing that these assessments can largely be conducted through document review and remote virtual consultations, are there specific circumstances under which in-person audits would be necessary or would provide additional value?*
Audit finding corrective action criteria		*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*

Commented [LC31]: China suggests that regular authorization audits and periodic reviews should primarily be conducted through document review, virtual interviews and verification of sample materials. In-person audits should not be treated as a routine requirement. They should be considered only in specific circumstances, such as where submitted materials are clearly incomplete, key issues cannot be verified remotely, significant systemic deficiencies are identified, or the relevant CCM invites an in-person audit. Where an in-person audit is necessary, its scope, personnel, timing, materials to be accessed, confidentiality requirements and cost arrangements should be agreed in advance with the relevant CCM. An in-person audit should not be interpreted as allowing direct or unrestricted access by the Secretariat or auditors to data review centres, complete raw video records or commercially sensitive materials.

Commented [LC32]: China supports communication between the Secretariat and the relevant CCM or sub-regional programme when deficiencies are identified during an audit. However, 90 days should not be applied as a uniform mandatory timeframe for all types of deficiencies. The timeframe for corrective action should be determined through consultation, taking into account the nature of the deficiency, technical complexity, and whether equipment modification, software adjustment, vessel port calls, staff training or fleet-wide changes are required. Authorization of a national or sub-regional EM programme should not be automatically suspended during the corrective action period, unless there are serious, persistent and unaddressed substantive non-compliance issues. Audit findings should primarily assist programmes in meeting the minimum standards and should not be automatically converted into compliance findings.

			in consultation with CCM or sub-region program concerned. (This language stems from the ROP audit).
Audit Review period			*All authorized EMPs and sub-regional programs will be kept under continuous review by the Secretariat 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 language stems from the ROP audit). Every 3 years?*
Application of the questionnaire and data confidentiality	China suggests that audit questions should remain within the scope of the agreed minimum standards and should not create new substantive obligations. For EM programmes under development or in a pilot phase, it should be possible to indicate "under development" or "partially applicable", with an explanation of the improvement plan. Where a question is not applicable, CCMs should be able to indicate "N/A" and provide an explanation, rather than being automatically considered non-compliant. Audit materials and data access should comply with WCPFC data confidentiality rules and relevant domestic laws and regulations of CCMs. Data or materials		

Commented [LC33]: China supports periodic review of authorized EMPs and sub-regional programmes, but suggests avoiding overly broad wording such as "continuous review" without further clarification. A regular review cycle of three to five years may be considered, with the specific cycle determined by programme maturity, previous audit outcomes, data quality performance and changes in applicable standards.
Triggered reviews may be considered where there are major changes to standards, significant systemic problems, persistent data quality issues or substantial changes to programme structure. The focus should remain at the programme and procedural level and should not routinely expand to vessel-by-vessel inspection, raw video inspection or on-site inspection of data review centres. Reasonable transition periods should be provided for newly adopted standards or requirements.

	reviewed during an audit should be limited to what is necessary for the audit purpose and should not extend to unrelated raw video, commercially sensitive information or personal information. Where sample materials are required, anonymized, masked or structured data alternatives should be allowed where appropriate. The Secretariat or auditors should not use information obtained during the audit for purposes beyond the audit, nor share such information further without authorization.	

PNA + Comments	Chairs' Response
EM program governance may require that programs operate under clear legal authority and accountability, maintain independence from industry and EM service providers, and apply robust controls over data access, ownership, and confidentiality, typically established through domestic laws, regulations, and policies at the CCM level.	The importance of clear governance frameworks that ensure accountability, and appropriate safeguards for data access, ownership, and confidentiality is widely recognized. While governance arrangements may vary across jurisdictions, responsibility for defining and overseeing these frameworks appropriately rests with the CCM. In carrying out this role, the CCM can help ensure that governance mechanisms promote effective oversight, appropriate stakeholder engagement, and robust safeguards for data access, ownership, and confidentiality. The *independence* component is addressed in the audit questionnaire and accreditation process.

Technical conformity with the EM Standards, Specifications, and Procedures (SSPs) can generally be achieved through a type-approval approach, supporting both conformity and scalability across fleets and programs.	Will include this suggestion in the review of interim standards. If a type-approval approach is adopted, we will revisit the audit questionnaire and update accordingly.
Effective operational procedures are essential and should include routine system testing and maintenance, clear mechanisms for detecting and responding to system failures, and the use of audit trails and access logging; these requirements can largely be implemented through standard operating procedures, incident reporting processes, and improvement plans.	Requirements for routine system testing and maintenance, as well as clear mechanisms for detecting and responding to system failures, are outlined in the VMP and can be further assessed through the review of interim technical standards. Requirements for the use of audit trails and access logging are currently included as recommended ("should") provisions in the interim technical standards and can be further assessed during the next standards review.
EM data review and analysis must ensure that EM reviewers (including where applicable, artificial intelligence systems) are formally recognized, independent, appropriately trained, and apply defined review effort, sampling rates, and verification rules to ensure consistent and credible data interpretation.	The interim standards require EM analyst to be independent and appropriately trained. The questionnaire requires CCMs to provide examples or supporting documentation to demonstrate they meet this standard. Defined review effort and verification rules to ensure consistent and creditable data can be included in the review of interim standards. If adopted, the audit questionnaire will be updated accordingly. Sampling rates will be addressed under the EM CMM.
Data integrity and usability require that EM outputs are aligned with ROP minimum data fields, compatible with SPC databases, and of sufficient quality and structure to meet the objectives of the EM program, which can be illustrated through a clear process flow diagram	When the ERandEM IWG review the interim minimum data fields, we can ensure the data integrity and usability of EM outputs are aligned with ROP minimum data fields, compatible with SPC databases, and of sufficient quality and structure to meet the objectives of the EM program.

implemented at the CCM level similar to the one being discussed at this meeting	