

WCPFC EM Framework Considerations: Includes Feedback on Independence Ranking from ERandEMIWG9 meeting 16 June 2026

Key Terms

EM Data - Data generated through analysis of EM records.

EM Records - Footage (still images and video) and sensor data (if applicable) recorded by an EM System that can be analysed to generate EM Data to meet the EM Data Requirements. Sensors may include any number of sensors (e.g., hydraulic sensors) that are part of the EM equipment and whose data is recorded on the vessel as part of the EM system.

Audit - Carried out by the Secretariat to verify that a CCM is complying with specified requirements.

Accreditation - is when the Secretariat formally recognizes that a CCM is competent to participate in the WCPFC EM program.

Independence - is the condition whereby the collection, transmission, storage, review, analysis, and reporting of EM data are conducted free from actual, perceived, or potential conflicts of interest and undue influence from fishing vessel operators, vessel owners, processors, or other entities with a direct interest in the outcomes of monitoring activities.

Impartiality - is the principle that EM data and records are reviewed, interpreted, and reported objectively, consistently, and without bias, favoritism, discrimination, or prejudice toward any vessel, fleet, company, Flag State, or stakeholder.

EM Records Analysis/Interpretation - The process of an EM Analyst reviewing EM records and converting them into EM Data.

Review for Data Quality - The verification process of re-analyzing/interpreting a portion of previously analyzed EM records to determine completeness, adherence to protocols, and accuracy of the EM Data produced by the EM Analyst.

(Secretariat) Independent Data Quality Review - A systematic, documented, and objective assessment conducted by, or under the authority of, the Secretariat to independently evaluate the quality, completeness, accuracy, consistency, and reliability of EM data, analyses, and reports submitted by flag CCMs, and EM service providers. The review is undertaken independently of the original data collection and review processes to provide assurance that EM data meet WCPFC EM standards and are suitable for compliance, scientific, and management purposes.

Independent and Impartial EM Data Review on the *High Seas*: Options for Consideration

**Low Independence & Impartiality
HIGH Risk**

**High Independence & Impartiality
LOW Risk**

Flag State record analysis & Regional Standards	Flag State record analysis & independent data quality review	Third party conducts record analysis for Flag State	Third party conducts record analysis for Flag State & independent data quality review	Third party conducts record analysis for Flag State & simultaneous data provision to Flag State and Secretariat	Third party conducts record analysis for Flag State, simultaneous data provision to Flag State and Secretariat & independent data quality review	Centralised independent review body
China 1	China 2	China 3		Could Consider		
					United States	
	EU (could merge with 4)		EU (could merge with 2)			
Japan	Japan	Japan				

	Approach	Description	Relative level of Independence	Key Considerations
1.	Flag State record analysis & Regional Standards	EM record analysis undertaken by Flag State guided by agreed regional standards and procedures	Low	Improved consistency; independence remains limited
2.	Flag State record analysis & independent review for data quality	EM record analysis undertaken by Flag State AND review for data quality undertaken by Secretariat on a sample basis.	Low- Moderate	Enhances oversight; consider review percentage for data quality and Secretariat resourcing needs
3.	Third party conducts record analysis for Flag State	EM record analysis undertaken by accredited independent third- party providers on behalf of Flag State	Moderate	Improves impartiality; requires Secretariat accreditation of third-party providers
4.	Third party conducts record analysis for Flag State & independent review for data quality	EM record analysis undertaken by accredited independent third- party provider on behalf of Flag State AND review for data quality undertaken by Secretariat on a sample basis.	Moderate-High	Improves impartiality; requires Secretariat accreditation of third-party providers; consider review percentage for data quality and Secretariat resourcing needs
5.	Third party conducts record analysis for Flag State & simultaneous data provision* to Flag State and Secretariat	EM record analysis undertaken by an accredited third party provider on behalf of the Flag State AND upon completion of analysis, the <i>same EM data</i> must be provided at the same time to the Flag State and the Secretariat	High	Removes information gatekeeping; requires Secretariat accreditation of third-party providers; consider management of annotated data throughout the year
6.	Third party conducts record analysis for Flag State, simultaneous data provision to Flag State and Secretariat & independent review for data quality	EM record analysis undertaken by an accredited third party provider on behalf of the Flag State AND upon completion of analysis, the <i>same EM data</i> must be provided at the same time to the Flag State and the Secretariat AND review for data quality undertaken by Secretariat on a sample basis.	Higher	Removes information gatekeeping; requires Secretariat accreditation of third-party providers; consider management of annotated data throughout the year; consider review percentage for data quality and Secretariat resourcing needs
7.	Centralised independent review body	A single independent entity conducts all EM data review	Highest	Cost and resource requirements; reduced flexibility for Flag States

Feedback from CCMS

New Zealand	<ul style="list-style-type: none"> • What we should be striving for through the ER&EM WG is an enabling framework that promotes the increased uptake of EM. Standards, systems and processes need to be sufficiently robust so as to provide reliable data for management, science and compliance purposes. However, at the same time, we need to be conscious of not disincentivising the use of EM by exacerbating fishers privacy concerns or unnecessarily increasing costs. The challenge of the working group is to find the right balance between these objectives. • When thinking about these frameworks, its useful to look at the precedent we have set with observers. We don't have to reinvent the wheel where we don't have to, and it provides a useful benchmark for avoiding falling into the trap of holding EM to too high a standard and expecting something from EM that we don't expect from observer programmes. However, we also have to be conscious of the differences between observers and EM and how this will impact upon the design of our framework. The sensitive nature of footage and the increasing technological complexity of EM may mean that we need to do things differently. • The value of independent review on the high seas cannot be assessed without understanding how it would work in practice. While different operating models are possible, all would face common issues such as system incompatibility, strict legal and data security requirements, and the need for detailed, collectively agreed review processes. Addressing these challenges would require significant time and investment—likely several years and millions of dollars. • Given the above, I would question whether the benefits associated with independent review outweigh the costs and time required to implement such an approach. Yes, independent review would result in greater trust in the data, however we should recognise that this would likely come at the expense of cameras on fewer boats as resources that could otherwise be spent on EM programmes (camera installation, primary review etc.) would need to be diverted to operationalize an independent review body. The simple fact of sharing footage with another body will also act as a disincentive for fishers to adopt EM due to the increased privacy concerns. • In addition to the costs, the sheer complexity associated with operationalizing an 'independent review' model will require significant time for the Commission to overcome. Heading down this path would thus likely act as a brake on the wider uptake of EM and the management benefits this would provide. • In our view, a robust audit process that assesses EM programmes against the agreed convention standards would provide sufficient confidence in the data. Whilst this confidence may be less than if the review was conducted independently (as opposed to the flag state), given that the majority of high seas longline fishing is currently unverified, this would represent a significant improvement on the status quo. At the end of the day, we shouldn't let the perfect be the enemy of the very good.
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	<ul style="list-style-type: none"> We can also look at the role of observers as a potential audit function – occasional placement of an observer on a boat equipped with EM may well be more cost effective than designing and implementing an operating model with independent review’, would provide a more comprehensive audit (observers can verify whether key activity is occurring outside the field of view of the cameras, something secondary review cannot achieve) as well as providing additional benefits (e.g. enabling collection of biological data).
EU	<ol style="list-style-type: none"> We believe that an important feature of a review or audit process is that it should not be carried out by the same entity that conducted the initial review. Considering the importance of an independent quality review (which can be limited to a sample), we would also eliminate from consideration options 3 and 5 which do not foresee this modality. Options 2 and 4 (ex aequo): we think both options are feasible and provide a lot of assurance. We would propose merging these two options to allow flag States to decide whether they choose to conduct the record analysis itself (with in house experts) or whether to subcontract this work to a WCPFC accredited independent third party. This would allow maximum flexibility, noting that a subcontracting arrangement can be useful for flag States that do not have the necessary capacity to perform record analysis, but that this option should be retained for those flag States that do.
China	<p>China considers that the WCPFC EMP should take into account differences among CCMs in fleet size, operational patterns, domestic legal requirements, technical capacity and existing EM arrangements. A single mandatory pathway should be avoided. CCMs should be allowed to meet agreed regional standards through equivalent implementation pathways.</p> <p>1. General Comments</p> <p>The EMP should be based on the principle of flag State responsibility. Flag States should remain primarily responsible for EM implementation, data management and initial analysis for their vessels.</p> <p>A clear distinction should be made among raw EM video, annotated data and standardized structured data. Routine WCPFC needs should primarily be met through structured data outputs, not complete raw video.</p> <p>An equivalent implementation mechanism should be developed, allowing flag State-led programmes, optional third-party participation and appropriate Secretariat assurance to coexist.</p> <p>Any data sharing or review arrangement should clearly define data scope, purpose of use, access rights, confidentiality obligations, retention periods and dispute procedures.</p> <p>2. Comments on the Options</p> <p>Option 1: Flag State analysis guided by regional standards.</p> <p>China considers this the most appropriate main option for the initial stage. It should be developed into a “flag State-led and regionally certified” model, supported by common requirements on data fields, species codes, event codes, analysis procedures and quality control.</p>

Option 2: Flag State analysis with Secretariat sampling review.

China considers this a supplementary assurance mechanism to the flag State-led model. Secretariat review should focus on standardized data outputs and quality control records, rather than routine access to complete raw video. Where findings may have compliance implications, the flag State should have an opportunity to respond or request further review.

Option 3: Accredited third-party analysis on behalf of the flag State.

China considers this a useful optional complementary pathway to improve impartiality and confidence. WCPFC may establish open, transparent and non-exclusive accreditation criteria, but should not designate a single provider. The provider should be designated by Flag States.

Option 4: Third-party analysis with Secretariat sampling review.

China considers this useful only in certain higher-risk circumstances. It should be designed as a risk-triggered or voluntary enhanced assurance option, rather than a routine mandatory requirement.

Option 5: Third-party analysis with simultaneous data provision.

China may consider this option with caution, provided that simultaneous data provision is strictly limited to standardized structured data agreed by WCPFC, and does not include complete raw video. A “simultaneous receipt and subsequent confirmation” mechanism should be considered.

Option 6: Third-party analysis, simultaneous data provision and Secretariat review.

China does not consider this suitable for implementation at the initial stage. Given its cost, data governance risks and complex responsibilities, it may be considered only as a longer-term option or limited pilot.

Option 7: Centralised independent review body.

China does not consider this suitable for near-term implementation. It raises major questions on governance, funding, member oversight, data security and institutional accountability. A more practical and flexible mixed model should be prioritized at this stage.

3. Preferred Ranking

China suggests the following order of preference:

First: Option 1 — Flag State record analysis guided by agreed regional standards.

Second: Option 2 — Flag State analysis with Secretariat review for data quality on a sample basis.

Third: Option 3 — Accredited independent third-party analysis on behalf of the flag State.

China considers that Option 5 may be explored cautiously if limited to standardized structured data and accompanied by a flag State confirmation process. Options 6

	and 7 do not appear suitable for implementation at the initial stage and may be considered only as longer-term options or limited pilots.
Japan	<ul style="list-style-type: none"> ● The scaler among 7 options only considers relative level of independence and risk. However, Japan believes that cost is also important factor to be carefully considered. For example, option 7 (centralized independent review body) would require significant amount of additional budget for the Secretariat, which in turn would drastically increase regular contributions of each CCMs. Japan questions whether the option is implementable. Plus, Japan would like to clarify what “risk” described in the scale means. ● Among 7 options, some approaches can be implementable even now while other approaches seem challenging in terms of costs and feasibility and may need longer time to carry out. In this regard, Japan suggests considering options step by step: At this point, Japan can consider option 1 to option 3. ● The document highlights the importance of “independence.” However, Japan thinks that all EM programs will have no issue regarding independency if they receive authorizations from the Secretariat and meet the minimum standard, which states “EM analysts MUST not be employees of a fishing company involved in the observed fishery or have other direct conflicts of interest.” In this regard, Japan considers that option 1 or 2 should not be seen as inferior options because of low independency if those options meet EM minimum standard.
United States	<ul style="list-style-type: none"> • The United States prefers Approach #6. While this is similar to Approach #5, we prefer #6 because the additional QA/QC option further strengthens independence and impartiality. We believe this Approach (#6) has an appropriate level of independence but still allows CCMs to maintain some flexibility with the third party option. Simultaneous submission reduces the risk that one member could alter, delay, or selectively disclose information before others receive it. It also increases confidence among Members that the data are authentic, complete, and independently managed. • To reduce the burden on the Secretariat and potentially save costs, we propose that the Secretariat's independent review occur simultaneously with the Secretariat's audit of the EM program every one to three years (depending on the agreed-upon reauthorization timeframe for each program). This review could take place during the regular Secretariat audit of each EM program and could include review of a number (to be discussed further) of randomly selected trips, focusing on verification of camera placement, video quality, and the accuracy of annotated EM data.
ISSF	<p>ISSF offers the following comments at a principles level, recognizing that many of the practical questions — including costs, Secretariat resourcing, data handling requirements, and accreditation criteria — will necessarily influence whichever governance model the Commission ultimately adopts.</p> <ul style="list-style-type: none"> • <i>Independence principle.</i> Whatever model is selected, the level of independence it provides should be no less than that established under the Regional Observer Program. The ROP's core principles — that data collection and analysis must be independent of vessel operator

	<p>influence, and conducted in an impartial and objective manner — represent a baseline that EM should meet, not a ceiling.</p> <ul style="list-style-type: none">• <i>Governance model choice.</i> ISSF does not express a preference among the specific options. We note that the options presented in the paper are not necessarily mutually exclusive — for example, a Secretariat function and a third-party service provider model could operate in a complementary way — and that the relative merits of each option will be easier to assess once there is greater clarity on the allocation of roles and responsibilities among the relevant actors, as well as what is required at each stage of the process (for example, we note CCMs are yet to form a common view on purpose and objective of the second stage review.)• <i>Governance framework scope.</i> We note that the paper focuses primarily on the question of independence in EM data review. A full governance framework for the EMP might usefully address a broader set of elements — including accountability mechanisms, data access and confidentiality, and oversight responsibilities at the Commission level. The IWG may wish to consider whether these additional elements warrant explicit treatment, either in this paper or through subsequent work.
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