



TECHNICAL AND COMPLIANCE COMMITTEE
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COMPLIANCE MONITORING SCHEME: RISK-BASED ASSESSMENT FRAMEWORK

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27 September 2021

Submitted by Lead of the CMS Risk-Based Assessment Framework

¹ Rev2 replaces Rev 1, which replaced the original version issued on 15 September.

Compliance Monitoring Scheme: Risk-based Assessment Framework

Dear Colleagues

I am writing to follow-up on *Circular 2021/56 of 15 July 2021 on the work of the Compliance Monitoring Scheme Intersessional Working Group* from Ms Emily Crigler, Vice Chair of the Technical and Compliance Committee (TCC) (who is also Chair of the Compliance Monitoring Scheme Intersessional Working Group).

In relation to the Risk-Based Assessment Framework (RBAF), the Circular attached a high level outline of a possible approach to the RBAF and sought feedback. Some very constructive feedback was received. The Circular indicated there would be follow-up with a possible RBAF model and template to risk-rate current obligations. Unfortunately, it has taken longer than I had anticipated to pull together the next stage of this process.

I am pleased now to attach a Discussion Document on the development of a RBAF and also a RBAF spreadsheet. The RBAF spreadsheet lists current obligations, relevant compliance history, provides a “likelihood” of non-compliance rating for each obligation, and provides scope for CCMs to consider “consequence” of non-compliance for each obligation – and hence an overall risk rating.

Feedback on the Discussion Document (particularly the questions in the blue boxes) and RBAF spreadsheet (particularly “consequence” ratings) is requested by 1 November. This can be provided to me directly by email (heather.ward@mpi.govt.nz) or, ahead of TCC17, posted into the TCC Online Discussion Forum.

There will also be scope within the TCC17 plenary to discuss the CMS work programme, including the RBAF, under Agenda Item 5.3 (c.). I would not expect the TCC17 plenary discussion to go into the detail of individual risk ratings for obligations.

As you know, TCC17 must also initiate the process to develop a list of obligations to be assessed through the CMS in 2022 (covering activities in 2021). This will need to be agreed by WCPFC18. I propose that a small

Working Group be established for this purpose. I propose this SWG meet in early/mid November and also engage by email ahead of WCPFC18.

As noted in the Discussion Document, CCMs are invited to assess the “consequence” of non-compliance with each obligation – and hence a possible risk-rating for each obligation.

If CCMs agree to this approach at TCC17, it would be helpful to have any “consequence” ratings from CCMs **by 1 November 2021** (**heather.ward@mpi.govt.nz**). Based on these ratings, I will develop a consolidated list of risk-rated obligations, which can be used by the small Working Group to “test drive” the RBAF.

The aim is to use the RBAF as a tool to guide the development of a prioritised list of obligations for assessment in 2022 and a forward schedule of obligations to be reviewed in future years. It is anticipated that use of the RBAF will contribute to a more transparent and structured approach to this annual process.

I look forward to constructive discussion on the RBAF at TCC17 and, if agreed, in the small Working Group. I trust this is an agreeable process and look forward to advancing this important work with your cooperation.

Ngā Mihi,

Heather Ward
WCPFC Lead on Risk-Based Assessment Framework
New Zealand Commissioner to WCPFC

Proposed Development of a WCPFC Risk-Based Assessment Framework for the Compliance Monitoring Scheme

Discussion Document for consideration and feedback, September 2021

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Objective

The objective of a risk-based assessment framework (RBAF) for the Compliance Monitoring Scheme (CMS) is to:

- assist CCMs to **prioritise obligations** for inclusion in the annual CMS based on the risk of non-compliance of achieving CMM objectives.

Background on CMS context for the Risk-Based Assessment Framework

1. The purpose of the WCPFC's Compliance Monitoring Scheme, as set out in **paragraph 1** of CMM 2019-06, is to *"ensure that Members, Cooperating Non-Members and Participating Territories (CCMs) implement and comply with obligations arising under the Convention and conservation and management measures (CMMs) adopted by the Commission"*. The purpose of the CMS is also to *"assess flag CCM action in relation to alleged violations by its vessels, not to assess compliance by individual vessels"*. [[Conservation and Management Measure for the Compliance Monitoring Scheme | WCPFC](#)]
2. Under the CMS, there is an annual assessment of compliance with a selection of obligations within CMMs for each CCM. The selection of these obligations is agreed on by CCMs at WCPFC each year.
3. As set out in **paragraph 6** of CMM 2019-06, the WCPFC will update what obligations shall be assessed using a risk-based approach. Until this risk-based approach is developed, in considering the obligations to be assessed in the following year, the WCPFC shall take into account:
 - (i) *the needs and priorities of the Commission, including those of its subsidiary bodies;*
 - (ii) *evidence of high percentages of non-compliance or persistent non-compliance by CCMs with specific obligations for multiple years;*
 - (iii) *additional areas identified through the risk-based approach to be developed; and*
 - (iv) *the potential risks posed by non-compliance by CCMs with CMMs (or collective obligations arising from CMMs) to achieve the objectives of the Convention or specific measures adopted thereunder.*
4. See also **paragraph 7** of CMM 2019-06 which provides criteria for the annual assessment of compliance by CCMs with priority obligations, and **Annex 1** of CMM 2019-06 which sets out criteria for the five levels of compliance status.
5. Note that members agreed at WCPFC12 (2015) to the list of obligations to be assessed for the next three years (2016, 2017 and 2018) and the frequency of assessment (with 93 obligations assessed annually, 25 obligations every two years and 18 obligations every three years – with further guidance required on driftnets and data buoys). In 2018, 2019, and 2020, WCPFC agreed each year on an annual list of obligations to be assessed.

WCPFC/Year when list of obligations adopted	Covers Activities in Year	Summary Report Attachment	No. of Obligations	Number of rows in dCMR per CCM (some obligation are assessed in the dCMR more than once) [Ref: W.Sec]
WCPFC 12 (2015)	2015	Attachment O	118 (93 + 17 + 8 + driftnets)	121
	2016	Attachment O	109 (93 + 8 + 8)	126
	2017	Attachment O	112 (93 + 17 + 2 + data buoys)	93
WCPFC 15 (2018)	2018	Attachment V	83	83
WCPFC 16 (2019)	2019	Attachment R	85	85
WCPFC 17 (2020)	2020	Attachment M	70	71
			Average 96	Average 96.5

Enhancing the Compliance Monitoring Scheme

6. Under **paragraph 46** of the CMM 2019-06 (and paragraph 45 of the preceding CMM 2018-07) on the Compliance Monitoring Scheme (CMS), the WCPFC committed to a multi-year workplan to enhance the CMS with the aim of making it more efficient and effective by streamlining processes. This includes the development, during 2020-21, of “a risk-based assessment framework to inform compliance assessments and ensure obligations are meeting the objectives of the Commission”.
7. Prioritising the obligations for annual assessment through a risk-based assessment framework (RBAF) is also related to other elements of the workplan to enhance the CMS. Notably the work on Audit Points (to ensure clarity about the elements within a CMM to be assessed) and the work to streamline and reduce duplicative reporting by CCMs. This workplan was a response to some of the recommendations from the report of the Independent Panel which reviewed the WCPFC CMS [[CMS Review Final Report - Consolidated issued 9 March 2018.pdf](#)].

What might a Risk-Based Assessment Framework for CMS look like?

8. With reference to ISO 31000 – 2018, risk can be defined as the effect of uncertainty on objectives. It is typically expressed as a function of likelihood and consequence:
 - Likelihood = the chance of an event happening
 - Consequence = the outcome of an event on objectives.

Some general comments

9. The CMS currently operates by assessing *individual* obligations within CMMs. The likelihood of non-compliance varies from obligation to obligation. Non-compliance with some obligations will have a greater impact, than non-compliance with other obligations in the same CMM, on the achievement of the objectives of that CMM.
10. Deciding which obligations have a lower risk and which have a higher risk could *guide* the prioritisation of the obligations in CMMs for assessment as part of the CMS, taking into account the needs and priorities of the Commission [para 6 of CMM 2019-06].
11. The RBAF is not a “silver bullet” for prioritising obligations for assessment. There are a range of variables that also need to be taken into account, including the lack of data in some cases (e.g. lack of compliance history or the lack of verified data), a degree of subjectivity in assessing qualitative information (particularly for rating “consequence”), and the need to consider resource implications for managing the CMS each year.
12. The RBAF should help in providing more structure to the selection of priority obligations – but inevitably there will be circumstances where some collective flexibility and judgement from members is required.
13. The RBAF is *not* a tool to assess the risk of non-compliance in relation to individual CMMs. Rather it will assess the risk that non-compliance with particular obligations poses for the achievement of a CMM and the broader objectives of the Convention [para 6 (iv) of CMM 2019-06].
14. The RBAF should ensure there is a regular assessment of *all* obligations within CMMs, with higher risk obligations receiving greater attention through the CMS than lower risk obligations.

Likelihood

- It is proposed that likelihood be rated based on data from previous compliance history under the Compliance Monitoring Scheme [reflecting para 6 (ii) of CMM 2019-06]. It would be scored as follows:

Likelihood	Description
Rare	Experience indicates that non-compliance with a CMM is <i>rare</i> (<1% of non-compliance from “recent” assessments)
Unlikely	Experience indicates that non-compliance with a CMM is <i>unlikely</i> (1-5% of non-compliance from “recent” assessments)
Moderate	Experience indicates that non-compliance with a CMM is <i>moderate</i> (6-20% of non-compliance from “recent” assessments)
Likely	Experience indicates that non-compliance with a CMM is <i>likely</i> (21-50% of non-compliance from “recent” assessments)
Almost certain	Experience indicates that non-compliance with a CMM is <i>almost certain</i> (51-100% of non-compliance from “recent” assessments)

Comments:

15. In response to comments, the **definition of likelihood** has been clarified. It measures the level of non-compliance with an obligation. This is based on compliance history – the compliance score from the annual Compliance Monitoring Report process. The accompanying RBAF spreadsheet provides data on the years of assessment and average ratings for obligations.
16. A number of comments reflected on the **sporadic assessment of some obligations**. Not all obligations are assessed each year, so there will be gaps in compliance assessment history, and some obligations have never been assessed. For the 2013-2019 assessment years, an average of 96 obligations have been agreed by the WCPFC to be assessed each year for the CMS. Of the 220 obligations in the RBAF spreadsheet, **78 obligations have no compliance history**.
17. In the absence of a compliance history, some obligations could be scored against the best available evidence, such as the likelihood of non-compliance with other similar or previous obligations (references should be documented), and the likelihood rating should be precautionary. Other options, where there is no compliance history, may be to assign a “moderate” likelihood rating (precautionary) or rely on the “consequence” rating until compliance history is generated.

Views?

- In the absence of compliance history, should non-compliance with other similar or previous similar obligations be used?
- Should a “moderate” likelihood be assigned until compliance history is generated?
- Should “consequence” be considered only, until compliance history is generated?
- Other options?

18. There were a number of suggestions that greater value should be placed on **more recent CMS assessments** (e.g. over the last 2-3 years). The WCPFC Secretariat noted, for example, that the CMS has evolved over time – with the current CMS involving “a deeper and broader scope of analysis that draws off a wide range of available WCPFC data and information sources, supported by an annual reporting procedure and facilitated by an online reporting system.”
19. Levels of compliance may change over time as CCMs become more familiar with requirements and compliance processes improve. Compliance with an obligation in 2013, or in any single year, may not be comparable to compliance with the same obligation in 2020.
20. The accompanying RBAF spreadsheet has used the **compliance history provided by the WCPFC Secretariat for the 2013-2019 period**. It sets out the years in which each obligation has been assessed (if it has) and uses the average compliance score for those assessments. This provides insights into the regularity of the assessment of particular obligations. It also illustrates how often non-compliance with obligations occurred in the 2013-2019 period (for those obligations which have been assessed).

21. As the RBAF beds in, and a more comprehensive and regular range of compliance history is generated, the RBAF could move towards using the most recent 3 or 4 years compliance history for each obligation (i.e. for the most recent 3-4 years when the obligation was assessed).

Views?

- Use the complete compliance history provided by WCPFC Secretariat as a trial while the RBAF beds in?
- Move towards using the average of the most recent three year assessment for each obligation?

22. There were some comments suggesting that **new obligations or amended obligations** should be prioritised for assessment, in order to identify at an early point whether CCMs have implementation difficulties or to test that the new or amended obligation is fit for purpose. Prioritised, early assessment would reinforce the impetus behind introducing a new or amended obligation. It would ensure that compliance history was generated to inform subsequent prioritisation.

23. On the other hand, it might be preferable to make a judgement at the time the new or amended CMM is adopted by the WCPFC as to when the new obligation should be assessed. This could take into account resources, availability of relevant data on compliance with the obligation, and other compliance priorities.

Views?

- Should new or amended obligations be automatically included in the next year's list of obligations for assessment?
- Should the WCPFC decide at the time of adoption of a CMM when the obligations should be assessed in the CMS?

24. There were suggestions to simplify the **likelihood categories** into three categories: "unlikely" (less than 5% or less than 10%); "moderate"; and "likely". As set out in the attached spread sheet (and below), a preliminary assessment of those obligations with an assessment history across the above five categories suggests a reasonable spread, with all categories being relevant.

Likelihood	Description	No. of obligations
Rare	Experience indicates that non-compliance with a CMM is <i>rare</i> (<1% of non-compliance from "recent" assessments)	38
Unlikely	Experience indicates that non-compliance with a CMM is <i>unlikely</i> (1-5% of non-compliance from "recent" assessments)	50

Moderate	Experience indicates that non-compliance with a CMM is <i>moderate</i> (6-20% of non-compliance from “recent” assessments)	35
Likely	Experience indicates that non-compliance with a CMM is <i>likely</i> (21-50% of non-compliance from “recent” assessments)	14
Almost certain	Experience indicates that non-compliance with a CMM is <i>almost certain</i> (51-100% of non-compliance from “recent” assessments)	4

Note: This is based on compliance history - not all obligations have a compliance history. It relates to a total of 141 obligations with compliance history out of a total of potential 224 obligations for assessment under CMS.

25. One comment proposed that “likely” or “almost certain” likelihood ratings should result in at least a “high” risk rating, as that likelihood of non-compliance should be brought to the attention of the TCC. It is likely that this result would occur “naturally”, taking into account the consequence rating. But if it does not result in a “high” risk rating, members may want to make a judgement as to whether that is appropriate – noting that the RBAF is a *guide* to prioritisation of the list of obligations and judgement and flexibility may still be required.

Views?
<ul style="list-style-type: none"> • Retain the above five categories for “likelihood”? • Adjust the categories or simplify them? If so, how? • Note that judgement and flexibility will be required, including in the circumstances where non-compliance is “likely” or “almost certain”.

Consequence

- It is proposed that consequence be rated as the impact of non-compliance with an obligation on meeting the objective of the relevant CMM [reflecting para 6 (iv) of CMM 2019-06]. It would be scored as follows:

Consequence	Description
Insignificant	The consequence of non-compliance presents <i>minimal or no threat</i> to the objective of the CMM
Minor	The consequence of non-compliance presents a <i>minor threat</i> to the objective of the CMM
Moderate	The consequence of non-compliance <i>may undermine</i> the objective of the CMM
Major	The consequence of non-compliance <i>will probably undermine</i> the objective of the CMM
Serious	The consequence of non-compliance <i>will seriously undermine</i> the objective of the CMM

Comments:

26. There was a proposal that where there is **no clear objective or purpose statement in a CMM** (from which to judge "consequence"), then one may be inferred based on the language in the CMM. In the attached spread sheet, objectives have been included where these exist in CMMs. Where there are no explicit objectives within a CMM, a possible objective has been suggested based on language from the CMM. In future, members may wish to consider the inclusion of an objective or purpose statement as best practice for the development of CMMs and to assist the RBAF process for prioritising obligations.
27. Some commented on the importance of **objective or impartial risk ratings** of the obligations, suggesting that the rating of consequence could be relatively subjective amongst CCMs – it will require discussion and agreement amongst members. Criteria or examples may be useful to illustrate what each "consequence" category means for a particular obligation – this may be an outcome from the Audit Points work. Another suggestion was that consequence should be based on a more binary analysis: "presents minimal or no threat to the objective or purpose of the CMM vs will probably undermine the objective or purpose of the CMM".
28. A preliminary (unilateral) assessment of the consequence of non-compliance with obligations across the above five categories suggests that the minor to serious categories are relevant. The insignificant category, however, could be removed if members agreed.

Views?

- Is it useful to establish an "objective" for each CMM to assist "consequence" rating? [Comments are welcome on proposed CMM objectives]
- Should the above four categories for "consequence" rating be retained?
- Should they be simplified? If so, how and why?
- How could criteria be incorporated to help measure "consequence? Would that be helpful?

Risk matrix

- The product of scores for both likelihood and consequence can be set out in a matrix. Those non-compliance events with lower likelihood and lower consequence pose a lower risk, and vice versa. (see matrix below for example). The below matrix has been adjusted to remove the "insignificant consequence" rating (as suggested above).

CONSEQUENCE				
LIKELIHOOD	Minor	Moderate	Major	Severe
Rare	Low	Low	Moderate	High
Unlikely	Low	Moderate	High	High
Moderate	Moderate	Moderate	High	Severe
Likely	Moderate	High	Severe	Severe
Almost Certain	High	Severe	Severe	Severe

RBAF Spreadsheet

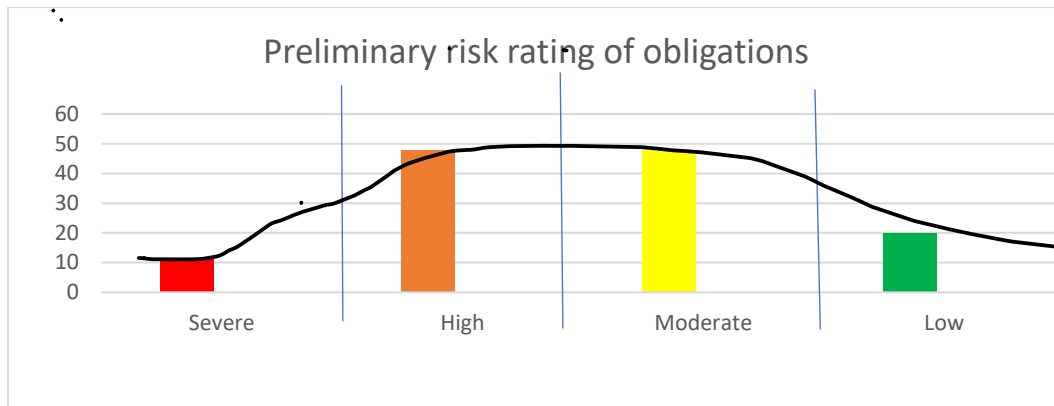
- Using WCPFC Secretariat data, the spreadsheet is a comprehensive list of 220 current obligations, referring to previous obligations where appropriate.
 - The 18 obligations from the Convention are listed separately – these can be added if members consider appropriate.
 - It sets out when obligations have been assessed through the CMS and provides an average score over these assessments – which is the basis for the likelihood rating.
 - It notes which obligations have been included in the Audit Points work to date. Also which obligations have been included in the “hold on file” Annual Report Part 2 initiative.
 - It correlates obligations with the thematic groups proposed by the WCPFC Secretariat for consideration.
- **You are invited to assess *consequence* of non-compliance with the obligations and, therefore, possible risk ratings for each of obligations in the spreadsheet.**

Schedule of assessment for obligations

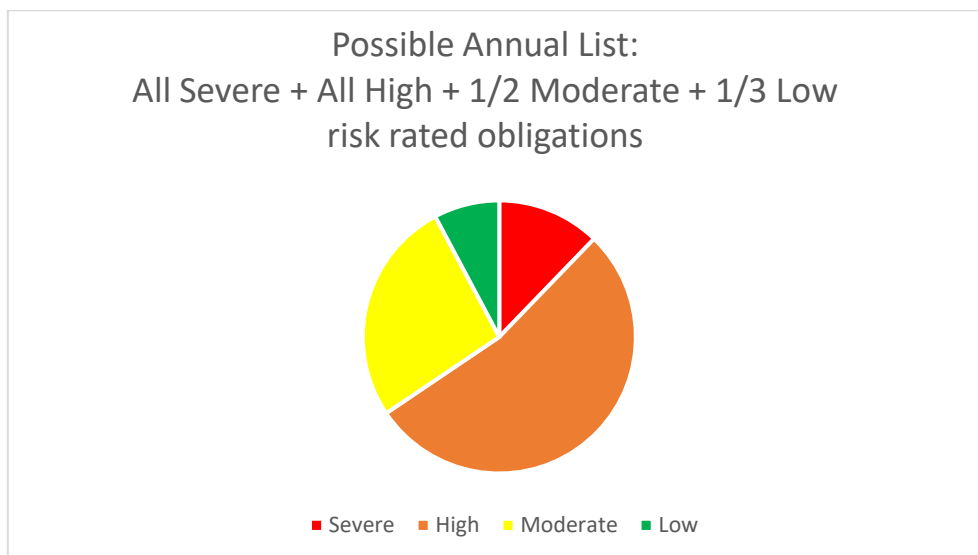
- Once all obligations have been assessed for risk, a forward schedule of annual assessments must be developed.
- This should be based on the principle that those obligations with a higher risk rating are assessed more frequently than those obligations with a lower risk rating.
- For resource reasons, there must also be a manageable number of obligations to be assessed each year.
- The list of priority obligations each year will need to reflect a mix of severe, high, medium and low risk rated obligations to ensure comprehensive assessment of all obligations over a relevant timeframe (e.g. 3 years or more).

Comments:

29. Sorting obligations into severe, high, moderate and low risk is one way of prioritising the assessment of obligations.
30. From a preliminary – and rough - risk rating of obligations, it is likely that the obligations will fall into a relative normal curve. Around half of obligations may be rated “severe” and “high” risk, with the remaining half rated “moderate” and “low”. About three quarters of obligations may be rated moderate or high.



31. Including all of the obligations rated “severe” and “high” risk in the annual list of obligations may result in a list of obligations roughly the same size as that used for 2018-2020. Rotating a selection of obligations rated “moderate” or “low” risk into the list on a regular basis would enlarge the list.
32. A formula could be devised to include “moderate” and “low” rated risks on a regular basis. For example, half the “moderate” rated obligations on the list each year, with the remaining half included in the list the following year. The “low” rated obligations could be split into thirds, with a third included on the list each year for the coming three years. This would ensure there is a regular schedule to assess all obligations.
33. There would still need to be an annual process to check that the list was fit for purpose and to consider new or amended obligations.



Views?

- What approach should be taken to “severe” and “high” risk rated obligations?
- What approach should be taken to “moderate” and “low” risk rated obligations?
- Does the formula of all severe and high risk obligations, $\frac{1}{2}$ moderate and $\frac{1}{3}$ of the low risk obligations seem workable?

How to rationalise the list of obligations for annual assessment?

34. At the same time, however, further work is required to rationalise the obligations to be assessed. The RBAF spreadsheet contains **220 obligations**. [Note that the 18 obligations from the Convention are listed separately.]
35. Currently, obligations are divided into four categories of limits, implementation, report and deadlines. This adds to the expansion of the list of obligations (effectively, some obligations can be categorised under more than one category – with some obligations categorised in up to three categories).

Category	Number of obligations
Limit	22
Implementation	103
Report	53
Deadline	37
Report/Deadline	2
Implementation/Report	1
Implementation/Report/Deadline	1
TOTAL	219*

*Not sure why this does not add up to 220.

36. In this respect, the work under way by the WCPFC Secretariat to streamline annual reporting requirements for CCMs is relevant.
37. This includes the improvement to Annual Part 2 Reports, where CCM responses to **implementation type obligations** are “held on file” as these responses do not tend to change annually (i.e. they reflect national-level policy, regulations or legislation to give effect to obligations). The WCPFC Secretariat has proposed that there would simply be one annual question for relevant obligations which would seek confirmation from CCMs that they have checked (and, if necessary, updated) their implementation statement to ensure it remains valid for the relevant obligation.
38. This does not preclude implementation obligations being assessed through the CMS – but it may simplify the process. The focus would be on those CCMs which have not provided an implementation statement or have not provided an adequate implementation statement. New implementation obligations could be assessed at an appropriate juncture after introduction to ensure that CCMs have provided an implementation statement, with a regular (but not necessarily annual) schedule to assess on-going implementation. [See paras 31-34 of WCPFC-TCC17-2021-10 [Summary of submissions of Annual Reporting and update on initiatives to streamline annual reporting | WCPFC Meetings](#)]
39. This may mean that implementation obligations – while still assessed – are assessed in a different way. They may not need to be included in the annual list of obligations. The WCPFC Secretariat has treated **109 implementation** obligations (includes a couple of report obligations) in this way for the 2020 year.

40. In addition, there may be scope to reduce the number of obligations by combining, *where appropriate*, **report and deadline obligations**. This would be relevant, for example, where there is an annual Part 1 or 2 report obligation, accompanied by the corresponding deadline obligation. This could be treated as one obligation. [This appears consistent with work to date on Audit Points – and agreement by the WCPFC to accept the assessment by the WCPFC Secretariat as to whether a deadline has been met or not.] There are some deadline obligations, however, that should remain because the timeliness of the report carries a higher risk (for example, transshipment notifications and declarations). This will need to be considered.
41. The WCPFC Secretariat is also developing **thematic groupings of obligations**, in addition to the current categorisation into quantitative limits, implementation, reporting and deadlines. Thematic grouping of obligations may be another means to rationalise or cluster the list of obligations to be considered in the annual CMS. In the accompanying RBAF spreadsheet, obligations have been grouped according to the WCPFC Secretariat’s proposed thematic groupings (noting this is still a work in progress).

Thematic Group	Number of Obligations
Annual Fishing Activity Related	39
Additional Measures for Pacific Bluefin Tuna	6
Additional Measures for Pacific Bluefin Tuna	11
Inspection Activity	26
Mitigating Impacts of Fishing on species of special interest	49
Observer Related	22
Operational Requirements for Fishing Vessels	25
Overarching Requirements	10
Quantitative Limits for Tuna & Billfish	32
TOTAL	220

42. The development of **Audit Points** may also be a means to consider streamlining of the CMS in the context of considering, substantively, what is the *actual requirement* to fulfil the obligation? [The Audit Points work to date covers 158 obligations out of a total of 218 obligations.]

Views?

- Views on the potential to treat “implementation” obligations differently in the CMS process given the move to “hold on file”?
- Thoughts on the scope to consolidate obligations through the Audit Points process (for example, combining report and deadline obligations where appropriate)?
- How could thematic grouping or clustering be used to streamline the CMS, including prioritisation of obligations?
- Any other comments on ways to rationalise the number of obligations assessed each year?