

## Strawman

### Research Track – Operational Assessment – Key Stocks – Interim Analysis

This document is SEDAR Staff's attempt to map out the transition from the existing process to a new approach that combines the Research Track with regular scheduling of influential or 'key' stocks and interim analyses to reduce the lag in the science supporting ABC advice.

#### Managing Flexibility

Current SEDAR process guidelines are highly proscriptive. There are default TORs and detailed process schedules that form the starting point for all projects. However, while this is particularly true for SAFMC-GMFC assessments prepared by SEFSC, the unique analytical, data, and staffing challenges of assessments prepared for other Cooperators or conducted by FL FWC have led to less reliance on the default schedules and TORs.

The RT-OA process offers an opportunity to provide more flexibility in the process so that each project can be crafted to meet its needs, rather than being crafted around a default schedule of workshops/milestones and TORs. Implementing this flexibility will create gray areas in the process that will need to be addressed during initial planning. Staff proposes creating a "Planning Team" for each assessment project to outline the project schedule, TORs, and identify critical personnel. Approvals and appointments by Cooperators would continue per the current practices – unless the SEDAR Steering Committee wishes to make changes in the approach. This is similar to how the SAW Chair, lead analyst, and SAW Working group operate for assessments in the Northeast conducted through the SAW/SARC. It is also similar to how SEDAR Coordinators have worked previously with FL FWCC staff to develop guidelines for several assessments led by FWCC, with SEFSC and CFMC staff on CFMC assessments led by SEFSC, and HMS and SEFSC staff on shark assessments.

#### Planning Team (Organized for each assessment project)

SEDAR Coordinator, Lead Analyst, Council staff lead, SSC chair or representative

#### Charge

1. Develop a project schedule: identify and provide a timeline for the workshops/webinars, critical deadlines and milestones necessary for the project

- Final delivery deadlines will be established by the Cooperator/Steering Committee. The planning team is responsible for setting up a schedule that gets the project completed by that time.

NOTE: This is identical to how the SAW/SARC operates in the NE. SAW/SARC peer reviews are regularly scheduled 2x a year. The Northeast Region Coordinating Council (NRCC) determines which stocks are done for each peer review. The work group leader and lead analyst largely determine what is necessary to get there.

2. Develop initial TORs: What unique issues does this assessment need to address?

- STC can require certain default or standard TORs for all assessments, as done now. This step is for modifying and adding to the defaults to address the specific challenges of each assessment.
- The role of Council staff, analytical lead, and SSC chair is to ensure that issues of concern for their group are considered. For example, the SSC may be concerned about environmental impacts on a stock and add a TOR to have them considered.

### 3. Identify participants necessary to meet the TORs

- the assigned lead analyst may not be able to address certain specific TORs (e.g. an environmental or survey examination). There may also be a need to bring in specific data providers.

### Applicability Caveat

This proposal is primarily directed toward the process used for GMFMC-SAFMC assessments led by the SEFSC. Some of the concepts here may apply to other aspects of SEDAR, such as using the RT and OA terminology. Some SEDAR partners (HMS, FWCC) may not have the resources for the full process of RT-OA-IA. The Commissions have their own established assessment processes, for which SEDAR provides a peer review venue, and therefore are not subject to these proposals.

Given that focus, there may be instances in the following text where technical groups are referred to as the ‘SSC’, rather than the generic but longer “technical advisor”. The same may apply for APs or analytical agencies (e.g., SEFSC). In all cases, each Cooperator is free to insert their appropriate group when considering this proposal.

### 1. Research Track

Similar to: Benchmark

Purpose: Build a robust assessment tool – will not provide management advice.

Process: can vary. Typical – 2-3 workshops – Data, Assessment, Review

Peer Review: by independent panel; usually an in-person workshop

Participants: Same as the current benchmark steps

Public Participation: Same as current process. Open, public workshops with opportunity to comment throughout (through SEDAR). Additional opportunity once the product is disseminated to the Cooperator.

TORs: follow same approval process

Product: A thoroughly documented, independent peer reviewed assessment tool.

Data Timeliness: The most recent data available at the time of the DW will be used. Data will not be updated as the process proceeds, and the schedule will not be delayed to update a data timeseries.

Expected Timeline: 12-18 months.

Frequency: SEDAR-wide: 1-2 Research Tracks underway at any particular time

Per individual stocks: variable, based on need. There are no “expiration dates” on the assessment tool built through a RT (or the benchmark)

## FAQs

Is an RT required for existing, peer reviewed benchmark assessments?

No. A RT would only be required for an existing assessment if there is a need for major changes, such as those that would trigger a new benchmark in the current process.

Is an RT required for first time assessments?

Yes. The RT will be used to build the model tool, similar to the current benchmark. This does not mean RTs will always be limited to single stocks. Multiple data limited stocks could be addressed, as has been done under the current process.

Will RTs only be applied to single assessments, similar to current benchmarks?

No. RT may be applied to a group of stocks to address a methods or data input change shared by all. For example, a RT could be used to develop indices for multiple species from a new survey dataset. A RT could also be used to develop and evaluate a change in model structure or assumptions that could be applied to multiple existing assessments.

Will RTs provide transparency and include opportunities for public involvement?

Yes. RT workshops and webinars will be functionally similar to existing SEDAR workshops.

What role will SSCs play in RTs?

SSCs will play a role in all phases, just as they do now for benchmarks.

How will Stock ID be addressed?

Stock ID will be determined at the start of the RT process, similar to how it is now addressed prior to benchmark DWs. The Steering Committee will provide guidance on the stock ID determination process when there is a stock ID question to resolve.

Will data providers be expected to recompile or reanalyze data after submitted through DW/Pre-AW phase?

No. The intent is for data to be provided in such a way that the analytical team can compile it as necessary for the assessment.

## 2. Operational Assessment

Similar to: Standard and Update (will encompass both)

Purpose: Provide analyses to support management advice with up to date data.

Process: Will vary by project, may range from the current standard to update approaches.

The Planning Team will be responsible for outlining the schedule/deadlines/workshops for each operational project

Peer Review: Provided by SSC

Participants: Will vary by project, similar to current standard and update

Public Participation: Same as current process for standard and update. Open, public workshops with opportunity to comment throughout when workshops are held (through SEDAR). Additional opportunity once the product is disseminated to the Cooperator.

TORs: follow same approval process; may require additional detail to incorporate suggestions of peer reviewers (independent and CIE) on the RT tool.

The Planning Team will be responsible for drafting the TORs for each operational project

Product: A brief report similar to current updates and standards, that provides management quantities and addresses the TORs

Data Timeliness: The intent is to use the most recent data so the advice is timely

Expected Timeline: 2-6 months.

Frequency: Key stocks: every 2-5 years

(Intervals will be established for each stock as part of the long-term scheduling phase addressed in the Key Stock section)

Others: Longer, variable, based on need

After RT: immediate, once updated data are available

## FAQs

If an Operational Assessment can range from a current update to standard, who will decide how it is done?

The Planning Team will outline the process, based on recommendations and requests from the Cooperator, including SSC and APs. The team will review research needs identified in the RT (or prior assessments) and consider if any are addressed and can be included. The team should also review any new research and data sources that may be relevant. All of these factors will need to be considered when outlining the process and how extensive it needs to be.

How will the interval between OAs be determined?

Intervals will vary between stocks, and should be determined through a collaborative effort of the SSC/APs/SEFSC (or other appropriate groups depending on the cooperator). Ideally, future timing will be addressed during the RT, and may be addressed during an OA. Future timing may change as a fishery or stock changes.

How will this expected timeline be achieved, given the data delivery issues we current face?

The expected timeline reflects the analytical time period, not the time necessary in advance for data preparation. One reason for that here is that this process of regularly scheduled operational

and interim analysis for over two dozen stocks per year will require a significant change in data delivery practices. Given the role of data bottlenecks in overall assessment productivity, this is likely the single biggest impediment to this plan.

### 3. Interim Analysis

Similar to: Somewhat similar to updated projections in content, and to updates in process

Purpose: Provide support for management (ABCs) between assessments – potentially on an annual basis

Process: conducted by appropriate analyst/agency

Peer Review: Provided by SSC

Participants: Internal, no “SEDAR Appointees”

Public Participation: Available during SSC review and Cooperator consideration. Handled by the Cooperator.

TORs: Developed by the SSC, to provide guidance on the analysis. The SSC should provide this information, during RT or OA reviews, for the next interim.

Product: A brief report that provides management quantities and documents the input data and addresses the TORs.

Data Timeliness: use the most recent data so the advice is timely

Expected Timeline: 1-3 months (once data are available; see FAQ above)

Frequency: Annual, unless the stock receives an operational assessment in that year.

FAQs

What is an interim analysis?

This is a new concept that is not fully defined yet. The scope and contents of an interim analysis will likely vary based on the stock, the type of assessment, and data availability. The underlying principle is to identify which sources of data are influential to the assessment and can be rapidly updated. For some stocks, a survey may be key, while for others it may be age composition. The SSC should play a role in deciding the nature of the interim analysis on a stock by stock basis, as they will have to use it for ABC advice. Some consideration of future interim analyses may be required in initial RT assessments.

Will an Interim Analysis be provided in the same year a stock goes through a RT?

Yes. The RT may modify the tool for the future and will not provide updated information to support management advice. Therefore an interim analysis will be required for management advice during the year(s) when an RT is underway, and an operational assessment based on the new RT tool will provide advice in the following year.

What is SEDAR’s role in an interim analysis?

None, once the overall, long term schedule is developed. The analyses will be provided directly to the Cooperator.

#### 4. Key Stocks & their Assessment Schedule

Similar to: Nothing currently

Purpose: Provide a regular, long-term assessment product schedule for influential/important/targeted stocks (i.e., “Key Stocks”)

Process: The Cooperator (Council) and its technical body (SSC), working analytical agency (SEFSC) and advisors (AP) advice, will identify a group of approximately 12 Key stocks that will be subject to a set, long-term plan for delivering assessment products (Operational and Interim analyses)

Peer Review: Provided by SSC

Participants: Regular Cooperator process participants – technical, advisory, and decision-making

Public Participation: Available during review and Cooperator consideration. Handled by the Cooperator.

TORs: Not applicable

Product: A list of key stocks and the reason for selection, and a schedule of assessments.

Examples (Figures 1 and 2 of the SEFSC Proposal)

	<div>Analyst 1</div> <div>Analyst 2</div> <div>Analyst 3</div>					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Red Snapper</b>	Operate	Interim	Interim	Interim	Operate	Interim
<b>Black Sea Bass</b>		Operate		Interim		Operate
<b>Red Porgy</b>	Interim		Operate		Interim	
<b>Gag Grouper</b>		Interim		Operate		Interim
<b>Vermilion Snapper</b>	Operate		Interim		Operate	
<b>Snowy Grouper</b>		Operate		Interim		Operate
<b>Tilefish</b>	Interim		Operate		Interim	
<b>Red Grouper</b>		Interim		Operate		Interim
<b>Scamp</b>	Research	Operate		Interim		Operate
<b>Gray Triggerfish</b>			Research	Operate		Interim
<b>Greater Amberjack</b>			Interim		Operate	

Stock	Prioritization Score	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Red Snapper	6.6	RT + I	O	I	O	I	O
Greater Amberjack	6.4	I	RT + I	O	I	I	O
Gray Triggerfish	6.1	O	I	I	RT + I	O	I
Gray Snapper	3.7	O	I	I	I	O	I
Scamp	2.8	I	I	O	I	I	I
Red Grouper	2.5	O	I	RT + I	O	I	I
Gag Grouper	2.5	I	O	I	RT + I	O	I
King Mackerel	2.4	I	O	I	I	RT + I	O
Cobia	2.3	I	I	O	I	I	RT + I
Vermilion Snapper	2.2	I	O	I	I	RT + I	O
Spanish Mackerel	2.1	I	I	O	I	I	I
Yellowedge Grouper	1.5	RT + I	O	I	I	I	O
GULF DLM		DLM	I	I	I	I	I
Caribbean		I	I	I	DLM	I	I

## FAQs

Can Key stocks change over time?

Yes. The Cooperator can swap stocks if the fishery or environment changes. This will have impacts on long term planning, and a RT will be required to bring the stock onboard if the stock does not have a peer reviewed stock assessment.

Can this approach be supported under the constraints of the Data Delivery System currently in place?

This approach is data intensive. Currently data delivery now limits the SEDAR process to around 8 annual projects – Benchmark, Standard, and Update inclusive – across all Federal Cooperators (Councils + HMS)?

Data availability for assessments is a major bottleneck that has been discussed by the Steering Committee since the beginning. The SEFSC proposal suggests that the regular schedule and focus on a subset of key stocks will help their efforts to increase data automation and therefore throughput. There are other critical data providers around the region (e.g., States as well as regional groups including ACCSP, GULFFIN, MARMAP, SEAMAP) that must be considered in the overall data delivery strategy.

However, the need to resolve data issues is a challenge to implementing this plan immediately. One possible benefit of delay is it gives the STC a chance to pilot or soft start this process before fully committing.

The SAFMC SSC has already agreed to piloting this approach for a few stocks in the next year or so. They will consider a list of key stocks, interim analyses, and potential pilot candidates at their May 1-3 meeting.

What if an issue arises with a stock, whether key or not, that needs to be addressed immediately?

There will always be unexpected events that will challenge long term assessment plans. One way to address this is to reserve some assessment capacity to address the unknown of the future. In the top figure example, reducing the annual interims of red snapper would free up resources for additional interims, of stocks yet to be determined, in future years.

For the key stocks, securing annual updates to data are essential to the success of the SEFSC proposal. Since data availability (ages and indices in particular) often limits the ability of the STC to change assessment schedules in response of fishery issues raised by the Councils, having data updated for all key stocks on an annual basis will give more opportunity for flexibility. This is not without cost, as moving one stock up will push another one back (unless some reserve capacity is retained as suggested above). There are also practical limitations, such as analyst assignments, that will limit flexibility.

What about stocks assessed by FL FWCC?

The FWCC conducts assessments of several stocks that may be considered “key” based on their landings and influence in the fishery, such as yellowtail snapper, hogfish and spiny lobster. The impact to FWCC of the SEFSC proposal was raised when the underlying concept was presented to the SAFMC in March 2018. As of this writing, the extent to which FWCC can incorporate this full proposal is unknown.

What is SEDARs role in Key Stocks?

SEDAR is only involved in the planning of the assessment workload. Key stocks will be identified by each Cooperator and used to develop their longterm assessment plan.