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## Background

The Southeast Data, Assessment and Review (SEDAR) process was originally conceived in 2002 as a thorough and transparent way to conduct and review the assessments for a few of the more controversial stocks. Since its inception, the program has grown tremendously and is routinely applied to all the major stocks in the Fishery Management Plans (FMPs) of three Fishery Management Councils (Councils) and for sharks managed by the National Marine Fisheries Service (NMFS) Highly Migratory Species (HMS) Division. The wider use of SEDAR slowed overall assessment output considerably, partly due to the need to redevelop inputs and models multiple times to accommodate the evolving requests that typically arise in the name of thoroughness. At the same time, the demand for stock assessments from the Councils and other stakeholders has increased considerably.

To increase throughput, the SEDAR Steering Committee (SC) created a three-tiered assessment process: Benchmark, Update and Standard. The original Benchmark assessment process retained its thorough nature, including two in-person workshops (Data and Review). Update assessments were introduced to limit model changes, only adding new years to the previously approved data streams to bypass the independent peer-review. The standard assessment was created as an intermediate process where the assessment development and review focused on a few key changes in the data or model during a single in-person workshop. To some extent the new process suffered from its own success in that more partners with more data contributed to increasingly complex models with a corresponding increase in potential challenges. Moreover, Cooperators (NOAA, Councils, Commissions) tended to request more benchmark or standard assessments than originally anticipated, resulting in a systemic overload. Finally, schedules were frequently changed to accommodate various concerns of SC members, which created inefficiencies as data providers were expected to shift priorities.

In 2014, the Southeast Fisheries Science Center (SEFSC) and others proposed a number of changes to increase both throughput and thoroughness. One of these changes was a shift to a cycle of research track (RT) and operational assessments (OA), similar to what has been done in other regions. The RT assessments would produce a peer-reviewed stock assessment model that would be updated in subsequent OAs for management advice. This cycle would increase quality because RT assessments are not rushed to completion under the pressure of needing to provide management advice (as current benchmark assessments are). It would increase throughput because

data providers can plan ahead. Additionally, data providers will not have to recalculate data inputs multiple times as they did for the benchmark process since no management advice is produced during a RT. Final updated inputs are not required until the follow-up OA.

In addition to providing management advice after a RT assessment, the OAs were also intended to encompass previous standard and update assessments categories. They are stand-alone assessments, building from previously approved assessment configurations to include updated data and minor model modifications, and provide management advice in a timelier manner than RTs.

The first RT assessment began in 2019 and the first OAs were conducted in 2020. As with any new process, modifications are expected as information is gained through implementation. Research Tracks proved to be very broad-based and are far more time consuming than originally predicted, greatly delaying management advice. Additionally, the OAs proved challenging for the Cooperator technical bodies to be comfortable using the results to recommend management specifications. Given these factors, the SC in 2023 concluded there was a need for an assessment category between the RT and the OAs and agreed that Benchmark assessments should be included in the suite of options for SEDAR assessments. The Benchmark assessments will allow more flexibility to examine and modify data inputs and modeling approaches as well as provide management advice at the completion of the process.

The intent of this document is to concisely lay out a detailed description of the Research Track/Benchmark/Operational Cycle that will guide the construction of appropriate Standard Operating Procedures.

## Research Track (RT) Assessment Overview:

- Purpose: Build a robust assessment tool. As the results are not intended to provide management advice, up-to-date data streams are not required.
- Products: A thoroughly documented, independently peer reviewed assessment and report.
- Process: Two in-person workshops Data and Review. Assessment process is conducted via webinars.
- Peer Review: Independent panel utilizing Center for Independent Experts (CIE) reviewers; usually an in-person workshop.
- Assessment Development Team (ADT): Panel of participants who participate in both the data and assessment stages of the process to provide consistency in the decision-making process (may also support the Review Workshop stage). Members are appointed by the Cooperators.
- Planning Team (PT): Appointed by Cooperators to suggest participants, produce initial terms of reference (ToR), and assist in scheduling of project milestones.
- Public Participation: SEDAR provides open, public workshops and webinars with the opportunity to comment throughout. Additional opportunities are available once the product is disseminated to the Cooperator.
- Terms of Reference (ToR): Draft ToRs are produced by the PT and approved by the Cooperators approximately one year in advance of the assessment. Some flexibility for

modifying the ToRs is acceptable, which may require a longer time line and adjustment of the schedule for other species.

- Data Timeliness: Terminal year for RTs will be set by PT, in consultation with key Data Providers. The most recent readily available data for the data workshop (DW) should be utilized. Data will not be updated as the process proceeds, and the schedule should not be delayed to update data streams.
- Expected Timeline: 16-20 months (not including subsequent OA to provide management advice). Species that have not been assessed for many years will generally take longer.
- Stock ID Process: 3-5 months (not all RTs will need this and, in many cases, could be done with other species through a separate procedural workshop process).
- Frequency: On average, it is expected that there should be few RTs underway at any time. There are no "expiration dates" on the assessment tool built through a RT, therefore the frequency of assessments should be tempered by the extent of compelling new information and the resources available to conduct the work.

## Specific Research Track Components:

Planning Team (PT; Organized for each assessment project)

Consists of the SEDAR Coordinator, Lead Analyst, lead agency and cooperator staff leads, SSC chair or representative. Specific duties include:

1. Develop a draft project schedule, providing a timeline for the workshops/webinars, critical deadlines and milestones necessary for the project.

- Data delivery deadlines established during SEDAR/SEFSC Master Schedule Planning calls.
- Final delivery deadlines will be established by the Cooperator/SC. The planning team is responsible for setting up a schedule to complete the project by deadlines.
- Approval of Milestone Project Schedule follows current practice (lead analytic team and Cooperator).

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

- May begin with default ToRs for all assessments. This step is to modify and add to the defaults, addressing the specific challenges of each assessment.
- The role of Cooperator staff, analytical lead, and SSC participant(s) is to ensure that issues of concern are considered. For example, the SSC may be concerned about environmental impacts on a stock and add an item to the ToRs to be 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 experts and data providers.

## Assessment Development Team (ADT)

This group is a subset of the participants within the DW process, and the bulk of the Assessment Process (AP) participants, including assessment leads and other analysts as needed

(who will contribute to the report and analyses), Cooperator representatives (e.g., 1-2 members of the Council SSC or equivalent), and 1-2 other external analysts as recommended by the PT. Members are expected to maintain a high level of commitment, participating in both the data workshop process and assessment webinars to ensure consistent decision making. The team should have a good balance of technical expertise and regional knowledge. Any perceived biases should be balanced to the extent possible. Decisions are made by consensus. Specific duties include:

- 1. Data Stage
  - DW working groups, which may include experts outside the ADT, make recommendations and prepare report sections and associated documentation.
  - Recommendations regarding appropriate data sets and the use thereof are discussed during the full plenary. ADT members are responsible for ensuring their consensus recommendations are included in appropriate DW report sections.
- 2. Assessment Stage
  - Assessment participants may also include others beyond the ADT, such as other analysts/data providers, fishers and other stakeholders, who contribute to the discussions, but are not part of the consensus decision making process.
  - The ADT may deviate from recommendations made during the DW process.
  - ADT members may contribute analyses as needed (based on expertise, especially if added to the working group to help with a specific analytical area), contribute to report preparation, and present to Review Panel as needed.

## Data and Assessment Workshop and Webinar Chair

- The SEDAR Coordinator will serve as the Chair for the Data and Assessment Components of the Research Track Process in most cases.
- The SEDAR Coordinator will serve as the Chair for the Stock ID component of the Research Track process, if there is one.
- A Cooperator may choose to contract an individual other than the SEDAR Coordinator to serve as the Chair for any of Stock ID, Data, or Assessment components of the Research Track process. Should they choose to do so, the Cooperator would be responsible for any stipend required.
- Chair Duties may include (but are not limited to): facilitate the running of in-person workshops and webinars, communicate with working group leads, building consensus for recommendations.

## <u>Data Management</u>

• SEFSC will provide a Project Manager (PM) for each RT that it conducts. The PM will be responsible for coordinating SEFSC tasks and all data management for the assessment.

• At the completion of each RT, a summary page listing all data sets included in the assessment, along with the contact information for who provided the analysis, will be compiled. This will be the source of data information for the next assessment.

### Benchmark Assessment Overview:

- Purpose: Build a robust assessment tool within a determined timeframe to provide management advice. Up-to-date data streams are required.
- Products: A thoroughly documented, independently peer reviewed assessment and report.
- Process: Two in-person workshops Data and Review. Assessment process is conducted via webinars.
- Peer Review: Independent panel utilizing Center for Independent Experts (CIE) reviewers; usually an in-person workshop.
- Planning Team (PT): Appointed by Cooperators to suggest participants, produce initial terms of reference (ToR), and assist in scheduling of project milestones.
- Public Participation: SEDAR provides open, public workshops and webinars with the opportunity to comment throughout. Additional opportunities are available once the product is disseminated to the Cooperator.
- Terms of Reference (ToR): Draft ToRs are produced by the PT and approved by the Cooperators approximately one year in advance of the assessment. Some flexibility for modifying the ToRs is acceptable, which may require a longer timeline and adjustment of the schedule for other species.
- Should new information become available later in the process (e.g., assessment stage), discussions between the Cooperator and Lead analytic agency will be required to determine if this information can be accommodated during the assessment cycle.
- Data Timeliness: Terminal year for RTs will be set by PT, in consultation with key Data Providers. The most recent readily available data for the data workshop (DW) should be utilized. Data will not be updated as the process proceeds, and the schedule should not be delayed to update data streams.
- Expected Timeline: 12-18 months. Species that have not been assessed for many years will generally take longer.
- Stock ID Process: 3-5 months (not all Benchmarks will need this and could be done with other species through a separate procedural workshop process).
- Frequency: On average, it is expected that there should be few Benchmarks underway at any time. There are no "expiration dates" on the assessment tool built through a Benchmark, therefore the frequency of assessments should be tempered by the extent of compelling new information and the resources available to conduct the work.

## Specific Benchmark Components:

Planning Team (PT; Organized for each assessment project)

Consists of the SEDAR Coordinator, Lead Analyst, lead agency and cooperator staff leads, SSC chair or representative. Specific duties include:

1. Develop a draft project schedule, providing a timeline for the workshops/webinars, critical deadlines and milestones necessary for the project.

- Data delivery deadlines established during SEDAR/SEFSC Master Schedule Planning calls.
- Final delivery deadlines will be established by the Cooperator/SC. The planning team is responsible for setting up a schedule to complete the project by deadlines.
- Approval of Milestone Project Schedule follows current practice (lead analytic team and Cooperator).
- 2. Develop initial ToRs: What unique issues does this assessment need to address?
  - May begin with default ToRs for all assessments. This step is to modify and add to the defaults, addressing the specific challenges of each assessment.
  - The role of Cooperator staff, analytical lead, and SSC participant(s) is to ensure that issues of concern are considered. For example, the SSC may be concerned about environmental impacts on a stock and add an item to the ToRs to be 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 experts and data providers.

## Data and Assessment Workshop and Webinar Chair

- The SEDAR Coordinator will serve as the Chair for the Data and Assessment Components of the Research Track Process in most cases.
- The SEDAR Coordinator will serve as the Chair for the Stock ID component of the Research Track process, if there is one.
- A Cooperator may choose to contract an individual other than the SEDAR Coordinator to serve as the Chair for any of Stock ID, Data, or Assessment components of the Research Track process. Should they choose to do so, the Cooperator would be responsible for any stipend required.
- Chair Duties may include (but are not limited to): facilitate the running of in-person workshops and webinars, communicate with working group leads, building consensus for recommendations.

## <u>Data Management</u>

- SEFSC will provide a Project Manager (PM) for each RT that it conducts. The PM will be responsible for coordinating SEFSC tasks and all data management for the assessment.
- At the completion of each RT, a summary page listing all data sets included in the assessment, along with the contact information for who provided the analysis, will be compiled. This will be the source of data information for the next assessment.

# Operational Assessments (OA) Overview

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

- Product: A brief report similar to previous update and standard assessment reports, that provides management quantities and addresses the ToRs.
- Process: The previously peer-reviewed assessment model is applied to the most recent data. Requests to incorporate compelling new information must be included in specific ToRs.
- In the case of OAs that immediately follow an RT, any departures from the approved RT should be rare and include only the most compelling recommendations made during the CIE or SSC reviews.
  - There is no Statement of Work (SoW) for this process. The corresponding ToRs should be negotiated between the Cooperators and lead analytic agency immediately following the SSC review.
  - This OA should be completed within 6 months, though it may take slightly longer for first tine assessments.
- For OAs not immediately following an RT, the ToRs should be developed according to the following procedure:
  - November 1<sup>st</sup>: Cooperators produce draft SoW that are submitted to the lead agency (e.g., SEFSC) for their review by November 1st. Draft SoWs should provide enough detail for each item requested (data inputs, potential assessment modifications) to enable the lead agency to determine the time required to complete the task for scheduling purposes, including the terminal year of data and any specifications relating to the need and nature of any desired Topical Working Groups, additional webinars or workshops
  - *February 1st*: SEFSC provides feedback to Cooperators via memo
  - Cooperators/Technical review bodies review feedback and negotiate final SoWs with SEFSC
  - April 1<sup>st</sup>: Final SoWs provided to SEDAR Program Manager.
  - SEFSC informs Cooperators what can be accommodated during the Spring SEDAR Steering Committee discussions regarding Project Scheduling
  - Using the final SoW as the template, draft ToRs are produced by Cooperator and lead analytic agency; approval of ToRs follows existing Cooperator approval process
- Assessment team: Assessment leads take responsibility for executing the peer-reviewed methods from the previous benchmark or RT assessment and consensus recommendations from relevant TWGs.
- Topical Working Groups (TWG): Need for these groups will vary by project; not all assessments will require TWGs Topics and process (webinars, in-person meetings) should be identified in the SoW
- SEFSC will provide a Project Manager for each OA that it conducts. The Project Manager will be responsible for coordinating SEFSC tasks and all data management for that assessment.
- At the completion of each assessment, a summary page listing all data sets included in the assessment, along with the contact information for who provided the analysis, will be compiled. This will be the source of data information for the next assessment.
- Public Comment Opportunities: Open, public SEDAR TWG webinars or workshops will provide opportunity to comment. Additional public comment opportunities will be available once the product is disseminated to the Cooperator. In addition, public participation should

be encouraged during SEDAR procedural workshops that address issues common to multiple species.

- Peer Review: Provided by Council SSC or equivalent
- Data Timeliness: The intent is to use the most recent data so the advice is timely. Generally the previous calendar year can be accommodated if the data deadline is scheduled after June. However, some assessments will need to be scheduled to begin earlier in the year to spread the workload.
- Expected Timeline: 3-6 months from the final data deadline, depending on specifications in the ToRs. Operational assessments that are close to strict updates should require 3 months. Operational assessments deemed to be complex enough to require more than 6 months, or three or more Topical Working Groups should be reconsidered for the benchmark or research track.
- Frequency: Variable. Key stocks would ideally be assessed every two to five years, others as requested

### **Specific Operational Assessment Components:**

<u>Topical Working Groups (TWG)</u>: small working groups assembled to discuss specific topics identified in the Statements of Work for a given SEDAR Operational Assessment

- Tasked to review and make recommendations on specific topics identified in the SoWs. These SoWs should include:
  - What is the goal for this Topical Working Group?
  - What data is needed?
  - What is the timing for this group to get its recommendations compete?
  - Who would participate in the topical working group?
  - Process recommendation: meet via webinars or in-person workshops
- Should not exceed one or two TWGs as the assessment has already been approved through a peer review. If more topics need to be discussed, a RT or Benchmark should be considered.
- Comprised of members of the SSC, stakeholders, and other technical experts
  - Once the details of a TWG are identified (topic, timing, process, etc.) Cooperators will be asked to appoint individuals to serve on specific TWGs for a given assessment. The Cooperators will follow their approved appointment procedures as for other SEDAR processes.
  - Multiple groups will be needed if expertise does not overlap every topic being discussed
- May utilize an IPT-style approach (free discussions amongst participants and preliminary decisions by telephone or email) to facilitate some of their discussion, with final decisions reviewed during the public webinars or workshops.
- Timing of the TWG needs to be such that the report documenting the discussions and recommendations is available in time for the analytic teams to incorporate the information into the assessment. Timing will need to be considered when Project Schedule is developed.

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- If a data issue (life history, selection of indices, review of landings, etc.), the TWG will need to meet early in the process so recommendations can be finalized and provided to data providers prior to final analytic product deadline. The amount of lead time will be topic-specific and will need to be incorporated into the development of the specific Project Schedule.
- If a modeling issue (incorporating uncertainty, Steepness discussion, etc.), the TWG will need to meet after data compilation, and perhaps some modeling work, is complete.
- Topical Working Group discussions and recommendations need to be documented.
  - The writing responsibilities will depend on the topic but in most cases, an expert in the data involved or issue being discussed will take the lead on producing the documentation, with support from other members of the TWG.
  - $\circ$  The documentation may be as a working paper or as part of the stock assessment report.
  - Additional working papers and reference documents may be provided as needed in support of TWG discussions.
- TWGs will be organized within the SEDAR Process, as that process it is already set up to handle Cooperator appointments, notices, meeting and webinar logistics, etc.
  - For TWGs held via webinars, SEDAR will provide logistical support. Any SSC or other stipends that may be required for individual participants will be provided by the Cooperator.
  - For TWGs that require an in-person meeting, SEDAR will provide logistical support, cover meeting expenses, and provide travel support for a specific number of appointed participants, as allowed by the budget. Any SSC or other stipends that may be required for individual participants will be provided by the Cooperator.
- TWG meetings or webinars will be chaired by SEFSC staff, though they may choose to appoint another Technical Chair to serve in that role for a specific assessment/topic.
- It is expected that personnel from the lead analytic agency and Cooperators (data providers and analytic team representation) will be involved in TWG discussions

### TWG Process:

In most cases, the TWG process should be organized around webinars. At least two SEDAR-run webinars are noticed in the Federal Register. These webinars are open to the public and follow standard SEDAR procedures. A TWG will convene a workshop only if the Cooperators deem that an in-person meeting is necessary and funding is available.

• The first webinar is a Scoping webinar, where the TWG members and data providers discuss the issues that were identified when the TWG was proposed. They discuss potential data that may be available, and possible approaches to consider while evaluating the issue.

- Analytic team and data providers will be available to answer questions/provide data or additional analysis
- The second webinar is the Recommendations webinar, where the TWG members finalize their recommendations to the Analytic Team regarding the data or assessment issues they reviewed.
  - Gives TWG chance to see impacts of their recommendation
  - Gives analysts a chance to present any issues that may have arisen from recommendation and provide guidance on a way forward
  - Public webinar will serve as part of the record for the decisions
- Between the two publicly noticed webinars, the working group members may utilize an IPT-style approach (free discussions amongst appointed participants and preliminary decisions by telephone, webinar, or email) to facilitate some of their discussion, with final decisions reviewed during the public webinars or workshops.

### Data Management

- SEFSC will provide a Project Manager for each OA that it conducts. The Project Manager will be responsible for coordinating SEFSC tasks and all data management for that assessment.
- At the completion of each OA, a summary page listing all data sets included in the assessment, along with any revisions to the contact information for who provided the analysis, will be compiled. This will be the source of data information for the next assessment.
  - Data availability and acquisition for TWGs will require coordination with the lead analytic agency and other data providers. When data may also be required from non-Agency sources, the Cooperators should assist in securing participation from the relevant individuals and institutions.