

## **Team procedures**

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### **Team policy on documentation and deadlines (adopted 9/14, revised 11/14)**

Except for emergency cases, the Teams will take action only on items that have been placed on the agenda, and for which sufficient documentation has been received, well ahead of time; specifically:

- If possible, each potential action item should be on the preliminary agenda distributed to the Teams ahead of the meeting, and in all cases must (at least) be on the final agenda as adopted by the Teams at the beginning of the meeting.
- For November SAFE report chapters, “sufficient documentation” means a stock assessment that has been certified by the AFSC as complying with the SAFE chapter guidelines. For all other potential action items, “sufficient documentation” means a reasonably detailed Word or Powerpoint file.
- The Teams expect that sufficient documentation for any potential action item will be provided at least 7 days prior to the start of the meeting. If exceptional circumstances make it impossible to meet this deadline, the Teams expect such documentation to be provided as soon as possible, and in no case later than 5:00 p.m. on the day before the presentation is to be given.
- In the event that a document is revised prior to its presentation at the meeting, the author must provide the Team(s) with an efficient means of identifying which tables, figures, or pieces of text have been revised (e.g., use of redline/strikeout format, or a written description or list of changes).

### **Team procedures for writing minutes (adopted 9/14)**

Recommendations to chapter authors and others should be formatted as follows:

- Use stand-alone paragraph(s)
- Use bold font throughout
  - Except that items in a list need not be bolded if they follow a bolded paragraph clearly indicating that the items in the list are part of the recommendation
- Use the word “recommend” (joint Teams) or “recommends” (single Team)

### **Team policy on model numbering (not adopted; for discussion purposes)**

#### *SSC proposals*

In its December 2014 and June 2015 minutes, the SSC made the following requests/recommendations regarding numbering of stock assessment models.

1. *“The SSC requests that stock assessment authors use the following model naming conventions in SAFE chapters:*
  - *Model 0: last years’ model with no new data,*
  - *Model 1: last years’ model with updated data, and*

- *Model numbers higher than 1 are for proposed new models.*
2. *“The SSC recommends that the Groundfish Plan Teams further refine the numbering system to avoid confusion and ensure that the origin of the model can be traced back to the original derivation. Our initial suggestion is to keep the numbering system the same throughout all three stages of the annual stock assessment cycle.*

### Strengths

1. Provides a way to transition from last year’s model with last year’s data to the same model with this year’s data.
2. Keeping the numbering system constant throughout the assessment cycle should help to reduce confusion during that cycle.
3. Consistent use of the label “Model 1” should make it easy for readers to identify the base model.

### Weaknesses

1. Not clear how to number a previously proposed model that is retained (other than last year’s model), given that model numbers higher than 1 are reserved for new models.
2. When Model 1 from last year is included with no new data, it is renamed Model 0, but when any other model from last year is included with no new data, it retains its old name, which seems inconsistent.
3. Similarly, it seems inconsistent to use the label “Model 0” to refer to the exact same model, with the exact same data set, that was labeled “Model 1” in the previous year.
4. Proposals 1 and 2 are mutually exclusive with respect to Models 0 and 1 if a preliminary assessment is prepared (i.e., if no new data are included in the preliminary assessment, last year’s model would be labeled “Model 0” in the preliminary assessment, but the same model would be labeled “Model 1” in the final assessment, which is inconsistent with the SSC’s desire to keep the numbering system constant throughout the assessment cycle).

### *An alternative proposal*

What follows is a tentative suggestion, offered as an attempt to start Team discussion in response to the SSC’s request for Team consideration of these issues. Adoption of this proposal would address some of the SSC’s concerns, but it would not be a trivial undertaking, and may be more trouble than it is worth. Refining the numbering system “to avoid confusion and ensure that the origin of the model can be traced back to the original derivation” is a tall order!

### Short version

Names of models constituting “major changes” get linked to the year that they are introduced, while names of models constituting “minor changes” get linked to the model that they modify.

### Long version

The *base model* is a model accepted by the SSC for use in setting ABC and OFL.

It may be the case that the current base model constitutes only a minor change from one or more previous base models. The *original version of the base model* is the base model from the earliest year from which the current base model constitutes only a minor change.

When a model constituting a “major change” from the original version of the base model is introduced, it is given a label of the form “Model  $yy.j$ ,” where  $yy$  is the year (designated by the last two digits) that the model was introduced, and  $j$  is an integer distinguishing this particular “major change” model from other “major change” models introduced in the same year.

When a model constituting only a “minor change” from the original version of the base model is introduced, it is given a label of the form “Model  $yy.jx$ ,” where “ $x$ ” is a letter distinguishing this particular “minor change” model from other “minor change” models derived from the original version of the same base model.

Define the “average difference in spawning biomass” between Model  $A$  and Model  $yy.j$  as follows:

$$\text{ADSB} = \sqrt{\sum_{y=1977}^{2000+yy} \frac{(SB_{\text{Model } A,y} / SB_{\text{Model } yy.j,y} - 1)^2}{yy + 24}},$$

where both models are run with data through year  $20yy$  only.

A cutoff value of ADSB (say, 10%) is used to distinguish major changes from minor changes.

Definition by way of hypothetical example (assumes that the new system will be instituted in 2016)

- The model accepted by the SSC for use in setting the 2016 ABC and OFL was first introduced in the 2012 assessment, where it was labeled Model 2. Re-label it for the 2016 assessment as Model 12.2.
- The 2016 assessment includes the base model (Model 12.2), along with three new models. Relative to Model 12.2, two of the new models result in *less* than a 10% ADSB, so they are viewed as modifications of Model 12.2. These are labeled Model 12.2a and Model 12.2b. Relative to Model 12.2, the third new model results in *more* than a 10% ADSB, so it is viewed as a major change. It is labeled Model 16.1.
- The SSC accepts Model 12.2a for use in setting the 2017 ABC and OFL.
- The 2017 assessment includes the base model (Model 12.2a), along with three new models. Relative to Model 12.2 (*not* Model 12.2a!), two of the new models result in *less* than a 10% ADSB, so they are viewed as further modifications of Model 12.2. These are labeled Model 12.2c and Model 12.2d. Relative to Model 12.2, the third new model results in *more* than a 10% ADSB, so it is viewed as a major change. It is labeled Model 17.1.
- The SSC accepts Model 17.1 for use in setting the 2018 ABC and OFL.
- The 2018 assessment includes the base model (Model 17.1), along with three new models. Relative to Model 17.1, two of the new models result in *less* than a 10% ADSB, so they are viewed as modifications of Model 17.1. These are labeled Model 17.1a and Model 17.1b. Relative to Model 17.1, the third new model results in *more* than a 10% ADSB, so it is viewed as a major change. It is labeled Model 18.1.
- ...and so forth.

### Strengths

1. Performance-based rule for distinguishing major from minor changes eliminates the need to make subjective decisions about how many, or which, structural changes are required to make such a distinction.

2. Computing ADSB with respect to the *original version* of the base model eliminates the possibility of “version creep,” whereby the current model is always viewed as a minor modification, despite many sequential tiny changes that cumulatively translate into a big change.

#### Weaknesses

1. Does not acknowledge that a new model might have *less* than a 10% ADSB with respect to *the original version of the base model*, but *more* than a 10% ADSB with respect to *some other previously considered model* (doing so could be very complicated, as it would require comparing the spawning biomass time series from any new model to the spawning biomass time series from every model ever considered in the past).
2. Would require going back through old SAFE reports and SSC minutes to determine the year and number of the original version of the base model as well as the current base model.
3. While a performance-based distinction between “major” and “minor” changes is convenient, it can mask substantial qualitative differences in model structure, because it is theoretically possible for two models to have very different structures and still result in less than a 10% ADSB.