

**BlackSea4Fish project**  
**Online Presentation Series 1**  
**The State-Space assessment model**

6<sup>th</sup> of June 2020,

Niels Hintzen

**Questions and answers**

1. Yevhen Leonchyk: Odessa center YugNIGO, echoed by Mikail Pyatinskii

***If we have data up to and including 2018, are the assessment results (SSB and Rec) interpreted as providing information on stock development up to January 1st of 2019 or only up to January 1st of 2018?***

**Niels:** It depends on when the fish is spawning. If the spawning period is assumed to be in winter (1<sup>st</sup> of January 2018), generally SAM gives you estimates of the survivors up to 1<sup>st</sup> of January 2019, otherwise at spawning time

2. Nazli Demirel: BS4F Coordinator

***For data limited stock, if there is only length-frequency data, is it possible convert it through age-length key and/or estimate catchability for each age to use in SAM directly?***

**Niels:** Use both of the methods and run SAM parallel to see what the model is going to “tell”.

3. Ali Cemal Gucu: Middle East technical University:

***Can we consider using scaleYear multiplier to tackle with IUU problem in BS-Turbot?***

**Niels:** If the time series are for a very short period, better not to do it. Cohort’s signal will be weak.

4. Yevhen Leonchyk: Odessa center YugNIGO.

***What is the minimum length of an age series to use SAM?***

**Niels:** Not below 10-15 years. For survey data at least 5 years, for catch data – 10 years. If the time series are too short the model wouldn’t provide good estimations (smooth lines).

Followed up by Mikail Pyatinskii:

***Will this depend on the maximum age of the species?***

**Niels:** yes it will, more years will be required for longer-lived species