## PLEASE PROVIDE COMMENTS TO [annala@snap.net.nz](mailto:annala@snap.net.nz) before 12:00 on Monday 8th August 2016

**SC12** – **ECOSYSTEM AND BYCATCH MITIGATION THEME**

AGENDA ITEMS 6.1.1.1, 6.1.1.2, and 6.3 (part)

* 1. **Ecosystem effects of fishing**
     1. **Review of research and information**
        1. **SEAPODYM**

**Recommendations:**

**SC12 recommends that WCPFC notes that SC 12 endorses the results of the review of SEAPODYM (EB-IP- 14) as follows:**

1. SEAPODYM is ready for application by WCPFC to assist its decision making. SEAPODYM would be a useful complementary model to Multifan-CL for MSE work that includes spatial management. Similarly, the capacity of SEAPODYM to include alternate oceanographic states (e.g. ENSO phases and climate change projections) would allow climate proofing to be a consideration in the MSE work undertaken by WCPFC.

2. WCPFC should encourage and where feasible support (through Project 62) the contined

development of diagnostics to evaluate the fit of the model to data, the validity of underlying

assumptions, and allow comparison with alternate population dynamics models.

3. An annual review meeting, similar to the pre-assessment workshop held annually to guide the development of the WCPFC stock assessments, would benefit SEAPODYM applications in the WCPO.

4. WCPFC and other sub-regional organisations should consider options for industry support for research and data that would enhance SEAPODYM’s forage component.

5. SEAPODYM could be used as a tag simulator to test assumptions and/or provide priors or fixed values for the inclusion of the PTTP data in Multifan-CL applications.

6. A detailed technical document which describes reviews to date, developments implemented and developments planned should be developed to support future SEAPODYM work (including for example criteria for reference models).

* + - 1. **Ecosystem indicators**

**SC12 recommends that the Commission:**

* Note the proposed approach for the design and testing of ecosystem indicators for WCPO for use by WCPFC
* Note the importance of this work programme and its prioritisation within the SC work plan
* Provide direction on the scope of the work, timing, and the implementation
* Consider funding from the SC budget or other sources to resource the work
  1. **Seabirds (part)**

**Regarding the results of tori line research, SC12 recommends that the Commission:**

* note the tori line options reported here, developed especially for small longline vessels, and recognise that they may be useful for vessel operators to implement practical and effective tori lines to meet current required specifications.
* consider these tori line designs during the review or development of any updated tori line specifications, as will be required for the review of specifications set out in CMM 2015-03.