Overview of Hake Documents

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A short summary of each of the Hake documents for the November-December 2016 MARAM International Stock Assessment Workshop is provided below.

**Background Documents:**
**BG1:** Butterworth DS. 2016. This document

- Lists the recommendations from the 2015 Panel that relate to hake, together with response on progress made.

**Hake Assessment:**

**Primary Documents:**
**P1:** Rademeyer R and Butterworth DS. 2016. Reference Set results and projections under the current OMP for the South African hake resource.
- Provides projections under the present OMP as a basis to judge whether a revision should be advanced one year to speed recovery and secure a shorter period of TAC reduction.

**P2:** Rademeyer R and Butterworth DS. 2016. Further projections under the Reference Set for the South African hake resource.
- Shows the trade-offs that result from a TAC reduction for 2018 which is greater than allowed under the current OMP.

**Background Documents:**
- Projections under the current OMPO (OMP-2014) at the time that OMP was selected.

**Hake Modelling Predation:**

**Primary Documents:**
**P1:** OLRAC SPS. 2016. Method used to include cannibalism and inter-species predation in the species, sex, age and size disaggregated hake stock assessment model.
- A summary of the technical details of the Bergh *et al.* hake predation model.

- A summary of technical details of the Ross-Gillespie hake predation model.
- Tabulation of points of similarity and of difference between the two hake predation models.

- Suggestions for future research directions.

P5: OLRAC SPS. 2016. The Bergh et al. (2016) hake cannibalism and inter-species predation model with the predator/prey preference, the daily ration of hake predators and the diet of the predators from the Ross-Gillespie (2016) model.
- Results from changing some aspects of the Bergh et al. hake predation model to resemble the Ross-Gillespie model more closely.

Background Documents:
- Detailed background on the Ross-Gillespie hake predation model.

Hake GeoPop:
Primary Documents:
- Application of the GeoPop model to M. capensis.

- Application of the GeoPop model to M. paradoxus.