We have grave concerns over the SPC paper at least on three points:

- Significant deviation from the requests from SC5;
- Base line; and
- Effectiveness of longline catch limit.

1. **Significant deviation from the requests from SC5**

   The requests by SC5 to SPC are very clear as described in Attachment, which was drawn up and confirmed among scientists at SC5. However, the SPC paper does not follow the requests.

   In particular, SC5 provided detailed requests in regard to “Examination of the impacts of various exemptions and special provisions in CMM 2008-01”:
**Exemption and special provisions**

Repeat of some of the scenarios presented in CMM2008-01 (Maybe just 5 and 6), with the following exemptions and provisions excluded to illustrate their impacts (one at a time and then combined):

- **Longline**
  - No 2000mt limit for the longline catch reductions (e.g. reductions for all longline from 2001-04 or 2004)
  - Remove exemptions for the Hawaiian and Chinese longline fleets

- **Purse seine**
  - Effort at 2004 levels for all fleets (including Archipelagic waters)
  - Remove Archipelagic waters exemption
  - Removal of the ‘existing arrangements’ provision
  - FAD closure includes Archipelagic waters in Indonesia
  - Appropriate domestic Philippines purse seine fleet

- **Other fisheries**
  - Set catches and or effort for all other fisheries to 2001-04 or 2004 levels

In response to this request, the SPC paper responds “The exemptions and special provisions within CMM2008-01 are predicted to play a role in keeping fishing mortality high, but we have not looked at these individually to see which have the greatest influence.” Furthermore, the SPC paper illustrates five (5) arbitrary scenarios, namely [no-exemp], [close high seas], [FFA FAD ban], [FAD-LL BET] and [Large cut].

We must express grave concerns over this arbitrary deviation from the requests by SC5. In particular, the scenarios [close high seas], [FFA FAD ban], [FAD-LL BET] are closely connected with possible allocation of fishing opportunities, which is far beyond the mandate of SPC and belonging to the Commission’s discretion. We strongly request these three scenarios must be excluded from the future work by SPC unless the Commission requests so.

2. **Base line**

The SPC paper examined a series of projections with the base line of 2007. Again, this is serious deviation from the requests from SC5. As shown in Attachment, SC requested SPC to conduct projections with the base line of “2001-2004 or 2004 levels”.

WCPFC members have been making efforts to reduce bigeye catch through the implementation of
CMM2005-01, CMM2006-01 and CMM2008-01, all of which have the base line of 2001-2004 or 2004. We must express our grave concern over SPC to change the baseline in their projection without any request by the Commission. This is critically important because purse seine fishing effort increased significantly from '2001-2004 or 2004 levels' to 2007 level as SPC pointed out in their paper “Assessment of the Potential Implications of Application of CMM 2008-01 for Bigeye and Yellowfin Tuna” (WCPFC6-2009/IP17).

3. Effectiveness of longline catch limit
The SPC paper describes uncertainty of effectiveness of longline catch limit on bigeye fishing mortality for several times.

We need clear explanations on the consistency between this paper and their previous paper “Predicted Impact of Potential Management Measures on Stock Status and Catches of Bigeye, Skipjack and Yellowfin Tunas in the Western and Central Pacific Ocean” (WCPFC-TCC4-2008/14 Suppl.), which concluded:
“The 30% longline reduction is the single measure that is predicted to provide the greatest reduction in fishing mortality, but it would be associated with a 7% reduction in MSY and a reduction in long term average catches”
Attachment B. Bigeye Projections for WCPFC6 to be conducted by the Scientific Provider

**Background**

Previous analysis of potential management option (e.g. TCC paper) were based on evaluating fishery-specific fishing mortality changes though a yield-based framework. Due to the complex nature of CMM 2008-01 (e.g. a mixture of catch and effort limits, time/area closures, and stepped reductions), this approach was no longer considered sufficient to provide the detailed investigation of management measures requested by the Commission.

In response SPC developed the capacity within MULTIFAN-CL in order to undertake mixed catch and effort projections. While these analyses are more demanding in terms of the time required to prepare the projection data sets, in particular the stepped reductions, we feel that the additional work is warranted to more accurately reflect the provisions in CMM 2008-01. The first consideration of this approach is described in GN-WP-17.

**Requests from SC**

Following the presentation of GN-WP-17 at SC-5, the general requests for additional information were requested:

1. Further presentation of the outputs of the projections, in particular spawning biomass trajectories and predicted catches;

2. Examination of the impacts of various exemptions and ‘special’ provisions in CMM2008-01; and

3. Examination of the predicted impacts of additions/ changes to CMM-2008-01 provisions

4. Inclusion of SKJ

In order to meet these information needs, the following analyses were requested:

**Further outputs**

The following outputs could be made available:

- Predicted annual catches by broad fisheries groups (see fishery definitions in Table 2 of the BET assessment report)

- Total spawning biomass

In addition some plots of regional biomass trends and projected fishery impact plots could be included in future reports.
Exemptions and special provisions
Repeat of some of the scenarios presented in CMM2008-01 (maybe just 5 and 6), with the following exemptions and provisions excluded to illustrate their impacts (one at a time and then combined)[1]:

- Longline
  - No 2000mt limit for the longline catch reductions (e.g. reductions for all longline from 2001-04 or 2004)
  - Remove exemptions for the Hawaiian and Chinese longline fleets

- Purse seine
  - Effort at 2004 levels for all fleets (including Archipelagic waters)
  - Remove Archipelagic waters exemption
  - Removal of the ‘existing arrangements’ provision
  - FAD closure includes Archipelagic waters in Indonesia,
    - Appropriate domestic Philippines purse seine fleet

- Other fisheries
  - Set catches and or effort for all other fisheries to 2001-04 or 2004 levels.

CMM 2008-01 alternatives
In order to examine potential impact of strengthening CMM2008-01, the following be included from 2010 in the projections:

- Longline (with and without all LL exemptions)
  - 40 to 100% reductions in longline catches over 2009-2011

- Purse seine (with and without all PS exemptions)
  - 4 to 12 month FAD closures
  - Percentage reductions in effort from 2004 levels

- Other fisheries
  - Percentage reductions in catch / effort from 2004 levels

[1] Some of the scenarios below might be redundant (covered by another scenario)