**Results of SWG on Management Objectives**

Suggested **initial list** of performance indicators (shaded) for Tropical Purse Seine Fisheries **for the purpose of the evaluation of HCRs only**. SPC is requested to continue the work on HCRs based on the suggested indicators here as much as possible. Short-, medium-, and long-term calculation results would be provided, if possible. **The list is interim and should be reviewed and may be revised when further information is available.**

**Objectives included here do not consist a consensus view of the SWG. The SWG developed a list of useful indicators, simply using the MOW/US suggestions as a guide without agreeing/disagreeing them. Each indicator is considered to have different importance to different CCMs, thus should not be considered to have equal weights.**

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| **Objective Type** | **MOW4 Strawman** | **US proposal**  **(DP22)** | **SWG suggestion of objective** | **Performance Indicator**  **(WP14)** | **Monitoring Strategy**  **(WP14)** | **SWG Suggestion to include as an indicator** |
| Biological | Maintain SKJ (and YFT & BET) biomass at or above levels that provide fishery sustainability throughout their range. | Maintain SKJ, YFT, BET stock sizes above LRPs. |  | Probability of SB/SBF=0 > 0.2 in as determined from MSE. | Probability of SB/SBF=0 > 0.2 in the long-term as determined from the reference set of operating models | **Yes** |
| Economic | Maximise economic yield from the fishery |  |  | Predicted effort relative to EMEY (to take account of multi-species considerations, SKJ, BET and YFT; may be calculated at the individual fishery level).  BMEY and FMEY may also be considered at a single species level. | Observed rent from the fishery relative to MEY.  Observed effort in the fishery relative to EMEY. | **Yes** |
|  |  | Maximize catch | Average expected catch. (may also be calculated at the assessment region level) | Observed catch information | **Yes** |
| Increase fisheries-based development within developing states (SIDS) economies, especially on-shore processing capacity. |  |  | As a proxy: Average proportion of SIDS-catch to total catch for fisheries operating in specific regions. | Percentage contribution of fisheries to GDP.  Proportion of total catch processed by SIDS  Value of product exported from SIDS. |  |
| Maintain acceptable CPUE. |  |  | Average deviation of predicted SKJ CPUE from reference period levels. | Observed CPUE maintained at or greater than specified levels. | **Yes** |
| Optimise fishing effort |  |  | EMEY (as for Maximise economic yield ).  Effort consistent with specified level | Annual monitoring through logbook/VMS |  |
| Maximise SIDS revenues from resource rents | Take into account the special requirements of developing states and territories |  | Proxy: average value of SIDSs/non-SIDDs catch ~~Average proportion of SIDS-effort or catch to total effort or catch for fisheries operating in specific regions~~ | Observed proportion of SIDS-effort/catch to total effort/catch from SIDS waters from logsheet or VMS data | **Yes** |
| Catch stability |  |  | Average annual variation in catch ~~in the short-, medium- and long- term~~. | Observed variation in catch  from logsheet data | **Yes** |
| Stability and continuity of market supply |  |  | Average annual variation in catch effort in the short-, medium- and long- term | Observed variation in catch  From logsheet data  Observed variation in market prices  Market throughput of tuna products |  |
|  |  | Effort predictability | Effort variation relative to reference period level (may also be calculated at the assessment region level). |  | **Yes** |
|  | Maintain SKJ, YFT, BET stock sizes around TRPs (where adopted). |  | Probability of and deviation from SB/SBF=0 > 0.5 (SKJ) in the short- medium- long-term as determined from MSE (may also be calculated at the assessment region level). | Current median adult biomass, as determined from the reference set of Operating Models. | **Yes** |
| Social | Affordable protein for coastal communities |  |  | As a proxy: Average proportion of CCMs-catch to total catch for fisheries operating in specific regions. | Average fish consumption per year per person relative to some target. |  |
| Food security in developing states (import replacement) |  |  | As a proxy: Average proportion of CCMs-catch to total catch for fisheries operating in specific regions. | Ratio of locally marketed fish to imported fish products. | **Yes** |
| Avoid adverse impacts on small scale fishers | Minimize adverse impacts on other fisheries, including:  o Downstream fisheries like longline fisheries;  o Competing fisheries like troll, pole-and-line, and non-tropical purse seine fisheries; |  | o MSY of SKJ, BET, YFT  o Possible information on other competing fisheries targeting SKJ. (may also be calculated at the assessment region level)  o Any additional information on other fisheries/species as possible. | Monitoring of fisheries in CCMs | **Yes** |
| Employment opportunities |  |  | As a proxy: Average proportion of CCMs-catch to total catch for fisheries operating in specific regions as determined from stochastic projections. | Monitoring of fishing and processing sector in CCMs |  |
| Ecosystem | Minimise bycatch | Minimize adverse impacts on NADSs |  | Number of FADs sets  Expected catch of other species as possible | Ratio of target species catch to catch of non-target species from observer program | **Yes** |
| Minimise ecosystem impact |  |  | Size or age structure of population  Total bycatch amount | From observer based size sampling and stock assessment outputs |  |
| Other |  | Adhere to the other principles and provisions of the Convention. |  |  |  |  |