



Pacific
Community
Communauté
du Pacifique

Testing alternative harvest strategies (where does MSE fit in)

SPC, OFP

November 2015

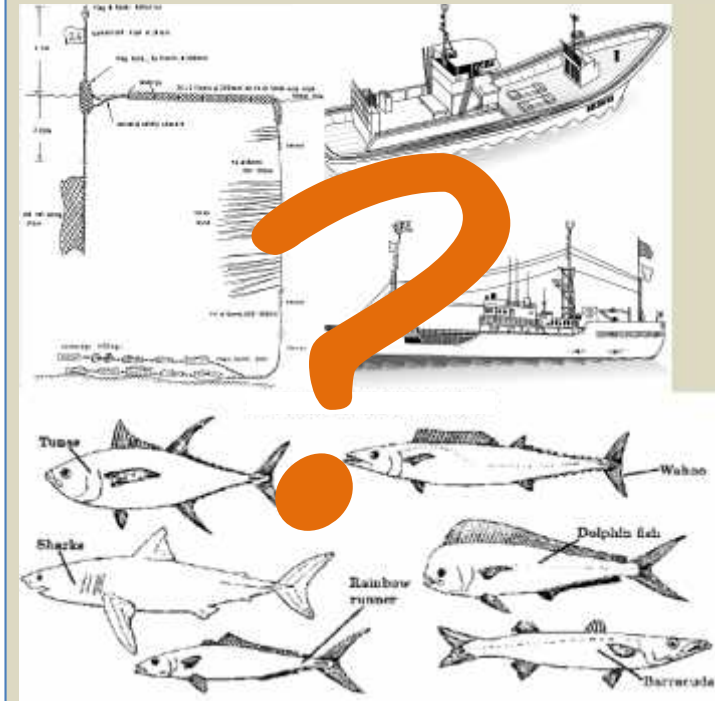
Why have an MSE process?



- Clearly defined Management Objectives
- Harvest Control Rules built on agreed target and limit reference points.
- Models each step of the management process - better evaluate the trade-offs of alternative strategies.
- Decisions based on longer-term trade offs between management objectives rather than short term considerations.
- Consultative approach to developing and adopting a harvest strategy.

The MSE framework

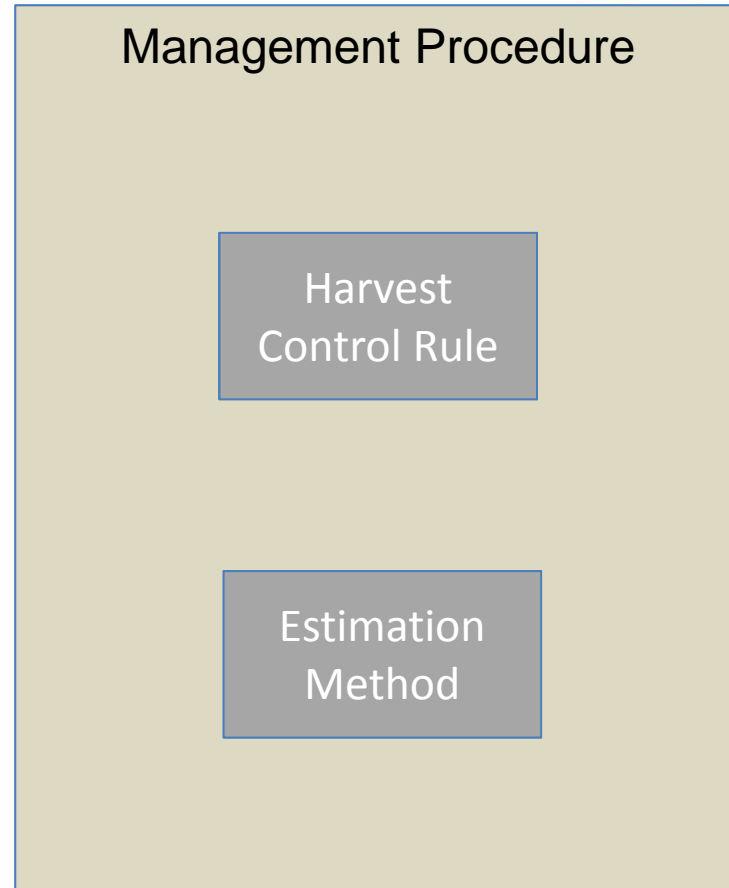
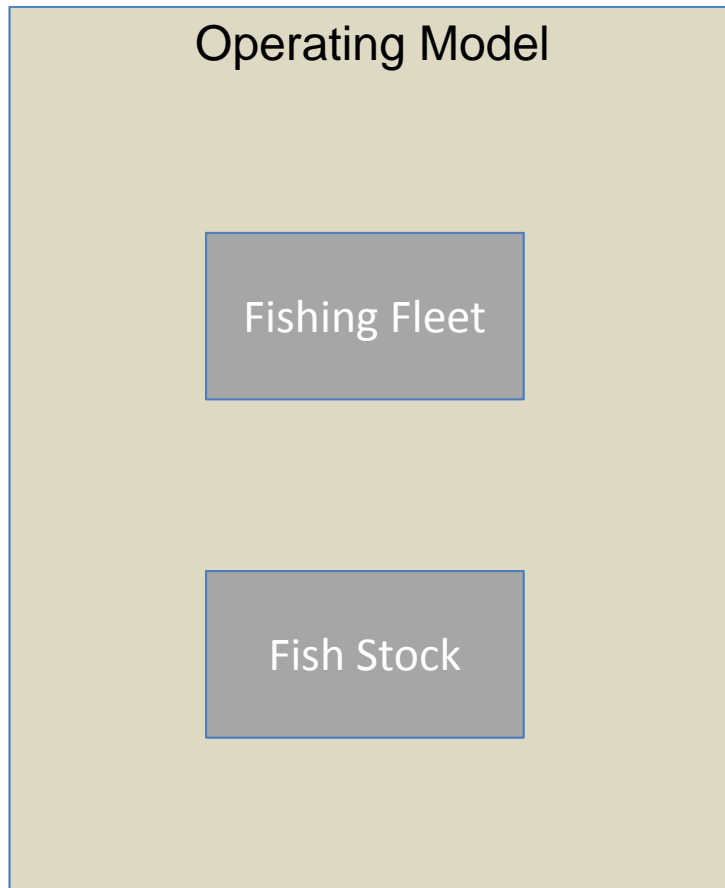
Operating Model



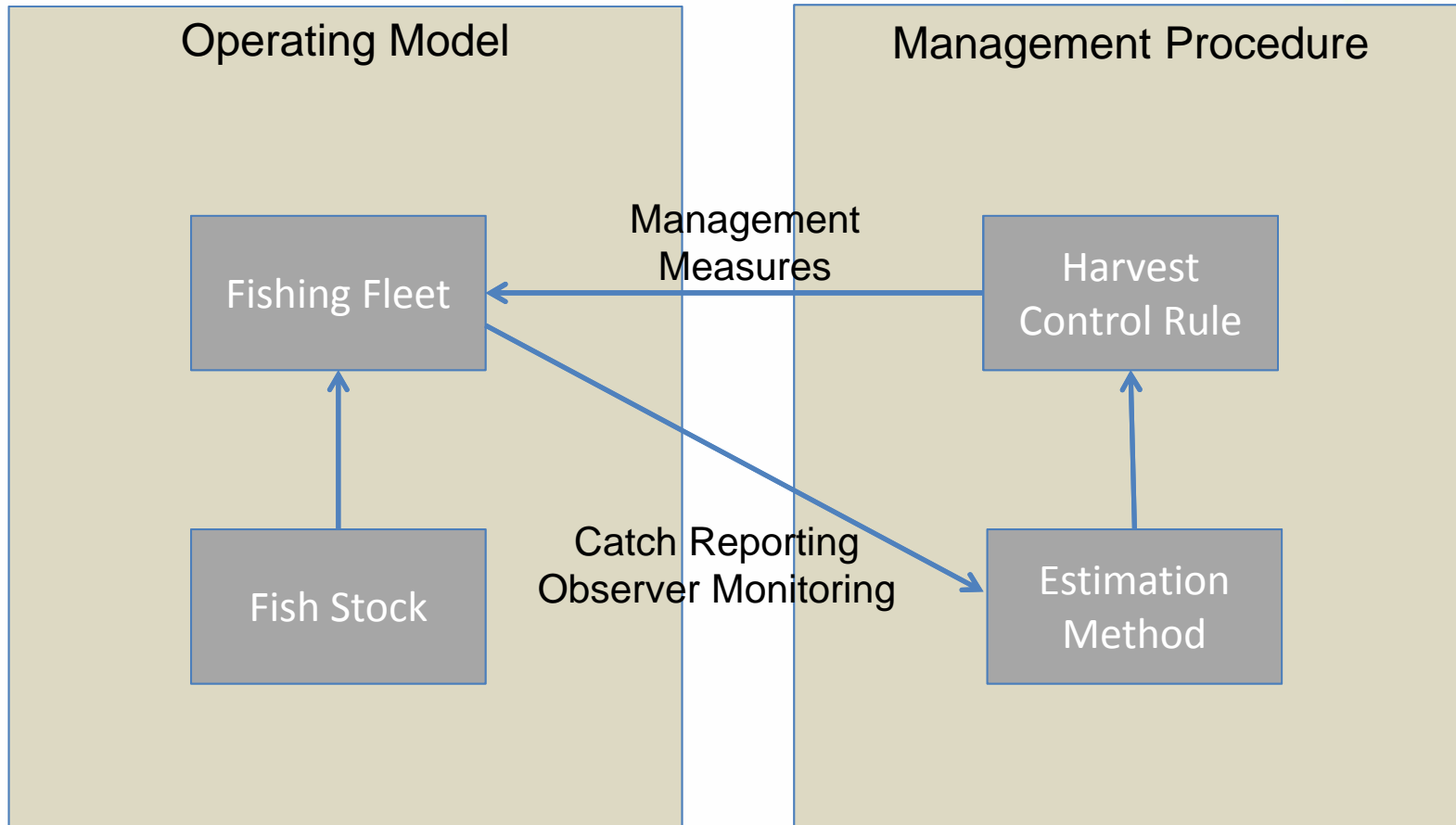
Management Procedure



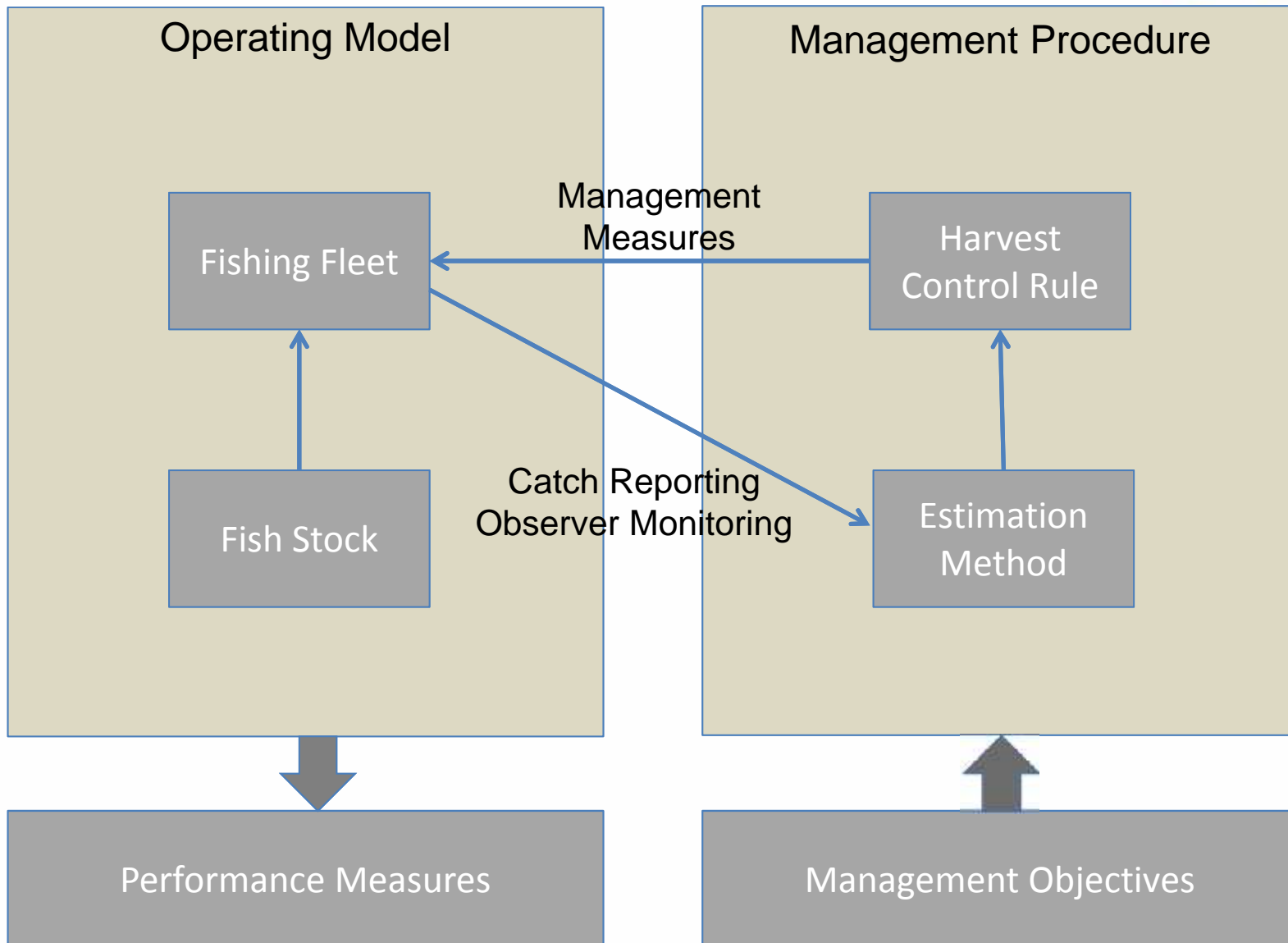
The MSE framework



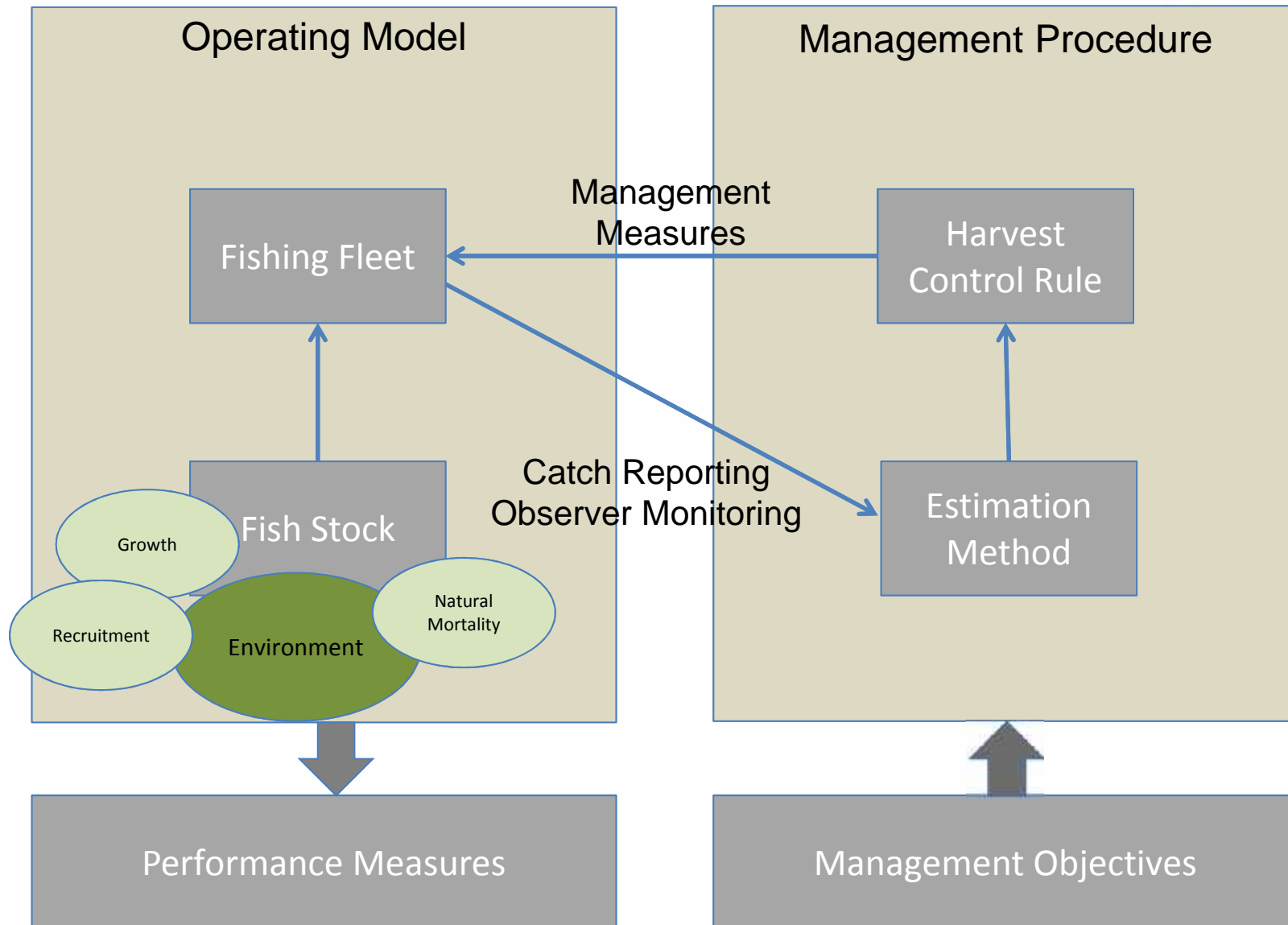
The MSE framework



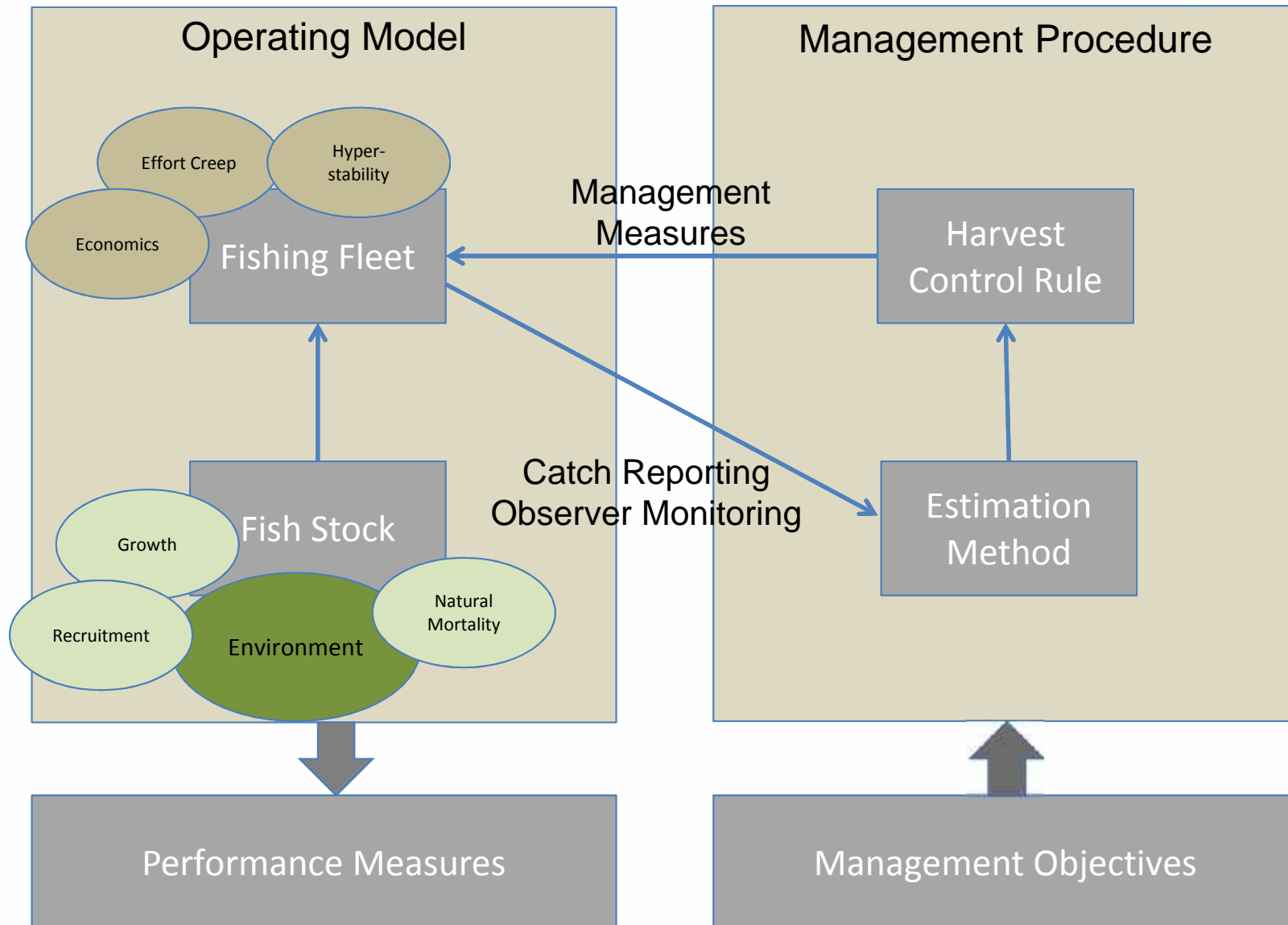
The MSE framework



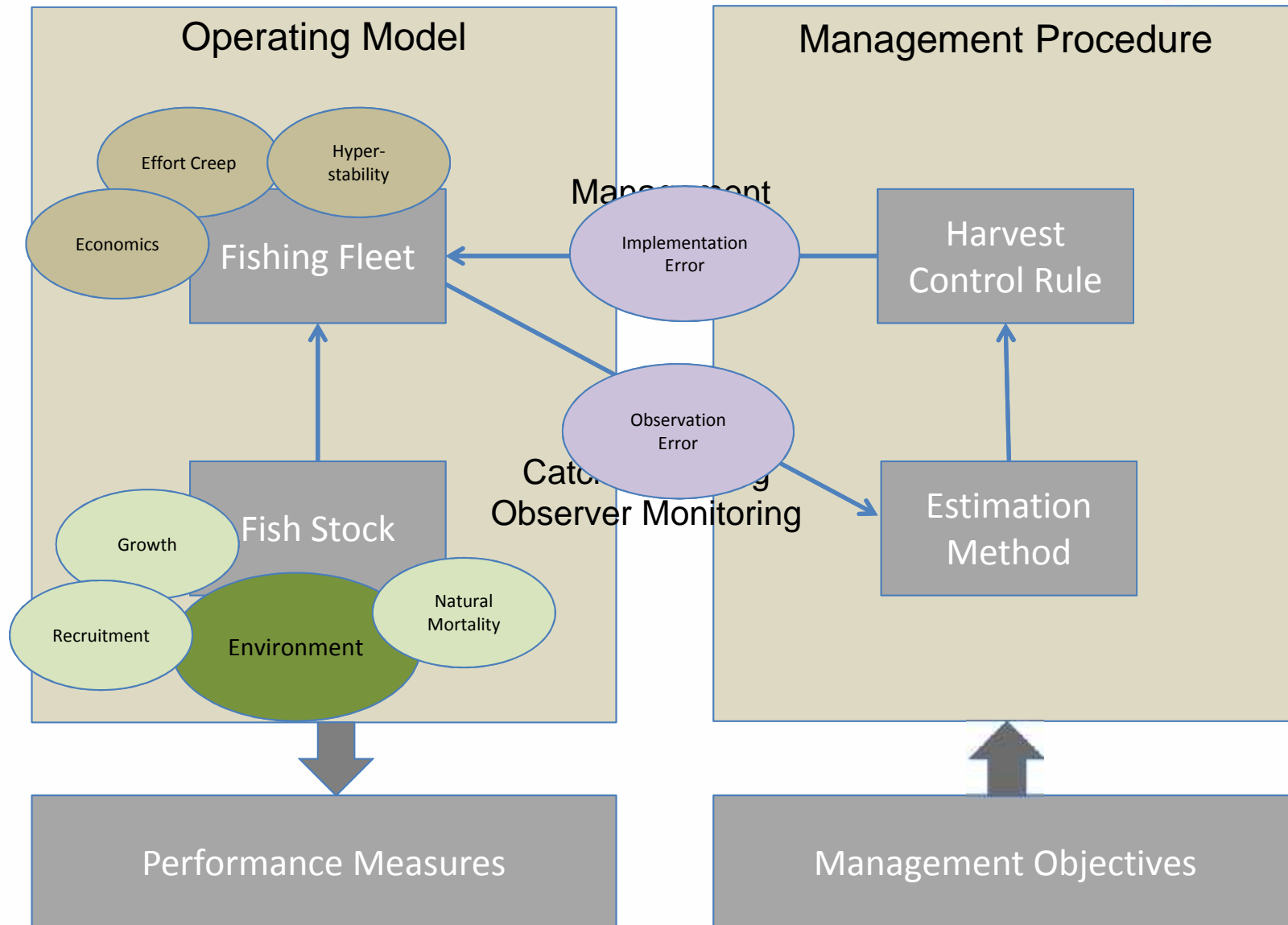
The MSE framework



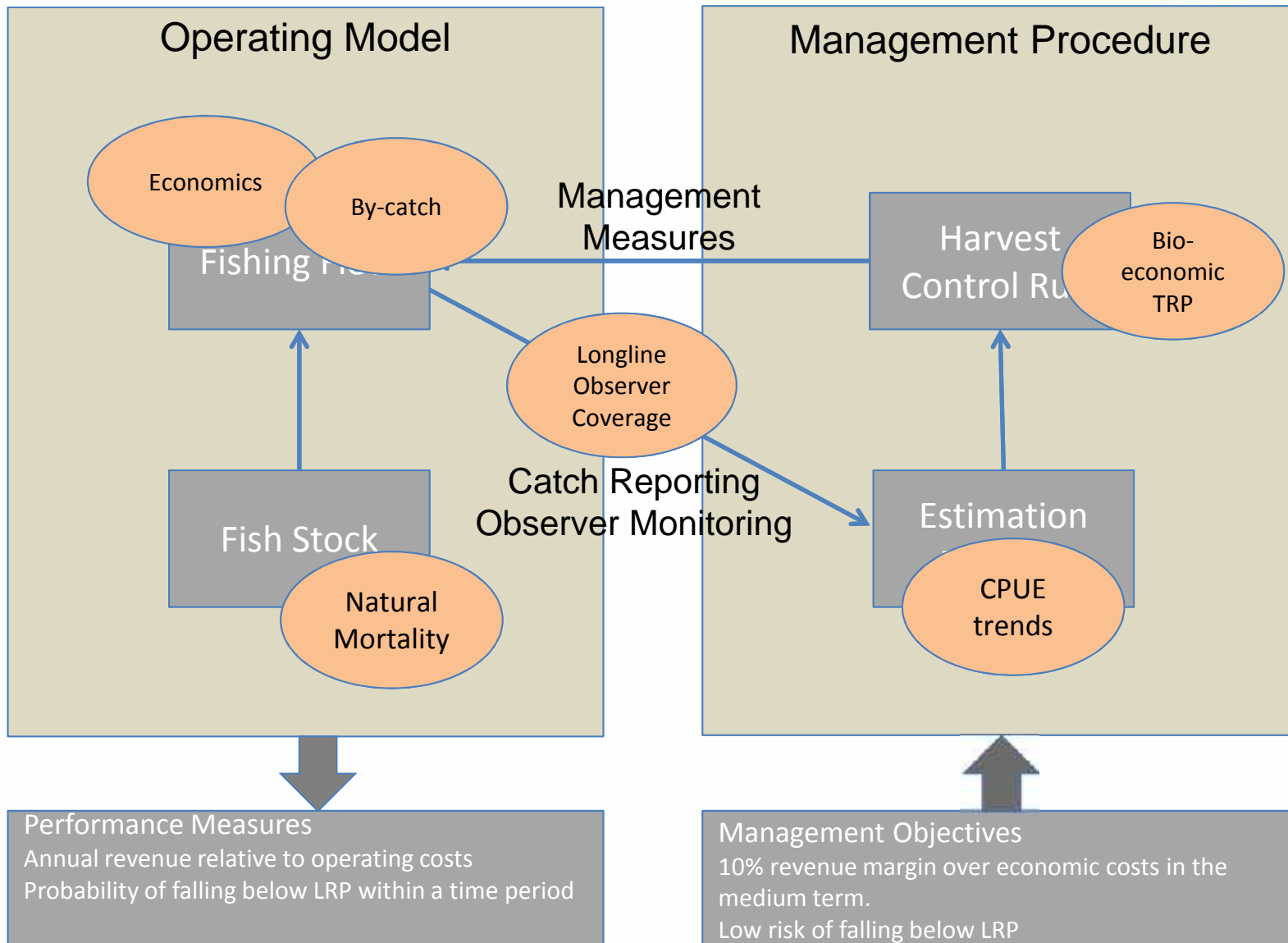
The MSE framework



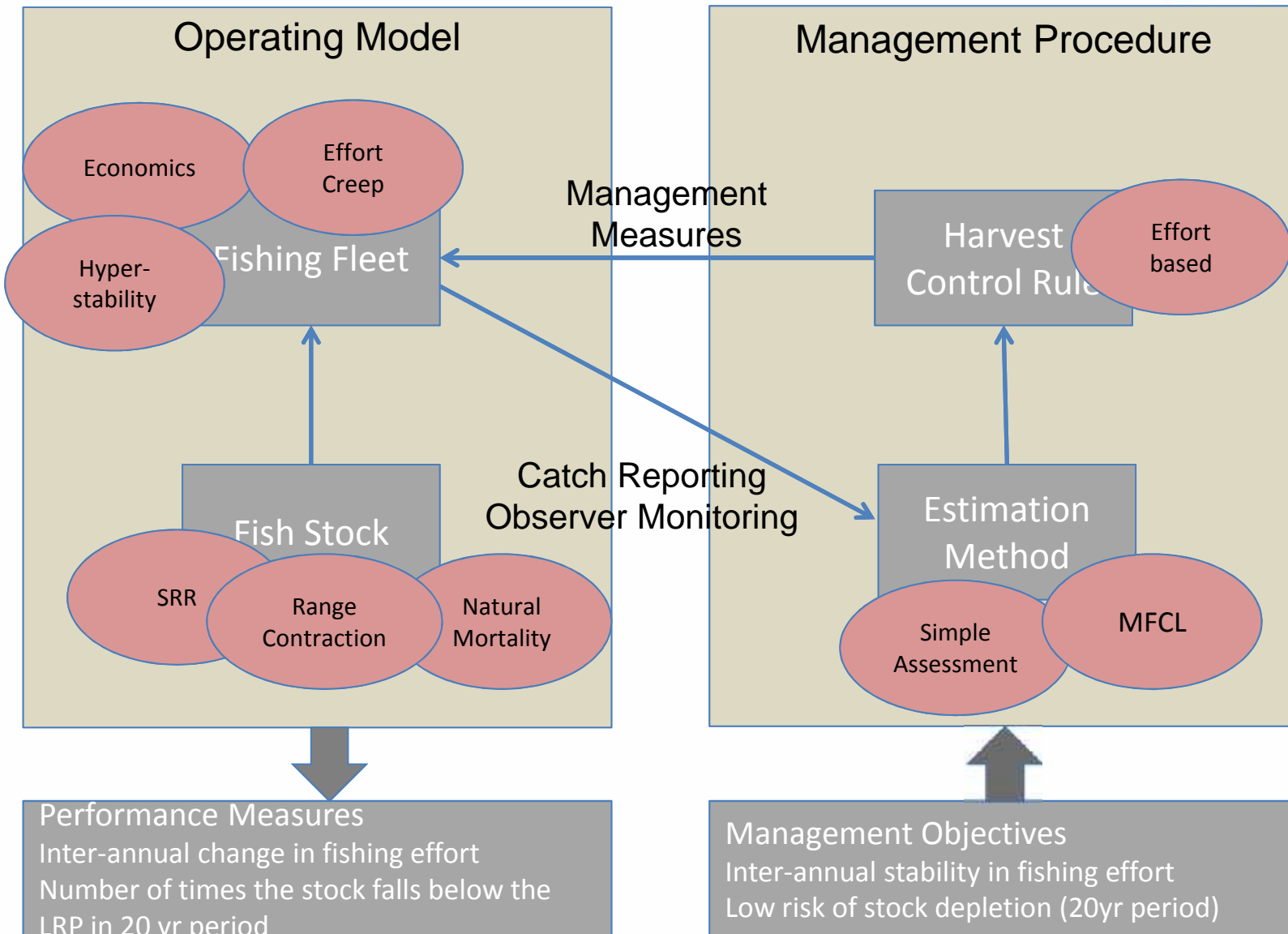
The MSE framework



South Pacific Albacore



Skipjack



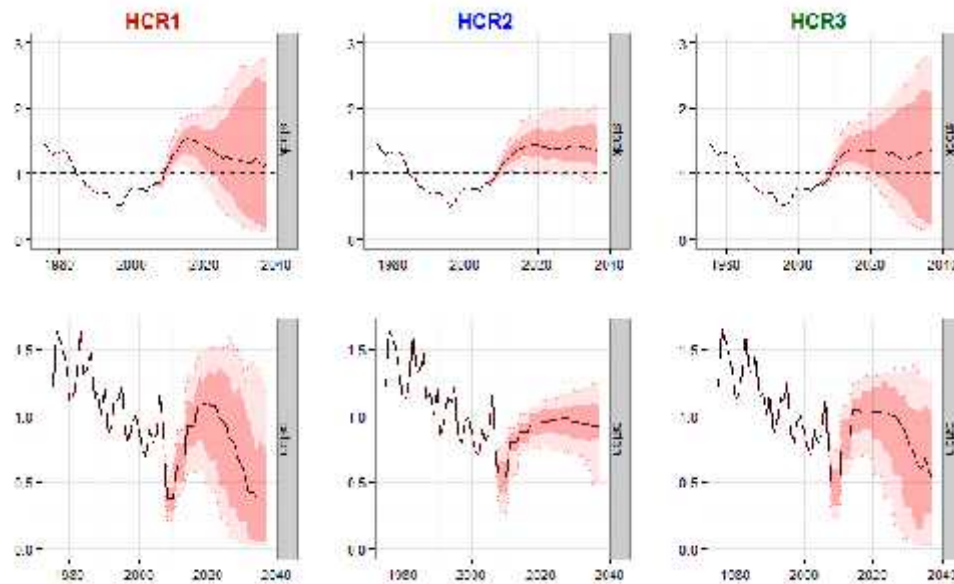
Essential Components



- Limit and Target Reference points
- Defined Objectives
 - What do you want to achieve?
 - When do you want to achieve it?
- Agreed performance criteria
- Discussion and agreement on key sources of uncertainty
- Candidate harvest control rules
- ...
- Agreement on presentation of results and method for selecting the preferred management procedure
- ...
- Schedule for re-evaluation or formal review
- Exceptional circumstances – when is it OK (necessary) to take emergency action

Time scales

- Defined Objectives
 - What do you want to achieve? When do you want to achieve it?



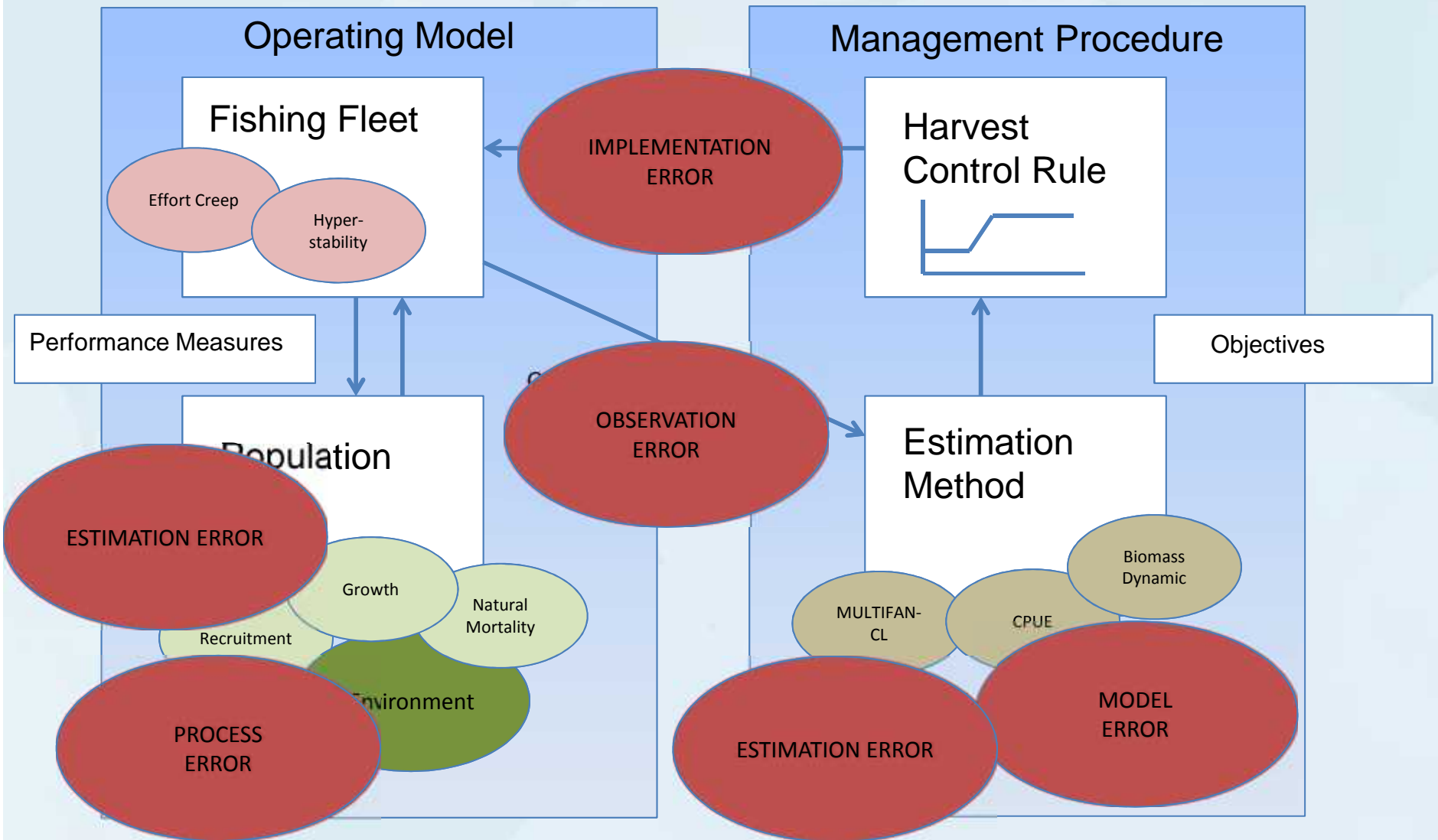
- Schedule for re-evaluation or formal review
 - When is it possible to detect results
 - Growth; Maturity; SRR; Data lags; Assessment uncertainty

Time scales



- MSE is a consultative process and requires input and feedback from managers and stakeholders throughout
 - Limit and Target Reference points 2015
 - Defined Objectives 2015
 - Agreed performance criteria 2016
 - Discussion and agreement on key sources of uncertainty 2016/17
 - Candidate harvest control rules 2016/17
 - Running the analyses
 - Agreement on presentation of results 2016/17
 - Selection of preferred management procedure 2018





MSE approaches in other tRFMOs



- IOTC
 - Indian Ocean Albacore
- ICCAT
 - North Atlantic Albacore
 - Swordfish (North Atlantic and Mediterranean Sea)
- CCSBT
 - 2000 – 2006 Management procedure development
 - 2011 – 2014 Adaptive re-building harvest strategy for Southern Bluefin tuna
- WCPFC Northern Committee
 - North Pacific Albacore
- Each RFMO is different
 - We can learn from what others have done
 - But we need to find a solution that works for us