Annex V

Minority Statement with Respect to the Report of the Stock Definition Working Group

D.S. Butterworth

The report of the Working Group on Stock Definition (Annex I) seems, unfortunately, to have been appreciably compromised by ambiguous use of terminology as a result of failure to first define, even if only conceptually, what certain terms mean. This leads to lack of clarity as to exactly what is intended by certain key statements in the report, which I fear mean different things to different people. Central to this confusion is use of the term 'stock' itself. In regions of the world, and also many international bodies, where I have worked on fisheries matters, the intended sense of this word is clear, even if not explicitly stated. This is that 'stock' is a biological unit/construct, indexed typically by 'spawning biomass', and that any differences between management area boundaries and the true, though unknown, extent (perhaps with temporal as well as spatial dimensions) of the biological unit in question are a reflection primarily of estimation errors given limited information. Indeed, such an interpretation is implicit in the process of 'stock assessment' as pursued throughout marine resource management fora. However, other views expressed in the Committee indicate that the word 'stock' is, or is coming to be, used with a very different meaning in other parts of the world.

Before clear advice and advances in this area can be made by the Committee, it seems to me essential that first the pertinent constructs underlying the debate be clarified, terms be selected for these, and then these terms be used consistently. In particular, what needs to be distinguished is:

- (a) biological constructs, which are properties of the overall population in question and its aggregative/ reproductive/dispersive behaviour, and which exist entirely independent of human intervention (in whatever form), and;
- (b) constructs related to such human intervention and its regulation (essentially constructs qualifiable by the word 'management'). We do not need finalised definitions (which I believe need to be formulated in terms of interchange rate time scales) for the biological constructs involved before proceeding with debate, but we must at least have conceptual clarity, so that everyone is clear what others mean when they use certain terms.

My other particular difficulty with the Working Group report is with the introduction of the word 'principle' - see the final paragraph of section 12.6 of the Scientific Committee report. Again this may, unfortunately, reflect different interpretations of the meaning of this word in different parts of the world. In my experience, the word 'principle' suggests some near cast-iron criterion which one would expect to apply in all instances except special and extreme circumstances. I 'tested' the 'principle' suggested in the paragraph referenced on two major southern African marine populations with which I am familiar, and immediately found it to give rise to totally misleading inferences: that populations which clearly have substantially, perhaps completely, recovered would be considered to have poor status. The difficulty in those cases with the 'principle' advanced arises from differences in historic and current areal distributions.

In this sense, I consider it inappropriate and premature to put forward the 'principle' advocated at this stage:

- (1) it is at best a potential 'guideline', not a 'principle';
- (2) it is but one of a number of such potential guidelines;(3) its potential relevance or otherwise will differ on a case-by-case basis, depending particularly on the density-dependent mechanisms thought to apply and the associated space-time region;
- (4) it is elevated (implicitly, by omission) above the guideline used in this context in the development of the RMP and following associated *Implementation Simulation Trials* (conceptually that a 'stock' reflects a reproductively 'discrete' breeding unit); this is not to suggest that the idea put forward may not have merit, but the form in which it has been reported suggests (perhaps unintentionally; hopefully incorrectly) that it is intended to supplant past implicit practice a potential decision for the informed discussion of which the clarifications sought above would seem an essential prerequisite.

Note: I regret that owing to clashes with other sub-committees, on all except the first occasion upon which the Stock Definition Working Group met, I was unable to attend its sessions and thus contribute the thoughts above to its deliberations.