

mentioned types of measures will be successful in avoiding, minimizing, or mitigating the possible cumulative impacts of commercial, ship-based tourism in the Antarctic Peninsula area. Thus, periodic review and revision of the applicable guidelines and codes of conduct to take account of new information is a necessary and important part of the range of measures that can be taken to avoid, minimize, or mitigate possible cumulative adverse impacts.

7. ASSESSING THE PRACTICALITY OF POSSIBLE MANAGEMENT MEASURES

All possible measures for assessing and avoiding or minimizing the cumulative effects of commercial, ship-based tourism may not be practical to implement. As an example, it would be prohibitively costly to attempt to monitor every site in the Antarctic Peninsula area that might be subject to ship-based tourism, even if baseline information on those sites were already available. When assessing possible management measures, the decision makers must consider the practicality and cost of implementing the measures, as well as the need for management action. Variables that may need to be considered include 1) the likely acceptance of the measure(s) by the Antarctic Treaty Consultative Parties, by IAATO members, and by tour operators not members of IAATO; 2) the ease and economic consequences of implementation; 3) possible alternative measures; 4) the actual and perceived effectiveness of existing measures; 5) the uniqueness or novelty of the site to which the measure(s) would apply; 6) the evidence indicating that a cumulative impact is occurring or likely to occur and that the contemplated measure(s) would prevent, minimize, or mitigate the impact; and 7) the presence of a comparable, similarly accessible site or sites near the site that the management measure(s) would affect.

8. ONGOING RESEARCH AND MONITORING PROGRAMS OF POTENTIAL RELEVANCE

There are several long-term research and monitoring programs being conducted in the Peninsula area that are compiling information potentially useful for detecting the possible cumulative environmental effects of tourism and other activities in the area and changes due to natural factors such as change in climate. They include 1) the Antarctic Site Inventory being carried out by Oceanites, a non-governmental organization; 2) the Antarctic Marine Living Resources (AMLR) Research Program being carried out by the Southwest Fisheries Science Center of