The Diving Medical Advisory Committee

DMAC, Eighth Floor, 52 Grosvenor Gardens, London SW1W 0AU, UK Tel: +44 (0) 20 7824 5520

www.dmac-diving.org info@dmac-diving.org

DMAC Statement on Deep Saturation Diving Conducted Using Appropriate Procedures

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Divers are at risk of injuries and illnesses caused by the working environment. The environmental factors include changes in ambient pressure, gas density, partial pressure of breathing gases and isolation in a constrained hyperbaric environment. Both psychological and physiological effects are recognised. Though several of the environmental factors become more pronounced as diving depth increases, there is no specific depth threshold for which the risk of adverse health effects is markedly raised.

Various legislative regulations, industrial standards and company procedures prescribe mitigating measures to counteract potential negative health effects as diving depth increases. Such measures include compression profiles designed to avoid high pressure nervous syndrome (HPNS), reduced lock-out time, suitable and proven equipment for the intended depth, appropriate emergency and contingency plans, increased rest period between saturations and criteria for selection of divers based on experience and physical fitness.

Operational saturation diving is presently performed regularly down to 300 msw. Experience does not suggest an increased risk of decompression sickness or other medical complications to these depths with appropriate procedures. Saturation diving is considered a safe method for manned underwater intervention within the depth range it is currently utilised.

The following documents contain useful guidance on appropriate procedures for conducting deep saturation diving projects:

- ♦ NORSOK Standard U-100 Manned underwater operations
- ♦ NORMAM-15/DPC Brazilian Navy Directorate of Ports and Coasts Maritime Authority Standards for Underwater Activities

DMAC, the independent body comprising diving medical specialists from across Europe, seeks to provide advice about medical and certain safety aspects of commercial diving.