

Devices and Methods for Transmitting EDS Back-up Signals to Subsea Pods

ABSTRACT

Methods and systems for a backup emergency disconnect signal (EDS) transmission in an offshore oil and gas installation are provided. A backup EDS transmission system includes a pressure pulse generator located close to a water surface and configured to generate a predetermined pressure variation pattern including at least one of positive and negative pressure pulses and corresponding to an emergency disconnect signal, the signal being propagated downwards in a mud column. The pressure pulse generator is located at a surface end of the mud column. The backup EDS transmission system also includes a pressure pulse receptor connected to a controller of blowout preventers and configured to measure a pressure in the mud column, at a subsea location.

Figure 2A