## **Experiences with Dual-Sensor Towed Streamer Acquisition and Imaging in the Eastern Mediterranean**

Martin Widmaier<sup>1</sup> and Øystein Lie<sup>1</sup>

## **Abstract**

The launch of dual-sensor towed streamer technology in 2007 was probably the most important milestone in the seismic industry during the last 10 years. The launch kicked off huge interest and demand for broadband seismic methods and their benefits. It also triggered the development of new acquisition and processing technology on both the source and receiver side. Broadband benefits and the ability to accurately separate dual-sensor recordings into up- and down-going wavefields have been exploited throughout the entire seismic value chain (Widmaier et al., 2015). Since the first 2D dual-sensor applications in 2007, PGS has steadily converted its seismic fleet from conventional to dual-sensor streamers and will complete the fleet-wide roll-out during 2015.

The 2D and 3D dual-sensor seismic acquisition and imaging projects that were conducted to solve imaging challenges in the Eastern Mediterranean are regarded as important milestones both for the roll out of the technology as well as for subsurface image quality in the region (Figure 1). This paper will revisit the key experiences made in the Eastern Mediterranean region during the last years.

<sup>&</sup>lt;sup>1</sup>Petroleum Geo-services