## Dubai Bathymetric Chart Survey



UTEC Survey is now well into the first phase of its hydrographic survey of offshore Dubai. Work began at the beginning of October 2008 and the processing and hand-over of the acquisition data is now scheduled for completion by the end of November. This will place the survey team on-track in the preparation of a revised detailed bathymetric chart SP 334 of the Dubai Emirate.

The second phase of the project is on schedule for completion by the end of 2009 when Dubai will become the first of the Emirate States to have up-to-date ENCs (Electronic Navigation Charts) of its waters. These are needed for use with ECDIS (Electronic Chart Display Information Systems.)

The survey is being conducted to provide updated bathymetric data in waters beyond the Palm and World offshore developments and up to the delineated national boundary. The Dubai Municipality has considered it necessary to reassess the shipping channels providing access to Dubai Port to identify any changes to the seabed that may have been caused by the intensive reclamation work that created the offshore developments.

The UTEC Survey team has been using a dedicated 9-meter survey catamaran, the UTEC Saqr which is equipped with a Kongsberg EM 3002 dual head multi-beam sonar, providing a 100 per cent mosaic of the seabed. It is also collecting additional sensor data to comply with IHO directives. As the survey moves into deeper water, the company will use the 43-meter AOS Neptune Crescent. Data is being acquired to IHO (International Hydrographic Office) standards so that ENCs can be produced in S-57 format. Data is also being acquired in SP 44 format and spatial data is being collected in the new S-100/101 format. This will provide Dubai Municipality with survey results in the most up to date formats available and will enable them to be used in a wide range of hydrographic and geodetic applications.

The UTEC survey is being conducted in two phases over 24 months. When the first phase is completed by the end of the year the company expects to have acquired some 15,000 line kilometers of data. This will have increased to over 30,000 line kilometers by the time the project is completed in mid-2009.

Collected data is being processed by a UTEC Survey on-shore team in a dedicated office established at the Dubai Municipality's Abu Hail facility. The UTEC service also includes training Dubai Municipality personnel who will lead the creation of a hydrographic office and a Dubai National Marine Information System for the emirate. Using the data collected, the Dubai hydrographers will be able to produce nautical charts and ENCs of the emirate's offshore waters. It will also transfer data to the United Arab Emirates' National Hydrographic Project which is working on a separate data acquisition programme for ENC production.

Commenting on the progress of the project, Trevor Hughes, UTEC Survey's vice president for business and commercial development said; "We are pleased with how the project is progressing. We have a multi-national team comprised of some very skilled hydrographers working on it and undertaking a thoroughly professional job, working to the high standards demanded by our client. Our investment in the most modern survey hardware is now being seen to have paid dividends with the quality of the data it is producing. The Dubai Municipality team members have proved to be a pleasure to work with and are assisting the shore based team, allowing us to produce our best work for them. We are confident that by the end of the project the Dubai National Marine Information System that they will be running will be a world class facility."