

On-Line Environmental Monitoring

GEMS recently completed a five-month environmental compliance monitoring programme in Fos-sur-Mer on the south coast of France. Two surface buoys were deployed to monitor sediment plume dispersal during dredging operations, and offer protection for the commercially sensitive oyster beds in the vicinity. Each buoy was interfaced to a subsea YSI-6600 sonde fitted with turbidity, conductivity, temperature and pressure sensors. Data were relayed to GEMS UK-based ARTEMes server at ten minute intervals via a GSM modem programmed with GEMS proprietary firmware.

The systems were designed, built and deployed within one week of order using the joint expertise of GEMS Survey and OSIL. The client was able to log on and browse up to the minute data and view historic trends using ARTEMes' flexible user interface. When pre-defined thresholds were exceeded, the client project team were notified directly by SMS message to their mobile telephones, enabling them to make informed decisions about the ongoing dredging operation.

The ARTEMes system is not restricted to buoy-mounted systems, and can be used to deliver remotely measured metocean data to the client's desktop from almost anywhere in the world where GSM, GPRS or satellite communications are available. GEMS are also running a second system providing on-line meteorological data from a remote location in Nigeria. This highly adaptable service represents a major new opportunity to further enhance GEMS Group's capabilities and meet their clients demands for high quality, up to the minute data, delivered by a convenient and reliable method.

<https://www.hydro-international.com/content/article/on-line-environmental-monitoring>
