An International Monitoring System (IMS) network or hydrophone- and seismometer-based sensors has been established over a period of ten years by the Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO) to monitor the global ocean for compliance with the Treaty. Six of the IMS monitoring stations use triplets of hydrophones cabled to shore, designed to provide continuous acoustic data in real-time via satellite data links to an International Data Centre in Vienna, Austria. Maintaining timely data availability is challenging, due to the vulnerability of cabled systems to ship-anchoring and fishing activities nearshore, and to natural events such as underwater landslides. Lead-times of two or more years are required for underwater systems repairs, so the CTBTO is currently exploring possibilities for alternative technologies and temporary data sources to help maintain continuous data availability. The CTBTO has a continuing interest to collaborate with recently established national or international scientific ocean observatories on experiments to calibrate, validate and test its sensors, data acquisition and processing systems. This paper presents the current status of the IMS hydroacoustic network, details its performance to date and discusses possible ways to increase data availability.