

# Virtual Shark Net Protecting Australian Beaches



Tritech International has successfully deployed its first full-beach shark detection system in collaboration with Shark Mitigation Systems Ltd (SMS). The Clever Buoy system is currently active at City Beach in Perth, Australia. The system uses [Gemini 720i multibeam sonar](#) which combine the benefits of high-definition imaging, medium-range target detection and a fast update rate, thus making it ideal for marine life detection.

Each Clever Buoy is solar powered and utilises a PC running the jointly developed SharkTec software, with three sonar creating a continuous area of coverage.

## Virtual Shark Net

When the SharkTec software identifies a shark, a message is sent to onshore via the Clever Buoy app and is integrated into emergency services messaging to the public. City Beach now has two Clever Buoys active, each with three sonar, creating a virtual shark net around the entire beach.

Pauline Jepp, Senior Software Engineer, Tritech, commented that SharkTec was born from SeaTec, Tritech's marine mammal detection software. Data has been collected by SMS over a number of years and used to adapt SeaTec software to be more focused on sharks. The system was trialled extensively in Bondi Beach, Sydney Harbour, Hawk's Nest Bay and Jeffrey's Bay, South Africa before being deployed in Perth.

SMS approached Tritech in 2013 to collaborate on the project following a number of successful projects where the company's SeaTec software was used to detect marine life around tidal turbines.