

We have been advised by Mr Tony Isaacson, who gave evidence to the Shark Mitigation Senate Enquiry in Brisbane on Monday 31 July 2017, of a request from Senator Whish-Wilson to provide an update on our Clever Buoy Shark Detection technology and our ongoing engagement with various state governments within Australia.

Please forward the correspondence below to Senator Whish-Wilson on our behalf.

### **Summary**

Clever Buoy is an innovative new shark detection and automated alert system with no competitors in the market and offers a real opportunity to deliver a non-invasive alternative to shark mitigation measures around the world. The expansion curve is steep, with significant capital investment by SMS in rapid development and ongoing continuous improvement to ensure every time Clever Buoy is deployed it is smarter and more accurate than the last. The system is progressing towards being the world's first fully sustainable ocean wildlife monitoring system and is a great example of innovative technology developed in Australia by Australians with no direct government support.

### **The Technology**

Clever Buoy utilises multibeam imaging sonars from the subsea industry which is at the leading edge of underwater technology. Sonar is significantly more reliable underwater than all current forms of aerial surveillance (Helicopter and Drone). When high definition sonar imagery is combined with our shark detection software utilising advanced machine learning algorithms similar to facial recognition, Clever Buoy is more reliable and accurate than human visual verification, effectively removing human error. Contrary to the subjective comments from Surf Lifesaving WA to the Senate Committee in Perth, Clever Buoy is able to accurately detect multiple species of shark. No technology for shark mitigation is 100% full proof, but Clever Buoy delivers a critical control to reduce the risk of negative interactions with sharks on our beaches.

### **Australian Deployments**

#### **Summer 2016:**

SMS with some co-funding from Optus completed a successful trial deployment of Clever Buoy at Bondi Beach, NSW which delivered significant exposure for the NSW DPI Shark Management Strategy. Although there was support from the NSW government, no government funding was provided for the trial.

System was embraced by the Bondi Lifeguards and integrated into operational beach management systems. Clever Buoy is now formally endorsed by the Australian Professional Ocean Lifeguard Association.

#### **July 2016:**

Contracted by the World Professional Surf League (WSL) for deployment at the Jeffreys Bay

South Africa Championship League to provide detection and surveillance services for athletes (location of Australian surfer, Mick Fanning's shark attack in 2015).

**November 2016:**

Collaborative Research with NSW DPI in Hawks Nest on White Sharks. Co-funded, NSW DPI covered the operational costs, SMS covered all the capital costs.

**Summer 2017:**

City Beach, Western Australia full system deployment. Co-funded, WA Government partially covered the operational costs, SMS covered all the capital costs and part of the operational costs.

System integrated seamlessly into the Western Australia government's shark alert system.

**April 2017:**

Contracted by the World Professional Surf League (WSL) for deployment at the Margaret River, WA Championship League event to provide detection and surveillance services for athletes.

**Engagement Summary**

It is extremely slow and frustrating engaging with three tiers of government and inertia is constraining the ongoing innovation of Clever Buoy within Australia. There appears to be no clear guidelines for engagement or ownership from federal and state government to support and fund local government initiatives for shark mitigation measures. We have engaged with many local councils and local mayors around Australia, and consistently they want to proceed but are constrained by lack of direction and funding support. The early adopters market in Australia would seem to be too small to support the required growth of a unique and viable technology like Clever Buoy. Momentum for Clever Buoy in Australia has waned as a result of the bureaucratic process, and SMS is now shifting focus on the global market, specifically the US market, with substantial interest in the technology and the incidence of shark interactions increasing around the globe. SMS is a WA company, Australian Owned and operated and it would be an incredible loss for SMS to have to move overseas to sustain and operate our business as a result of no support from the Australian Government. The company is currently working on proposals for a significant number of offshore localities and in the absence of a reasonable number of deployments in Australia, the company will be forced to relocate its technology, manufacturing and personnel overseas.

Regards,

Richard

**Richard Talmage**

