

**Title: Local Record Centre data capture using mobile technologies.**

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### ***Background/Progress***

Collecting and managing data in a spatial format can be time consuming, create problems in duplication and require further time and resources in validation. New technologies have recently become available at an affordable cost through the release of Not for Profit licence scheme by Environmental Systems Research Institute (ESRI) which enabled WWBIC to provide a solution which addresses some of the issues.

In 2010 Sea Trust were looking for a system which would simplify their management of data, avoiding the need for paper on boat based surveys, and where this could be uploaded quickly and efficiently to the main database in the LRC. The system chosen was a mobile recording application, ArcGIS Mobile (AGM) designed for touch screen devices where data can be uploaded to a database in ArcGIS Server (AGS) based at WWBIC as soon as an internet connection or cellular network is available.

Sea Trust received funding for the project from CCW and Briggs Marine, WWBIC invested in increased server capacity and the installation of AGS. Alongside this was the development of a mobile application for use on a tablet computer and/or smartphone by Dr. Rob Davies working with Cliff Benson and his colleagues in Sea Trust. Trials were carried out on shore and at sea until the system satisfied the requirement. It is now used by Sea Trust on all boat and ferry surveys and a demonstration of data capture and editing was executed live, in real time at the recent WBP conference.

### ***Plan/Proposals***

WWBIC wishes to move forward with the technology, to develop tailored applications for terrestrial recording which would benefit a range of recorders, groups, societies. Tailoring applications to the user group and the use of touch screens and drop down menus means that once applications are developed, they are simple to use and require very little training. The use of the system means the data is captured once to one location and is available to be viewed or edited on a desktop or by fieldworkers via a cellular network. The web interface would also be tailored to the client requirements. The data once captured can be published through open geospatial formats meaning that LRC clients with multiple offices could access the data quickly. This coupled with the use of cellular networks to capture the data opens up new

possibilities e.g. rapidly collating monitoring/survey effort from widely dispersed locations or perhaps in reaction to critical events.

***Decision Points***

To note that WWBIC welcomes approaches by members who wish further information or wish to work with WWBIC to develop applications.