Android App for Dugong Monitoring

Kickoff Meeting Thursday 10 September 2015

Chris Poonian - Tech advisor C-3

Chris Dilley - android developer

Rey N - C-3 Philippines

Simon, Sarah, Edmund

Apologies : Anthony Fulgoni, Kii – Friday 10:30 to set up

Agenda :

Introductions

Requirements

CD feedback

Process by which we will work

Key Points:

**Fishing:** Community fishermen different types of fishing, go to sea at 2am and back 9am (6-8 hours fishing in the sea). 6 areas.

**Phone:** We need to know what Androind phone will be used and to find an emulator: Rey to discuss with Smart and let us know by middle of next week if possible.

**Network coverage** in the villages : Some have 2g others have 3g. Rey will explore with Smart when 2g villages will be upgraded to 3g. If this is months away, we will develop a 3g solution, otherwise we will consider whether to develop a 2g solution (SMS based)

**SMS Images on 2g:** Rey to test and confirm that it is possible to send SMS with images on the 2g network.

**App Design:** Icon which will bring up camera : easy for the fishermen to use.

**Boat Tracking:** Is it necessary to track the boat if not photos have been taken? CP : concern battery life. Rey : 24 hour electricity in the island so we can choose community that has good electricity. Can the phone be off until photo is taken or the phone is on for the fishing trip with or without the application being open – different battery life? CD : Can track if the phone is on. Can get a position every 30 mins. Privacy issue at home : possible to have GPS polling for a certain set period of time, triggered by first time app is opened. CP: Fishing behaviour may be different from normal if they know they are being tracked.

**2G option**: Fishermen will need to press button to upload the data. No wifi in communities. Rey : ok to explain to fishermen they should press the button. CD : needs different set-up server to upload SMS to receive SMS messages and connect to internet. This could be provided by Smart - makes things more complicated. Rey : can manually collect the data from the communities and send the data – connect android phone to laptop. Have this as a backup. Rey : to take test photo with android and send to Chris. Chris to connect with Rey.

**GPS Accuracy:** Lowest level of accuracy - within 50 meters – is sufficient. Latitude and longitude only required.

**5 data elements :**  photo, latitude and longitude, time and date stamp, telephone number, track of boat

**size and detail of the image**: downscale the image for data transmission. If queries need to return to fisherman. In this case phone needs to keep the data as a backup. Store full resolution image on the phone but download lower image.

**Multiple dugong sitings:**  fishermen can see up to 4 or 5 dugong in exceptional cases. If same dugong they should only take one photo of it.

**Project process:** SEN will contract with Chris. Software will be owned by SEN but C3 willl have free licence to use. Separate account between C3 and Kii – to be clarified tomorrow.

Chris will move forward on assumption we are using 3G.

Next meeting will be late next week when Rey has answers from Smart. 1. Rey to tell us situation with Smart. 2. Chris to update us with development work. Date of meeting : Wed, Thurs, Fri ok for all.

**Chris:** Name and icon for the app. SEN will provide.