Predictive Model

* What language is the model written in?
  + ML in TensorFlow. All code to the model not provided but provided with deployable model you can feed an image to and get a classification from.
* In what format will the model be supplied?
  + TensorFlow used for classification prediction.
* Will the model need to be trained prior to implementation?
  + Not required to train the model.
* What is the output of the model? Is it binary classification only – positive class Dropbear; negative class NOT DropBear?
  + Yes, it’s binary with a confidence rating.

 Website

* What information should be presented to each user type? Research vs member of the public.
  + Public should only have access to sightings within a postcode. Researchers require a login, via a case-by-case basis from a web form.
* What is the intended experience for a researcher vs a member of the public?
  + Researchers should be to search, and access based on different fields. Public, again, just getting updates based on postcodes, and sign up via email for alerts via email.
* Do researches require a log-in to gain additional access to information compared with public?
  + Absolutely.

 Application

* Is the application a limited view of the website with specification information only about Dropbear sightings? OR full dataset as website?
  + Mobile app only for the general public. Website for researchers.
* Does the application have two different accesses – one for public one for researchers?
  + App only for the public.
* Please confirm that a phone app is required and not a web app.
  + Require a mobile app.
* Please also confirm whether Android and Apple required.
  + Yes, both operating systems. Latest version only.
* Please also confirm that the app does not already exist.
  + It’s brand new and a proof-of-concept.

Image capture and data requirements

* What messaging protocol is being used to receive the images from the camera traps? Please clarify 'SMS email'.
  + 3G network using email SMTP. Your system needs to receive these emails.
* What other information is sent with the images? Timestamps? Camera trap number? Batch number (to understand if triggered by same motion)?
  + Timestamp, no camera trap number (will be based on email address assigned to camera trap), will send 3 images and numbered in order of image taken.
* How recent does a sighting have to be for a positive reading on the app to occur? What time frame (in days/hours/minutes) = a recent sighting?
  + Works better during the day than night, so more sighting during the day. Any time a positive sighting is seen with a confidence value above 75%, it should be logged on the website and app.
* What is the minimum threshold distance to determine vicinity of sightings?
  + Outside of scope as its more to do with the accuracy of the ML model.
* What data for each image is required to be collected and displayed on the website for each user?
  + Time of image, GPS location, image itself, confidence level.

 Automation requirements

* Is this automated sorting performed by the Model?
  + No sorting done by the ML model, only predictions. Sorting done at database level, you’re expecting to manage the DB.
* Please clarify what is required to be automated in terms of sorting.
  + Some data has been somewhat pre-sorted (positive vs negative sighting).
* What benefit do you seek out of the sort feature?
  + Don’t need someone to manually sort the images. Should be automated.
* Does the system need to classify images within a specific time frame? Does the system have latency requirements around sending out warnings?
  + Model can predict within 2 seconds. But shouldn’t be a concern. Really only handling received images (moving through the pipeline).

 Scalability and ongoing support

* What are your requirements for scalability when the app and website go commercial?
  + Only employed for a prototype, so commercial level not a concern. However, all code must be documented and hosted on AWS for all systems developed.
* Do you require ongoing maintenance support of the solution?
  + No ongoing support and maintenance is out of scope.
* Please confirm training is not part of the requirements to be delivered
  + Out of scope.
* Please confirm promotion and communication strategies are not part of the requirements to be delivered.
  + Only must answer to Dr Klein who will be talking to other stakeholders. Milestones every 3 months to present to Dr Klein.