IMOS Animal Tracking – Protected Data Policy

New form of secure data within the IMOS - Animal Tracking Database: Protected Data Status

In discussions with some users of the IMOS - Animal Tracking Database (herein 'the Database'), issues related to the security of some data have been raised. These concerns have centred on the fact that detection data (which incorporates the tag ID) are publicly available, even if other tag metadata (i.e. species, size, sex, etc.) are embargoed (the only current form of data protection within the Database before the implementation of Protected Data Status). These users have demonstrated that while the embargoing of metadata was initially envisaged as the only required form of guarding data against misuse, in some rare situations the availability of the detection data may present an imminent threat to animals or projects even though tag IDs are not directly linked to a species, project, or other identifier within the Database. As such the IMOS - Animal Tracking Data Committee (herein 'the Data Committee') has been requested to develop an issues paper and specification that would allow this security concern to be addressed (Table 1). Given that such protection of data is not strictly aligned with IMOS principles of open access to data, this specification includes clear criteria that must be met to show why protection outweighs the requirement of open access.

Table 1: Public availability of current and proposed IMOS - Animal Tracking data security levels

Security type	Tag metadata available	Detections available	Approver
Open data (default)	Yes	Yes	None – implied by data submission
Embargoed metadata	No	Yes	User – designated at time of data submission
Protected Data Status	No	No	IMOS - Animal Tracking Scientific Committee

Protected Data – a new form of data security

After extensive discussions within the Data Committee and the IMOS - Animal Tracking Scientific Committee (herein 'the Scientific Committee'), the method of providing the form of protection identified stops the identified detection data being displayed in the Database, except to the members of projects that deployed the nominated tags. Users have the ability to embargo tag metadata upon data entry, but only a System Administrator is able to stop the display of the detection data within the Database (Protected Data Status). This only occurs after a user receives authorisation for this to be implemented (see below). The protection of detection data under this form of security lasts for as long as the associated tag metadata embargo is valid. It should be noted that current metadata embargo is initially for up to three years (with review). However, if Protected

Data Status is used then the metadata embargo should match the period for which detections are protected, and the period for both of these protections set at the approved period.

Authorisation for Protected Data Status

Users wishing to protect detections need to follow the procedure outlined below to receive authorisation:

1. Provide the Data Committee Chair with a request for Protected Data Status. This request should contain the following information:
   a. A clear description of how making the detection data available through the Database presents an imminent threat to the tagged animals, proponent's project, or another user's project;
   b. Why embargoing tag metadata is insufficient;
   c. The period of time for which the protection is required (for both tag metadata and protected detections);
   d. A statement of other solutions to this issue that have been explored;
   e. A statement demonstrating how IMOS - Animal Tracking will benefit from the project despite the protection of detections;
   f. A statement of how the protection of detections will likely affect the three levels of IMOS - Animal Tracking target users – the research community, resource managers, and the public – and how the project will address these issues; and
   g. A statement from the proponent's institution that they support this protection of the data.
2. If considered necessary for making a decision on such requests, the Data Committee or the Scientific Committee may request further clarification/information from the proponent or other relevant parties. Feedback on the suitability of the application will be provided if an application is denied or considered inadequate. Applicants will have a single opportunity to submit a revised request for Protected Data Status.
3. The Data Committee will evaluate the request, including substantiating the imminent risk criteria, within four weeks. The Data Committee will make a recommendation to the Scientific Committee on whether the protection should be authorised. All discussion pertaining the Protected Data Status application will be fully minuted for future reference.
4. The Scientific Committee will evaluate the Data Committee's recommendation and the request, provide a conditional approval within four weeks if it considers the criteria for approval have been met, and forward this to the IMOS Director (with feedback to the Data Committee) for confirmation. If the Scientific Committee does not approve the request, it will also notify the IMOS - Animal Tracking Facility Leader and the IMOS Director. All discussion pertaining the Protected Data Status application will be fully minuted for future reference.
5. The IMOS Director will provide an endorsement to the Scientific Committee's approval if appropriate. The proponent will be notified of the outcome on endorsement (or lack there of) by the IMOS Director.

6. Once all approvals are in place, the System Administrator will be notified as to the details so that protection can be implemented.
7. Any subsequent requests for Protected Data Status, including Freedom of Information requests, will be managed by the IMOS office.

Authorisations for Protected Data Status occur at the project level within the Database, and as such requests are made on a project by project basis. However, where multiple projects consider the same issues apply, requests for authorisation to Protect Data Status can be submitted and considered together. Applications for Protected Data Status will remain confidential. Information requests to IMOS - Animal Tracking regarding Protected Data Status are handled by the Scientific Committee and a response provided as required.

The authorisation for Protected Data Status is reviewed on an ongoing basis by the Data Committee during the requested period to ensure that the triggers for the protection remain valid. The Data Committee will report annually to the Scientific Committee and the IMOS Director on the status of Protected Data. Projects with Protected Data Status may be asked to provide information on the status of the imminent threat demonstrated to enable such a review to occur. If the Data Committee considers that the threat is no longer valid then it will make a recommendation to the Scientific Committee about removing the protection.

If at any time during the authorised protection period the proponent considers that protection of detections is no longer required, they will notify the Scientific Committee and the protection will be removed.

Criteria against which the request for authorisation to Protected Data Status is assessed

1. That there is a clearly demonstrable imminent and ongoing threat to the tagged animals, the user's project, or another user's project. This may require that information provided in the protection request be substantiated through investigation.
2. That IMOS - Animal Tracking will gain benefit from the provision of data and other products by the user despite the Protected Data Status, including (but not limited to):
   a. Access to full data once the period of protection is finished;
   b. Where applicable, the proponent will provide receiver download files to the Database to enable access to data from non-protected tag IDs on the user's receivers;
   c. That suitable acknowledgement of IMOS will be provided in project outputs;
   d. That the project ensures the availability of other products, including reports, publications, etc. to demonstrate that Protected Data Status are being used; and
   e. That there are benefits to nationally important projects.
3. A request will not be authorised if it is primarily for commercial purposes or to protect priority of publication.