

Data Capture Engagement Plan

CLIENT/FACILITY & CI CoE Pilot

Draft Version 1.0

[Date]

[Insert Distribution Statement, e.g. “For CI CoE Pilot Distribution to *CLIENT/FACILITY* Personnel Only”]

Table of Contents

[Engagement Context](#)

[Engagee](#)

[Scientific data of focus](#)

[2. Goals, and Objectives](#)

[Data Capture Hardware](#)

[Data Capture Software](#)

[3. Resources](#)

[Human Resources](#)

[Other Resources](#)

[4. Operations](#)

[External Milestones](#)

[Collaboration mechanisms](#)

[5. Engagement Risks and Mitigations](#)

[6. Metrics](#)

[7. Intellectual Merit, Broader Impacts, & Recoverables](#)

[8. Version Log](#)

1. Engagement Context

Engagee

[Insert brief paragraph describing Engagee including their scientific focus and/or mandate, duration of operation to date, and current state of operation (eg: conceptualisation and visioning / planning / construction / operational / maintenance / upgrade / shutdown / retiring / other)]

Scientific data of focus

[Briefly summarise the subject of interest to the Engagee as far as the purposes of this engagement are concerned in 1 paragraph, more details will be added later]

2. Goals, and Objectives

[Under each of the following headings (as appropriate) outline the goals and objectives of this engagement given the above described context.

In general goals are broad and possibly abstract and should be refined by defining specific objects which are measurable. Eg: A goal might be to improve data discoverability, or increase sample rates and coverage, and the associated objectives would be: apply known metadata practices to dataset X, or design a new sensor to measure Y]

Data Capture Hardware

[Are there any goals as regards the equipment used to sample the parameters of interest (eg the sensors), or initially store and process these data in the field (eg data-loggers), or regarding the mechanisms by which these data are transported (wifi / ethernet / SD Card / drone / ship / aircraft) to any secondary storage, processing, distribution, archive, or other secondary facilities]

A. Goal

a. Objective

Data Capture Software

[Are there any goals as regards the software stack used to initially sample and capture the parameters of interest and the associated metadata (eg the sensor interface protocols, metadata schema, storage formats, vocabularies and ontologies), or initially store and process these data in the field (eg operating systems, communication protocols, update/security/compression tooling, remote workflow management and annotation), or regarding the mechanisms by which these data are transported (eg communication protocols, privacy management) prior to it reaching secondary backed up storage, processing, and distribution infrastructures]

B. Goal

a. Objective

With these goals in mind, CI CoE Pilot is committed to working with [Engagee] staff on this effort through [Date]. We will identify specific objectives and tasks at weekly meetings.

3. Resources

Human Resources

1. Coe Human Resources

[Identify engagement lead and engagement seconds for each goal. Identify CoE engagement team members. Briefly describe expertise or roles of each. List effort allocated to each for the period of engagement]

2. Engagee Human Resources

[Identify engagement lead and engagement seconds for each goal. Identify CoE engagement team members. Briefly describe expertise or roles of each. List effort allocated to each for the period of engagement]

Other Resources

[Identify any further resources either the CoE or Engagee intends to contribute or make available to the engagement such as server time, access to sensor hardware, access to data, access to tools or software source code. If there are time or other limits on any of these resources list and name these too]

4. Operations

External Milestones

[List any key deadlines by which certain goals or objects must be met due to external requirements (Eg: Conferences, Financial periods, Funder Reviews, Environmental events, Personnel movements, other).]

Internal Milestones

[Once complete then determine additional milestones to achieve all remaining objects according to a mutually agreed upon plausible timeline]

Collaboration mechanisms

[Given the above goals, objectives, milestones, and available resources and constraints determine a plan of engagement such as identifying weekly meeting times, or the use of SCRUM development teams, or similar]

5. Engagement Risks and Mitigations

[Consider what factors could potentially lead to the engagement failing to achieve any of the goals set out within the given milestone deadlines. List all known risks and describe how these risks may be mitigated as far as possible]

6. Metrics

[For Each objective, describe how success and completion will be measured and determined. Eg, software released, operations test passed, conference paper submitted, review report written, service deployed, etc]

7. Intellectual Merit, Broader Impacts, & Recoverables

List any anticipated potential recoverables for future engagements. These might be expected to include:

- Additional expertise and insights into the cybersecurity needs of the environmental research community.
- Refinements to the CI CoE Pilot *Guide*, tools, and templates based upon experience from the engagement.

8. Version Log

Tracking Engagement Plan by date and version number
Ver001- 201905011

This material is based in part on work supported by the National Science Foundation under Grant Number XXX-0000000 and XXX-0000000. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.