

1 Artefact Working Group

1.1 Purpose

Formulate the minimum requirements for:

- a. Artefact data attributes to be deployed across the system (captured through mobile device applications and used to facilitate the production of comparable datasets).
- b. Functionality of the capture of artefact data on the mobile device application.
- c. eResearch tools required for searching artefact data.
- d. eResearch tools required for the analysis of artefact data.

The working group should also discuss and provide direction on any other aspect of the FAIMS project relevant to the capture, management or analysis of artefact data.

1.2 Scope

For pragmatic purposes, this phase of the FAIMS project has restricted the development of digital artefact recording to two classes of artefacts: ceramics and lithics. While the requirements for data attributes may vary from project to project, we hope that this working group may agree on some minimum requirements for these two classes that will be universal across all assemblages.

FAIMS data capture application development is focused on the digital creation of data in the field on mobile devices (e.g., Android phones and tablets), but the project also envisions the development of companion desktop software. Applications will be modular and extensible, but the project is unlikely to initially support the full gamut of attributes required for detailed laboratory recording. As a result (and to encourage the creation of compatible datasets across as wide a range of projects as possible), we ask this group to focus on a minimum threshold of attributes that should be recorded under all (or almost all) circumstances.

At this stage, it is most important to establish a minimum list of attributes (e.g., dimensions, shape, fabric, etc.), rather than the specific vocabularies or taxonomies to populate them (although some discussion on the latter may not be avoidable). We recognise that such vocabularies and taxonomies may vary from one region or time period or project to another, and we expect their details to be developed in other fora.

1.3 Topics to Consider

- a. Are there universal attributes (dimensions, shape, fabric, etc.) for lithics and ceramics that applies to all types of archaeology (indigenous, classical, historical, maritime)? Or do these categories need to be customised by region and chronological period? Are there high-level vocabularies or

taxa that might also be widely applicable (e.g., functional categories for ceramics, such as storage, transport, or serving vessels), or will all such vocabularies / taxa need to be customised by region and chronological period?

- b. What attributes do you always record? What attributes do you sometimes omit?
- c. Are there significant differences in the way you record an artefact and the way you record archaeological features? How might that affect the development of a tool for digital capture?
- d. Do you regularly do some sort of group / assemblage record, and then a more detailed inventory record for selected artefacts?
- e. Do you photograph or sketch artefacts in the field? What percentage of artefacts is ultimately photographed or drawn (in the field or in the laboratory)?
- f. How precise are measurements of artefacts taken in the field? In the laboratory?
- g. How do you access reference data needed to identify and date objects in the field or laboratory? Should these be integrated in data capture?
- h. How often do you need to search through artefact data collected in the field (digitally or manually)? Is it critical, or is it really only accessed in the lab?
- i. Is there more consistency in stratigraphic recording in comparison to artefact recording?
- j. What visualisation or statistical tools do you rely on to analyse your artefact data? What visualisation and statistical tools would you like access to in a perfect world?
- k. How do you find artefact data created by other researchers? Is searching for artefact data more complex than searching for stratigraphic or site data?

1.4 Expected Outcomes

- a. List of essential attributes required for recording a ceramic artefact in the field.
- b. List of essential attributes required for recording a lithic artefact in the field.
- c. List of functionality requirements for recording artefact data on a mobile device application.
- d. List of functionality requirements for searching artefact data on the FAIMS portal.
- e. Suggestions regarding workflow or approach (e.g., Do we need separate group and individual records? Should group records be handled with excavation / survey units and individual inventory here?).
- f. Suggestions for analytical tools to be included within or developed by the FAIMS portal.
- g. Should controlled vocabularies be used throughout? If so, global or local?