1 Excavation Working Group

1.1 Purpose

Formulate the minimum requirements for:

a. Excavation 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 excavation data on the mobile device application.

c. eResearch tools required for searching excavation data.

d. eResearch tools required for the analysis of excavation 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 excavation data.

1.2 Scope

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 excavation that may be widely applicable.

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. To ensure core functionality and 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 during excavation.

1.3 Topics to Consider

a. What are the 10 most important components of excavation record? Why?

b. What is the desired granularity of your data? What is the achievable granularity of your data? What is the smallest spatial or conceptual entity that you currently record? That you would like to be able to record digitally?

c. What data do you need to quantify (e.g., deposit composition is 30% gravel and 30% sand)?

d. What in your data is a qualitative observation (e.g., the matrix is highly compacted)?

e. What in your data is a measured, objective observation (qualitative or quantitative, e.g., "this stratigraphic unit yielded 10kg of pottery", "the color of the soil in the matrix is Munsel 7YR")?

f. What in your data is interpretive (e.g., "this wall is late prehistoric")?

g. Is there any "data" that doesn't neatly fit in the above categories?

h. When discussing the above questions, did the group use the same vocabulary to refer to the same concepts? What similar concepts were mapped to different words? What different concepts were mapped to the same words?

i. Is there a significant difference in recording between "simple" single-phase excavations and "complex" multi-layer excavations, enough so that we need separate systems for each?

sectionExpected Outcomes

a. List of essential attributes required for recording excavation data in the field.

b. List of functionality requirements for recording excavation data on a mobile device application.

c. List of functionality requirements for searching excavation data on the FAIMS portal.

d. Suggestions regarding workflow or approach - what would the process of recording a stratigraphic unit in the field look like?

e. Suggestions for analytical tools to be included within or developed by the FAIMS portal.

f. Should controlled vocabularies be used throughout (and if so, global or local)?