

# Connecting Iranian excavation reports and museum information to cultural heritage information systems

Massoomeh Niknia<sup>1</sup>, Øyvind Eide<sup>2</sup>, Christian-Emil Ore<sup>3</sup>

<sup>1</sup> Kharazmi University, No.43.South Mofatteh Ave, 14911 – 15719, Tehran, Iran

<sup>2</sup> Digital Humanities — Historisch-Kulturwissenschaftliche Informationsverarbeitung, Universität zu Köln, Albertus-Magnus-Platz, 50931 Köln, Germany

<sup>3</sup> ILN/EDD, University of Oslo, Postboks 1123 Blindern, 0317 Oslo, Norway  
[niknia.m@gmail.com](mailto:niknia.m@gmail.com)

**Abstract.** Iran has a rich tradition of archaeological material. Excavation reports comprise one of the most important types of grey archaeological publications. Based on previous works starting in the 1990's we describe two methodologies for extracting information from excavation reports:

- Manually encoding the reports into XML documents and then extracting information from the encoded reports.
- Automatically extracting information directly from the reports.

The basis for both methods is various types of elements seen as valuable for future use of excavation reports, based on local experience and international standards. These two methods not only lead to different levels of reproducibility, but also lead to different needs for human resources investment. We will discuss how data sets established using these two methods can be imported into CIDOC CRM compatible databases. The first method has already been employed and hopefully we will be able to show results also from the second method in time for the conference.

The main objective of this study is to provide a solution to the organisation of excavation reports in a standard way so that it opens up for exchange of data between domestic institutions as well as at the international level. The state of the art international solution in this field, CIDOC CRM, has been under-utilised in Iran until now. This study investigates the application of this ontology. Extensions of CIDOC CRM, including CRMarchaeo, will also be explored to find out to which extent they serve our need and if there are issues to be addressed.

**Keywords:** Iranian Excavation Reports, CIDOC CRM, CRMarchaeo, Cultural Heritage Information Systems