



## STSM Report

**Practical Assessment of a new metric heritage test object.**  
(COSCH Working group 2/ Cost-Action TD 1201).

REFERENCE: Short Term Scientific Mission, COST TD1201

Beneficiary: Mona Hess, UCL Department of Civil, Environmental and Geomatic Engineering (CEGE), United Kingdom

Host: Dr Patrick Semal, Head of Scientific Service of Heritage, Curator of the collections of Anthropology and Prehistory, Royal Belgium Institute of Natural Sciences (RBINS), Brussels

Period: from 26/08/2013 to 06/09/2013

Place: AGORA3D project (High Resolution 3D for Scientific and Cultural Heritage collections), based in the Royal Belgian Institute of Natural Sciences (RBINS)

### **Purpose of the STSM**

The 'heritage test object' includes known surface and geometric properties which support comparative imaging on different 3D imaging systems and allow evaluation of sensor geometry, colour and spatial resolution. It has been specifically designed for use by museum and heritage institutions, who are concerned with surface geometry and colour 3D recording of museum artefacts.

The measurement mission was kindly be hosted by the AGORA3D project based in the Royal Belgian Institute of Natural Sciences (RBINS) and across three other federal scientific institutions in Belgium.

Aim of the STSM project is a step towards ensuring high-end 3D content generation in cultural heritage that is fit for the intended purpose and that data captured today is sustainable for a wide range of scientific uses into the future.

Milestone 1: 3D data collection of the metric test artefact with a wide range of sensors

Milestone 2: Technology knowledge transfer of the developed test protocols with the metric test object,

Milestone 3: Networking and project presentation at the AGORA3D meeting in late August to the Belgium museum and university heritage and museum professionals, towards further collaboration.

Milestone 4: Evaluation of collected 3D data.

For the following analysis of 3D datasets is presented in the STSM report:

Sphere diameter error (e.g. measured diameter deviation from nominal/ calibrated sphere) and Sphere spacing error (e.g. measured distance between actual measured distance and nominal/ known distance measurement here from Arius3D).

