# Issue 337: Excavation Interface

**Starting Date:**

2017-04-04

**Working Group:**

3

**Status:**

Open

**Background:**

In the **38th joined meeting of the CIDOC CRM SIG and ISO/TC46/SC4/WG9 and the 31st FRBR - CIDOC CRM Harmonization meeting**, Gerald Hiebel made [**a presentation about excavation interface on CRMarchaeo**](http://www.cidoc-crm.org/sites/default/files/Excavation_Inference4CRMarchaeo.pdf) and proposed to introduce  (a) new class about excavation interface,  (b) a new property to the A1 Excavation Process Unit which will describe the production of the excavation interface  (c) new class about segment of matter and a new property of it  for describing the confinement of the excavation interface.

The crm-sig accepted the proposal and assigned to Gerald to write the definition of the proposed classes and properties.

Heraklion, April 2017

### Figure 1 shows the relations of the new class Axx Excavation Interface. Actually the property relating it to A1 Excavation Process Unit that should be introduced according to (b) already exists in CRMArchaeo as *AP4 produced interface*. Its Range has to be modified from S20 Rigid Physical Feature to Axx Excavation Interface. A new property *APxx confines* with domain Axx Excavation Interface and range S22 Segment of Matter is proposed.

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### Axx Excavation Interface

Subclass of: S20 Rigid Physical Feature

Scope Note: This class comprises instances of S20 Rigid Physical Feature that constitutes a surface produced through one or several A1 Excavation Process Units. Instances are often documented through drawing and/or measured by technical means such as photography, tachymetry or laser scanning. Using a planar excavation methodology this is typically the surface of a planum or the surface of a profile. Using a stratigraphic excavation methodology the Axx Excavation Interface would have the intention to approximate an A3 Stratigraphic Interface. The drawing and measurement of profiles is also common practice when a stratigraphic excavation methodology is used.

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Examples:

The Excavation Interface Planum 6 of square I22 in Area F-I is documented in the fielddrawing “Planum 6 F-I i22 “ created in Fall 1982

The Excavation Interface Eastern profil of square I22 in Area F-I is documented in fielddrawing “Ostprofil F-I i22” and confines the excavation square I22 to the east.

Properties:

APxx confines (is confined by): [S22](#_A2_Stratigraphic_Volume) Segment of Matter

### APxx confines (is confined by)

Domain: Axx Excavation Interface

Range: [S22](#_A2_Stratigraphic_Volume) Segment of Matter

Quantification: one to many (0,n:0,1)

Scope note: This property identifies partly or completely the surface (Axx Excavation Interface) of a [S22](#_A2_Stratigraphic_Volume) Segment of Matter that was excavated during one or several A1 Excavation Process Units. In case of a planar excavation methodology this may be the S22 Segment of Matter contained between two planums as upper and lower boundaries and limited by e.g. four Profiles to the north, east,south and west. The documentation of the excavation interfaces should help to document the structure and composition of the S22 Segment of Matter that they confine. Using a stratigraphic excavation methodology the S22 Segment of Matter is intended to approximate an A2 Stratigraphic Volume Unit.

Change of Range for AP4

### AP4 produced surface (was surface produced by)

Domain: [A1](#_A1_Excavation_Process) Excavation Process Unit

Range: Axx Excavation Interface

Quantification: one to many (0,n:0,1)

Scope note: This property identifies the instance of an Axx Excavation Interface that constitutes the new surface produced during one or several A1 Excavation Process Units in the excavated area. Frequently this surface or parts of it are documented through drawing and/or measured by technical means such as photography, tachymetry or laser scanning.

Examples:

The stratigraphic Excavation Process Unit excavating the Stratigraphic Volume Unit (2) produced surface S1.

The stratigraphic Excavation Process Unit excavating the volume (S22 Segment ) between Planum 5 and Planum 6 produced surface Planum 6 .