

# 3D ICONS

## Potential usage of 3D data and IPR issues

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## IPR Scheme overview

IPR Scheme covers:

- ❑ 3D Models
- ❑ Metadata for Europeana
- ❑ CARARE2 Metadata (held in MoRE2)
- ❑ Content to be provided to a 3D-ICONS portal
  - Under discussion
    - More complex models/data
- ❑ It does not cover ACCESS to sites and monuments – these are usually private agreements between the owner or administrator and the 3D model creators.

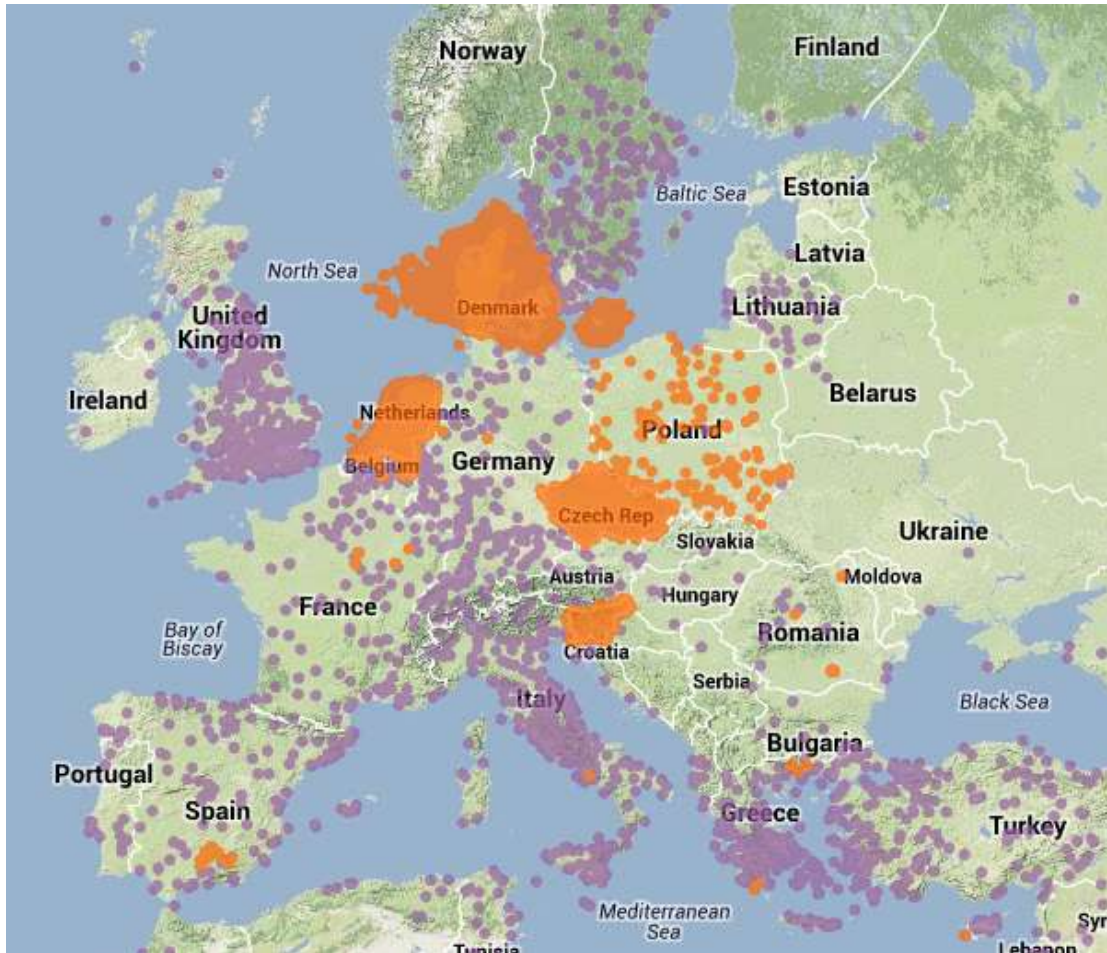
- ❑ Default IPR position for 3D models is BY-NC-ND.
  - This licence is the most restrictive, only allowing others to download your works and share them with others as long as they credit you, but they can't change them in any way or use them commercially.
  - But “Rights Reserved – Free Access” would be an option too.
- ❑ Technology – streaming a good solution
  - Security loophole in 3D-PDF
  - Looking at HTML5/WebGL, UNREAL and Unity3D also.
  - Nexus: Takes original hi-res model and renders WebGL on screen. Converted files stored on owner's server.
  - Technologies offer some protection but nothing is hacker-proof.



# Europeana Data Exchange Agreement

- ❑ CC0 agreement with Europeana for metadata
  - EDM compliant
  - Won't accept metadata without a DEA
- ❑ To summarise the DEA conditions:
  - All content suppliers have total control over the metadata supplied to Europeana (and thumbnail images - optional)
  - Suppliers can request to have metadata withdrawn
  - Suppliers have absolute control over the content (URL).
  - The metadata is designed to facilitate search and retrieval
  - Metadata may be used in 3<sup>rd</sup> party apps (e.g. geo-locations).

## Example use of geo-location metadata What is where?



<http://carare.eculturelab.eu/Care50m/Map.html>

Maps the geo-location (physical position) recorded for each item supplied by CARARE to Europeana.

Other uses of EDM metadata:  
HACKATHONS ...  
Timeline and other Europeana applications.

- ❑ Rights statements (DC: Rights) are either encoded as literal statements or as URLs referring to web pages that contain information about the applicable rights. The web pages inform the user about the terms under which the digital object and the corresponding preview can be used. Europeana uses 12 different Creative Commons rights statements in total which define the type of access and use allowed or not. (Currently used for sorting by Copyright).

Source: <http://pro.europeana.eu/web/guest/available-rights-statements>



# CARARE 2.0 Metadata Schema

- ❑ Developed in the CARARE project as a rich schema for archaeological domain
  - Based on existing standards with some additions (MIDAS, LIDO)
  - Used for 3D models provided by CARARE (~ 50 3D-PDFs).
- ❑ CARARE 2.0 extended model to cover specific requirements of 3D models
  - Provenance (London Charter paradata) e.g. digitisation and processing methods, equipment used, datasets ...)
- ❑ Mapped to EDM in MINT tool and ingested via MoRE.
- ❑ Also compliant with CRM-DOC (dig extension)



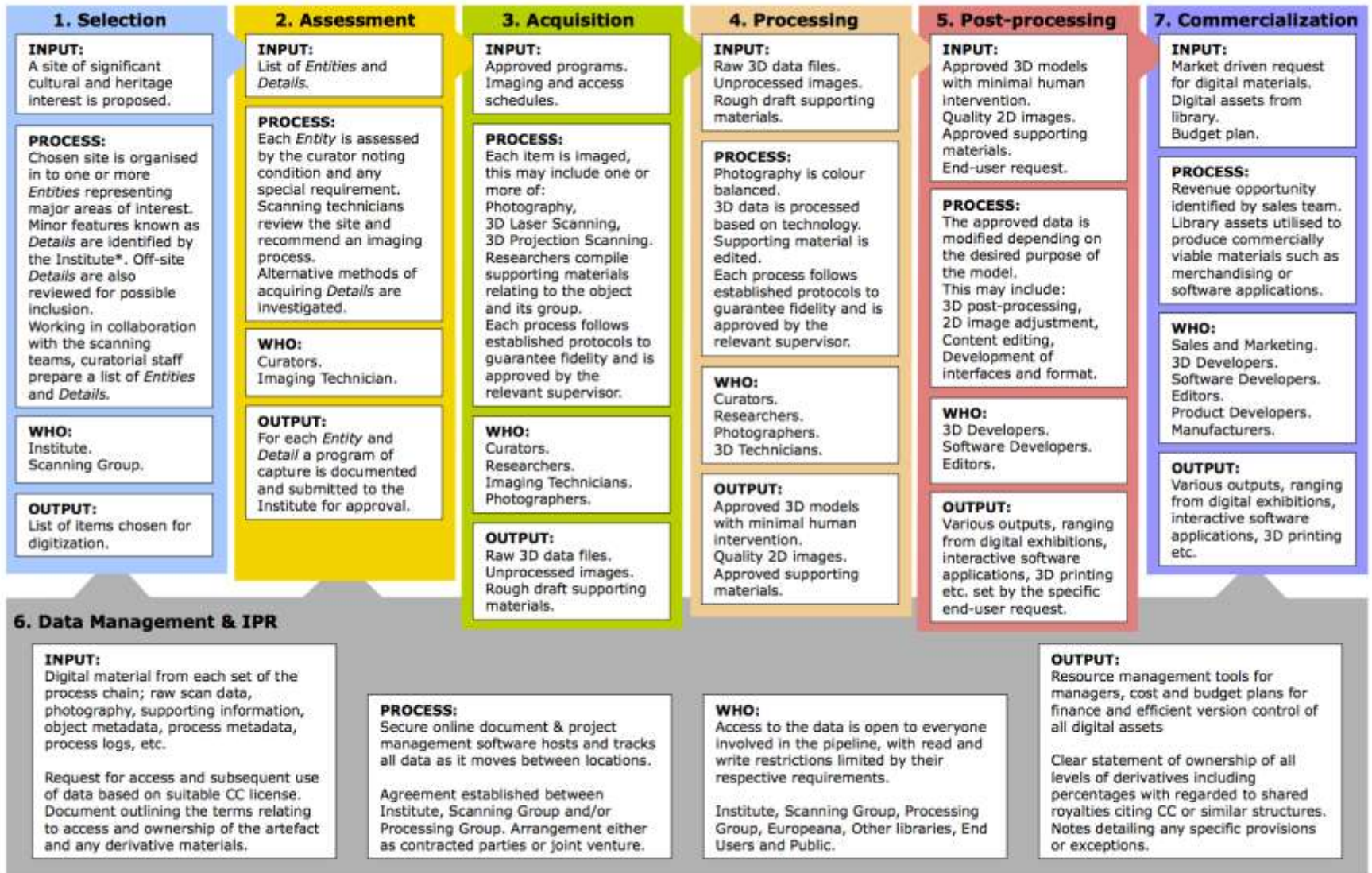
# CARARE 2.0 IPR Statements

- Specifies:
  - Rights for whole collections\*
  - **Rights associated with the Heritage Asset,**
  - Rights associated with the digital object itself (copyright, access rights, reproduction rights)\*
  - Rights for the metadata.\*

\* = optional



# Activity Chain



\*Institute refers to the organization responsible for managing a particular heritage location.

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# 3D-ICONS IPR Scheme

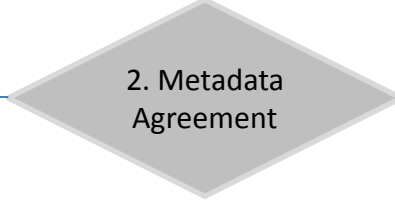
**CONTENT PARTNER**  
objects and sites  
provenance  
archives  
accreditation

(access to assets and original IPR)



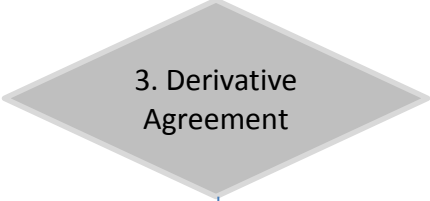
**IMAGING PARTNER**  
3D data, photography,  
supporting materials

(creates 1<sup>st</sup> generation content + IPR)



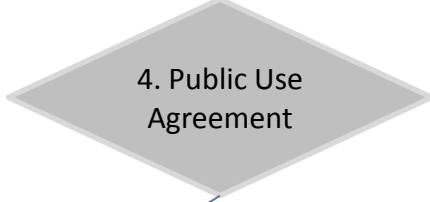
**EUROPEANA**  
who, what, where,  
when

(portal & search engine)

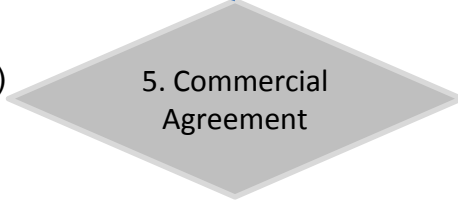


**DEVELOPMENT PARTNER**  
3D data, photography, texture  
maps, digital merchandise,  
physical merchandise

(creates 2<sup>nd</sup> generation content + IPR)



**DISTRIBUTING PARTNER**  
visualisations made  
available online



**SALES PARTNER**  
fulfilment, distribution

(establishes revenue paths for materials)

- ❑ 3D Models for Europeana may be derived from larger, more complex models
  - Scientific research
    - Enable researchers find models and data sets (metadata)
  - Commercial applications e.g. tourism, gaming, marketing
    - 3D gamers prefer to take existing models and modify them
    - 3D is very attractive to the public
  - Education
    - Brings history alive, brings artifacts together with sites
  - Technology transfer
    - Using techniques developed for archaeology for medicine, engineering and other applications

- Where would you like to see archaeological technology go next?
  - An area of growth in my mind is virtual landscapes that incorporate our findings into recreated worlds. Typically, we see a lot of 3D visualization that is fairly passive, with fly-throughs or "visits" where you navigate through abandoned, sterile recreations. I'd like to think along a more interactive world, where elements are hyperlinked to more information, the marketplaces are full of avatars, and smoke rises from kitchens. This throws us into the world of gaming technology. *GIZMODO interview with Dr. James Newhard, Director of Archaeology, College of Charleston*

# 3D ICONS

Any questions?

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[www.3Dicons-project.eu](http://www.3Dicons-project.eu)