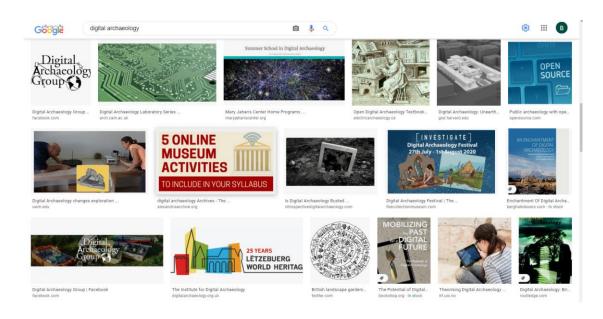


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## Priorities for Digital Technologies in Archaeology

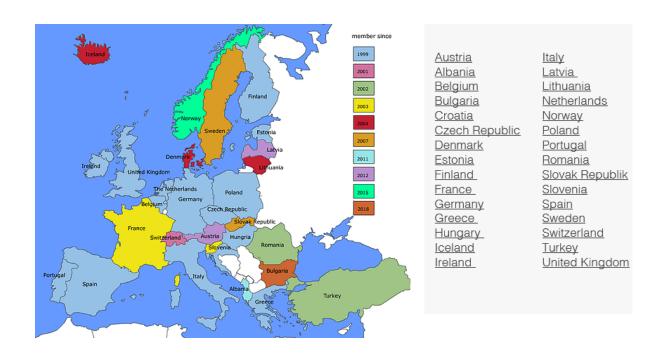
Contribution of EAC to CDCPP 8th December 2021

#### Barney Sloane, President EAC





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- EAC: CoE-facing European states' archaeological heritage managers' organisation.
- As of March 2022, there will be 35 member states, with about 80 organisations
- Exists to act as forum for information exchange, guidance development



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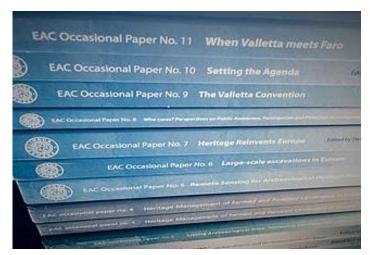
### Working groups:

- Rural land use (joint with EAA)
- Remote sensing
- Archaeological archives
- Making choices

### **Guidelines:**

- Standard and Guide to Best Practice in **Archaeological Archiving** in Europe
- Guidelines for the use of **geophysics** in archaeology

### **Publications:**



**EAC Occasional Paper 13** 

Dare to Choose Making Choices in Archaeological Heritage Management

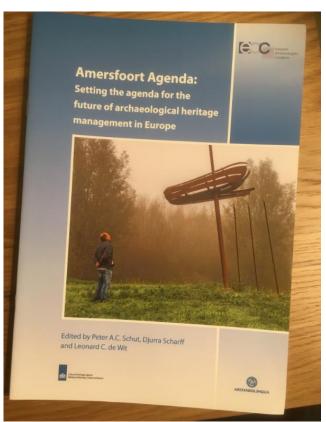
Edited by Ann Degraeve Budapest, 2018



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Strategic document: Amersfoort Agenda Setting the agenda for the future of archaeological heritage management in Europe.

- 1. The spirit of Faro: embedding Archaeology in society
- 2. Dare to Choose
- 3. Managing the Sources of European History





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## Amersfoort Agenda and Strategy 21



Direct links between EAC objectives and ST21 objectives as presented by Leonard de Wit to CDCPP









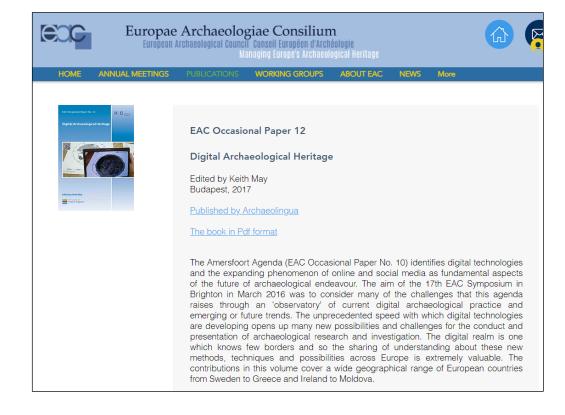


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### EAC Priorities for digital heritage

Technological, cultural and policy development is needed to enhance:

- UNDERSTANDING
- SHARING
- **IMPROVING**
- **PRESERVING**
- COMMUNICATING





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### Priority: UNDERSTANDING: Technologies to discover, characterise and monitor condition of archaeology

Valletta: Arts. 2-4

What? Combination of sensing and analysing technologies to identify and characterise new sites.

Why? Human and climatic changes threaten unknown sites; current approaches are slow and expensive.

**Current barriers?** Technological and methodological challenges, access to imaging, lack of guidance for consistency between states

**Transformation?** Review policies of data sharing; invest in further research; develop guidance

Benefits? Rapid identification of heritage assets and threats to them for management and protection

European Example: **ESA/IIT – Arianna's work!** 





The AI developed by IIT researchers will analyse satellite images in order to detect traces of hidden archaeological sites. CREDIT ESA/IIT



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### Priority: SHARING: Public Access to Archaeological Heritage

Valletta: Arts. 7-9

**What?** Web-based applications linking to national data – from any device, any time, free.

Why? Real desire by people to engage with their heritage,

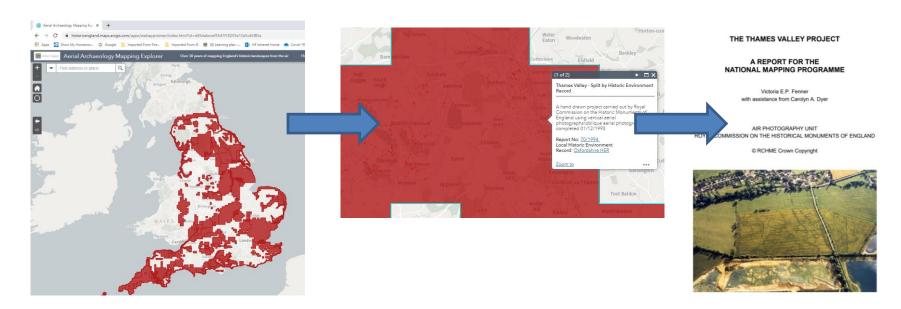
**Current barriers?** Control/limitations; digital readiness of information

**Transformation?** Cultural shift, safeguards; Guidance for inventorising; Technological infrastructure investment

Benefits? Public trust, engagement, local care and protection, education, community pride

English Example: Aerial Archaeology Mapping Explorer





Historic England's Aerial Archaeology Mapping Explorer: Evidence of appetite

- Only English aerial survey data (not complete national dataset)
- 38 media stories in national and local press on launch
- Over 90,000 visits to the app  $(6^{th} Oct 11^{th} Nov)$
- Maintained average of 1,000 visits a day (counted 20th to 27th October) a fortnight after initial release



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## Priority: IMPROVING: Developing excavation techniques

Valletta: Arts. 6-8

What? Emerging cradle-to-grave digital recording of archaeological sites

Why? Development-led archaeology in Europe worth €1Bn+ per annum, need to

increase cost-effectiveness

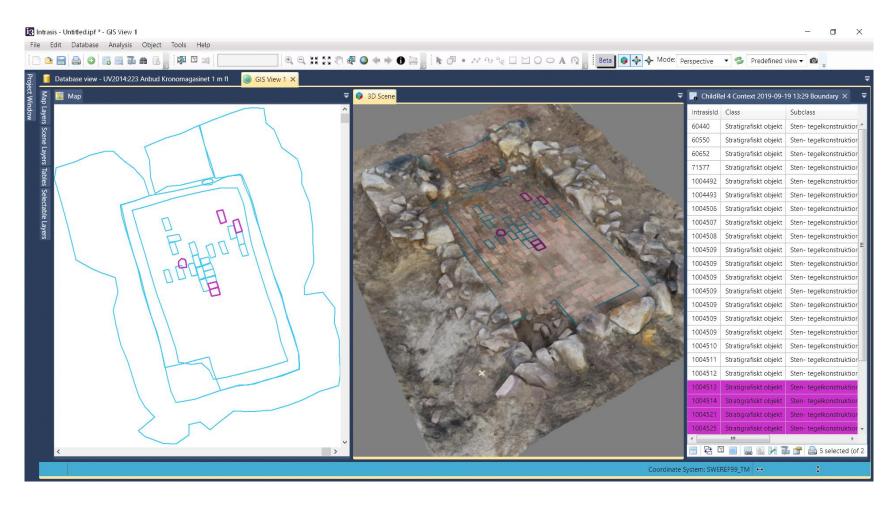
**Current barriers?** No international standards; skills and training; enforcement

**Transformation?** Integration into state practice; standards and guidance

Benefits? Increased cost-effectiveness; enhanced data sharing and reuse

Swedish Example: Intrasis





Intrasis 3D: National Historical Museums Sweden



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## Priority: PRESERVING: Ensuring Digital Legacies

Valletta: Arts. 4, 8

**What?** Trusted Digital Repositories, linked to Aggregator platforms

Why? Increasing quantities of digital data are at risk of fragmentation, loss.

**Current barriers?** No international standards; skills and training

**Transformation?** Integration of demonstrators into state practice; standards and guidance; technological infrastructure investment

Benefits? Pooling of shared knowledge, rapid access, re-use for research and conservation

UK/European Example: ADS, ARIADNE+





## Priority: COMMUNICATING: Growing the conversation

Valletta: Art. 9

What? Familiarising and embracing the way young people use digital.

**Why?** Digital is increasingly a layer of reality for young people. Avoiding engagement will lead to loss of contact, relevance and impact.

**Current barriers?** Mainly cultural? Some skills required.

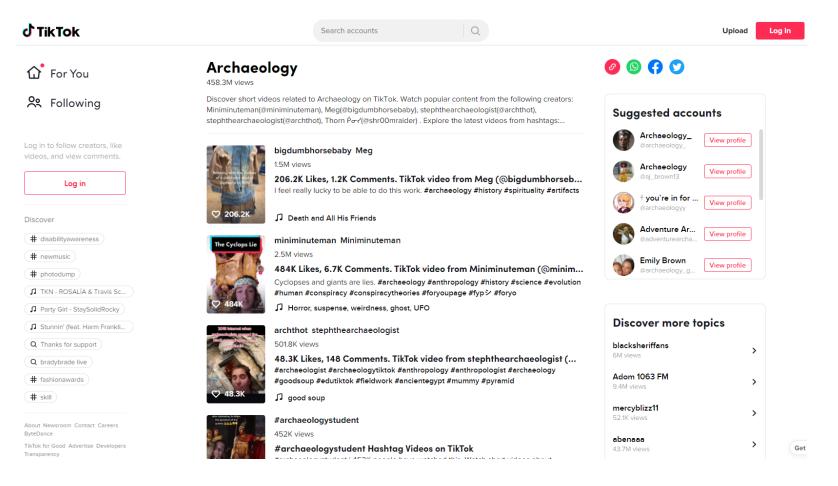
**Transformation?** Support, enthusiasm, engagement

Benefits? Opens doorways to deeper engagement, educates, excites and inspires

World-Wide Example: TikTok Archaeology creators



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Screengrab, December 2021 of TikTok's Archaeology 'page'. Note number of worldwide views: 458 3 million



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- Transformations include cultural, skills, infrastructure and research: it is about influence as much as money
- EAC does not cover all of Council of Europe
- EAC can act as direct conduit to states archaeological heritage managers and promote CoE Recommendations regarding digital technologies and their development.
- CoE can help non-EAC members benefit from EAC guidance and toolkits
- Closer relationship and information exchange would be welcome to achieve this cooperation