

NEWSLETTER

JUNE 2025 | ISSUE #4

EDITORIAL

Dear Readers,

Welcome to the 4th Newsletter of the **RITHMS** Project. Since April, the RITHMS Consortium has been deeply involved in the final stages of development, with numerous key activities shaping these past few months.

On April 7-8, we held the first training session with the police forces of the Consortium, offering a first approach to the RITHMS Platform.



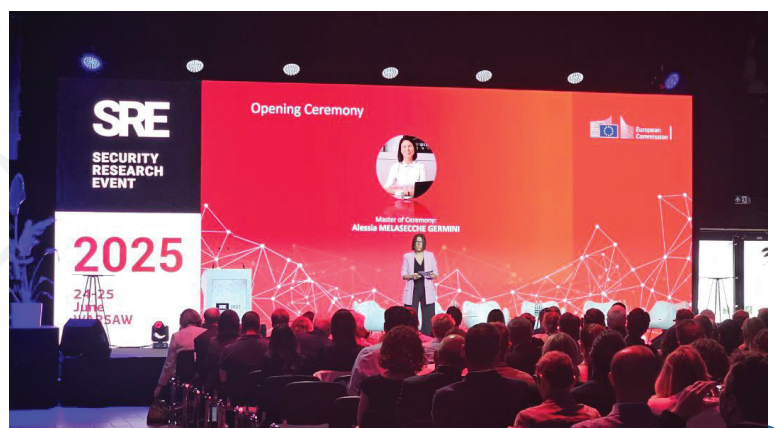
In May, we launched the pilot phase involving the Carabinieri, the Dutch Police, and the Spanish

Police, with the kind collaboration of the Romanian Police.

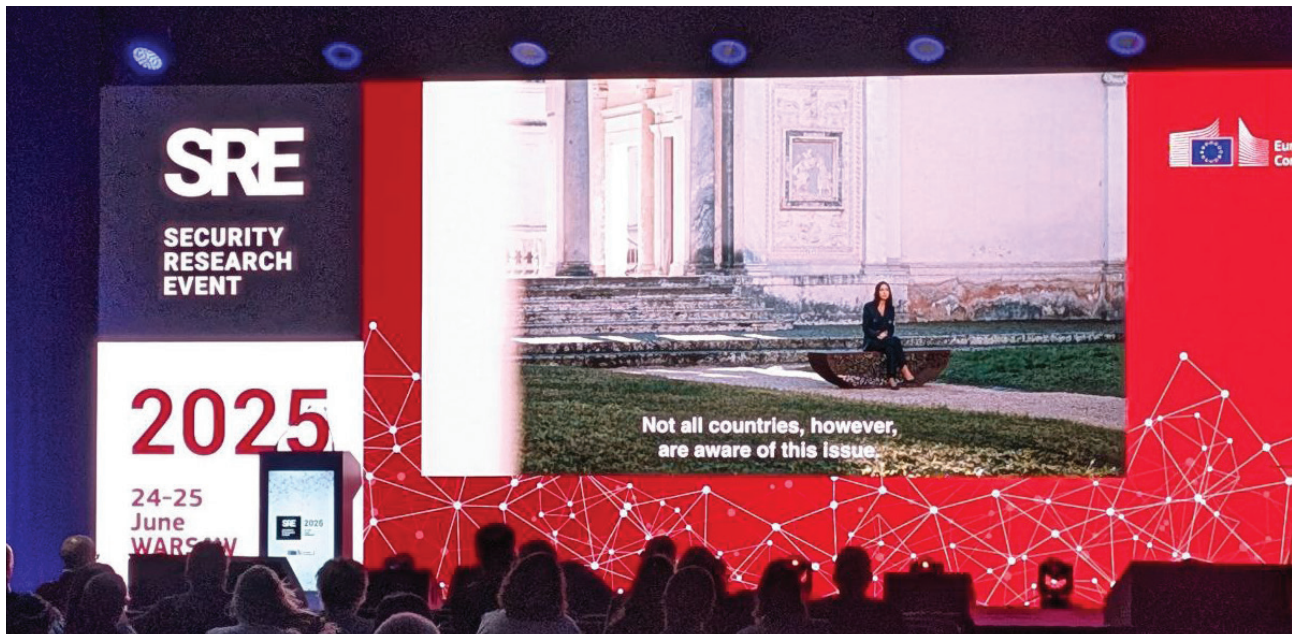
The pilots will continue through July. This phase is critical for further refining the Platform and tailoring it to meet the specific needs of end users. Stay tuned as we move closer to delivering an advanced and customised solution to support Law Enforcement in addressing the illicit trafficking of cultural goods.

RITHMS AT THE SECURITY RESEARCH EVENT 2025 IN WARSAW

On 24-25 June 2025, the **RITHMS Project** was showcased at the Security Research Event (SRE) 2025, hosted in Warsaw, by the Coordinator's team from the **Centre for Cultural Heritage Technology (CCHT – Istituto Italiano di Tecnologia)** with the support of the **European Software Institute (ESI)**.



RITHMS AT THE SECURITY RESEARCH EVENT 2025 IN WARSAW



Throughout the two-day conference the project team engaged with researchers, policy-makers, and operational practitioners from across Europe, providing live, case-based demonstrations of the RITHMS platform and discussing its potential to counter the illicit trafficking of cultural goods. These interactive sessions enabled participants to evaluate the platform's functionalities directly against operational needs and to offer valuable feedback for future development.

The programme also featured a public screening of the documentary "Threads of Heritage. Down the Rabbit Hole of Art Crime," produced within the framework of RITHMS. The film attracted considerable interest among attendees and stimulated a wider conversation on the strategic



importance of protecting cultural heritage within the European security agenda.

See below for further screening occasions (p. 4)



NEWS

RITHMS at Europol – Core Group on Illicit Trafficking of Cultural Goods

From **10 to 12 June 2025**, the RITHMS Project, represented by CCHT and ESI, participated in the Hackathon and Tool Testing Meeting organised by Europol's Core Group on Illicit Trafficking of Cultural Goods.

Over the course of the three-day event, the team delivered four rounds of in-depth demonstrations of the RITHMS Platform to European LEA officers, including project partners from the Carabinieri TPC, Dutch Police, and Spanish National Police, as well as Europol ICT personnel.



The meeting provided a valuable opportunity to showcase the platform's functionalities in an operational context and to collect constructive, hands-on feedback from end users. The insights gathered will directly support the ongoing development of the platform, ensuring its alignment with the needs and priorities of those combating cultural heritage crime.

Introductory Training Workshop for Law Enforcement Agencies

On **June 20**, in the fascinating venue of Schloss Fürstenried (Munich), the RITHMS Project held the Introductory Training Workshop on the RITHMS Platform, dedicated to Law Enforcement Agencies (LEAs).

The event was kindly introduced by two exceptional keynote speakers **Mr. Klein**, from the **Bavarian State Criminal Police Office** and **Mrs. Shlageder**, from the **Bavaria Ministry of Science and Arts**.



The workshop was designed to provide participants with a comprehensive introduction to the RITHMS platform's features and functionalities, combining a theoretical overview with practical applications and operational scenarios demonstrated step by step.

This initiative represents a collaborative effort to equip LEAs with advanced tools to support them in addressing the complex challenge of illicit trafficking of cultural goods more effectively.

We look forward to further engaging with the European LEAs as the RITHMS project progresses to its final months.

Conference Cultural Heritage, Property Issues and Best Practice

On 21 June 2025 in Würzburg, Germany, CCHT researcher Riccardo Giovanelli presented the RITHMS Platform at the international conference organised by the Julius-Maximilians-Universität Würzburg under the hospices of the Deutscher Archäologen-Verband.



The talk highlighted the Platform's potential to support intelligence-led policing in the fight against illicit trafficking in cultural goods.

THREADS OF HERITAGE



THREADS OF HERITAGE

Down the Rabbit Hole of Art Crime

WARSAW

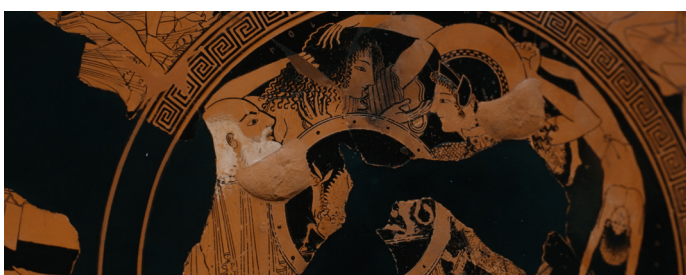
24 JUNE 2025, 5:00 PM
AUDITORIUM, EXPO XXI

ROME

11 JULY 2025, 9:00 PM
NATIONAL ETRUSCAN MUSEUM OF VILLA GIULIA

GENOA

14 JULY 2025, 9:00 PM
PALAZZO DUCALE



This summer, join us for the screening of *Threads of Heritage*, a compelling documentary exploring the hidden world of cultural heritage trafficking and the international efforts to combat it.

- **Warsaw – 24 June 2025, 5:00 PM** | Auditorium, Expo XXI
- **Rome – 11 July 2025, 9:00 PM** | National Etruscan Museum of Villa Giulia
- **Genoa – 14 July 2025, 9:00 PM** | Palazzo Ducale

Open to institutions, professionals, and the general audience.



⇒ [More information](#)

⇒ [Watch the trailer](#)

RESULTS

Overcoming data siloes in cultural heritage crime research: a consolidated OSINT-derived dataset on art, antiquities, and the trade in cultural goods

Original Paper | Open access | Published: 05 June 2025
Volume 25, article number 16, (2025) | [Cite this article](#)

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Accepted: 19 April 2025
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Abstract

The current landscape for provenance researchers, cultural heritage crime analysts, and law enforcement working in the culture sector is characterised by the siloing of data across dozens of databases, resulting in fragmented and incomplete resources that must be manually correlated and validated to provide insights into cultural heritage crime. The European Union-funded Research, Intelligence, and Technology for Heritage and Market Security (RITHMS) project is developing a platform to assist law enforcement agencies across Europe in tackling the illicit trafficking of cultural goods by aggregating open, specialised, and police data from a range of sources. This article outlines one of the initial phases of data collection, which has developed 30 tailored web scrapers for the collection of data from existing databases of stolen, missing, protected, and unprovenanced cultural goods. This has resulted in the largest known non-police dataset of these and associated data objects addressing the real-world challenge of data siloes in heritage crime and provenance research. This

Archival Science
International Journal on Recorded Information

A new article by the RITHMS team presents a major milestone: the development of 30 tailored web scrapers to collect and consolidate data from on-line repositories of stolen, missing, protected and unprovenanced cultural goods.

This open-source intelligence dataset is the largest of its kind outside law enforcement, offering real-world applications for provenance research and heritage crime investigations.

Take a look at the operational scenarios in which the RITHMS Platform can be deployed.

RITHMS Digital Platform.
How Social Network Analysis Can Be Leveraged To Fight High-Risk Criminal Networks Trafficking in Cultural Goods

Michela De Bernardin, Madison Leeson, Riccardo Giovanelli, Sara Ferro, Arianna Traviglia
(Istituto Italiano di Tecnologia)

RITHMS DIGITAL PLATFORM features

- Interoperable
- Multifunctional (with multiple analysis and query tools available)
- Deployed only at segregated Law Enforcement Agencies (LEAs) premises
- Powered by **Social Network Analysis (SNA)**: a method of mapping, studying, and visualising relationships among entities
- Capable of **identifying, evaluating, and analysing relations and connections** between criminal and non-criminal actors involved in the trafficking of cultural goods
- Capable of integrating LEAs restricted data with the collected **Open Source Intelligence (OSINT)** data (i.e., websites, social media, repositories)
- Capable of providing LEAs with **enhanced intelligence on criminal networks** to steer the investigations

OPERATIONAL SCENARIO 1
LOOTED OBJECT with SUSPICIOUS PROVENANCE

- Officers check out antiquities on auction/sale (art fair, gallery, auction house)
- O. identify an archaeological object with incomplete provenance, no import/export documentation, just accompanied by an expert declaration of authenticity
- O. input acquired data into the Platform and start running multiple scrapers
- RITHMS highlights the networks of:
 - 1. the auction house/seller's connections** (previous sellers, buyers, consigners, usual experts; e.g., the expert authenticating the item stands out as the authenticator of several items recently seized as looted; a usual seller stands out for previous indictments for illicit importation)
 - 2. previous movements of the item** (previous sellers, buyers, collectors, auctions, art galleries; e.g., a missing link to a suspicious collector emerges)
- O. enhance their investigation following the new leads

OPERATIONAL SCENARIO 2
ART THEFT

- A painting is stolen from a museum at night
- CCTV footage reveals two individuals and one of them is identified based on records of previous criminal activities
- Officers input the name and selected data from previous investigations into the Platform
- RITHMS highlights the **network of multiple criminal connections** revolving around the thief
- Interrogations and traditional investigative procedures lead to the arrest of an intermediary who has facilitated the lending of the painting
- This name as well is input into the Platform
- RITHMS highlights the **network of relations connecting the two individuals, suggesting additional persons of interest to interrogate and potential routes for the stolen painting**
- O. enhance their investigation following the new leads

OPERATIONAL SCENARIO 3
CRIMINAL NETWORK EXPANSION PREDICTION

- Officers input data concerning a set of previous investigations revolving around an identified criminal network
- O. start running multiple scrapers
- RITHMS highlights the criminal network's current status, including suggested missing links
- Thanks to the **Link-Prediction function**, running dedicated algorithms based on statistics, **the potential evolution (expansion) of the criminal network emerges through the prediction of additional relations**
- The Link-Prediction function will be tailored in accordance with specific requirements of the LEA users

RITHMS
Research, Intelligence and Technology for
Heritage and Market Security

Funded by the European Union

CEPOL
EUROPEAN UNION AGENCY FOR
LAW ENFORCEMENT TRAINING

This poster is part of the research conducted in the framework of RITHMS project (GA: 101073832), funded by the European Union. Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or the Commission. Neither the European Union nor the granting authority can be held responsible for them.

Consortium: Italian Institute of Technology (with Art Crime Project: APS, VTT, ESI, Ringard, BEA, SciCan, Universidade da Coruña, Bayern School of Police, European Institute Foundation, CO.TPC, Spanish National Police, The Netherlands Police, Bulgarian Directorate of Border Police, Moldovan General Inspectorate of Police, Bosnia and Herzegovina Directorate of Border Police, Conspirecity).

⇒ **READ MORE**

UPCOMING EVENTS

STAY TUNED FOR INFO ABOUT RITHMS FINAL EVENT UPCOMING IN SEPTEMBER

CONTACTS:



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RITHMS_EU



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This newsletter is an issue of RITHMS project (G. A. 101073932) funded by the European Union.

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