

Issue #3



Editorial



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Dear colleagues, welcome to the third edition of the GRACE project newsletter. The project is making superb progress and we have many interesting updates to report as we approach the final stages of GRACE.

In June we, VICOMTECH, held a consortium meeting at our offices in San Sebastian, Spain, which for many partners was the first chance to officially meet face-to-face since the project began. The meeting was very successful and included technical sessions on security topics.

On the technical side, the last 6 months have been dedicated to tool enhancements and integration within a common collaborative platform. The platform now includes NCMEC referral ingestion, an initial pack of multimedia analytics and first versions of targeted online search, crossmatching, prioritisation and trend analysis.

In parallel, a large exercise analysing the experimental federated learning (FL) platform has been conveyed during September and October, with 6 machine learning (ML) training nodes split across 4 countries and 5 project specific tools duly adapted for the FL environment. The environment uses a progress tracking tool that allows the researchers, as well as the law enforcement agencies (LEAs), to have a common view on the artificial intelligence (AI) fine tuning process.

Finally, preparations for the 2nd pilot are in progress, with multiple stages on testing analytics tools as single or complex chained elements. This task involves considerable efforts in selecting representative data in relevant amounts from true reports and technical preparation of the testing environment, being robust and secure to run tests on operational data.

As an addition to this year's pilots, an annotation campaign has been pursued that generated 75,000 annotated images by our LEA partners, that will be used through the last period of the project for adapting specific AI classifiers. We are highly thankful for the dedication of our LEA partners in this tedious task and their valuable contribution to the improvement and automatisation of child sexual exploitation material (CSEM) AI analytics tools.

GRACE pilots:

The GRACE project's 2nd pilot started with an initial one week excercise session held in Lisbon from the 17th to 21st of October 2022, at the premisses of Policia Judiciaria (PJ).

The exercise was divided into two main modules: in the first stage, a group of LEA experts processed a large volume of images and videos containing material related to the sexual exploitation of minors (CSEM), annotating it with classification tags that will be used for training task specific ML algorithms; then 14 tools for processing images and audio and text files were tested on operational data and assessed by the present LEAs.

From the 28th to 30th of November 2022, a new exercise session will take place, aiming to monitor the development progress of the GRACE platform, more specifically, the use of a user friendly Collaborative Platform for the management and semi-supervised analysis of NCMEC reports. This constitutes the first, alpha testing of the GRACE platform, of which the final version is expected in one year's time. We thank our host PJ for their hospitality and engagement in the technical preparation and arrangements of their facilities for the GRACE pilot requirements.

With the end of November approaching, the consortium will also reach the next milestone, the 2nd reporting period. To this end, a consortium meeting will be organised, that wraps the progress of the GRACE project during its last year and, ultimately, prepares for defending its ideas and developments during an upcoming external review in mid February 2023.

If you'd like to find out more about GRACE you can watch the GRACE video, visit the website or connect with us on Twitter and LinkedIn. We thank you for your continued support on this very important project.

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Key project activities

I. Workshop at Europol

In mid-April, a 3-day workshop was held at Europol headquarters to discuss the prioritisation and ontology for the project. The operational priorities and rules to be implemented within the GRACE platform were defined and Europol presented the current state of the ontology. Missing elements were also identified to be taken into account for the next iteration.

II-TECNOSEC 2022

From the 11th – 12th May GRACE partner Vicomtech attended TECNOSEC in Madrid, the 1st Exhibition & Congress of High Police, Security and Intelligence Technologies. The technologies and progress of GRACE were presented in a speech given by Vicomtech's Senior Security Expert, David Rios, to an audience of 50 people.

III • Third Co-creation workshop

The consortium met virtually on May 26th to discuss the technological advancements of the project. In particular, the group covered topics such as federated learning, data access and the collaboration platform with the technical and LEA partners. The conceptual topics on the processes and end user environment of the collaboration platform were also discussed.

IV•EAFS2022

The 2022 edition of the European Academy of Forensic Science Conference (EAFS22) took place in Stockholm from May 30th - June 3rd. More than 1200 police enforcers, forensic professionals, and researchers attended the event where participants could get to know the project goals and progress so far.



Key project activities

V•French Presidency of the EU



In June, GRACE colleague Sara Falconi (Seconded National Expert, EUROPOL – EC3) was invited to Paris to speak at a seminar organised by the Central Office for the Fight against Serious and Violent Crimes (OCRVP) of the French Central Directorate of the Judicial Police, a collateral event of the French Presidency of the European Union. The seminar, Combatting child sexual exploitation, was attended by a wide network of experts in the CSE domain.

VI•GRACE Consortium meeting

On June 28th/29th the second GRACE consortium meeting took place at VICOMTECH in San Sebastian, Spain. The meeting benefited from the presence of the members of the External Advisory Board and the Ethics Board, along with representatives from sister projects and initiatives, including HEROES and EACTDA with Tools4Leas project.



VII•i-LEAD 2022

GRACE partner VICOMTECH attended the i-LEAD (Innovation – Law Enforcement Agencies' Dialogue) Industry & Research Days 2022 event that took place in The Hague, Netherlands from the 6th – 8th September. A summary of the GRACE project was presented and project leaflets were distributed to attendees.

VIII • Europol Cybercrime Conference 2022

On the 19th and 20th October the GRACE project was presented in a dedicated exhibition room during the Europol Cybercrime Conference 2022, together with the activities performed by Europol officers from AP Twins, dedicated to fight Child Sexual Exploitation online. The joint presentation was well received and the



audience showed a lot of interest in the technologies under implementation, and the need to create an innovative solution to cope with the increasing of the online material related to such crimes.



Watch the GRACE video



Working together to stop the spread of online child sexual exploitation.

Learn all about the GRACE project with our new promotional video. It'll take less than 2 minutes to learn all about the project, its aims and objectives and goals.



New guidelines for first responders

The exponential growth in online child sexual exploitation and abuse material (CSEM) is a significant challenge for European law enforcement agencies. For officers responding to suspected victims of CSEM this means they need to be equipped with the necessary skills and training to swiftly act in the best interests of the child.

To assist first responding officers, a collaboration has been formed through the GRACE project whereby child sexual exploitation specialists from Europol's European Cybercrime Centre (EC3) and the European Cybercrime Training and Education Group (ECTEG) have come together to produce easy and efficient training guidelines.

The guidelines will enable first responding officers to effectively handle delicate situations that usually take place at a victim's close whereabouts, such as their home or school, often hidden from the eyes of the public. The guidelines are prepared in a way that encompasses the unified standards that these officers can use in their daily work, thereby equipping them with relevant information on how best to respond if they came across a child suspected of being the subject of sexual abuse.

The guidelines will be embedded into the ECTEG's eFirst project, as part of the knowledge base that every law enforcement officer should be aware of, regardless of their field of work. A public version is available for download here.





Next steps for GRACE...



January 2023 - Consortium and Ethics Advisory/
External Advisory board meeting, The Hague





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If you have any enquries related to this newsletter please email grace-fct@shu.ac.uk

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