

RAYUELA NEWSLETTER



Newsletter Issue 4 | January 2022 | HORIZON 2020 Programme | Contract No. 882828

"Alea iacta est" - Julius Caesar 49 BC acknowledged the presence of games, even though the story of his life ended in tragedy, our project Rayuela is fighting for the opposite - protecting the youth in the world which is so unpredictable and unforgiving - online world.

According to UNICEF's report "The State of the World's Children 2017: Children in a Digital World," children and adolescents under 18 account for approximately one in three Internet users worldwide. Although these minors can be considered digital natives, in many cases, they are not aware of either the benefits and opportunities or the risks and dangers that Internet access entails. To tackle this problem, it is necessary to identify risk patterns and train minors in using the Internet and new technologies. And what better way to do this than by playing? That is precisely the purpose of the European project RAYUELA ("empowerRing and educAting YoUng pEople for the internet by pLAYing"). The project, coordinated by the Universidad Pontificia Comillas, has a solid multidisciplinary consortium of 17 partners from 9 European Union countries, including universities and research centers, law enforcement agencies, and technology companies.

The RAYUELA project seeks to research the psychological, anthropological, and sociological factors that influence cybercrime (such as cyberbullying, online grooming, or human trafficking) and the risks associated with the use of IoT devices such as wearables, home assistants, or connected toys. An interactive adventure game will be developed from the obtained results to address these issues. The obtained in-game data will be subsequently analyzed to determine if specific profiles are more likely to commit or suffer some of these cybercrimes so that the law enforcement agencies, policy makers, educators and other relevant actors involved in the project can take measures to help and protect them.



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The pilot phase will be led by two European educational institutions located in Greece and Belgium, so the bulk of the controlled environment experiments will be carried out in these two countries. Furthermore, the game will also be tested at the ICAI Technology Campus (www.campustecnologicodelicai.com), a summer camp in Madrid focused on technology issues in which 7,000 students have participated over the six years of Campus and around 1,400 students per edition.

Likewise, tests will be carried out in events related to this topic throughout Europe. It is also envisaged that the game will eventually be publicly available for as many minors as possible. Therefore, unlike other traditional research methodologies in which the impact on society and target groups is diffuse, with RAYUELA, young people will be trained in using the Internet and new technologies, learning from their own decisions while they play. The project started in October 2020, and the prototype of the game is expected to be available in March 2022. The evaluation results on the effectiveness of the game in the learning process, the analysis of the in-game information gathered, and the translation of the research into public policies to help and protect possible profiles at risk will be obtained and made public in the final stretch of the project (2023).

WHAT YOU WILL FIND IN OUR NEWSLETTER

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PROJECT IN A NUTSHELL



RAYUELA aims to bring together law enforcement agencies (LEAs), sociologists, psychologists, anthropologists, legal experts, computer scientists and engineers, to develop novel methodologies that allow better understanding of the factors affecting online behaviour related to new ways of cybercriminality.



RAYUELA's main goal is to better understand the drivers and human factors affecting certain relevant ways of cybercriminality, as well as empower and educate young people (children and teenagers primarily) in the benefits, risks and threats intrinsically linked to the use of the Internet by playing, thus preventing and mitigating cybercriminal behaviour.



Project focuses on cybercrime, which has a significant cross-border impact among the EU countries, but also outside the EU. Specifically cybercrime related to children, teenagers and young adults, which happen to be one of the most vulnerable populations in the EU, who must be protected and nurtured to stay safe online.



RAYUELA proposes a series of solutions to help the EU in the prevention, investigation and mitigation of cybercrime related to online grooming, cyberbullying and human trafficking, while incorporating the perspective of gender and cultural diversity.



Dissemination of the project's activities and results is essential for the successful exploitation of the innovative solutions developed by RAYUELA. RAYUELA's innovations offer high replicability across the EU, thanks to its strong focus on gender, ethnicity and religion diversity. The need to raise awareness across value chains is directly related to the success of the project.



RAYUELA's consortium brings together 17 partners from 9 different EU Member States (ES, BE, SK, EE, PT, UK, GR, LV, DE). The consortium has been built with great care, looking for a group of excellent partners with proven expertise and who can fully provide the necessary know-how in the fields addressed by the project.

PROJECT IN A NUTSHELL



1. UNIVERSIDAD PONTIFICIA COMILLAS (coordinator)
2. ZABALA INNOVATION CONSULTING, S.A.
3. UNIVERSIDAD POLITÉCNICA DE MADRID
4. FUNDACION TECNALIA RESEARCH & INNOVATION
5. AYUNTAMIENTO DE VALENCIA



6. TIME.LEX
7. UNIVERSITEIT GENT
8. UC LIMBURG
9. ALL DIGITAL AISBL



10. BRATISLAVA POLICY INSTITUTE



11. TARTU ULIKOOL
12. POLITSEI- JA PIIRIVALVEAMET



13. MINISTÉRIO DA JUSTIÇA



14. POLICE SERVICE OF NORTHERN IRELAND



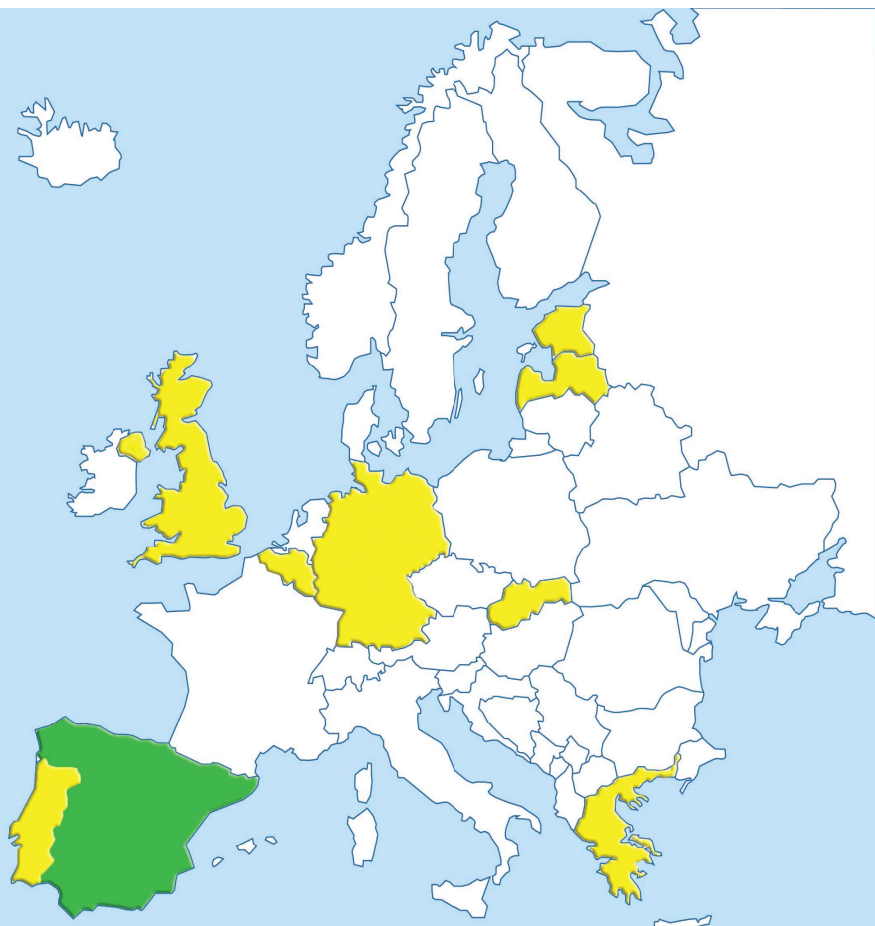
15. TILDE SIA



16. ELLINOGERMANIKI AGOGI SCHOLI PANAGEA SAVVA AE



17. NEC LABORATORIES EUROPE GMBH



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COORDINATING INSTITUTIONS



Universidad Pontificia COMILLAS is a private university located in Madrid (Spain). Founded in 1908, ICAI is COMILLAS Engineering School (<https://www.icaicomillas.edu>) focused on industrial and telecommunication technologies. With +1,200 students, +300 professors and researchers, and +240 international agreements, ICAI has a strong focus on R&D activities, with +75 funded innovation projects and aggregate investments of +€5M. On the other hand, CIHS (<https://www.chs.comillas.edu/en/>), COMILLAS' expertise in psychology, criminology and anthropology also contributes towards building a solid knowledge base on the main drivers for cybercrime.



In this project, ICAI is represented by its Institute for Research in Technology (IIT). The IIT is a university institute from the ICAI School of Engineering devoted to research and training of researchers on technological fields. It is a non-profit institute, which aims to be flexible and pragmatic in the way it works. It gathers more than 60 researchers and over 40 full time doctoral students. It is an interface institution working with the industry in a self-supported base with an annual budget over €5M. Its main activities focus on the design and development of computational models to perform techno-economic analyses, as well as on advising and consultancy tasks.





RAYUELA ATTENDING INTERNATIONAL SUMMIT ON SECURITY AND CYBERSECURITY COLADA-SPAIN 25th September 2021

One of RAYUELA consortium members UNIVERSIDAD de COMILLAS attended International Summit on Security and Cybersecurity Colada-Spain, where topics on AI, Cybercrime, National Security of Spain, Education, Digital Transformation and Business Security and Cybersecurity Incidents were discussed and analysed. Most significantly the attendants tried to answer following questions such as: What risk and protection factors do we find to become a victim or an offender of these crimes? Which is the main modus operandi? Team RAYUELA discussed the principal elements for prevention and how to transform these findings into concrete situations and characters in upcoming video game.

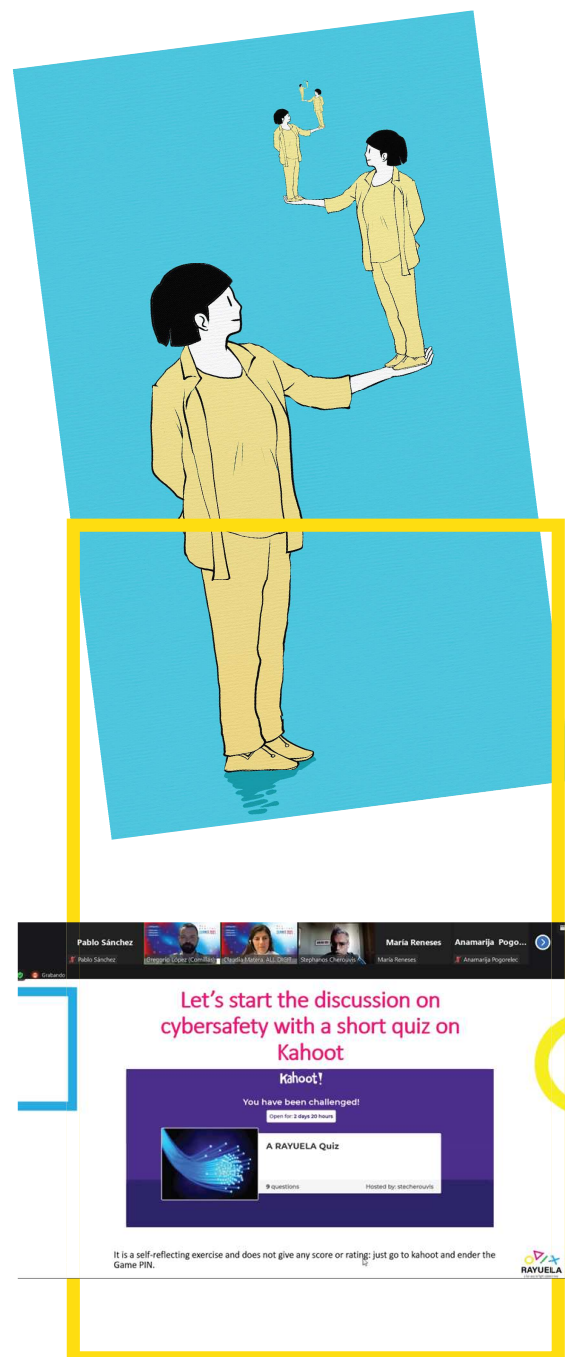


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RAYUELA LEADING WORKSHOP "CYBERCRIMES AND TEENAGERS. RISKS AND THREATS ON DIGITAL ENVIRONMENTS" AT ALL DIGITAL SUMMIT 2021.

October 13 - 15, 2021

Three days' event called Digital Skills and Tools for a Better World was focusing on the three digital empowerment themes: citizens and competence centres; STE(A)M educators; and young people. During the first day of the conference with high level of policy makers and international stakeholders within digital and education, participants have been engaged in an active discussion on the meanings of specific terminology and behaviour related with cybercrime, such as "online grooming". Using a Kahoot quiz, Dr. Stephanos Cherouvis, Senior Researcher, ELLINOGERMANIKI AGOGI, has facilitated the discussion on the awareness shared by participants. Questions around the topic have been raised and answered with insights from Dr. Maria Reneses Botija, Postdoctoral Researcher, UNIVERSIDAD de COMILLAS, based on the research carried out by the RAYUELA project team. An overall overview of the project has been provided by Dr. Gregorio Lopez, Assistant Professor, UNIVERSIDAD de COMILLAS, with the invitation to follow the project channels for the upcoming Awareness campaign designed and developed by Dr. Claudia Matera, Project and Fundraising Officer at ALL DIGITAL.





3rd CONSORTIUM MEETING October 20-21, 2021

The RAYUELA team was able to meet in person for the first time at the Consortium meeting in Greece. The meeting was organized by ELLINOGERMANIKI AGOGI assisted by the PMO coordinated by ZABALA, and special attention was paid to the results and conclusions of the work carried out during the first year of the project. Purpose of the meeting was also to set up the work plan for the next 6 months and to discuss each WP and its developments. Even though not all the partners were able to attend this meeting most of them were present and the rest of the partners were involved through the video call.

The agenda of the meeting was following:

1. **WELCOME** BY THE COORDINATOR (COMILLAS) Introduction of the Agenda by the coordinator Gregorio López.
2. **WP1 BUILDING A KNOWLEDGE** BASE ON CYBERCRIME DRIVERS FOR CHILDREN AND YOUNG ADULTS (COMILLAS). Review of the WP1 was done by María Reneses, who updated the whole team about finishing the deliverables assigned to this work package and about further activities on translating all the information gathered along into the serious game.
3. **WP2 TECHNOLOGY ASSESSMENT** AND IT THREAT LANDSCAPE (UPM). The work done under WP2 was presented by Manuel Álvarez (UPM), Jaime Pérez (COMILLAS), especially about performing a study on privacy and security issues of IoT devices, development of test methodology and analysis of the technological threats associated with cybercrime.
4. **WP3 DEVELOPMENT OF A CYBERADVENTURE SERIOUS GAMING** ENVIRONMENT (TECNALIA). Ana Moya was explaining the challenges, which they face within this work package as the need to design a proper roadmap. She also spoke about analysis of serious games that currently exist related to cybercrime.

5. **WP4 ONLINE PRIVACY, DATA SECURITY AND ETHICS** (TIMELEX) + WP9 ETHICS REQUIREMENTS (COMILLAS). Pieter Gryffroy (TIMELEX) presented work done under this workpackage such as GDPR compliance guidance or ethical roadmaps. María Reneses (COMILLAS) updated the whole team about the status of WP9 deliverables.

6. **WP5 GATHERING INSIGHTS VIA PILOT STUDIES** ACROSS THE EU (EA) Stephanos Cherouvis introduced the team to reporting template to collect data in pilots and also informed about the community, which has been built in Open Schools for Open Societies Platform.

7. **WP7 COMMUNICATION, DISSEMINATION AND CAPACITY BUILDING** FOR CYBERCRIME PREVENTION AND AWARENESS (BPI). Viera Žúborová informed about the possibilities for boosting the social media channels, promotion of website through different formal and informal channels and creation of the new promotional materials including new newsletter and infographics.

8. **Project Research Committee** (PRC) Meeting. WP Leaders and Project Coordinator.

9. **WP6 DATA ANALYSIS & INTERPRETATION** ON PROFILES FROM YOUNG VICTIMS & OFFENDERS (COMILLAS) Gregorio López spoke about the importance of obtaining high quality data as one of the key elements for success under this WP. Most of the activities under this workpackage will start in December.

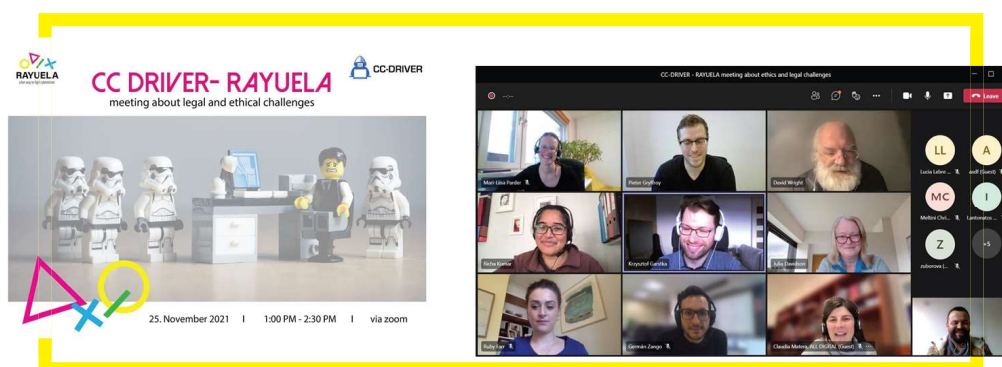
10. **WP8 PROJECT MANAGEMENT.** (COMILLAS) + Project Management Board (PMB) Meeting + 4th Consortium Meeting Planning. Gregorio López presented the work done under this workpackage, he pointed out that teams can be used more intensively to improve communication between partners and between Wps. He also asks the consortium to follow the guidelines for deliverables production and submission that were circulated a few weeks ago. The consortium agrees on the next date and venue for the 4th Consortium meeting.

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TWO WORKSHOPS ORGANIZED BY RAYUELA ON OPEN CLASSROOM CONFERENCE 2021 October 22-24, 2021

RAYUELA team contributed to the Open Classroom Conference (<http://openclassroom2021.ea.gr/>) with 3 RAYUELA events on addressing cybercrime in the school context and on Data Management and Ethics for schools. The EDEN Open Classroom Conference 2021 "Real change takes place in deep crisis", co-organised by the European Distance and E-Learning Network, the EDEN Digital Learning Europe, the Institute of Educational Policy, and ELLINOGERMANIKI AGOGI. Our RAYUELA members were actively involved in this interactive and educational program. Gregorio Lopez ((UNIVERSIDAD de COMILLAS)) delivered a keynote entitled "Understanding cybercrime: the RAYUELA perspective", Stephanos Cherouvis (ELLINOGERMANIKI AGOGI) and Gregorio Lopez (UNIVERSIDAD de COMILLAS) a workshop called Cybercrime and the classroom: A game-based approach to building safer schools and communities and Pieter Gryffroy (TIMELEX), Mari-Liisa Parder (TARTU) and Marten Juurik (TARTU) delivered another workshop called Data Management and Ethical Challenges for Open Schools.



MEETING WITH CC DRIVER November 25th 2021

We organized another meeting with our sister project #CCDRIVER where we exchanged the best practices on the legal and ethical challenges aspects of Cyber Criminality research. This cooperation helps us to ensure that research results and compliance continue to go hand in hand.

Members of the RAYUELA team are systematically working on continuation of research tasks. To add more information, which could be added to the game we conducted several focus groups with young people (students) through the project partner countries. The questions were focusing mainly on the misinformation and their personal experience with this phenomenon. We believe that this kind of data will be a valuable asset to the design and development of the game.

As a research project, RAYUELA aims to bring together law enforcement agencies (LEAs), sociologists, psychologists, anthropologists, legal experts, ethicists and philosophers, computer scientists and engineers, to develop novel methodologies that allow better understanding of the factors affecting online behaviour related to new ways of cyber criminality, as well as promoting the potential of these young talents for cybersecurity and technologies, thus addressing the main 'pillars' of the aforementioned EU BIK strategy. And the project proposes to achieve these goals by playing, which represents a novel approach and a new method to investigate and mitigate cybercriminal behaviour which, although in this project will be specifically applied to some ways of cybercriminality, opens a research line to apply it to any other in the future. The game will follow a common script as the main plot, stacking increasing levels of complexity for each storyline considered. Overcoming each level will depend on the player's decision-making capabilities to react to the different risk situations they can face online. As the crucial part of this, we created detailed roadmap about the insights from technical WPs (WP1, WP2, WP4, WP5, WP6) and the process to design the serious game by integrating those insights about cybercrime behaviour and how it can be adequately implemented, observed, and measured within the game.

To continue with the research without any legal issues we also developed the ethical code for social research that deals with adolescents using serious game. It is developed with RAYUELA project in mind, but can be used as a reference for any other activities focusing on children and adolescents and experiments done with them. The ethics code sets important principles to be followed in working with adolescents and relevant questions for every step of the research (planning of research, conduct of the research and application of research results). The aim of the ethics code is to support WP5 in validation of the game, especially during recruitment and deployment, supervised testing, real-piloting the game, monitoring the pilot studies and evaluating the results. The principles highlighted in this ethics code are: respect, beneficence and non-maleficence, justice, responsibility, honesty and integrity.

OUTREACH

The Video of the Campus Tecnológico ICAI (Escuela Técnica Superior de Ingeniería) is OUT. RAYUELA has the great opportunity to deliver 3 workshops on it and interact with their brilliant students. You can find more about it from this short trailer about the event Comillas ICAI - Campus Tecnológico 2021

One of the RAYUELA consortium members, the **POLICE SERVICE OF NORTHERN IRELAND** is part of a local government initiative. NI Cyber Security Centre has launched a new programme aimed at protecting young people while they are online. The Cyber Champions Programme involves the provision of a resource pack to help teachers and leaders of youth clubs explain key aspects of cyber security in an accessible way.



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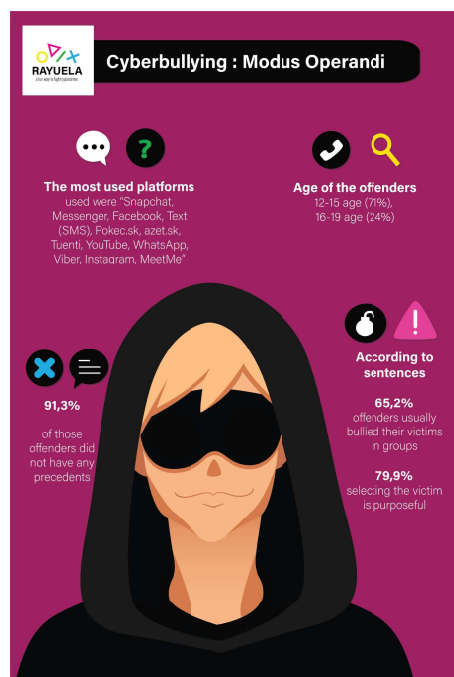
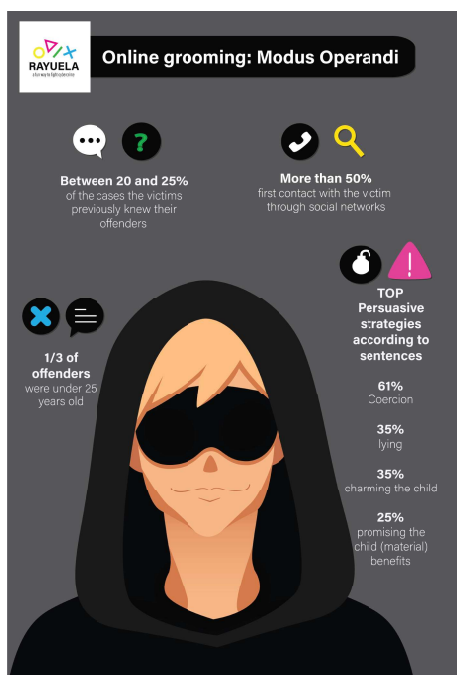
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OUTREACH

FIRST SERIE INFOGRAPHICS BASED ON RAYUELA RESEARCH IS OUT!

Fun way to fight cybercrime is the identity of Rayuela Project. And how to fight cybercrime? You need to know the risk factors of victims and offenders and their modus operandi - to develop a game that is mirroring the scenarios that happened and build an educational program that improves the knowledge of our children.



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UPCOMING EVENTS

Meeting with the RAYUELA International Advisory Board

4th CONSORTIUM MEETING

Bilbao, 5 - 6 April, 2022



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PROJECT DATA

PROGRAMME: H2020-SU-FCT01-2019

Sub-topic 2: Understanding the drivers of cybercriminality, and new methods to prevent, investigate and mitigate cybercriminal behaviour

TYPE OF ACTION: Research and Innovation Action (RIA)

DURATION: 36 months (1 oct 2020 – 30 sept 2023)

PROJECT BUDGET: € 4 978 040 (EU contribution: € 4 974 290)

CONSORTIUM: 17 partners from 9 European countries

COORDINATOR: COMILLAS

project coordinator: Gregorio López

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