

June-July 2026**C4FF Makes Strong Progress on CSAMGuard+ and FERIDE Projects**

C4FF has made strong progress on two major international innovation projects during 2026: **CSAMGuard+**, focused on developing advanced technologies to help combat the online distribution of Child Sexual Abuse Material (CSAM), and **FERIDE**, which is developing data-driven technologies to support more sustainable and efficient agricultural practices.

Both projects have successfully moved from their initial mobilisation phases into active technical development, with C4FF working closely with international partners and end users to refine requirements, establish use cases and prepare the foundations for technology development and validation.

CSAMGuard+: Advancing AI-Based Technologies for Online Child Protection

The CSAMGuard+ project successfully commenced in May 2026, marking the next stage in C4FF's work on the development of technologies to detect and help address the distribution of CSAM.

The project's first consortium meeting took place in July 2026, bringing together the international project partners to review the initial work programme, confirm responsibilities and establish priorities for the coming development period. The project's Monitoring Officer (MO) has expressed satisfaction with the progress achieved during the initial phase.

During the first months of the project, the consortium has concentrated on establishing a comprehensive state-of-the-art review and analysing existing technologies, approaches and research relevant to the project's objectives. This work is helping the partners identify current technological capabilities, limitations and opportunities for innovation.

C4FF is also working closely with the University of Warwick to coordinate the UK research and development activities. The collaboration combines C4FF's experience in developing technology solutions for online safety and its previous work with stakeholders in the CSAM domain with the University's research expertise.

An important milestone has also been the successful completion of a project change request with ITEA. The change process followed changes in the international consortium and has enabled the project to establish an updated and more focused implementation structure.

The consortium is now looking to expand the international partnership by bringing additional countries and organisations into the project. Discussions are taking place with potential partners in several European countries, with the aim of strengthening the project's technical, research, validation and exploitation capabilities.

The next phase will focus increasingly on requirements, datasets, system architecture and technology development, laying the groundwork for the project's planned AI-based solutions, including CSAM detection, analysis of text content and biometric age prediction.

FERIDE: Developing Smarter and More Sustainable Agriculture



C4FF is also making good progress on the FERIDE project, which commenced in April 2026. The project aims to develop innovative digital and AI-enabled solutions to support sustainable agricultural production, with a particular focus on soil carbon monitoring, cultivation optimisation and irrigation/fertigation decision support.

The project's first review meeting took place in June 2026. C4FF presented its progress and activities undertaken during the initial project period, including work on the UK use case and engagement with stakeholders. The Monitoring Officer was satisfied with the progress made and the project's overall direction.

Since the start of the project, the C4FF team has held a number of meetings with the Turkish project partners to develop the project's use cases, clarify technical requirements and discuss the data and validation requirements needed for the next stages of development.

A significant part of C4FF's activity has also involved strengthening its understanding of the agricultural environment and engaging directly with the farming and agricultural technology community. In July 2026, members of the C4FF team attended the Groundswell Festival, one of the UK's major events focused on regenerative agriculture and sustainable farming.

The visit provided an opportunity to gain first-hand insight into current agricultural practices, challenges faced by farmers and emerging approaches to soil health, carbon management, precision agriculture and sustainable land management. The team also used the event to engage with organisations and potential stakeholders whose knowledge and experience can contribute to the development and validation of FERIDE's solutions.

The project is now moving towards the next stage of technical development. C4FF is working with its partners to further define the Soil Carbon Balance Monitoring System, cultivation optimisation tools and Decision Support System (DSS) for irrigation and fertigation. These activities will require the integration of agricultural data, monitoring technologies and AI-based analysis to provide practical information that can support better-informed farming decisions.

C4FF is also continuing discussions with UK agricultural and research organisations to strengthen the project's UK use case and identify suitable opportunities for field validation and demonstration.

International Collaboration at the Core of Both Projects

Both CSAMGuard+ and FERIDE demonstrate C4FF's continued commitment to international collaborative research and innovation.

While the projects address very different challenges, they share a common approach: combining C4FF's experience in AI, cybersecurity, software development, cloud technologies and decision-support systems with the specialist knowledge of universities, research organisations, businesses and end users.

The coming months will focus on translating the requirements and research undertaken during the initial phases into practical technical developments, while continuing to expand stakeholder engagement and international collaboration.



C4FF looks forward to continuing its work with the CSAMGuard+ and FERIDE consortia and to reporting further progress as both projects move into their next stages.

Working with Schools and Universities

The work with universities and schools are continuing. By the standards of the Science Fair/STEM competition, which took place on 22nd April 2026, observed by Professor Ziarati who acted as a judge at the event, at Earlsdon Primary School, the quality of these projects has improved immensely.

Professor Reza was very impressed by the projects that was presented to him and the other judges on the day. Congratulations to Earlsdon Primary School and their science team on such an excellent achievement. They should all be extremely proud of what they have accomplished.



The Head Mistress and Deputy Heads of Earlsdon Primary and two of the Science Fair/STEM Competition Judges

OPTIMISM Final conference

The project OPTIMISM final conference took place on 27-28 May 2026 at UPC in Barcelona. A very successful conference attended by some 60 participants. Two final papers on OPTIMISM project were also presented at the MT'26 Conference. This was the penultimate dissemination activities for seek feedback on the OPTIMISM Training Programme and on the methodology and arguments used in its design and means of delivery.



Professor German de Malo Rodriguez presenting the agenda for the Final Conference and partner meetings and the intended papers for presentation at the MT'26 conference



Professor Reza Ziarati presenting the key aspects of the OPTIMISM and the first paper at the MT'26 Conference. He was presented with a Certificate by the session Chair Clàudia Barahona-Fuentes.



Some of the participants at the MT'26 Conference



The presentation of a certificate to the second author of the OPTIMISM Papers, Professor German de Melo Rodriguez by Clàudia Barahona-Fuentes



The OPTIMISM partners' Dinner event, celebrating the success of the OPTIMISM Project and the papers presented at the MT'26 Conference. From the right Professor Reza Ziarati, Mrs Ziarati, Aris Chronopolous from IDEC, Professor Juan Moreno (Dean, UPC), Mrs Moreno, Capt. Heikki (Crescat Oy), Chief Mate Alexander (MUS), Amir Lazempour and Vanessa Makar from C4FF, Mrs Rodriguez and the last but by no means least, OPTIMISM front runner, Professor German de Malo Rodriguez.



The time for some relaxation – Professor Reza Ziarati and his wife, Zena, enjoying the hospitality of the UPC, sailing around the Barcelona Bays.

Barford Project – Meeting of SIG Particulate Matter in University college London

Dr Malcolm Eyekyn and Professor Reza Ziarati delivered presentations at the February 2026 meeting of the Special Interest Group (SIG) on Particulate Matter, jointly organised by the Universities of Leicester and Nottingham. Their presentations highlighted the latest findings from the project, explained the rationale for preparing the subsequent technical report and research paper, and presented the results of the most recent investigations, including smoke tests conducted to better understand pollutant dispersion patterns.



Left Photo above shows Professor Reza Ziarati, Chair of C4FF and chair of IMarEST Midland Branch presenting his team's finding at University College London, the right photo shows Dr Malcolm Eykyn giving participants at the SIG on PM Filtration Flows workshop the issues concerning establishing a quarry at Barford, Warwickshire.

IMarEST Midlands Branch Event and Lectures

C4FF participated in several IMarEST events and lectures during 2026. On 16 May 2026, a lecture and panel discussion on Air Quality and Marine Pollution was held at the Holiday Inn, Kenilworth. It is hoped that this will be the first in a series of events and lectures aimed at encouraging the IMO and the United Nations to consider monitoring a wider range of pollutants in confined and enclosed spaces aboard ships.



The event was followed by a series of afternoon presentations in support of the Barford community. These presentations drew upon the expertise of IMarEST members in assessing air quality in and around both a proposed quarry site and an operational quarry. The photographs below show Professor Amin Al-Habaibeh presenting research undertaken by his team at Nottingham Trent University (NTU).

Professor Amin Al-Habaibeh and Professor Stephen Benjamin presenting their work during the Barford Project session.



Professor Amin Al-Habaibeh and Professor Stephen Benjamin presenting their work at the Barford Project session.

The workshop sessions provided a valuable opportunity to exchange perspectives on the impact of pollution on both local communities and occupational environments. The discussions highlighted the importance of collaborative approaches to addressing environmental challenges and improving air quality monitoring practices.

Many thanks to the organisers, speakers, and participants for their valuable contributions and engaging discussions. Special thanks are extended to Professor Amin Al-Habaibeh, Professor Stephen Benjamin, Professor Lakhvir Singh, and his team for their contributions, dedication, and excellent organisation of the event.

One of the research team's journal papers can be accessed here:

<https://lnkd.in/esmuXkJb>

Events such as these demonstrate the importance of bringing together diverse expertise to address environmental challenges and develop practical, evidence-based solutions for a healthier and more sustainable future.

New Projects

The Centre for Factories of the Future (C4FF) has reached several important milestones across UK and European innovation programmes, reflecting its growing role in applied AI, safety-critical systems, and sustainable industrial technologies.

CSAMGuard+



CSAMGuard+ addresses the growing challenge of detecting and preventing the spread of Child Sexual Abuse Material across digital platforms. The project focuses on developing an AI-driven, privacy-compliant solution capable of operating across encrypted, private, and public digital environments. The system combines content analysis, metadata intelligence, behavioural modelling, and biometric recognition to support real-time detection while respecting legal and ethical constraints.

The consortium brings together research organisations, technology providers, regulators, NGOs, and law enforcement bodies, ensuring that the solution is grounded in operational reality and aligned with international child protection frameworks.

FERIDE

A second Eureka Clusters project involving C4FF, FERIDE (FERTigation Irrigation DEcisive Farming), has been started.

FERIDE responds to increasing pressures on agriculture from water scarcity, rising input costs, and climate uncertainty. The project focuses on precision irrigation and precision fertigation, using real-time environmental data to optimise water and nutrient delivery. The goal is to improve crop productivity, reduce resource waste, and lower energy and fertiliser use while supporting sustainable farming practices.

The project establishes a European-scale collaboration between farmers, agronomists, technology providers, and researchers to support data-driven decision making in agriculture.

Lean Optimal: Feasibility Study Under Development

Alongside funded projects, C4FF is progressing Lean Optimal, a feasibility study exploring whether small and medium-sized manufacturers can reduce waste, rework, and excess energy use using simple, affordable predictive tools based on existing shop-floor data.

Lean Optimal focuses on early detection of process drift using routine production and machine data, without requiring new sensors or complex system integration. A key element of the study is understanding how operators and supervisors respond to early warnings and recommendations, ensuring that any future solution fits real shop-floor practices. Lean Optimal is currently at feasibility stage and is not yet funded.

Looking Ahead

These developments highlight C4FF's continued focus on applied research with real industrial and societal impact. From agentic AI in manufacturing, to digital child safety, precision agriculture, and SME sustainability, C4FF is strengthening its position as a delivery-focused partner across UK and European innovation programmes.

Further updates will be shared as these projects move forward.

CyberSEA Project Confirms Readiness for Platform Testing Phase



CyberSEA Project Meeting 4 was held at Berlin School of Business and Innovation GmbH, located at Karl Marx Strasse 97–99, Berlin.

The meeting brought together project partners to review overall progress and confirm readiness for the next phase of implementation. Discussions focused on the technical development of the CyberSEA learning platform, coordination across partner countries, and alignment with the project's objectives on strengthening maritime cybersecurity skills and awareness.

A key outcome of the meeting was agreement to commence testing of the CyberSEA learning platform and hub from 1 February 2026. Testing will take place across multiple partner countries, including Sweden, Greece, Spain, Germany, Slovenia, Finland, Romania, and Poland.

This testing phase will enable structured validation of the platform, systematic collection of user feedback, and targeted refinements to ensure the learning environment meets the needs of maritime stakeholders. The process will support the wider CyberSEA goal of building practical, scalable cybersecurity capacity within the maritime sector.

Further updates will be shared as the platform moves through testing and refinement stages.



OPTIMISM Project Advances Toward Final Conference

The OPTIMISM project continues to progress toward its final phase, following the M5 Partner Meeting in Finland, hosted by CRESCAT. The meeting focused on a full review of project activities and outputs, confirming delivery status across all work packages and agreeing plans for the final dissemination phase. Partners also aligned on the structure and content of the final conference.

Looking ahead, the M6 Partner Meeting and Final Conference will take place in May in Barcelona, hosted by Universitat Politècnica de Catalunya. This event will mark the formal conclusion of the project, with dissemination of all results and consolidated feedback gathered from target groups across the maritime sector. The conference will serve as the main platform for sharing project outcomes with industry, training providers, regulators, and academic stakeholders.