

Business

Enea creates the technologies of the new Csi and Ncis

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You know the TV series Csi and Ncis, with all their subsidiaries (New York, Miami, New Orleans and so forth)? They tell about scientific police investigations in America conducted with the most up-to-date technologies. Now the Italian agency Enea (which studies new technologies, energy and sustainable economic development) is preparing to move beyond the frontiers of super-investigations as leader of a European project – true, not for TV. It is about creating networks of hyper-technological sensors and augmented reality techniques to conduct non-destructive, rapid and accurate scientific investigation directly at the crime scene. This is what the RISEN program (Real-time on-site forensic trace qualification) proposes, which sees the participation of 20 partners from 12 countries, including Italy with ENEA in the role of project coordinator; Ministry of Defence; University of Bergamo; CREO Consortium – Electro-Optical Research Center, based in L'Aquila. The technologies developed within RISEN will be tested by the Carabinieri Investigazioni Scientifiche Group (RaCIS).

ENEA will develop four sensors (Raman, LIBS, LIF, Crime light imaging), which will be used to identify and digitally label the traces on which to investigate. Thanks to the network of contactless sensors that will be developed, it will be possible to carry out safe, rapid and in-depth investigations directly on the place where the crime took place, optimizing the detection, identification and interpretation of the traces found. This will result in greater security for investigators, in a reduction of time and resources made available for investigations and, above all, in a rapid exchange of information between the police forces of the European countries involved.

See also [Ioniq 5, we have previewed the new Hyundai electric for families](#)

In addition to the sensors, the research team of the ENEA Center in Frascati will develop a 3D investigation system (Augmented Crime Scene), which will make it possible to reconstruct the crime scene in a virtual version, using augmented reality techniques. In this way, investigators will have a 3D crime scene as far as possible, an 'immersive' environment where they can evaluate hypotheses and conduct very accurate investigations, with the location of the traces analyzed by the sensors. All this information will be stored digitally, to be available, at any time. Currently, the artifacts found at crime scenes – for example blood, saliva, explosives, gunpowder, drugs and various fibers – are transported to the laboratory and analyzed with traditional approaches that take many hours or even days. These innovations could serve to eliminate the risks associated with the presence of biological or chemical agents at the crime scene, to limit the risk of evidence being contaminated, lost or destroyed ”.