Research axes of the Security and Defense Research Team

Axis 1 - Terrorism(s)/Counterterrorism, Radicalisation/Resocialisation

Our work focuses on empirically deciphering **the processes of radicalization and disengagement.** With the return of hundreds of foreign fighters, our investigations now tend to focus on the prison management of these prisoners. The aim is to understand more specifically the conditions of desistance and ideological disengagement. Read more

Axis 2 - Cybersecurity, Cybercriminality, Cyberdefense (C3

The consequent rise in cyber attacks over the period 2008-2017 raises the issue of **the cost of maintaining an operational environment for the digital economy**, which could ultimately threaten the growth and sustainability of industries that depend on IT infrastructures. **Targeted attacks**(Advanced Persistent Threats) **have been on the rise since 2010:**40% annual growth, with 20% of affected companies reporting financial damage (KCS-CERT 2012 & PWC 2011) and **more than 50% of incidents (intrusion, deterioration, espionage) affecting energy industries (nuclear, oil) and state infrastructures.** Read more

Axis 3 - Economic intelligence and new financial crimes

In the face of terrorist or criminal acts, an **understanding of the financing circuits**, while not solving everything, most often makes it possible to **trace the culprits and/or dismantle the network responsible for criminal acts** that are likely to be repeated. In some cases, the ex-ante detection of "abnormal" financial movements can even anticipate and prevent crimes and attacks. **The advent of crypto-currencies**, while it holds many promises of financial inclusion, transactional efficiency and cost reductions (both for individuals and institutions) **is not without risks**. On the one hand, detractors of these new technologies argue that these systems, most often pseudonymous, encourage criminal acts such as **money laundering and illegal trafficking.**Read more

Axis 4 - Major Organized Crime and emerging Criminalities

According to the definition developed at the United Nations Convention in Palermo in 2000, **organized crime** is any "structured group of three or more persons, existing for a period of time and acting in concert with the aim of committing one or more serious crimes or offences established in accordance with this Convention, in order to obtain, directly or indirectly, a financial or other material benefit" (Article 2). This is a deliberately broad delimitation of the field to encompass the vast family of criminal organizations: from the most elaborate and powerful forms of Italian, Japanese and Chinese mafias, to the loosest forms constituted by gangs, through intermediate forms such as motorcycle gangs, drug cartels, traffickers of protected animal and plant species, etc. Read more

Axis 5 - Modeling and probabilistic models for security

The positioning of the ESD-R3C team is very particular: it is located at the moving border between several scientific fields: some fields of the world of engineering sciences, the other fields of the world of human and social sciences.

Since the first drafting of a plan of attack of the axis 5 of the nascent ESD-R3C team, the Covid-19 crisis has occurred. It showed the humility that is essential in a major crisis for any modeling attempt (incomplete or distorted data, models unable to predict beyond a 7-day horizon). It highlighted the destructive power of the propagation of false news, which caused a very serious loss of confidence in Science and its proposals. Read more

Axis 6 - Applied research methodology

Beyond the debate on the distinction between qualitative and quantitative approaches, this line of research addresses the following issues: ethnography as a privileged tool for the production of socially useful local knowledge; H. S. Becker's "Tricks of the Trade"; the importance of the descriptive task; the survey; storytelling; and the use of the descriptive task. Becker; the importance of the descriptive task; inquiry; storytelling; case study and narrative; case study; longitudinal case study; the situation as a case study; "classical" qualitative methods (techniques of qualitative methodology - "direct observation" techniques - interview techniques - "active" data collection methods, triangulation within the framework of collection methods, internal and external validity of qualitative research, participant observation); Grounded theory; the stages of qualitative research (pre-analysis, data analysis or coding phase, categorization, linking and representation of results, data verification phase); sociology of translation and network actor theory; Visual Studies; Critical Incident Method (CIM); art-based research methods; the logbook; action research and intervention research. Read more

Axis 7 - Health and global crises

Whether it is on the environmental or sanitary level, our planet is now exposed to dangers that have no equivalent in the past. Epidemics have the capacity to spread throughout the world, as shown by the Covid-19 epidemic; global warming exposes us to increasingly frequent and violent climatic disturbances and phenomena; pollution and the depletion of natural resources cause disease, famine and profound imbalances within natural biotopes. This set of phenomena, combined with uncontrolled demography, may lead to massive population movements, as well as major conflicts for the control of resources.

It is to these systemic risks that the "Health and Global Crisis" research axis is interested in trying to identify the major risks and their consequences and to offer both analytical tools and possible solutions. Read more

Axis 8 - Polemology and military issues

A critical history of war cannot be limited to an event-driven and hegemonic history, centered on a simple battle history carried by a few great captains and a product of the history of tactics and the history of weaponry. Fuller reminds us that "the chapters of battles are the crests of the waves, the chronicles represent the troughs, the two remaining linked in the ebb and flow of three and a half thousand years of the practice of war". Under the prism of the long term, war must be made intelligible as a driving force that underlies -in European civilizations- the development and then the functioning of the State. Such a history breaks with this history of the military insofar as it seeks to incorporate social, economic and cultural dimensions as well as intellectual, legal, ethical, literary and artistic fields. Read more

Axis 9 - Intelligence Studies

Intelligence studies are consubstantial with the existence of intelligence services in many Western democracies. The aim of the "Intelligence Studies" research program of the Conservatoire national des arts et métiers, Team Security Defense Intelligence Criminology, Cyberthreats, Crises, is to participate in these debates at the national and European levels, while relating to the British model. In addition to dedicated teaching, it will conduct research around three projects, entitled "Intelligence governance", "The internationalization of intelligence methods" and "Non-state actors and intelligence since the 19th century", in a multidisciplinary manner and in liaison with the management and political sciences, international relations and contemporary history present within the team. Read more

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