

JEAN-CHRISTOPHE LE COZE

Safety researcher

Institut national de l'environnement industriel et des risques (*Ineris*)

<https://ineris.academia.edu/jeanchristophelecoze>

Cognitive, practical, organisational and regulatory safety challenges of a new era



Biography

Jean-Christophe Le Coze is a safety researcher (PhD, Mines ParisTech, HDR) at INERIS, the French national institute for environmental safety. His activities combine ethnographic studies and action research in various safety-critical systems. He is the editor of the book “Safety Science Research. Evolution, Challenges and New Directions” (2019) and author of “Post Normal Accident. Revisiting Perrow’s classic” (2020).

Abstract

Safety-critical systems such as offshore platforms, hospitals, aircrafts, nuclear power plants, refineries, bridges, dams, mines ... rely on a myriad of artefacts, actors and institutions to operate safely. It is an admirable political, technological, social and economic endeavour re-enacted everyday all over the world. But sometimes, when a bridge collapses, a building burns, an offshore platform

explodes, a nuclear reactor melts down, a train derails, a ship sinks or a plane crashes, we are reminded how precarious such successes are and we are also reminded of the diversity of practices across countries, sectors and companies. The Boeing 737 Max crashes in 2018 and 2019, the Grenfell tower fire in London in 2017 or the collapse of Vale's dam in Brazil in 2019 are recent reminders of such events. The analysis of these events reveal a number of features which characterise the current operating landscape of safety-critical systems which includes globalisation, digitalisation, externalisation or financialisation. What many safety-critical systems share these days are their properties of 'networks of networks' which requires for safety research to explore their cognitive, practical, organisational and regulatory features together (to which one needs to add their ecological side). This is a complex and ambitious endeavor. The talk will provide insights from a collective book '*Safety Science Research: Evolution, Challenges and New Directions*' (CRC Press, 2019) which addresses this problem.