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Presentation title: Towards a new detection of cybercrime offences by themes and degrees in French security forces data

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In order to answer to the growing needs of managing the response of law enforcement agencies against cybercrime, but also to grasp a better picture of this phenomenon, The French Ministerial Statistical Department for Internal Security lead a work to improve the detection of “Digital Offences” thanks to Natural Language Processing algorithm in procedural data from security forces. A first point highlighted in this work concerns the vocabulary used to designate this field of crime. Indeed, within the security forces, the definition of “cybercrime” and what it covers for data seizure in the complaints drafting software differs from one person to another. Moreover, the exploratory phase and the scope definition of this new indicator pointed out a very broad field of offences committed, but above all different degrees of digital means use in the commission of an offence. These initial findings have therefore led us to use the expression “digital offences” to designate the offence scope of this new variable rather than “cybercrime”. In order to improve analysis, the new indicator will go beyond a simple binary detection “cyber vs non-cyber”. It will automatically recognise five themes which are scam, personal injury, public order offences, copyrights infringement and the failure to comply with dedicated digital regulations. As well the reality of how these offences are committed thanks to digital means is strongly different. For example, ransomware is a more elaborate digital offence than romance scam. Then the new variable will detect three degrees of use of digital means to commit the offence from the most performing to the simplest one. This new grid is close to typologies developed in the literature on digital offences field of study.