



# OMEGA

## ESSAY

### Studying Swedish court cases built on decrypted chat messages

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#### Introduction

Maintaining confidential communication has always been a challenge for criminal groups. To minimize risk, offending must be planned in a way that limits potential law enforcement intervention. Criminals use codes and conceal communication (Gambetta, 2009), and advances in encryption technologies have greatly enhanced this capability, as evidenced by the many online marketplaces dedicated to the trade in illegal products (Munksgaard, 2024). Over the past decade, so-called cryptophones have gained notoriety in this domain. These phones are equipped with end-to-end encryption, an instant wipe function that erases contacts and messages, and other anti-forensics technology. GPS, camera, and microphone features are physically removed. Several companies supply such devices to the market. They are often sold anonymously, exclusively for cash, and with subscription charges up to €2,200 a year (Cox, 2024; Oerlemans & Van Toor, 2022).

In March 2021, a joint operation by European law enforcement authorities, Europol and Eurojust, managed to copy the server belonging to the cryptophone company Encrochat. This operation resulted in more than 6,500 arrests and the seizure of almost €900 million (Europol, 2023). Since then, Europol has gained access to other encrypted servers, and several European countries, including Denmark, Finland, Norway, and Sweden, have been provided large corpus of messages. In Sweden, the National Operative Department (NOA) of the police, received messages from three cryptophone services: Encrochat, ANOM and SkyECC, collectively referred to as the OMEGA material (NOA, 2021; Salihu, 2023). The communication stored on these servers revealed information spanning several years, implicating criminal individuals and organisations involved in illicit activities such as drug trafficking, assassinations, money laundering, and much more.

In this essay, we describe the OMEGA material, the court documents and the process of coding this extensive material. We also explore two understudied themes related to organised criminal groups: the changing roles of women and the strategic positioning of group members in other nations, referred to



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as *expatriating*. The OMEGA material has two benefits compared to most samples of organised criminal groups: its character and its scope. Traditionally, studies on organised criminal groups have relied on data from police-initiated investigations (von Lampe, 2016). This type of data suffers from potential selection bias because criminals identified and apprehended by police may not constitute a representative sample. Like the debate on leveraging interviews with imprisoned offenders, maybe these individuals share common traits of being less careful or less competent in evading detection, which led to their capture (Topalli et al., 2020). In contrast, the OMEGA material constitutes a more representative sample of offenders who used encrypted communication services. The selection bias should be smaller compared to police-initiated investigations. Secondly, the sheer scope of the material enables researchers to examine themes that are otherwise difficult to collect data on, and this can help researchers generate new insights on these otherwise very hard-to-reach populations.

*Legal Issues*

It is not illegal to use encrypted communication, and when police seized entire servers in their search for criminals, they also seized communication by law-abiding citizens. Defence attorneys in countries including the UK and France have raised questions about the legality of the seizures and use of the material as evidence in criminal courts (Oerlemans & Van Toor, 2022), and the Berlin Regional Court excluded the evidence (Mildebrath, 2022).

Lentz (2023) examined the lawfulness of using the material in relation to Article 6 of the European Convention of Human Rights (ECHR, 2018), which safeguards the right to a fair trial through three key principles: the presumption of innocence, the right to a trial within reasonable time, and the right to access pertinent information. The legal issues stem from the distinction between data-driven and focused investigations. In a data-driven investigation, police start with a large dataset and search for incriminating evidence, whereas in a focused investigation, police target specific suspected offenders and look for evidence against them.

Data-driven investigations, raise concerns about potential fishing expeditions, the erosion of due process protections, and violation of privacy rights. The use of the seized material may implicate the rules for contestability, disclosure, and reliability. It is not clear that the initial seizure of the servers was based on sufficient probable cause or whether the searches conducted on the seized data were tailored to specific crimes under investigation. Also, the defense is at a disadvantage if denied access to the full evidence against them. Only selected messages were presented in court. Lastly, there are not yet common standards in cross-border digital investigations. Sharing evidence between jurisdiction with different procedural safeguards challenges the right to a fair trial (Oerlemans & Royer, 2023; Stoykova, 2023).



Despite these concerns, several European countries have allowed criminal prosecutions based on evidence derived from the seized material (Europol, 2023; Oerlemans & Van Toor, 2022). The admissibility depends on national procedural laws and the specific circumstances of each case. In Sweden, courts permitted the use of the material with reference to the principle of free presentation of evidence. Under this principle, parties to a trial may present any available evidence, and the then court has the discretion to assess its value, a so-called free evaluation of evidence. This approach prioritises the search for truth over potential procedural irregularities in the collection of evidence (Lundh, 2021).

### *Material*

In Sweden, court documents are accessible to the public, subject to few restrictions. To obtain documents, applicants must provide the case reference number or other relevant information, such as the date of the conviction, the court of appeal, or personal details of the parties involved (Ordering Judgments, Decisions or Documents, 2023). Each request for case documents must be submitted individually to the corresponding court. We compiled a list of relevant cases based on information provided by the Swedish police. For each case, we requested the preliminary investigations, appeals, and record sheets. As this data contains personal information, it is stored in an encrypted folder at Malmö University in compliance with GDPR regulations. The overall research project, "Organised criminal networks," has been approved by the Swedish Ethical Review Authority (Dnr: 2022-05047-01). To ensure privacy and confidentiality, the final dataset only contains aggregated data.

As of this writing, our dataset consists of 139 District Court cases and 78 Court of Appeal cases, concluded between 2018 and 2023. There are still pending court cases, and the dataset will grow as more cases are resolved. The current documents, including preliminary investigations, amount to nearly 500,000 pages, and involves 782 defendants, with most individuals convicted of multiple crimes. The cases are built on evidence from Encrochat (58%), followed by ANOM (32%), and SkyECC (10%). While half of Sweden's 48 District Courts are represented, most cases are from the larger cities, Stockholm and surrounding areas (34%), Göteborg (28%), and Malmö (18%).

### *Coding*

The process of exploring, coding, and building datasets for the research project involved three phases: getting an overview, developing a more detailed version, and creating a comprehensive integrated dataset. The coding strategy we employed derives from constant comparison analysis (Richards & Hemhill, 2018), which is an iterative process where initial categories lead to the inclusion of more categories, which are then compared with the previously coded data. This approach allows for the continuous refinement and



expansion of the coding scheme as new insights emerge from the data. Figure 1 below illustrates this three-staged coding process and briefly describes the resultant datasets.

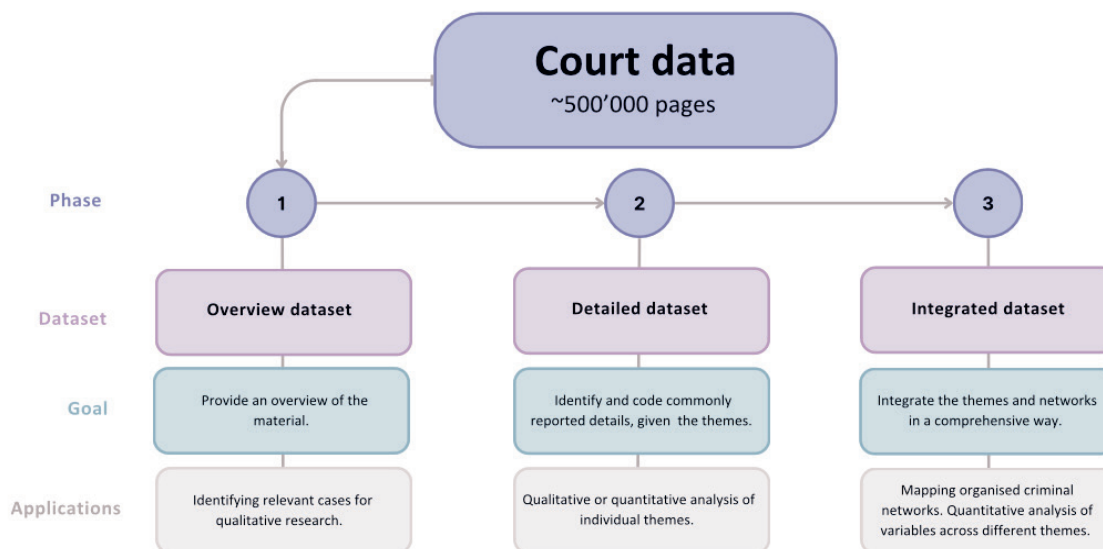


Figure 1: Three-staged coding process and datasets.

The first step focused on creating an overview dataset that included court data primarily from District Courts and, to a lesser extent, Courts of Appeal. This required organising the data to answer three questions: When was the crime committed? Which court was appointed to hear the case? What type of crime was prosecuted? This overview dataset allows us to identify case numbers based on attributes such as court type, location, date, crime classification, number of defendants, platform for encrypted communication. By cataloguing this information, we can efficiently search for and retrieve relevant court case numbers. The consistent structure of the court documents facilitated the identification of relevant information for a more detailed dataset. Each document begins with an outline of the case, including details on defendants, plaintiffs, witnesses, and the sentence, followed by information on the specific charges and defendant’s responses to those charges. We examined the cases and extracted datapoints for further analysis.

To develop the detailed dataset, we first arranged the court cases according to the most important crime type, based on the overview dataset, which provided us a limited number of categories to code. We assigned each crime category a number in a codebook, which we consider a dynamic, continuously updated document. The most important crime type categories were drugs, money laundering, weapons and ammunition, explosives, violence, doping, links to legal businesses, organisation of the criminal group, and geography. Using money laundering as an example, we first filtered the overview dataset to identify cases that included money laundering. Next,



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we read the corresponding case documents, identified the information on money laundering, and made subcategories based on these findings, such as amount of money, currency, frequency, gender of the defendant, modus, type of products, international connections, and origins of the money. The codebook includes illustrative examples for each category. In total there are 95 different crime types represented in the detailed dataset. Drug offenses dominate across all three encrypted communication platforms, ranging from dealing to smuggling. Additionally, there are violent crimes ranging from threats to murders, economic crimes ranging from fraud to money laundering, and weapons or explosives ranging from illegal possession of guns to large quantities of industrial-grade explosives. This detailed dataset serves as the framework for the construction of the final, integrated dataset. Table 2 below visualises the most common crime types.

Crime category <i>Examples</i>	Amount (N)	Out of total (%)
<b>Drug-related crimes</b> <i>E.g. drug offences, drug trafficking</i>	281	51%
<b>Possessions of weapons or explosives</b>	77	14%
<b>Violent crimes</b> <i>E.g. murder, assault, kidnapping</i>	69	13%
<b>Fraud or economic crimes</b> <i>E.g. money laundering, forgery, dealing in stolen goods</i>	41	7%

Table 2: Most common categories of crime types in the data

The final phase of coding involves integrating the data from the overview and detailed datasets into a comprehensive dataset. This integrated dataset will be used for quantitative analysis and the exploration for patterns, trends, and relationships within the data. We continued to refine the data coding, adding new variables to the categories identified. New variables include resources, international connections, women’s involvement, and many more. Additionally, we assigned unique numbers to each court and criminal group, as identified by police. Each new variable is assigned a binary coding, making it suitable for quantitative analysis. The assignment of unique identifiers to courts and criminal groups provides a structured framework that can support a wide range of analytical approaches.

*Themes*

The following two sections explore the potential of the OMEGA cases, by describing two research themes we are currently working on. We draw on



existing literature to illustrate the utility of the material and present a few preliminary findings that we look forward to working on more.

*Moving beyond gendered stereotypes of women in criminal groups*

The OMEGA data provides an opportunity to gain new insights into the roles of women in organised crime groups, and possibly challenge traditional conceptions in criminological research. While the share of women in criminal groups varies substantially across geographical regions, crime types, and methods used for the estimates, preliminary results indicate that women are actively involved in about 15% of the cases. This figure is roughly consistent with data from Finland where around 15% of persons arrested for illicit drug trafficking were women in 2021 were women, and Belgium where the corresponding figure was 12% (OSCE, 2023; p. 66-7). Criminological studies have historically treated women as peripheral, and research on women in criminal organisations is a comparatively new phenomenon (Zedner, 1991). Existing research often portray women as enablers or facilitators, taking roles such as drug mules or fronts for money laundering (Fleetwood, 2017). Much of their involvement has been attributed to their romantic partnerships or intimidation, perhaps overlooking their potential for active decision-making and even violence (Artz, 1999; Steffensmeier & Allan, 1996). Other studies have challenged these stereotypes, demonstrating diverse roles and agency of women in criminal groups. Campbell's (1991) study of female gang members in New York, found that they could be even more violent than their male counterparts, in some contexts, occupying roles as enforcers or drug dealers.

Grundetjern (2015) specifically analysed drug distributors in her study of 30 women in Norwegian prisons. She identified three profiles as based on their gender performances. One group emphasised having roles that revolved around femininity and vulnerability and frequently relied on sexual transactions to survive in the drug economy. This was the most diverse group in terms of drug use and age. A second group adopted a "street masculinity" to navigate the drug economy and ward off competition from rival dealers. This group was typically younger women who mimicked the strategies of their male counterparts. They were commonly taught by older brothers or male friends. The third group used a more conventional feminine business model, avoided violence and prioritising sociability in managing their operations. These findings highlight the importance of considering the specific context in which women operate within criminal groups and underline their agency. Relatedly, Mondani and colleagues' (2021) Swedish study on women in violent extremism, revealed varying rates of offending across different types of extremist milieus. While 43% of women associated with violent extremist organisations had committed at least one offense, the rates were lower for violent Islamic women (37%) compared to violent far-right women (44%) and violent far-left women (60%).



The OMEGA information is so broad that it allows for a thorough examination of otherwise rare forms of crime in-depth. An example is the cases of infiltration that have gained attention in Swedish media, such as women infiltrating law enforcement agencies, penal services (Cato, 2023), and the prosecutor's office (Bergman & Johnsson 2023). There are more examples of such infiltration throughout the court material, that will contribute new analyses of women's roles and agency, offending types, and tasks.

#### *Expatriates stationed in Spain*

The material also contains examples of Swedish criminal groups strategically positioning members along drug trafficking routes, particularly in Spain. We refer to these as criminal expatriates and note that the phenomenon came to our attention with media coverage of the group "Los Sueccos", operating on the Spanish sun-coast to facilitate drug trafficking (Wierup, 2021). These reports described how the expatriate group members set up and financed a legal business that served as front for drug trafficking operations. Similar business fronts were established in Sweden, enabling the two entities to do business with each other, with drug shipments disguised as legitimate transaction between legal entities. Recent reports have found Mexican cartels members in key European ports used for trafficking drugs, primarily cocaine (Europol & US Drug Enforcement Administration, 2022; Sciarrone & Storti, 2014).

Expatriates demonstrate how connections to drug producing countries are an advantage for domestic distributors in Sweden (Paoli & Reuter, 2008). Illicit drug markets are primitive compared to their legal counterparts and therefore often rely on interpersonal communication to compensate for binding contracts and institutional support (Kleemans, 2013; Von Lampe, 2016). Having group members stationed in key locales is important, as face-to-face meetings are more effective for building trust among transaction partners (Moeller & Sandberg, 2015).

During the coding process, we found 34 cases where group members relocated to Spain to better serve specific roles within the criminal network. For drug trafficking, this involves residing in cities along transportation routes, particularly in southern parts of Spain, close to Morocco, the key producer of cannabis to the European market. More than a third (36%) of all court cases has a connection to criminal groups in Spain, either between individuals or between individuals and a business. Furthermore, 21% of all cases involved a member of criminal group who was temporarily or permanently stationed in Spain, tasked with facilitating drug trafficking for the network.

To better understand organised criminal groups and their cross-national mobility, we will analyse how they use expatriates to acquire large quantities of illicit drugs near producing countries and traffic them across borders. This includes investigating how they acquire information on law enforcement





operations and customs (Aas, 2013), whether they have members stationed on both sides of a border, and how they assess weaknesses in authorities' control measures.

## Conclusion

The explorative coding and analysis of the court documents, reveal insights into the strategies and evolving nature of criminal groups in Sweden. While these groups are often locally grounded, seeking to infiltrate key legal agencies, they also exhibit a strong international orientation, and establish cross-border networks to facilitate illegal activities. We expect that the OMEGA material will help us shed light on some of the strategies these groups employ to reduce their risks of apprehension, for example in cross-border smuggling operations.

So far, we have found that these strategies include positioning members to act as nodes along transportation routes, establish legal businesses to serve as senders and recipients of illicit goods. Based on the material, we aim to develop more detailed crime scripts for drug trafficking in Europe and connect these to specific criminal groups. This will enable a more targeted and effective approach to combatting organised crime. Furthermore, the OMEGA material also reveals apparent changes in organised crime, notably the involvement of women in new roles that have not been extensively researched to date. The cases of women infiltrating law-enforcement agencies and their participation as key players in larger criminal operations represent critical areas for future research. These developments challenges traditional gender stereotypes in criminology and underscores the need for a better understanding of women's agency and roles within criminal networks. Combined, this material offers a valuable inside perspective on contemporary organised crime, its current forms and developing features. Ultimately, we hope that the OMEGA material can inform more effective prevention and intervention strategies. By identifying patterns of key players, facilitators, infiltrators and enablers, analyses of the material can help inform research and policy moving forward.

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