Organised narcotics networks in Iceland

A social network analysis
ABSTRACT. This study examines some of the organisational structures of the Icelandic organised crime groups which are dealing with narcotics. By examining this increasingly debated subject, I clarify what characterise central actors for the Icelandic organised narcotic networks. This study use social network analysis for mapping relations between criminal actors and identifying some of their characteristics (gender, age and ethnicity). The data for this study was collected by using a sample of individuals with criminal sentences for serious drug offences, which acted in groups of more than two, between the years 2006-2013. The results show that the organised narcotic criminal groups in Iceland resemble similar groups in other Nordic countries regarding their size. A major difference is the low involvement of foreign actors in the largest Icelandic networks. Females are a minority actor in these groups, although the most central actor in the largest network is a female.

KEY WORDS: organised crime, narcotic networks, social network analysis, Icelandic crime, drug-trafficking
Table of Contents

Introduction .............................................................................................................................................. 7
Aim and Research Questions .................................................................................................................. 10
Previous Research .................................................................................................................................. 11
Results from Iceland .............................................................................................................................. 11
  The Icelandic organised crime reality .................................................................................................. 11
  Risk assessment report conducted by the National Commissioner on organised crime and threat of terrorism .......................................................................................................................... 12
  Other examples of organised crime in Iceland .................................................................................... 13
Results from other Nordic countries ....................................................................................................... 13
Results from other European countries .................................................................................................. 15
  Europol report on organised crime ...................................................................................................... 15
Other results ........................................................................................................................................... 16
The social network perspective – some important concepts ................................................................. 16
  The basic assumption .......................................................................................................................... 17
Definitions on central social network terms ......................................................................................... 17
  Actors .................................................................................................................................................. 17
  Groups .............................................................................................................................................. 17
  Social network ................................................................................................................................. 18
  Relation ........................................................................................................................................... 18
Methodology ......................................................................................................................................... 19
  Material and selection process .......................................................................................................... 19
  The analysis process .......................................................................................................................... 21
  Social network analysis ...................................................................................................................... 21
    Attribution data and relational data ................................................................................................. 22
    The average formula ....................................................................................................................... 22
    Undirected line approach ............................................................................................................... 23
    Density .......................................................................................................................................... 23
Centrality........................................................................................................................................... 24
Reliability and validity......................................................................................................................... 24
Advantages and disadvantages............................................................................................................ 25
Ethical issues......................................................................................................................................... 25
Results and analysis ............................................................................................................................ 27
Results.................................................................................................................................................. 27
General information.............................................................................................................................. 27
Ethnicity................................................................................................................................................ 27
Type of structure.................................................................................................................................. 28
Density measurements.......................................................................................................................... 29
Centrality measurements...................................................................................................................... 30
Analysis................................................................................................................................................ 30
Structural formation............................................................................................................................. 30
Group composition............................................................................................................................... 31
Central actors......................................................................................................................................... 32
Summary of the analysis....................................................................................................................... 32
Concluding discussion.......................................................................................................................... 33
Acknowledgements............................................................................................................................. 35
Bibliography......................................................................................................................................... 36
Appendix............................................................................................................................................... 40
A. Heimild til vinnslu persónuupplýsinga. ........................................................................................ 40

6
Introduction

Organised crime is a widely debated subject and the debate has been intensified from the 1980s. Previously, organised crime was regarded as a problem only in countries with a history of Mafia structured organised crime groups, countries like Japan, Italy, China, USA and Colombia. The whole debate on organised crime in general has been looked upon with a high degree of scepticism as many European governments have in the past denied the existence of organised crime in their own country.¹ The more powerful organised crime groups are, the more likely they tend to control/influence those holding public office. Legislation, policy-making and legal rulings are then no longer in the favour of the general public but rather of organised crime groups.² As a result of this it is essential that research on organised crime are conducted by neutral scholars and by using scientifically approved methods.

A certain breakthrough was done in 2000 when a convention on transnational organised crime which was held by the United Nations defined many terms associated with organised crime.³ As a result of this convention Iceland formed legislation against organised crime in 2009. Nowadays all the European countries have adopted some sort of legislation that control organised crime, both the EU and the UN have established ad hoc instruments (for example groups specially designed for a specific task/problem) for the same purposes as they have acknowledged the existence of these crimes.⁴

Although organised crime has many faces (human trafficking, different types of corruption and other kinds of crime) this study will just examine one side of this phenomenon, organised crime associated with drug-trafficking. It is estimated by Europol that one third of all organised criminal groups in the EU are involved in illicit narcotic production or/and distribution. They also estimated that there are around 3600 active international organised crime groups working within the EU where most of them are active in the illicit narcotic market.⁵

Although the landscape for organised crime has changed much from the Icelandic alcohol prohibition era in 1915-1935 it was not along ago people said Iceland didn’t had any sort of organised crime. A turning point according to some was when Iceland became a member of the Schengen and before that time Iceland didn’t have any organised crime.⁶ Others have stated that

¹ Fijnaut & Paoli 2004: 5
² Van Dijk 2007: 53-54
³ United Nations 2000
⁴ Fijnaut & Paoli 2004: 1-2
⁵ European Police Office 2013: 33
⁶ Utanrikisráðuneytið year: unknown
organised crimes first evolved when foreign gangs and criminal networks became operated in Iceland. Before the era of foreign actors, Icelanders in general acted in more unorganised manner when importing illicit narcotics. Young Icelanders bought tickets to Holland themselves and tried to buy illicit narcotics on their own in Amsterdam and did all of the work themselves. But these are just speculations which haven’t been scientifically tested yet.

The debate today on organised crime in general in Iceland is dominated by statements and reports from the Icelandic police. Few others have engaged in the debate, leaving the Icelandic police to be nearly the only actor in providing information on this phenomenon in Iceland. This can be problematic as the debate almost exclusively dwells on the interests of one actor/organisation. Here Icelandic and other academics can contribute in more ways. They can examine this and every other social phenomenon from a neutral perspective and with scientifically proven methods, so they can support/dismiss what has been proven to work or not to work.

The Icelandic police have spent considerable efforts on dealing with motorcycle clubs which have been associated with delinquency by many foreign and domestic law enforcements but can this effort have resulted in weaker attention to other forms of organised criminal groups? Sure members of motorcycle clubs can participate in all kinds of crime like drug-trafficking. But this leaves out perhaps more invisible groups that don’t go around in marked clothing like many members of motorcycle clubs do.

Instead of focusing on one specific form of organised criminal group my research set its focus on one type of crime, drug-trafficking. Icelandic organised crime associated with drug-trafficking is a growing trend and have been in the last decade.

Although drug-trafficking and organised crime is often mentioned in the same sentence, there have not been made any specific definition on drug-trafficking as a form of organised crime in Iceland. As mentioned above, definitions on organised crime in general has been faced with high level of criticism while this debate hasn’t been loud in Iceland. Due to the lack of definition on organised crime, I will be using the criteria for organised crime as explained in the Icelandic penal code which is explained further down in this paper. The matter of how good the explanation is on organised crime is another interesting subject but I will not be discussing that in more details,

---

7 Sverrisdóttir 2006
8 By doing a quick search in two of the largest Icelandic newspapers on the Internet (visir.is and mbl.is) shows often comments/statements only from the Icelandic police.
9 SÁÁ 2010: 9
10 The penal code 1940:175
instead I will be the previously mentioned criteria which can be found in the Icelandic penal code for these groups that I will be doing the research on.

The Icelandic illicit narcotic market has been labelled by the Icelandic government as the most serious aspect of organised crime in Iceland although MC gangs, human trafficking and organised groups of burglars and thieves are also aspects of organised crime dealt with.\textsuperscript{11} Due to that opinion two extensive efforts have been taken to control organised crime in Iceland, more funding for the police and legislations that should make it easier to control organised crime according to their own opinion.

To my understanding it is important to have concrete explanations and detailed definitions on every social phenomenon, but before proceeding in developing such definitions it is essential to investigate the social phenomenon with great detail. The nature of certain phenomena can be depended on its surroundings, which in this case is Iceland. My research focuses on organised crime committed by groups that deals with illicit narcotic. These groups haven’t previously been labelled officially by any governmental agencies\textsuperscript{12} as organised criminal groups but by applying methods of social network analysis, it is my aim to examine groups which have members that have been convicted of committing serious drug offences in groups. This research is however just a small step towards a better understanding of organised crime in Iceland, it is my intention to continue the research on this phenomenon in the future. But for now I will settle with an objective to describe and define the Icelandic narcotic organised crime in terms of their size and basic structure. The general composition for groups that operate within the Icelandic narcotic field will also be examined. By identifying personal characteristics for the central actor in each group/network can contribute to a better understanding on how these groups/networks expands.

\textsuperscript{11} Online presentation from 2011 from the Icelandic Ministry of Foreign Affairs 2011
\textsuperscript{12} Much attention has been on MC clubs regarding to organized crime in Iceland and these clubs are often labelled as organised crime groups. They have names which are referred to, no other groups have been labelled officially by governmental agencies.
Aim and Research Questions

The aim with this quantitative descriptive research is to define and describe the organisational structures in terms of density, centrality and size of the Icelandic organised criminal groups dealing with illicit narcotics which haven’t been labelled previously officially as being committing organised crime. The secondary aim for this study is to identify some of the actors’ attributes which can shed some light on the composition of each group.

My specific research questions include:

- Which are the organisational structures of Icelandic groups that have committed serious drug offences in terms of density, centrality and size?
- How is the composition of these groups related to gender, age and ethnicity?
- What characterised the central actor (gender, age and ethnicity)?
Previous Research

In this chapter I will discuss results from research and reports on organised crime in general from Iceland and other Nordic countries where both population and culture is in some way similar to Iceland. Results from other European countries and relevant outcomes from a report which Europol conducted on organised crime will be discussed. Results from research and reports on the structural formation of organised criminal groups will be examined. Results are mainly from researches and reports on organised crime in general but there will also be few researches on narcotic organised crime this due to the fact that there is a lack of researches on narcotic organised crime. The search procedure involved using Internet databases.  

Results from Iceland

The most significant source on organised crime in Iceland is the report that the National Commissioner of the Icelandic Police publishes annually on general public threats. Among these general threats organised crime is addressed. The latest of these reports is from July 2013. Although it lacks a description of the scientific methodology it is the only source of information on organised crime in Iceland. In the newest report published, interviews with known criminals were conducted and used for analysis.

Other indications of organised crime in Iceland will be explained in the text although these indications haven’t been tested scientifically they resemble some of the characteristics found in international definitions on organised crime, which will be explained further down the text.

The Icelandic organised crime reality

Nearly all knowledge on Icelandic organised crime has come from the Icelandic police, which have influenced how organised crime is treated in media. In the media organised crime is preferably considered associated with specific motorcycle clubs in Icelandic media. In the recent year’s Icelandic motorcycle clubs have become full-time members of widely known organisations motorcycle clubs Hells Angels, Outlaws and Black Pistons as well as other Icelandic motorcycle clubs act as a support clubs to these known organisations. In 2012 the Icelandic police estimated that 11 clubs with 89 members total are in one way or another directly connected to organised crime in Iceland.

---

13 Mainly three online databases were used, Skemman.is (The united Icelandic university database), Stockholm University Library online database and Google scholar.
14 RÚV 2012, 01.03.
15 RÚV 2012, 06.03.
Per Ole Johansen states that the Scandinavian countries (where he also includes Iceland) have a growing illicit narcotic trade market, this market is though much younger and smaller than the illegal alcohol market. This growing market generated in 2010 around 15.000-33.000 Billion Icelandic crowns which can be converted to around 124.000 to 272.000 millions of $US. And to put it into a context the Icelandic illicit narcotic market in 2010 was a 0.99%-2.2% of GDP, it has been estimated that back in 1997 the United States illicit narcotic market has a less than 1% of GDP.

Governmental bodies have been given an increased funding for the purpose of controlling organised crime, for several years the National Commissioner of the Icelandic Police have been operating a special division which uses strategic analysis to map organised crime in Iceland. Other police departments have also got increased funding, the total governmental budget of around 100 million Icelandic crowns from 2011 to the second half of year 2012 has been used on means to control organised crime by all departments of the Icelandic Police. Other means have also been taken to control this phenomenon, this involves for example legislations that has been made, with the newest is from 2009 were organised criminal activity is outlawed and punishable.

Risk assessment report conducted by the National Commissioner on organised crime and threat of terrorism

The report states that organised crime as it is defined in the General penal code from 2009 can be found in Iceland. The following definition is from one of the laws on organised crime and can be found in the General penal code from 2009:

"With organised crime refers to the collaboration of three or more individuals whose primary goal is, directly or indirectly for a profit, to commit an organised criminal offense involving at least four years in prison, or when a significant part of the operation involves committing such offense."

From 2009 to present day there haven’t been anyone convicted for this particular offence. In 31 of January 2013 these laws got their first test in court and the results were that the accused where acquitted.

---

16 Per Ole Johansen 2005: 203
17 Matthíasson 2010
18 Converted from Icelandic crowns to US dollar through islandsbanki.is on 10. September 2013.
19 United Nations Statistics Division 2013
20 Reuter 1997: 1
21 Ríkislögreglustjóri 2008: 2
22 Converted to 5.319.149 SEK at Islandsbanki.is 24/10 2013.
24 The penal code 1940:175
25 Although they cite a wrong definition, the report later on defines organised crime accordingly to the General penal code.
26 The penal code 1940:175 Own translation.
Furthermore the report explains two differences between domestic and foreign organised criminal groups that operate in the Icelandic illicit narcotic market. They state that foreign groups are more organised than the domestic ones, foreign groups have clearer division of labour and their operations are less coincidental than domestic groups. Members in foreign groups have a higher level of professionalism but are replaceable. These foreign groups operate mostly for the illicit narcotic market by importing, manufacturing and distributing illicit narcotic in Iceland.  

Domestic groups operate often in more coincidental fashion, they work on randomly chosen project and often they work just on one specific project and then the group is dissolved but can be later on be reassembled if the “right job” comes up. There are few exceptions were Icelanders have been cooperating for a longer time by importing and/or distributing illicit narcotics with other Icelanders, but in general Icelandic criminal groups are more coincidental. Icelandic actors have also becoming more operational in international illicit narcotic-trafficking, these actors often operate and live outside of Iceland.  

**Other examples of organised crime in Iceland**

Organised crime is nothing new to the Icelandic crime reality although it has in recent years become a more and more popular media topic. Crimes that could have been labelled as organised crime have existed for a long time, for example during the time of the alcohol prohibition in Iceland in the years (1915-1935). It was then common that Icelandic sailors used foreign colleagues and foreign harbours to buy alcohol that they smuggled to Iceland where it often changed hands before making it to the customers. These were highly planned operations where the alcohol was bound to buoys and other actors of the operation sought it and then transported them to land where it was turned over to yet other actors within the same operation. Although it has not been examined or studied scientifically, these operations share some of same characteristics that Europol uses for defining organised crime, which is nearly same definition that the Icelandic police use.  

**Results from other Nordic countries**

Svensson (1996) and Spannow (1997), cited in a Brá report on organisational patterns of illicit narcotic crimes, have come to the conclusion that criminal groups operating from within Scandinavia often have the structure of small networks.  

---

27 Supreme Court of Iceland Case number 521/2012.  
28 Ríkislögreglustjóri 2013: 4-5  
29 ibid. 5.  
30 Guðmundsson 1993: 72-75  
31 Korsell, Heber, Sund and Vesterhav 2005: 22-23
A Swedish report on organised crime states that the EU definition on organised crime doesn’t cover many of the instances of organised crime in Sweden. The traditional organised crime doesn’t seem to exist in Sweden. Foreign groups use Sweden as a transit station in relation to smuggling of illicit narcotics. Characteristics as nationality and language are now less important for collaboration between criminal groups.32 Another report from Sweden which used social network analysis on organisational patterns of illicit narcotics crime states that criminal groups that work within the Swedish illicit narcotics market are often loosely knitted networks and are made for one particular assignment in mind. These groups can have members with very different background, for example members come from different countries and so on. Illicit narcotic importation is often in the hands of groups outside of Sweden which hand the illicit narcotic over to domestic groups for distribution. Previously established contacts between these groups are crucial for this step. Domestically non-Swedish groups are often more organised with hierarchical structure than other Swedish groups. The domestic groups take on organisation-like form with division of labour and within-group hierarchies when working on a project. Group size and time active can vary.33

Another Scandinavian report from 2001 states that semi-organised criminal groups are the most common form of criminal groups in Finland, these groups do not follow the criteria for organised crime from EU, UN or The council of Europe. The Finnish groups had a very unstable and non-hierarchic structure and often short-lived although they could be reassembled if the “right job” came to their hands. This prevented them from setting any long term goals towards more power or/and economical gain and they sought these things on an individual level instead. The individual gain was the most important and the loyalty towards other members had little meaning.34 Finland officials have reported that foreign criminal groups have become more dominant in specific types of organised crime. These foreign criminal groups often come from Russia or Estonia and they sometimes have Finnish members but they don’t have any leader roles within these groups. This has also been reported from officials in Estonia and Poland where domestic criminal groups often consisted of foreign members and these foreign members most often had leader roles.35

32 Korsell and Hansen 2002: 54-56
33 Korsell, Heber, Sund and Vesterhav 2005: 185-186
34 Aromaa 2004: 48-52
35 ibid. 46.
Results from other European countries

The hierarchical structure for organised crime is not the leading structure in Europe, rather this type of structure is the exception rather than the rule according to a report that European Parliament's Committee on Civil Liberties, Justice and Home Affairs conducted in 2011. They state: *furthermore that organised crime is neither as international, nor as organised as often represented by media and law enforcement agencies*. 36

Van Dijk argues that smaller/medium groups are taking over in other parts than Italy, Mexico, Russia, Bulgaria and Albania were the mafia type structure is withheld even today. The smaller/medium groups have a more flexible structure and are often established with a single purpose or a single job in mind and after a job is done they are broken down. 37

Europol report on organised crime

Europol claims that organised crime groups come in two models; the first one is the more classical model which has a vertical structure with hierarchies and clearer division of labour. The second is where the groups have a horizontal structure and unclear division of labour. Organised crime groups can have either characteristics of one or both of these models. Europol estimates that more than 40% of all criminal groups have a network type of structure which they characterised by using terms as: dynamic change, greater mobility and connectivity. Europol states that larger groups are more active than smaller groups when operating with illicit narcotic-trafficking. A flexible hierarchy structure is a method that criminal groups adapted to their own structure states Europol, this structure allows shared leadership of different groups and more collaboration among the leaders of criminal groups. The most common form of this progressive method has two leaders instead of one, another form is where bigger leading teams direct wider criminal networks, this form is called core group and often the leaders share some similar characteristics for example shared national, ethnic or language background.

36 Sheptycki, Ben Jaffel and Bigo 2011
37 Van Dijk 2008: 147-148
Europol states that 70% of organised crime groups have multi-national membership, these groups can then be divided into three subgroups:

- Homogenous groups with one dominant nationality. (25%)
- Groups of dual composition with two main nationalities. (20%)
- Purely heterogeneous groups with more than two nationalities. (25%)

The most frequent composition is that a group consists of members from both EU and non-EU countries. 38

**Other results**

Most of the previous research that I have looked at has come to the same conclusion. They have all in some manner criticised how organised crimes have been described in terms of organisations and fixed structures. Although the academic society has criticised the international definition for being more of a social and political concept than one that is useful for research practitioners, they haven’t agreed on a single definition. Instead there have come up with many different definitions. This variation in definitions describes perhaps best how flexible and complex social phenomenon organised crime is. 39

Schiray (2001), Paoli (2002) and Desroches (1999) as cited in a Brå report on organisational patterns of illicit narcotic crimes have argued that organisation is perhaps not the right term to describe organised crime in general. The structure change rapidly and members come and go, leadership is often based on special projects and are short-lived. Groups are made to serve some special purpose and/or to exchange some service. Ethnical or economical characteristics results in bonds that ties members together and from these ties groups are made. Long-lasting and large scale criminal organisations don’t exist with the exception of Mafia type groups. 40

**The social network perspective – some important concepts**

In this chapter I will explain the central concepts and terms in the social network perspective. This is done because many of these terms are repeatedly mentioned in the text without any detailed explanation. This research doesn’t use any certain theory instead it uses concepts and terms that have been explained within the social network perspective.

---

38 European Police Office 2013: 33-34
39 Larsson 2004: 31-32
40 Korsell, Heber, Sund and Vesterhav 2005: 22-23
The basic assumption

Relations between actors (individuals/groups) are essential for social network to sustain their existence, without them, societies wouldn’t have been established. And actors use these relations as gateways to political and economic power. So both entities (social network and actors) are dependent on each other. Criminals use their relations to other criminals for economic gain. By making new relations, their social network expandse and in return they have access to larger resources within their network.

Definitions on central social network terms

Most of the explanations come from a network perspective influenced work of Jeffrey McIllwain. Nearly his entire work is based on definitions for social networks from the works of Stanley Wasserman and Katherine Faust.41

Actors

Actors and their actions are influenced by their position within their own group, actors are interdependent. Their membership in a group can predict their further actions dependent on how the group is composited. Actors as they are defined by McIllwain citing Wasserman and Faust as a “discrete individual, corporate, or collective social unit.”42 In my research, actors are individuals who have been convicted for organised crime in a group. It isn’t possible for my research to predict further actions by the actors as there will be no examination on the nature of their membership to the group instead I use the assumption that every actors is equal in their group.

Groups

A group is a collective of individual actors and their ties to other individual actors, which are bound by some special bonds. A criteria is needed to be made for a group membership, by setting this criteria a finite set of individuals are made, which in return is called group.43 The bonds/ties that individual actors have to each another in my research are those that have been established by actors’ involvement in criminal cases investigated by the police, this leaves out any bonds/ties the actors can have outside their known criminal history. The criteria for group membership is then only those that have been convicted of committed serious illicit narcotic crime in a group. The group needs to be larger than single actor to be counted as a group.

41 McIllwain 1999
42 ibid. 305.
43 ibid. 306.
Social network
Social networks are larger units than groups, they consists of the entire finite set or sets of actors and their relations. It’s defined in previous mentioned work of McIlwain as, “the relational structure of a group or larger social system consisting of the pattern of relationships among the collection of actors.”\textsuperscript{44}

The concept of a network is that individuals have ties to other individuals, whom have ties to yet other individuals and so on. Individuals can benefit or be hindered by their network structural environment regarding to their position within their network.\textsuperscript{45}

Relation
Relations are the ties that link actors together, these ties serve as a channel for transfers of material and/or nonmaterial resources. In McIlwain paper, relations are referred to as “the collection of ties of a specific kind among members of a group”.\textsuperscript{46}

These ties aren’t own by one actor instead it needs more than one actor. There are different types of these ties, the most relevant types for this research is first the one of association/affiliation which are when actors are tied because of their belonging to a formal or informal organisation. Another type of ties that is relevant is the one when there are transfers of material resources, which make ties between actors.\textsuperscript{47} As mentioned above the ties between actors are made as a result of the actors’ involvement in a criminal cases. Actors can have had a different assignments within their criminal case but this factor isn’t relevant to my research.

\textsuperscript{44} McIlwain 1999: 304
\textsuperscript{45} ibid. 305.
\textsuperscript{46} ibid. 306.
\textsuperscript{47} ibid. 305.
**Methodology**

This chapter outlines the method used in this study, which is social network analysis. This is a quantitative method that maps and measures networks by simplifying social relations into numerical data, where ties are either absent or present.\(^{48}\) This will be presented in more detail and advantages and disadvantages will be discussed. The manner which the material was selected will be explained as will any ethical concerns with the procedure. The validity and reliability of the study will be looked at.

**Material and selection process**

It can be hard to apply the definition of organised crime onto a group that hasn’t previously been defined as an organised criminal group, so for this study I chose to use court cases with conviction for serious drug offences to identity actors. A similar approach has been used before for identifying criminal networks\(^{49}\), although that research did go a step further by also identifying known co-offenders to those actors that had been identified first. This research will only be examining those actors that have convictions for serious drug offences and their relations to other actors convicted for serious drug offences.

The material in this study consists of convictions from Icelandic courts both district and Supreme courts acted as the timeline before setting the search criteria. Icelandic court records are easily accessible through the Internet and are open for general public, although there are restrictions as court records are only available from 2006. Convictions from 2006-2013 were therefore chosen.

The search criteria was “serious illicit narcotic offence” which has no official definition but as Sigurður Freyr Sigurðsson came to conclude in his Master in Law thesis from 2009, is when courts label serious narcotics offenses (when cases are built on the Penal Code nr. 19/1940 article 173a) they have a specific quantity of certain illicit narcotic in mind. The quantity is quite different for every illicit narcotic as to see in the list down below.

- 5-10 kg Cannabis
- 1 kg Amphetamine
- 250 tablets MDMA
- 600 g Cocaine
- 1000 portions LSD\(^{50}\)

---

\(^{48}\) Edwards 2010

\(^{49}\) Korsell, Heber, Sund and Vesterhav 2005

\(^{50}\) Sigurðsson 2009
When searching the database 46 cases from all 8 of the District Courts matched the search criteria. There are 100 actors that have been identified in the court documents as either convicted or acquitted, 97 were found guilty and 3 not guilty. 83 other actors were mentioned in the case documents but these actors were not used for this study as they were not on trial.

Before excluding any actors from the database a categorisation was done, this categorisation was partially inspired by a sub-study for a Swedish study on the organisational patterns of illicit narcotic crimes.\(^{51}\) Five different categories were made and actors divided into these categories as following:

- Individual domestic actors, where there was none else convicted or suspected. (N=10)
- Individual foreign actors, where there was none else convicted or suspected. (N=16)
- Domestic group of actors, were there where more than one convicted or suspected. (N=13)
- Foreign group of actors, were there where more than one convicted or suspected. (N=4)
- Mixed group of actors (Foreign and domestic), where there were more than one convicted or suspected. (N=3)

Further explanation of these five categories:

- **Individual domestic actors, where there was none else convicted or suspected**
  These cases have one actor that is Icelandic and has either carried the illicit narcotic from someone else that he is not ready to unveil or has smuggle by him/herself for own profit.

- **Individual foreign actors, where there was none else convicted or suspected.**
  These cases have the same definition as the one above but instead of being an Icelandic the actor is foreign citizen.

- **Domestic group of actors, were there where more than one convicted or suspected.**
  These cases have two or more actors that in cooperation smuggled/ manufactured/sold illicit narcotic. These actors were all Icelandic citizens.

- **Foreign group of actors, were there where more than one convicted or suspected.**
  Same as above but instead of being Icelandic citizens, all the actors were foreign citizens.

- **Mixed group of actors (Foreign and domestic), were there where more than one convicted.**
  Same as above but instead of having actors either just from Iceland or foreign, these groups had at least one Icelandic actor and one foreign actor.

After this process the next step was to limit those cases to cases that involved more than one actor, as this research focuses on organised crime, so cases with just one actor were excluded from the research. 20 cases of 46 cases filled that requirement, which was when group members had been

---

\(^{51}\) Korsell, Heber, Sund and Vesterhav 2005
convicted for serious drug offence. One case that did fill that requirement was excluded from the data as one of the names given in the court document didn’t match any known actor in the police database. That actor had a wrong name according to the police database so the whole case was excluded from the research. The first case still left in the research was sentenced in 14 July 2006 and the last in 10 April 2013.

The next step was to process the names still left in the research with the Icelandic police database. This step was done by the Reykjavik Metropolitan Police. I sent them a document with court numbers and full names and these were then cross-referenced with the Police database. Before I got the data back they were encrypted by the Police.

The raw data sent from the police included for each individual their sex, age within a 5 year interval, their ethnicity and the type of crime these individuals were suspected of committing additionally to the case number. The whole criminal history of those individuals was used, from their first contact with the police to the last one. Unfortunately the data only shows the oldest date to be from 1989 but this is due to that the police changed database so cases before 1989 were dated with the same year that data was moved over to the new database.

**The analysis process**

Then this raw data was put into an excel document, here the individuals that had the same case numbers where linked together by placing the names of known co-offenders from same cases. After this process the data was run with the computer software Netdraw which can be used for visualising the data.

**Social network analysis**

To answer the research questions, a social network analysis was performed. From now on social network analysis will only be mentioned as network analysis. The use of this method is a natural consequence of the research questions as they are aimed at describing how organised narcotic crime are in Iceland regarding to its organisational structures in terms of density, centrality and size. Network analysis isn’t something that is brand-new, many researchers have used this method, both those within the criminology field and other disciplines and to name just a few: Sarnecki 1986 & 2001, Tove Pettersson 2002 and Brá report 2005:11.

As it is my interest to study interactions between actors in terms of bigger social structures and how their position within these social structures can affect their future actions, network analysis has some specific benefits in comparison with other methods. To understand why actors act within
bigger social structures it is crucial to systematically analyse these structures more closely with a method that can both investigate each actor and also the bigger social structure.  

**Attribution data and relational data**

Two sets of data is used in this research, attribution data which refers to data that are properties of individual actor, this can be for example sex, age and so on. The second type of data is called relational data which refers to data that are not properties of individual actors. Instead is refers to properties of the whole system of actors. The relations between actors make up the larger network with all sorts of ties and connections that bind actors together and form a larger structure. And the most appropriate way when using relational data is those of network analysis. For the purpose of contributing to some of answers to the research questions, individual attributes will be studied, this can be for example the case when age, ethnicity or sex is being examined. This can be achieved with this method as both the individual actor and the collective of actors can be examined at the same time.

The relational data in this research consists of relations between previous identified actors which have been convicted of committing a serious drug offence in a group. Actors within the same case of serious drug offence are linked together because of their involvement in the same case, while relations between actors from other different cases can be linked together because of their involvement in cases that don’t necessary have to involve drug offences. The police register were criminal history of identified actors made up the relations between actors for different cases. All relations in this research are then from the police register, actors that have been involved in the same cases are linked together. This leaves out all other relations actors can have with each other which aren’t known to the police register. This can be problematic as relations can have been made from other means than their involvement in the same police cases.

Relations which have been identified in the police register can vary in nature, this is highly depended on how the police works, which investigations they proceed with and so on. This doesn’t necessary reflects the entire reality.

**The average formula**

Average for age with intervals was found by adding both lower class limit and upper class limit to each other, after this step the total number was divided by 2 to find the midpoint. Then each midpoint (x) was multiplied with the frequency (f) of each interval which is (fx). Then the sum of all (fx) was divided with the sum of all the frequencies (f) to get the average age.

---

52 Hedström 2011: 91
53 Scott 2000: 2-3
Average age from frequency table with intervals

\[
\frac{\text{sum of } fx}{\text{sum of } f} = \text{Average}
\]

Undirected line approach

Results can be put into graphs and made easily understandable, with lines and nodes. Network analysis can use either directed or undirected lines. If the purpose is to study how actors feels about each other the directed line approach is used, this can be used to identify which individual is the most popular within a group. For this study the undirected line approach was taken, this is because no information for the actors’ personal feelings against each other was attained.\(^5^4\)

In network analysis you can easily shift from actor-related properties to network-related properties, and for this study this was crucial. One of the aims for this study was to identify how much an actor is central within his/her own network, the more an actor is central the more he/she tends to have more potential power. This was done by finding out the degree of centrality. To measure the centrality this study counted how many lines actor had to other actors, the actor with most lines was then the most central actor in the network.\(^5^5\) Density is another measurement that this study analysed. Density refers to a measurement that measure network-related properties. Density is measured by the number of actually existing relationships in relation to the number of possible relationships. The higher the density is in a network the faster it can grow and more cohesive.\(^5^6\)

Density

This concept is one of the most popular measurements in social network analysis and the purpose of this is to see how far from a completed graph any network is, the term complete graph refers to where all actors/points are directly connected to one another. Complete density is very rare even in small networks.\(^5^7\) The outcome from a density measurement can vary from 0 to 1, where 1 is a complete graph.

The formula for the density is:

\[
\frac{l}{n(n-1)/2}
\]

L stands for lines present in the graph and n for actors/points represented in the graph.

\(^{5^4}\) Hedström 2011: 93
\(^{5^5}\) ibid. 94.
\(^{5^6}\) Hedström 2011: 95
\(^{5^7}\) Scott 2000: 69-70
Centrality
This concept was one of the first aspects social network analysts became interested of, they argued that by finding the most central actor/point in a group can contribute to the conclusion that the central actor is most popular or is at the centre of attention.\(^{58}\)

There are two ways of measuring centrality, first is the local centrality which refers to how well actor/points is connected within its own group/environment. The second method is global/closeness centrality which refers to the distance among various actors/points, distance refers to a count of links between actors. The shortest distances for each actor/point to every other actor/point in the network is calculated and the sum will show how globally central the actor/point is. The lowest actor/point score in the network indicates which actor/point is the most central in the network.\(^{59}\)

Reliability and validity
It is common for social network researchers to use a test-retest method to measure the reliability. The test-retest refers to a method when a subject is tested on the same test twice but with a delay between them, the outcomes from these two tests results are then compared and if the answers are in a line with each other, the reliability is high.\(^{60}\)

In this case this method can be used for the same data later, the court documents will not change and if the same timeline is used the actors ties will not either change. But by using official documents/statistics the reliability can be affected as definitions/term can easily change over time, which can results in fewer or more cases being reported.\(^{61}\) It can be hard to transfer the results from this study onto the reality as these are official cases which needed at first to come to the attention of the police. Secondly it is nearly impossible to transfer the results from this study to the whole criminal society just based on these results, the results from this study gives only the picture for these known cases.\(^{62}\)

The term validity refers to if the measurement of the definition in question is really measuring the definition.\(^{63}\) Can groups that have been convicted for serious drug offences, be labelled as organised crime? None of the groups in this research have been given that label by any official organisation. This can be problematic, but by applying the official definition for organised crime onto these groups it can be argue that these groups show some resembles of groups that have been labelled as organised crime.

\(^{58}\) Scott 2000: 82
\(^{59}\) ibid. 83-86.
\(^{60}\) Knoke and Yang 2008: 38
\(^{61}\) Bryman 2011: 307
\(^{62}\) ibid. 308.
\(^{63}\) ibid. 163.
Advantages and disadvantages

One of the advantages of using court records or other archives is that the researcher does not need to rely on the memory of respondents nor on the reliability of the observer.64 Disadvantages with using a network analysis are that it only shows the known criminal activities relation between those actors that are included in the data.65 Previously there has been research conducted in France to estimate which kind of data is best equipped to examine narcotic organisations. The summary of those findings shows that sentences and preliminary investigation protocols were those that where most available and accessible but didn’t score high at giving a clear picture of this phenomenon as they are the result of a selection process.66

When using official documents such as court data to study criminality there are always problems. First it is important to point out that not all crimes are reported or investigated by the police so the actual criminality can never be published officially with 100% accuracy. Much dwells on how the police do their work, which cases are proceed with and which are not.67 Secondly the data represented in this research are from cases that only have convictions. Individuals can be falsely accused and even sentenced for crimes that they haven’t committed. A special interest from the police towards special group/individual can also have influenced an investigation and later on conviction. As a result of this, the material for this research can be affected by many individuals within the whole justice system. However, by accepting this selection, the use of court data gives a good picture of actual connections as the suspected actors in question are convicted for the same offence/crime. It can however be difficult to estimate the frequency and intensity between actors both in the same case and between other actors in other cases. There is always a risk that some people are sometimes found guilty although they are innocent. This can happen if someone finds himself at the same place as the real offender and is arrested with or without him.68

Ethical issues

The use of official records doesn’t remove all ethical uncertainty in this research. The individuals used in this research that were identified in those records weren’t asked for approval for gathering information about them. Although official documents are open for the general public, their usage can be harmful for those individuals that are mentioned in the documents. It is important that their identity will be concealed from the general public in this research. The point is not to identify any

64 Christina Prell 2012: 74
65 Korsell, Heber, Sund and Vesterhav 2005: 13
66 ibid. 12.
67 Pettersson 2002: 39
68 ibid. 43.
specific person nor is this research aimed to be used as a tool for further actions from the Police against specific persons.

For one of the data process steps a special approval was needed from the Icelandic Data Protection Authority. In this step, names of those individuals identified from the court documents were run through the police data and their previous criminal history was examined. This process was entirely in the hands of the police but for this process they needed an approval for running two separate databases together, the process was approved by the Icelandic Data Protection Authority. (See Appendix A)

All data is stored digitally by the researcher alone for the possibility of further research. Although this data is encrypted as mentioned above, Iceland has a relatively small population so it is possible to trace some of the encrypted individual back to their real identities.
Results and analysis

In this section I will first present the overall outcome of this research. Then a more detailed analysis will be done by comparing the results to those from previous research.

Results

72 individuals where used to construct the network and their criminal history used for connecting these individuals together. Only one actor was identified as being in two serious drug offence cases, other actors have just been involved in one serious drug offence case.

General information

All the actors had a total of 2839 police interventions registered in the police database. The criminal history of these individuals varies much when it comes to the time they begun to be active. The oldest registered case dates back to 1989 and the newest is from 2013. The oldest intervention is not accurate as there was a change of databases in that year so it is not possible to know precisely when the first intervention from the police was. The distribution regarding the sexes is 14% females (10) and 86% men (62) and the average age was 37 years. The most frequent age was on the 26-30 year interval (total of 18). Each individual had mean 3.61±1.72 connections to other actors within the whole network with a total of 327 ties/lines.

Ethnicity

In Figure 1 the distribution of ethnicity for all individuals in the entire network. Icelandic criminals made up 84,7% (61) of the sample group, Polish and Dutch came next with 5,5% (4) each. Then next came Lithuanians with 2,8% (2) and lastly one British individual who makes up 1,4% of the entire network.
Type of structure

Two types of structures were identified, one with only members from the same serious drug offence case, this structure will be referred to as a group. The second type is where actor/s is linked to other actor/s from other serious drug offence cases, this structure will be referred to as a network.

![Network Diagram]

*Figure 2:* The entire network of individuals. Circle represents females and triangle males. A line represents known association between actors. Different colours indicate ethnicity.

The Figure 2 is the whole network, those groups which have no other links to other actors outside their own serious drug offence case and those networks with links to other actors outside their own illicit narcotic offence case. Lines between nodes in Figure 2 refers to known associations between actors by the police database. These associations can have been made by cooperation in serious illicit narcotic offence cases and/or they might have come from cooperation in other cases which the police had investigated.

Furthermore the Figure 2 shows a circle represents female actors and triangle male actors. Different colours have been labelled to different ethnicity, blue marks Icelandic, red British, orange being Dutch, white Polish and yellow being Lithuanian. As a countermeasure for those which haven’t coloured version of this research a written labels have been applied to foreign actors, those with no label are Icelandic.
Table 1: Specific calculations for the Icelandic narcotic criminal network, divided into different types of networks.

<table>
<thead>
<tr>
<th>Type of network</th>
<th>Network A</th>
<th>Network B</th>
<th>Network C</th>
<th>All smaller groups</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individuals</td>
<td>8</td>
<td>9</td>
<td>23</td>
<td>32</td>
<td>72</td>
</tr>
<tr>
<td>Lines/links</td>
<td>17</td>
<td>19</td>
<td>53</td>
<td>41</td>
<td>130</td>
</tr>
<tr>
<td>Density</td>
<td>0,61</td>
<td>0,53</td>
<td>0,21</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Proportion of females</td>
<td>0%</td>
<td>22%</td>
<td>17%</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>Proportion of domestic individuals</td>
<td>100%</td>
<td>100%</td>
<td>91%</td>
<td>72%</td>
<td>85%</td>
</tr>
</tbody>
</table>

In Table 1 overall measurements for the largest networks were displayed and also some measurements for the entire network. A more detailed description of measurements for a specific network follows below.

From those 72 individuals, 7 two-actors groups were identified; only 2 of those two-actors had only Icelandic members. 4 two-actors groups had just foreign members and 1 two-actor group had one domestic and one foreign member. None of the two-person groups had any women in their group. One three-person group was identified in which two of the members where females, all of the members where Icelandic. One four-person group was identified, all of the members where Icelandic men. One five-person group was identified, all Icelandic members with two females. One six-person group was identified, all Icelandic men. Three larger networks were identified: The smallest network had 8 members (Network A), the network in the middle had 9 members (Network B) and the largest network had 23 members (Network C). Two foreigners are members of the largest groups while the other two had none.

**Density measurements**

Density and centrality measurements was only done for three of the larger networks, this is due to the fact that all the other networks had prior connections, from those cases that involved serious drug offence. From now only results from those three networks will be published leaving out the groups with no other links to other actor/s outside their own serious drug offence case. This is done as both density and centrality measurements will complete score, each actor in a group has a link to every actor within his own group. This resulted in a score equal to every other actor in the same group.

The smallest network of those with other connections than prior case of serious drug offence...
consisted of 8 actors, the density for this network was 0.61 and the value for the second largest network that had 9 actors was 0.53. The largest network had 23 actors and 53 actual lines between them, the possible amount of lines was 253 which gives the value of 0.21 in density.

**Centrality measurements**

For the actor-related properties on these three larger networks the centrality measurements will be explained for each network starting with the smallest network which had 8 actors.

The highest degree of local centrality in this network was 6 which one actor had, five other actors had degree of 5, one actor degree of 2 and one actor had a degree of 1. The actor that had the highest degree of local centrality in this network had the lowest level of closeness centrality within this network. The actor with the highest level of closeness centrality had the lowest degree value of local centrality in this eight actor’s network.

The second largest network had a local centrality degree of 6 as the highest degree while degree of 3 was the lowest degree of local centrality. The highest level of closeness for this network was 16 and the lowest level was 10 which the same actor that had the highest degree of local centrality had in this nine actors network.

The largest network with its 23 actors had two actors equal with the same highest degree of local centrality in this network, the degree of 8. The degree for this network ranged from 8 to 3 for local centrality. The closeness level ranged from 90 to 52, there wasn’t much difference between those with the lowest level and the second lowest level. The lowest closeness centrality level was 52 meanwhile the second lowest was 53.

**Analysis**

If the Icelandic legal definition on organised crime is used, a total of seven groups that were identified in this research are excluded as they consist of two known actors. The legal definition states that it needs three or more to be defined as organised criminal group. Four of the groups that don’t fill the criteria for organised crime in Iceland are foreign groups that can arguably be a part of a bigger network that haven’t been identified, but this can be said about all groups in the research.

**Structural formation**

The majority of the groups have no other connections to other groups. The Icelandic narcotic organised crime consists of many small networks if you exclude the largest network and this has also been witnessed in other Nordic countries as well. 69 Actors that do cooperate with other groups

---

69 Korsell, Heber, Sund and Vesterhav 2005: 22-23
often do this by themselves and do not use other previous group members to establish new groups. Those actors that are the links between groups are always Icelanders and in most of the cases are males.

The structural instability is high, groups are nearly always formed around one specific project and afterwards the same actors don’t all work together on similar project again. Actors can work with other actors on specific projects with or without using any other actors from previous operations. Link between different groups are often in hands of only one actor, cooperation between two groups never involves all the actors of each group. The cohesion is not high, the largest network has a small level of density (0,21) which is very low so information takes longer time to be sent from actors located on either end of the network.

Icelandic groups operate in a more coincidental fashion, only one actor was identified as being involved in two serious drug offence cases. This is the same conclusion that the report on organised crime conducted by the National Commissioner have come to. Those Icelandic groups are made around certain assignment and afterwards they are broken down. This has also been witnessed in Sweden, a report which used a network analysis came to conclude that groups are established around one particular assignment and afterwards members go their separate ways. The same can be said about organised crime in Finland, domestic groups are often very short-lived and centred around one specific assignment. Van Dijk has also argued that small/medium organised criminal groups often emerge for one particular assignment in mind.

**Group composition**

The group composition of those groups identified in this research shows that Icelanders aren’t very depended on foreign actors with just a minority of the groups having other members than Icelandic. In most cases Icelanders act exclusively with other Icelanders. If a group has a mixed membership of domestic and foreign actors, then there is only one foreign member in the group. Ethnicity still plays a role in emerging of a criminal group in Iceland. It have been stated that ethnical bonds is an important factor in making of a group. In a Swedish report the opposite has been stated, that ethnicity have less importance in group compositions. Furthermore in the Europol report on organised crime is it concluded that 70% of all organised crime groups have multi-national memberships. Additionally they divide these groups into three other subgroups, one subgroup is

---

70 Ríkissögur og rétt 2013: 5
71 Korsell, Heber, Sund and Vesterhav 2005: 185-186
72 Aromaa 2004: 48-52
73 Van Dijk 2008: 147-148
74 Korsell, Heber, Sund and Vesterhav 2005: 22-23
75 Korsell and Hansen 2002: 54-56
where the group is homogenous with one dominant nationality and this form resembles what have been identified in this research.\textsuperscript{76}

Considering the number of Icelandic actors at the expense of foreign actor in these networks, it can be said that Icelanders control the Icelandic organised illicit narcotic market. A report from Finland has stated that foreign criminal groups are becoming a more dominant form of organised criminal groups in Finland.\textsuperscript{77} It needs to be considered that my research didn’t look at specific changes over time in the dominant structural form of organised criminal groups, but by looking just at the number of individuals it can be stated that Icelanders still are the ruling form of members within the illicit narcotic market in Iceland.

Age is not a big issue for the composition of a group it seems. Young individuals can easily be members of groups with much older individuals. The median age of all the individuals is between 31-35 of age and the mean age of 37 years for those 72 individuals identified in this research. More than 40 individuals are younger than 36 years. Foreign actors have a higher mean age than the total, 38 years with the median age of 36-40.

Only nearly 14\% of all the individuals in this research are females. Their mean age is lower than for the total, nearly 35 years. However, a female had the highest degree of centrality in the largest network (Network C), and she also had the lowest value in closeness centrality which tells us that she is the central actor in this network, that most of the information goes through her and that she is the link between other actors/groups.

Central actors
The central actors in the three bigger networks have different characteristics. In the smallest of those three the central actor is an Icelandic male between 26-30 of age. The second largest network has a central actor that is Icelandic male between 31-35 of age. And in the largest network there is an Icelandic female between 36-40 of age.

Summary of the analysis
Icelandic organised criminal groups which deals with narcotics are small in size and short-lived. The larger the networks the more scattered the actors are. Relations within the largest network (Network C) indicate that actors have weak connections to the whole network. Information can take long time to go through networks with low level of density as it needs to pass through many actors before it has come to all the actors in a specific network. The most common form is small groups

\textsuperscript{76} European Police Office 2013: 33-34
\textsuperscript{77} Aromaa 2004: 46
that emerge for one particular assignment and all the members are not connected to other actors within the illicit narcotic market.

Icelandic actors are in the majority in the largest networks and they most often work just with other Icelanders. Foreign actors within a group with Icelandic actors are always in minority, no more than one foreign actor is a member of a group where Icelanders are. The mean age for the total network was 37 years, only foreign actors had a mean age of 38 years and only females a mean age of 36 years. Females are a minority in the total network, with only a 14% of all the members. Despite that they are in minority, the most central actor in the largest network (Network C) is a female.

**Concluding discussion**

The aim of this research was to describe the Icelandic narcotic organised criminal groups when it comes to structural formations and to define the composition of these groups, and to identify characteristics for the central actor of each network. This is hopefully only the first step in conducting research on organised crime in Iceland by me, this field is very interesting as there haven’t been done much research in Iceland on this phenomenon. The Icelandic narcotic organised criminal groups are very scattered and small, their structures are flexible and with few members within them. A characteristic like age does not seem to play a big role in the construction of these groups as the age variation is often high. Icelanders are the dominant actors in this field, foreign actors mostly cooperate with another foreign actor without any known assistance from Icelandic actors. Although there are fewer females in this line of work, they nearly almost operate within groups that have another female actor. The central actor has no common characteristics with other central actors; there is a high variety of their characteristics. Smaller groups/networks have higher level of density which means that they can distribute information much faster and their possibility of become bigger is relevantly much higher than those that have lower level of density. Most of the Icelandic groups have high level of density but as they aren’t operated for a long time the density measurement doesn’t apply for them.

But there is a lot of work to do in defining and describing the Icelandic narcotic organised criminal groups, further steps are needed to be taken for a more comprehensive evaluation for this field. Iceland is in a good position to do research on crime in general because of its geographical position, its small population and long tradition of keeping records on many activities.
It is important to know the field before using/making further means to control crime. It’s my experience that Iceland has been very poor in this, laws and legislations are often formed without much empirical data. Official funds have been spent on resources that haven’t been tested scientifically and this can have adverse effects.

I suggest that further research on this phenomenon will include that the organisational structure in terms of mechanical or organical structures will be applied to the organised criminal groups in Iceland. And for this to be possible there are factors that also need to be examined in more detail, particularly the illicit narcotics market stability, specific roles in drug-trafficking and management for drug-trafficking.

Another method of examining organised crime is to do a victimisation survey among business executives about racketeering and extortion, this method has proved to be rich in information in many countries. 78
Acknowledgements

I would like to thank especially the following individuals for their contribution when making this research, without them this study wouldn’t have been possible.

First of all my thanks go out to my extremely patient partner Harpa Viðarsdóttir, without her support I wouldn’t have begun on this work.

My school tutor Monika Karlsson for her significant pointers and advice on nearly everything from the essay structure to interesting books/researches on the research subject. Without cooperation with the Reykjavik Metropolitan Police this work wouldn’t have been possible, their positive response from the first day I contacted them has been most pleasant. This is largely thanks to Gunnar R. Sveinbjörnsson, Press officer for the Reykjavik Metropolitan Police, which coordinated this cooperation with a high level of professionalism. The person responsible for data processing on the behalf of the Reykjavik Metropolitan Police, Rannveig Þórisdóttir sociologist and a department manager for the Reykjavik Metropolitan Police, I would like to say special thanks for her interesting discussions on the matter on hand.

Then I would like to express my sincere gratitude to three police commissioners because without their approval for using their databases this work wouldn’t been possible, Stefán Eiríksson, police commissioner of the Reykjavik Metropolitan Police, Sigríður B. Guðjónsdóttir, The district police commissioner of Suðurnes and Inger L. Jónsdóttir, The police commissioner of Eskifjörður. Last but not least I want to thank Guðrún Sveinsdóttir assistant prosecutor for the Reykjavik Metropolitan Police for her legal advices on organised crime and related issues.
Bibliography


Appendix

A. Heimild til vinnslu persónuupplýsinga.

 Lýsgodiþjóðið á köflurýggi

b.v. Rannsóknir heimilduða, deildarfinna upplýsinga og

kenniðumstærð

Hreinsdína
F-3-115
150 Reykjavík

Helgi Michael Magnússon

Drænarrow 18

221 Haukarflúð

Heimild til vinnslu persónuupplýsinga

stef. 3. og 7. tals. 4. gr. regl. nr. 212/2006,

stef. 33. gr. laga ut. 77/2006,

um personvernd og meðfinn persónuupplýsinga.

1. Notkók

Personverndin hefður bókár umnoka. Hættasáttur börnadeóttar, deildarfinna upplýsingar og

sóttumstærð, f.h. Lýsgodiþjóðið á köflurýggið með helgi Michael Magnússon, B.A. orða í tæknisafni við Stockholmsstaða, dags 18. júní 2013, um aðgynna að gögnun á Köflurýggið fætur á köflurýggið til vegna kenniðumstærðar sem loft yfirhlinna "útlendingur.

Í umsóknini er tilgangi umhverfisstærð lýsð á öftiðumstæðann hærri.

Frá dögum urmingar skapapósið á köflurýggið á Islandi, hvítverk köflurýggi á henni. Sóttum

verður þeirra á þeim upplýsingum hana á köflurýggið með því að setja að þeim á hana með

sóttumstærðinum.

Á þeim vís þeirra í söttumstærðinum við Stockholmsstaða á l. B. gróðu.

Sóttumstærðinum verður þýskl valið með strafaðum hætti.

Heimildir verðað til á dominokulda með því köflurýggið henvinnaði, þegar kenniðumstærðinunum, þegar

umhverfisstærðunum verðað til á köflurýggið umhverfisstærðunum sem á þeim