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Public Safety Canada
Understudied Organized Crime Offending:
A Discussion of the Canadian Situation
in the International Context

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Understudied Organized Crime Offending: A Discussion of the Canadian Situation in the International Context

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Executive Summary

This report provides an analysis of selected possible understudied organized crime activities present in the Canadian context, contributing to the knowledge on both of the nature and the scope of organized crime. The analysis involved an extensive review of the literature and available data on organized crime activities in Canada, and a discussion of the existing state of organized crime literature in the international context. The analysis was based on available literature, official reports and informed speculations. Given the difficulty in gathering information about understudied activities, an in-depth analysis of such activities was not always possible. Nonetheless, the findings show the possible involvement of organized crime in some activities. Selected understudied organized crime activities were identified and analysed. Brief descriptions of the activities are included below.

How organized crime groups spend their money

Only a few studies have focused on how much, how, and where organized crime groups spend their illicit proceeds. Most studies adopt a traditional, law enforcement perspective, focusing on money-laundering. In jurisdictions other than Canada, studies have repeatedly focused on the impact of organized crime on the economic performance and growth of the legitimate economy. In Canada, research has demonstrated that organized crime invests in deposit institutions, the insurance industry, motor vehicles, real estate, criminal companies, currency exchange, marine vessels, jewellery/gems/gold/coins, and the securities industry. Overall, the knowledge on how organized crime groups in Canada spend their money appears limited. More innovative studies should analyze how organized crime manages its budget and how it invests its profits.

Environmental crime

Four specific types of environmental crime are showcased as examples of how this type of understudied criminal activity can occur. In particular, chlorofluorocarbon (CFC) smuggling, illegal dumping, radioactive waste smuggling, and issues related to electronic waste are examined. Starting in the 1970s, governments forced producers of waste to assume new responsibility about safe disposal and introduced waste brokers. These changes increased costs for legitimate waste disposal. As a reaction, to save money and time, companies started to dispose waste illegally. The main driver of environmental crime is the cheaper costs of (illegal) disposal in other, frequently less developed, countries compared to legal disposal in developed countries. A number of factors may provide criminal opportunities for organized crime, including its highly profitable nature, the complex nature of the activity (which favors the involvement of organized groups), as well as the complex regulation and enforcement systems applicable to the legal waste. To date, no study has been published on illegal dumping in Canada.

Wildlife crime

Wildlife crime is a category that concerns the taking, trading and exploiting of the world's wild flora and fauna in violation of national and international laws. The black market in illegal wildlife

is one of the largest illegitimate markets in the world. To successfully complete this type of criminal activity participation of different actors such as hunters, outfitters, wholesalers and traders is needed. Organized crime groups may provide important support, relying on their established capacity to ship illicit goods across borders. For the purposes of this research, descriptions of poaching and capturing endangered species, and the illegal harvesting of timber, illegal gemstones, and mineral mining are provided.

Organized crime infiltration in legitimate enterprises and markets

In other countries (e.g. Japan, U.S. and Italy), organized crime has been able to extensively infiltrate legitimate sectors and markets. Infiltration in the legitimate economy gives people involved with organized crime opportunities to launder illicit profits, gain social support, and get in contact with the world of politics and business, opening the way for more dangerous criminal activities. Organized crime infiltration into the renewable energy market was examined in particular detail; organized crime groups may be interested in this sector because of the increasing profit opportunities, including the possibility of exploiting funding of renewable energies to launder illicit profits.

The counterfeiting of goods

The Canadian Chamber of Commerce has argued that organized crime groups are involved in counterfeiting in Canada since this crime has shown high profit margins and involved a low risk of being caught. Organized crime groups usually use the Internet to acquire and sell counterfeit goods, and organized crime groups are mostly involved in distribution operations. In Canada, counterfeit products are usually routed from the US and Asia. New technologies, such as the Internet, have increased the accessibility to counterfeit products. Organized crime groups across Canada are implicated in producing and trafficking pharmaceuticals. These can be made with fake ingredients or with inappropriate dosages. To date, no study has specifically addressed the level of involvement of organized crime groups in counterfeit good operations in the Canadian context.

Online gambling

Online gambling is currently a new market that is frequently in under-regulated in some jurisdictions, which may attract organized crime groups. The difficulties associated with law enforcement for cybercrimes may create opportunities for individuals willing to exploit the vulnerabilities of online gambling systems. Empirical evidence of the actual level of involvement of organized crime in illegal online gambling is scant. Canadian policy makers have analysed some trends related to domestic illegal gambling. Particularly, studies have focused on the relation between illegal gambling and crimes within legal gambling, on specific aspects of gambling regulation and on the social costs of gambling. Data reveal that Canadians increasingly gamble online (although Canada is not among the most gambling nations) and that online gambling is not clearly regulated in the Canadian context.

Recommendations for future research

In the light of this research, it is clear that there is a need to assess the actual participation of organized crime groups in the identified markets; to analyse the *modus operandi* of organized criminal groups applying multiple empirical methods; to analyse how organized crime groups spend their money; and to study the infiltration of organized crime in legitimate companies and markets with a systematic approach.

1.0 Introduction

Any analysis of organized crime needs to consider the debated and controversial nature of the very concept of organized crime itself. Empirical research has repeatedly highlighted difficulties with the conceptualization of the phenomenon and the identification of its boundaries (Morselli, Turcotte, and Petit 2003a; van Duyne 2003; von Lampe 2001; Paoli and Fijnaut 2004b). Indeed, in the Canadian context, as well as in the international one, the concept of organized crime has frequently been exploited and defined in different ways by the media, the public, policymakers and academics (Woodiwiss and Hobbs 2009; Woodiwiss 2003). For example, several United States (US) organized crime commissions during the twentieth century had extensive impact on the media. These events prompted the adoption of a stereotypical and unempirical conception of organized crime: a nationwide alien conspiracy of Italian (mostly Sicilian) criminals plotting to undertake criminal activities. Organized crime is a politically sensitive topic and it “makes for good populist rhetoric and electoral politics” (Roberge 2009, 4). The fear of organized crime (and more recently terrorism) makes the population keener to accept legislation restricting civil liberties and granting more power to law enforcement.¹

Many scholars have suggested replacing and/or complementing the concept of organized crime with other concepts such as criminal enterprise and profit-driven crime. For example, van Duyne (2003) suggests that in order to overcome the conceptually unclear construct of organized crime, the concept of criminal enterprise should instead be employed, whereby the activities of organized crime are considered from an economic point of view. Similarly, according to Naylor (2002), criminology has too often focused on types of offenders, instead of on types of criminal activities and *modi operandi*. He suggests a typology of “profit-driven crimes” to refocus scientific analysis on criminal activities. Profit-driven crimes can be categorized into predatory, market-based and commercial crimes. Proponents of these categories suggest basing scientific analysis on the criminal activities (“what” and “how”) rather than on the offenders (“who”) (Naylor 2003). Others have distinguished between “Organized crime” and “organized crime” (Hagan 2006) or between “organized crime” and “crimes that are organized” (Finckenauer 2005). Hagan, for example, posits that organized crime has some distinctive elements such as ideology, structure, continuity, violence, bonding, illegal enterprises, legitimate penetration of business and corruption (Hagan 2006). Similarly, Finckenauer argues that there is a “danger, generally, in the promiscuous use of the label organized crime with reference to perpetrators of ‘crimes that are organized’, and also with criminal networks that lack what we regard as the essential defining elements of being criminal organizations” (Finckenauer 2005, 77-78). These studies suggest that not all complex crimes requiring the collaboration of multiple offenders and some sort of organization should be considered as organized crime.

¹ The problems related with the political and media exploitation of the concept of organized crime have been acknowledged by Canadian scholars (Morselli, Turcotte, and Petit 2003).

The *Criminal Code of Canada* (hereinafter CCC) (Section 467.1(1)) defines a criminal organization as:

“a group, however organized, that:

- a. is composed of three or more persons in or outside of Canada;
- b. has as one of its main purposes or main activities the facilitation or commission of one or more serious offences that, if committed, would likely result in the direct or indirect receipt of a material benefit, including a financial benefit, by the group or by any of the persons who constitute the group.

It does not include a group of persons that forms randomly for the immediate commission of a single offence”.²

The CCC acknowledges that minor groups should not be considered as criminal organizations. Yet, scholars have argued that the CCC definition is extremely broad (Mitsilegas 2003; Freedman 2006; Orlova and Moore 2005; Orlova 2008).

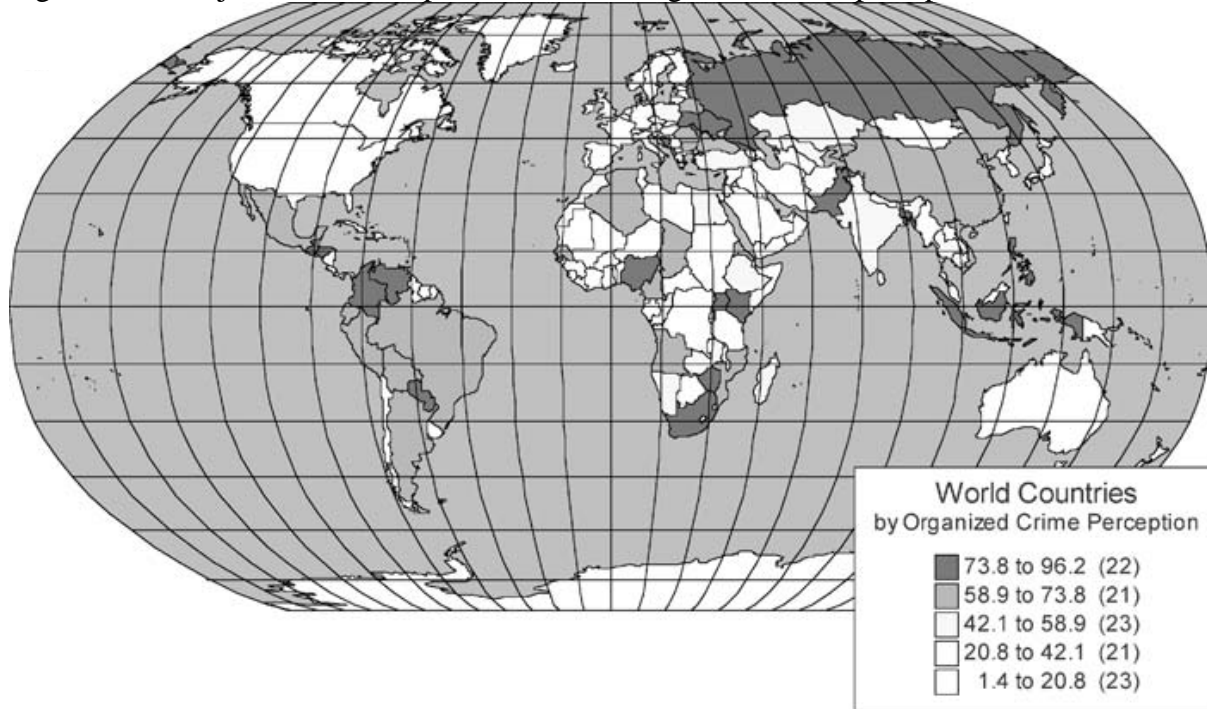
For the purpose of this study, the concept of organized crime will be interpreted in a relatively broad sense. Indeed, the identification of possible understudied organized crime activities requires such a definition, as knowledge on understudied criminal activities may be unavailable or extremely limited. From this perspective, the imposition of an excessively narrow interpretation of the concept of organized crime would be counterproductive. Given the expected scarcity of information, the lack of empirical evidence about the actual presence of organized crime offences may be caused by the understudied nature of the activity rather than by the absence of organized criminal offending. In order to identify potential understudied organized crime activities, this study, similar to previous Canadian research (Naylor 2003, 81), will focus primarily on criminal activities and markets (rather than on particular listed offences).

Organized Criminal Activities in Canada

From a global perspective, Canada scores very low in international comparative studies that analyze the presence of organized crime in different countries through a comparison of statistical data (see Figure 1) (van Dijk 2008, van Dijk 2007).

² The Canadian legal definition is coherent with the provision of the UN Convention against Transnational Organized crime (United Nations Office on Drugs and Crime 2004, 28).

Figure 1: van Dijk's "Global map with scores on organized crime perception index".³



At the same time, Criminal Intelligence Service Canada (hereinafter CICS) reported that the number of organized crime groups in Canada, over the past four years, has ranged from 600 to 900 (Criminal Intelligence Service Canada 2007, Criminal Intelligence Service Canada 2008, Criminal Intelligence Service Canada 2009, Criminal Intelligence Service Canada 2010).

Organized crime usually operates in areas where goods are transited, just as legitimate economic activities tend to operate in such areas. These areas are important connection and communication points, facilitating meetings and exchanges. Canada has important characteristics (listed below) that may make it a particularly attractive place for criminal activities.

- Access to the Pacific and Atlantic oceans
 - These access points allow for a connection between Europe and Asia through a single country.
- Extended border with the United States
 - A large part of the Canada-US border is unstaffed, allowing for easy border crossing. Moreover, the Canada-US border has two strategic entry-exit points between Canada and the US: Southern Ontario and the Lower Mainland in British Columbia are traditionally key entry-exit points between Canada and the US.
- Native reserves

³ Source: (van Dijk 2007, 44)

- Especially when close to national borders, these areas can facilitate the smuggling of illicit goods (e.g. illegal manufactured cigarettes, illegal guns). Native reserves have different mechanisms for controlling border points (McHale 2007). To complicate matters, some reserves have land on both sides of the border.
- Ports and airports
 - As in all other countries, ports and airports are trading places and sensitive points for illicit trafficking of goods (Roberge 2009).

Several studies and reports have analyzed criminal activities and markets in Canada. In order to enter into a discussion regarding understudied organized criminal activities, it is first important to briefly review what is known about organized crime activities in the Canadian context. To that end, a list and brief descriptions of organized criminal activities that have been identified in the Canadian context is included below.⁴

Illegal drug-related activities

Illegal drug-related activities include illegal production, distribution and importation of controlled and non-controlled substances and their precursors. In Canada, the most commonly trafficked (both at national and international level) drugs are cocaine, marihuana, methamphetamine and ecstasy (Criminal Intelligence Service Canada 2010, 24-27). Canadian organized crime groups are thought to be highly involved in all stages (production, smuggling, wholesale and retail distribution) of the illicit drug industry. Studies have shown that most drug related criminal activity is conducted in a flexible, dynamic and “disorganized” way (Desroches 2005, Desroches 2003; Morselli, Turcotte and Petit 2003a; Morselli and Petit 2007; Morselli, Giguère and Petit 2007). The illicit traffic of pharmaceuticals is widespread in Ontario as well as in the Atlantic region. Interestingly, compared to other countries, Canada has one of the highest rates of pharmaceutical opiate consumption (Criminal Intelligence Service Canada 2010).

Gambling

Gambling activities include games of chance or events with an uncertain outcome. These activities are legally practiced in licensed casinos and other areas. Since the 1980s, several casinos have opened in Canada. Gambling and casinos are attractive to organized crime groups as money-laundering opportunities due, in part, to the presence of several services that tend to be on site, such as banking, currency exchanges and money transfers (Piscitelli and Albanese 2000).

⁴ Organized crime activities identified as understudied pursuant to criteria identified in the methodology section of report will be further analysed in depth in the main part of the report.

Financial Crime

Financial criminal activities, for the purposes of this report, include any crimes against property committed for the purpose of obtaining a profit. Although organized crime groups maintain tactics thought to be traditional such as intimidation, violence, and corruption, recent reports highlight organized crime involvement in capital markets (Linden and Schneider 2010). Studies in the Canadian context have mainly focused on mortgage fraud, payment card fraud, mass marketing fraud, securities fraud, counterfeit currency and money laundering (described briefly below).

- Mortgage fraud
 - The deliberate use of mis-statements to obtain illicit financial loans (Liddick 2009). Organized crime groups engage and exploit Canadian financial professionals in order to obtain credit information (von Lampe 2008).
- Payment card fraud:
 - The theft of credit cards or credit card information. Studies show that the loss for this type of crime in Canada reaches more than \$500 million annually. Payment card fraud committed by Canadians is concentrated in urban areas in Quebec, Ontario and British Columbia (Criminal Intelligence Service Canada 2009, Criminal Intelligence Service Canada 2010).
- Mass Marketing fraud:
 - The use of media communication with the intention of deceiving the public about any type of product (e.g. telemarketing schemes). As indicated by the Canadian Anti-Fraud Call Centre, this type of fraud costs about \$5 million each year (Binational Working Group on Cross-Border Mass-Marketing Fraud 2008). Canadian mass marketing fraud tends to target foreign costumers (Binational Working Group on Cross-Border Mass-Marketing Fraud 2008).
- Securities fraud:
 - The use of false information to induce customers to buy or sell stocks in violation of the law. This fraud requires special technical knowledge. However, new technologies have facilitated the commission of this crime, making it possible to reach multiple jurisdictions (Criminal Intelligence Service Canada 2008). Social networks such as Facebook, and bulletin boards such as Craigslist, can be used both to issue fake promotional material to find new victims and to give new spaces to fraudsters (Criminal Intelligence Service Canada 2010).
- Counterfeit currency:
 - The illegal production of currency. In Canada, counterfeit currency can be printed by many colour copiers (Naylor 2002). The most commonly counterfeited bill is the \$20 one, which is also the most circulated bill. Canada is also one of most common sources of counterfeited US\$ bills (Naylor 2002).
- Money-laundering:
 - The use of financial transactions to hide the source and control the destination of illegal funds. There are multiple ways to launder money garnered through illicit activities (Beare and Schneider 2007). Criminal organizations may rely on purposely created enterprises as well as on ordinary enterprises, which may

be attracted by profit opportunities in order to launder money gained through illicit activities (Criminal Intelligence Service Canada 2009).

Smuggling of migrants and human trafficking

The smuggling of migrants and human trafficking includes the illegal transportation of persons across international borders. Organized crime groups involved in this activity in Canada move immigrants across both international and domestic jurisdictions. Research has shown this crime is frequent near the US border with Ontario, Quebec and British Columbia. According to Criminal Intelligence Service Canada, a small number of organized criminal groups are involved in this activity, while, street gangs are reported to be involved in human trafficking for sexual exploitation (2008, 30). The Royal Canadian Mounted Police report that “human trafficking suspects have been linked to other organized criminal activities, such as conspiracy to commit murder, credit card fraud, mortgage fraud, immigration fraud, and organized prostitution, in Canada or abroad” (Royal Canadian Mounted Police 2010, 1). Further, suspected transnational organized crime networks are believed to have operators in source countries who facilitate recruitment and transportation; these operators are believed to be able to provide high quality false travel documents (Royal Canadian Mounted Police 2010).

Firearms trafficking

The trafficking of illegal firearms between and within countries. Organized crime groups seem to be highly associated with this illegal activity. In Canada, firearms trafficking do not appear to be the primary activity of organized crime groups even if some groups are involved in it (Criminal Intelligence Service Canada 2010, 27). Yet, firearms are increasingly necessary for many participants in illegal markets and this demand increasingly needs to be satisfied (Morselli et al. 2010). Firearms are smuggled from different countries; the US has been identified as the most frequent source country of firearms in Canada (Criminal Intelligence Service Canada 2010, 27).

Tobacco Smuggling

The illicit trade of tobacco products across international borders. Tobacco is mainly trafficked or re-packaged in Native reserves near or sharing the border with the US. It appears that organized crime groups take advantage of the inelastic demand for cigarettes and are increasingly able to satisfy customer demand. In particular, tobacco smuggling has been reported in Ontario and Quebec (Beare 2002).

Counterfeiting

The sale of counterfeit products as if they were genuine. Counterfeit products are mainly trafficked to Canada from the US and Asia. New technologies have expanded the market, increasing the accessibility to the products. For example the internet enlarges the access and the availability of counterfeit goods with online stores and uncontrolled auctions (Criminal Intelligence Service Canada 2010).

Environmental Crimes

Environmental criminal activities include the illegal trade and disposal of hazardous waste materials and other materials. For the purposes of this report, two examples of environmental crime were examined: chlorofluorocarbon smuggling and midnight dumping.

- Chlorofluorocarbon (CFC) smuggling:
 - The illicit trafficking and disposal of chlorofluorocarbon. This activity emerged in Canada after the ratification of the Montreal Protocol which provides for the phasing out of CFCs and other like chemicals (Liddick 2009).
- Midnight Dumping:
 - The illicit disposal of hazardous waste by both large and small companies. This illegal activity proliferated after new regulation enacted in the 1970s required producers to adopt safe disposal procedures (Naylor 2002).

Wildlife Crime

Wildlife-related criminal activities include the illegal poaching and trafficking of flora and fauna species. Limited research on this phenomenon is available, particularly in the Canadian context. The trafficking in bear gall bladders and/or illegal hunting and smuggling of bear in Canada has been documented (Ibidem). This activity is related to Chinese Medicine; bears produce a particular toxin with strong aphrodisiac power some use to treat a variety of ailments (Ibidem). In addition, research has examined lobster poaching in Nova Scotia, an activity that concerns the infringement of fishing regulations and quotas (Sheptycki et al. 2009). Some information is also available on other poached animals and animal products including, for example, reptiles, Australian shark fin, and caviar (Criminal Intelligence Service Canada 2009).

Theft

Theft activities involve the misappropriation of property without the consent of the owner. In Canada, motor vehicle theft is one of the most frequent theft offences (Dauvergne 2008). Some law enforcement agencies suggest that organized crime is involved in major car ringing schemes (Morselli and Roy 2008). Clarke and Harris argue that the amount of unrecovered motor vehicles can provide information about the importance of international car trafficking (Clarke and Harris 1992). Such activities require complex criminal networks (Dauvergne 2008). Another activity related to organized crime may be the theft of heavy equipment (e.g. farm machinery, construction equipment) (Criminal Intelligence Service Canada 2010). Heavy equipment has been reported to be smuggled out of Ontario and Quebec and exported to Africa, Mexico, and South America. Finally, the increasing demand of metals from fast growing economies (e.g., India and China) appears to encourage organized crime activity surrounding metal theft to meet this demand (Criminal Intelligence Service Canada 2009).

2.0 Methodology

This study involved an extensive review of the literature and available data on organized crime activities, with the aim of identifying understudied organized crime activities. For the purposes of

this research, an operational definition of organized crime is provided, as well as criteria for characterizing organized crime activities as understudied.

2.1 Operational definition of organized crime

As discussed in the literature review, this study adopts a broad definition of organized crime. Criminal activities were identified as organized crime activities where there was evidence of:

- presence of group(s) of at least three persons;
- groups operating systematically (e.g. division of tasks/roles, informal hierarchy, previous planning and/or organization of illegal activities);
- groups whose main aim is profit. Groups primarily aiming at social/political objectives will not be considered organized crime;
- participation of the group(s) in criminal or illegal activities. This includes legal activities (e.g. enterprises) systematically conducted through illegal means; and/or
- participation of the groups in the use of intimidation or threat or violence or bribery/corruption or other forms of illegitimate influence.

2.2 Understudied organized crime activities

Empirical literature on organized crime activities in Canada was analysed and the current state of organized crime literature in Canada was compared to the international literature. Organized crime activities were identified as understudied where:

- the literature on Canada has not addressed activities or topics generally addressed in the international or national literature. In this case, organized crime activities were considered as understudied particularly in Canada (e.g. infiltration of organized crime in public procurement or other regulated markets); and/or
- the international (including Canadian) literature has not addressed specific activities which, on the basis of criminological, sociological and economic assumptions (adequately explained), likely appear to involve organized crime. In this case, organized crime activities were considered as understudied at an international level (e.g. How organized crime groups spend their money); and/or
- there is (although limited or uncertain) evidence of organized crime activities which are connected to specific characteristics of Canada (e.g. trafficking natural resources available in Canada including wildlife animals and plants and related products) (Naylor 2002).

2.3 Data gathering and analysis

To achieve the objective of this project, primary datasets to be used for the literature search and of key words were identified. The search facilities of the Università Cattolica del Sacro Cuore and the Università degli studi di Trento were used. These include: Lexis Nexis, Jstor, Criminal Justice Abstracts, Scopus, Ingenta, ISI web of science, Swetswise, EBSCO Electronic Journals Service, Academic Publishers databases: SpringerLink, Sage, Blackwell-Synergy, Cambridge University

Press, Oxford University Press, and Taylor&Francis. In addition, the documental archive of Transcrime⁵ was used, which contains hundreds of books, reports and articles on organized crime, illicit markets and criminal activities in general.⁶

All relevant sources were identified, collected, classified, and archived either electronically (if available) or on paper. A detailed analysis of all relevant literature was undertaken in order to identify understudied organized crime activities. Finally, the organized crime activities that were characterized as understudied were analysed.

Given the understudied nature of the activities selected, a limited amount of information was available. For this reason, Transcrime chose not to adopt an excessively rigid interpretative framework for the analysis. For some activities (e.g. how organized crime groups spend their money and organized crime infiltration in legitimate enterprises and markets), the presence of organized crime had already been proven by studies on other countries. For other activities (e.g. wildlife crime), empirical evidence of involvement of organized crime was scarce and most accounts were based on assumptions and anecdotes. This study attempted to analyse the factors facilitating organized crime involvement in each activity, the actual involvement of organized crime groups and the available information from Canadian literature according to the type of activity and the amount of evidence available. Each identified understudied criminal activity was classified into one or more of the three abovementioned criteria.

2.4 Limitations

This research is subject to limitations. Due to limited scope and available resources, it was not possible to conduct a complete review of available information, particularly grey literature and media reports. Furthermore, the understudied nature of the selected activities made it difficult to have access to reliable, detailed information and data.

3.0 Analysis of understudied organized crime activities

Selected organized crime activities that were identified as understudied pursuant to one or more of the criteria listed in the methodology section are included in this section of the report. In particular, how organized crime groups spend their money, environmental crime, wildlife crime, organized crime infiltration in legitimate enterprises and markets, the counterfeiting of goods, and online gambling were explored for the purposes of this research. Given the difficulty associated with gathering information about these understudied activities, it was not always possible to describe in detail the *modi operandi* of the crimes. Further, for some activities, the involvement of organized crime is based on inferences and not on empirical studies.

⁵ Transcrime is a joint research centre on transnational crime of the Università Cattolica del Sacro Cuore (Milan) and the Università degli studi of Trento. It was created in 1994 and since has conducted a number of studies for local, national and international authorities and institutions (www.transcrime.it).

⁶ Keywords for bibliographic research include, for example, “organized crime”, “organized crime”, “criminal markets”, “criminal systems”, “mafia”, “Canada”, “North America”, “Pacific rim” in multiple combinations.

3.1 How organized crime groups spend their money

Organized crime is motivated by financial profit. Criminal organizations are thought to be capable of making very high profits from the provision of illicit goods and services and from their exploitation of individuals and organizations. This has led to the adoption of law enforcement and policy countermeasures that focus the suppression of organized crime profits, namely, the adoption the “follow the money” approach. The literature review identified the tracing and confiscation of criminal assets as the most effective instrument to combat crime (Walker and Unger 2009; Buscaglia 2008). Although some scholars are more sceptical about the effectiveness of such policies (Naylor 2001), the rationale behind them (i.e. depriving organized crime of its profits and reducing opportunities for the exploitation of illegal money) appears founded. Organized crime is often considered by business executives and CEOs at the international level as an impediment to doing business in their own countries (van Dijk 2007).

A number of studies have focused on money laundering from different perspectives (Levi 2002; Caneppele, Calderoni, and Martocchia 2009; Curtol et al. 2006; Savona 1997; Beare and Schneider 2007). The economics of money laundering, which aims to explore the scale and impact of these illicit funds, is a relatively new field (Walker and Unger 2009; Dalla Pellegrina and Masciandaro 2009). Only a few scholarly works have focused on how much, how, and where organized crime groups spend their illicit proceeds. The latest UN report concerning global money laundering states that:

one of the most important missing pieces of information concerns the flow of income generated by crime, if, where and how these financial flows intersect with local, national, regional and international economies and their impact on these economies and financial systems. (Walker and Unger 2009, 822)

In jurisdictions other than Canada, studies have repeatedly focused on the impact of organized crime on the legitimate economy, on economic performance and growth. For example, the pervasive presence of mafias seems to represent a crucial constraint and cost on the economy of Southern Italian regions (Asmundo and Lisciandra 2008; Lavezzi 2008; Daniele and Marani 2010).

Concerning specific areas in which proceeds of organized crime are invested, some studies have focused on organized crime investments in the real estate sector (Nelen 2008). One such study analysed this issue in the Canadian context (Schneider 2004). Schneider reviewed Canadian Royal Mounted Police files to assess the patterns of organized crime investments in Canada. He acknowledged that organized crime invests in a variety of sectors (out of 149 cases, deposit institutions were involved in the 76,5% of cases, insurance industry in 64,4%, motor vehicles in 59,7%, real estate in 55,7%, criminal companies in 32,9%, currency exchange in 17,4%, marine vessels in 14,8%, jewellery/gems/gold/coins in 9,4% securities industry in 7,4% and other sectors in 43,6%), but the study focused on the real estate market, and identified the typologies of properties and the patterns and strategies of organized crime investments in real estate.

Except for the above mentioned studies on money laundering and the real estate sector, the knowledge on how organized crime groups in Canada spend their money appears limited. Indeed, according to the criteria identified in the methodology, how organized crime groups spend their money is understudied particularly in Canada, as well as at the international level. Notably, the Italian literature has explored, to some extent, the impact of the presence of organized crime on the legitimate economy. This topic is relatively new in the academic discourse, and more research needs to be done in order to better prevent and suppress organized crime activities.

3.2 Environmental crime

Environmental crime has increasingly become a global issue given the rising attention on global warming. Environmental crime also has local impacts on specific geographical areas. Environmental crime can be defined as illegal acts, which, directly or indirectly, harm the environment (White 2008a). Environmental crimes encompass a wide range of criminal activities which are committed with different operational modalities. These acts can include the illegal production of unlawful substances and their smuggling and the illegal dumping in hazardous and non-hazardous waste (Naylor 2002). Further, specific types of waste may be particularly vulnerable to crime, such as radioactive and electronic waste, as these types of waste are expensive to dispose through legitimate mechanisms.

Frequently, environmental crimes occur in areas and jurisdictions with lower controls and less effective enforcements. Therefore, illicit dumping may have a transnational dimension because the activity involves more countries. These crimes are committed by a variety of criminals, from individual actors to complex networks. Environmental crimes may involve government officials seeking illicit profits (White 2008a, 5). Indeed, government officials frequently play a pivotal role in these kinds of activities. This is because regulations usually give public officials wide discretionary powers in authorizing, controlling and sanctioning environment-related activities. Discretionary power, if not regulated properly (for example with operational guidelines, hierarchical controls or ombudsman services) may create opportunities for corruption.

For the purposes of this report, four specific types of environmental crime are included as examples of how this type of understudied criminal activity can occur. In particular, chlorofluorocarbon smuggling, illegal dumping, radioactive waste smuggling, and issues related to electronic waste are examined.

3.2.1 Chlorofluorocarbon (CFC) smuggling

CFC smuggling refers to the illegal transportation and disposal of CFC, a widely used refrigerant and solvent (Clapp 1999, 92). Growing international concern about the dangerous effects of CFC smuggling has resulted in the ratification of the Montreal Protocol and Basel Convention.⁷ Some

⁷ The Montreal Protocol on Substances That Deplete the Ozone Layer, a protocol to the Vienna Convention for the Protection of the Ozone Layer, entered into force on 1 January 1989. The Basel Convention on the Control of

of the literature argues that these international agreements failed in their goal (Liddick 2009, 138; Clapp 1999, 92). Indeed, CFC smuggling has increased following the adoption of the Montreal Protocol regulations⁸ (Liddick 2009, 138). The main driver of the crime is the cheaper costs of (illegal) disposal in other, frequently less developed, countries compared to legal disposal in developed countries. Nowadays, China is one of the main recipients of CFC from the developed countries (Liddick 2009). CFC is generally distributed and smuggled to China using false labels and evading American and European customs.

Some scholars argue that organized crime is involved in this type of activity (Liddick 2009, 140). However, such accounts are frequently based on scattered media sources and not on empirical analysis. Similarly, no empirical study was found on CFC smuggling in Canada. Naylor accounts for only one known case (Naylor 2002, 29). Nevertheless, a number of factors may provide good criminal opportunities for organized crime. These include the highly profitable nature of CFC smuggling, the complex nature of the activity (which favors the involvement of organized groups), as well as the complex regulation and enforcement system applicable to the legal disposal of CFC. Indeed, this complexity is exploited by criminal to avoid identification and reduce the risks of sanctioning.

3.2.2 Illegal dumping

Illegal dumping refers to the illicit disposal of hazardous waste, made by both large and small companies. Hazardous waste refers to all types of waste that carry potential threats dangerous for public health and the environment. Before the creation of new regulations and laws, hazardous waste was incinerated like the normal garbage released to city dumps (Liddick 2009). Starting in the 1970s, governments forced producers of waste to assume new responsibility about safe disposal and introduced waste brokers. These changes increased costs for legitimate waste disposal. As a reaction, to save money and time, companies started to dispose waste illegally (Sheptycki et al. 2009).

Cases of illegal disposal have been reported in different countries around the world. This includes minor incidents as well as massive dumping of extremely toxic and dangerous waste. In particular, massive illegal dumping has taken place in the Naples area, causing a national emergency in Italy. Italian organized crime has played an important role in this case (Massari and Monzini 2004, 297). Organized crime is thought to be highly involved in illegal dumping; however, most studies on this topic are not based on empirical evidence, but are instead often speculative in nature (White 2008b, 131; Liddick 2009). No empirical study included in this review focused on the illegal dumping of waste in the Canadian context. There is a lack of knowledge about the extent of this criminal activity and the actual involvement of organized crime groups in it.

Transboundary Movements of Hazardous Wastes and their Disposal entered into force on 5 May 1992 (<http://www.basel.int/>).

⁸ The Montreal Protocol provides that industrial countries have to phase-out the production and the use of this chemical substance, while developing countries are allowed the opportunity to produce it. (Naylor 2002)

3.2.3 Radioactive waste smuggling

Radioactive waste smuggling refers to the illicit and unregulated treatment of radioactive waste. Radioactive waste is any waste product containing radioactive material. Radioactive waste can be a serious danger for communities. Such waste is difficult to dispose and it can remain radioactive for years. For example, radioactive waste resulting from nuclear fuel can stay radioactive for 300 years. To protect both the public health and the environment proper disposal is needed, even if it requires high cost and investment of time (European Commission). The lack of low-cost, adequate, and safe disposal procedures for radioactive waste may create criminal opportunities for organized crime groups. In Europe, for example, authorities have investigated in illegal dumping of radioactive waste from Austria, France, Germany and Eastern Europe into the Mediterranean and Adriatic Seas by companies engaged by Italian organized crime groups (Liddick 2009). This illegal activity includes different criminal actions such as possession, theft and illegal transportation of radioactive materials (European commission).

Canada has an active business in nuclear energy, and is one of the main exporters of uranium in the world. Radioactive waste in Canada can be linked to nuclear fuel waste. Nuclear fuel waste is now kept in authorized facilities at the reactor sites which are not appropriate for long term storage (Duke Engineering & Services (Canada), Inc. 1999). The *Nuclear Fuel Waste Act* came into force in Canada in 2002, requiring nuclear fuel owners to create Canada's Nuclear Waste Management Organization (NWMO). The objective of this Act is to involve everyone (e.g. citizens, experts, stakeholders and Aboriginal people) in the evaluation of all the options for long-term nuclear waste management (Durant 2006).

As mentioned above, it may be possible that organized crime groups are involved with the illegal dumping of radioactive waste. European and Italian studies have addressed this issue and demonstrated that organized crime groups can profit from trafficking radioactive waste (Contri 2009; Liddick 2009). Indeed, the nuclear industry must pay extremely high costs for legally storing and disposing such waste. In turn, this generates incentives for cheaper and illegal disposal, with extremely high social and environmental side effects (Guerriero and Cairns 2009).

3.2.4 Electronic waste

Electronic waste, e-waste, or Waste Electrical and Electronic Equipment (WEEE) refers to insecurely, unnecessary, obsolete or broken electrical and electronic devices. This waste includes all secondary computers, entertainment electronics apparatus and other items as television sets and refrigerators sold or discarded by the original owners (Widmer et al. 2005, 437). This type of waste has a high and increasing risk of unregulated and unsafe disposal. The presence of toxic substances in e-waste can result in serious consequences for the environment, such as pollution of soil, air and water, and repercussions for human health (Widmer et al. 2005, 449). The issue of e-waste management is increasingly being recognized globally.

Electronic waste should be properly treated. However, safe disposal and regulated recycling usually imply a number of long processes which can be expensive (Luther 2010, 10). In the US, for example, to save money most electronics companies have moved overseas, where waste handling costs are lower. Thus, the e-waste generated and composed for disposal and recycling is

usually exported abroad. How this waste is managed in the destination countries is not known, but some evidence has demonstrated that unsafe and unregulated disposal methods are increasing (Luther 2010, 11; Wath, Dutt, and Chakrabarti 2010, 253 and 257; Schmidt 2006, A236). Unregulated and illegal disposal are not only related to exports to developing countries but often waste is mismanaged even within the source country. E-waste, also in this case, is illegally abandoned in dumps and left there without control and regulation (Luther 2010, 4; Boudier and Bensebaa 2011, 40).

In 2006, the INTERPOL Pollution Crime Working Group (PCWG) concluded a study on the links between organized crime and pollution crimes and exposed the involvement of organized crime groups in illegal e-waste disposal (Interpol Pollution Crimes Working Group 2006, 30; Interpol 2009). However, the lack of empirical evidence about the actual involvement of organized crime groups in e-waste was admitted by Interpol: “the most significant gap remains understanding the involvement of organized crime in the global distribution of e-waste” (Interpol 2009, 37). This most recent analysis focused mainly on a few countries.

Concerning the US, research has shown the possible involvement of traditional crime families in the illegal management of e-waste. Organized crime groups actually used different methods to illegally dispose hazardous waste, especially e-waste. The Interpol study illustrated that mob-affiliated persons, because of former involvement in waste business, were the owners of the city dump and easily disposed hazardous waste tagged as non-hazardous (Interpol 2009, 31).

Research on the Canadian situation, on the other hand, is very limited. The mentioned study by Interpol (2009) highlighted that Canada was one of the main receivers of US e-waste, but the data collected in the Interpol study do not appear to be reliable. The CISC found that organized crime is involved in illegal e-waste dumping and trafficking. Because of the profit that organized crime groups can gain in selling e-waste (e.g. old television after the entry of digital broadcast) some criminal networks started to export the collected waste to developing countries in Africa and Asia (Criminal Intelligence Service Canada 2008, 20-21).

Using these examples it is clear that environmental crime is understudied particularly in Canada as well as at the international level. The Italian case of illegal dumping of waste (including radioactive waste) in Southern regions is the most studied in the international literature, with a discussion of the growth of the illicit markets and its main drivers as well as of the involvement of organized crime. Remarkably, the international literature on organized environmental crime is frequently based on media accounts and official reports, while empirical research is still lacking. To date there is no study on illegal dumping in Canada. Surely, more efforts and resources should be invested in this area of study.

3.3 Wildlife crime

Wildlife crime is a category that concerns the taking, trading and exploiting of the world’s wild flora and fauna in violation of national and international laws (Akella and Cannon 2004). This category encompasses different types of offences such as poaching and capturing endangered species, the illegal harvesting of timber, as well as illegal gemstone and mineral mining. Generally, wildlife trade is legal, but, as demonstrated by Zimmerman (2003), the black market in

illegal wildlife is one of the largest illegitimate markets in the world. This crime requires a particular skill set and in some instances high level of organization is needed (Schneider 2008). Indeed, to successfully complete this type of criminal activity, participation of different actors such as hunters, outfitters, wholesalers and traders is needed. Further, organized crime groups may provide important support, relying on their established capacity to ship illicit goods across borders. (Zimmerman 2003).

For the purposes of this research, descriptions of poaching and capturing endangered species and the illegal harvesting of timber, illegal gemstone and mineral mining are provided.

3.3.1 Poaching and capturing endangered species

Poaching and capturing endangered species refers to the illegal trade of endangered wild flora and fauna. As noted, the illegal wildlife black market is one of the largest illicit markets in the world and, at global level, different types of species are constantly in demand and sold (Cooper and Chalifour 2004). Flora and fauna species are captured to be sold as food in national and international markets, as well as medicines, and as items to private collections (Zimmerman 2003). Canadian animals are required and poached for different purposes. For example:

- Bears
 - Bears are required in China and in East Asia for the aphrodisiac toxin produced from their gallbladder, ursodeoxycholic acid. This toxin is widely used in medicine to treat a variety of ailments. The bile from bear gallbladders can be used both for preparation of drugs with curative and preventive properties, and in tonic supplements and foods (Naylor 2002). Gallbladder trade begin with bear hunting and poaching, usually in the springtime. These organs are collected by hunters who sell them to traders. Traders, in turn, sell them to dealers that set up the shipping abroad (Naylor 2002).
- Eagles
 - Eagles, on the other hand, are poached for their feathers and talons which have important ceremonial and spiritual values, and are sold in the North American black market (Cooper and Chalifour 2004).
- Lobsters
 - Lobster poaching arose after changes were made to fishing regulations and licenses. These changes have increased the already existing tensions between the state and lobster-fishers and has created what that mass media has called the “lobster wars” (Sheptycki et al. 2009).
- Geoducks
 - Like bears, geoducks are highly in demand in China and in East Asia where these clams are considered a delicacy with a strong therapeutic effect. Moreover, because of their phallic shape they are considered powerful aphrodisiacs that can reinforce male performance (Vedder 2011).
- Caribou, moose, salmon and other fish, and migratory birds
 - Caribou, moose, salmon and other fish, and migratory birds are poached for their respective meats that are in demand in different markets around the world. Meat obtained illicitly is becoming an increasing public health problem because

its butchering and storage is not regulated and its quality and safety is not guaranteed (Wyler and Sheikh 2008).

3.3.2 Illegal harvesting of timber, illegal gemstone and mineral mining

Illegal harvesting of timber and illegal gemstone and mineral mining refers to all illegal activities concerning these industries. Canada is a country with a strong primary sector in which logging, manufacturing and mining, as well as the petroleum industries, have a central role (Akella and Cannon 2004). Illegal activities, for example, have been recorded in relation to the Canadian diamond industry and its markets. Illegal activities in this type of market can be done in various sectors including markets for polished stones and diamond exploration companies (Criminal Intelligence Service Canada 2003). Diamonds attract organized crime because they are an excellent source of wealth and a great way to launder money. The diamond industry, especially in the Northwest Territories, is continuing to grow and organized crime groups seem to be increasingly infiltrated in this area (Criminal Intelligence Service Canada 2003). Infiltration into the diamond industry can be accomplished by organized crime groups, by placing accomplices in jobs which allow them to access to confidential information or access to rough stones.

Empirical research on wildlife crime is relatively scarce and scattered at the international level. Similar to environmental crime, the involvement of organized crime in these activities is frequently alleged on the basis of limited empirical evidence, mostly relying on media reports and law enforcement opinions. Wildlife crime is understudied at the international level and is also understudied pursuant to the criteria listed in the methodology section insofar as it is a potential organized crime activity connected to specific characteristics of Canada.

3.4 Organized crime infiltration in legitimate enterprises and markets

Organized crime groups may infiltrate legitimate companies for a number of reasons. First, legitimate enterprises may provide a useful channel for laundering illicit proceeds. For example, organized crime groups may create or acquire bars and restaurants because these kinds of retail activities have a high cash turnover. This may allow money from criminal activities to be concealed through a variety of schemes, such as false invoicing to simulate higher profits. Second, enterprises can provide legitimate roles and employment for criminals, providing defences against law enforcement seizure and confiscation of unjustified assets. Further, playing the role of a legitimate entrepreneur can gain members of organized crime social support, hiding their criminal business and promoting an image of respectable members of a community. Third, legitimate companies give organized crime access to the world of economics and politics, allowing an extension of organized crime's network of contacts beyond the criminal underworld.

In several countries, studies on organized crime have demonstrated that, upon certain conditions, organized crime groups are capable of infiltrating legitimate enterprises and even entire markets. In particular, the United States, Japan and in Italy constitute three examples of developed economies which have suffered, at least in specific sectors and periods, from extensive infiltration

of organized crime groups into legitimate enterprises and businesses (Asmundo and Lisciandra 2008; Calderoni and Caneppele 2009; Caneppele, Calderoni, and Martocchia 2009; Hill 2006; Jacobs, Friel, and Raddick 1999; Kaplan and Dubro 2003; Varese 2006). In these cases, the infiltration of legitimate enterprises and markets reached a point where organized crime systematically disrupted legitimate markets with significant impacts on the society and the economy.

In Italy, in particular, organized crime groups have demonstrated their ability to infiltrate the public procurement procedures, affecting the effectiveness of state's economic activities and hindering the economic development of some areas. For example, Savona performed a script analysis of organized crime infiltration in public procurement procedures, highlighting the different *modi operandi* of Italian mafias. This may include extortion to legitimate companies awarded public contracts, the imposition of subcontractors or suppliers controlled by the mafias, and the direct awarding of contracts to mafia-owned enterprises (Savona 2010).

There is no comprehensive study of the infiltration of organized crime in legitimate enterprises and markets in the Canadian situation. Studies on money-laundering in Canada have focused mainly on the real estate sector (Beare and Schneider 2007; Schneider 2004). Interestingly, an empirical analysis of money-laundering patterns in Canada highlighted that “in 49 cases (32.9%), companies were established or purchased by an offender to facilitate the laundering process” out of a sample of 149 investigative files concerning money laundering activities by organized crime (Schneider 2004, 105). However, the analysis of criminal companies did not go beyond their exploitation for money-laundering purposes. At present, the actual impact of criminal enterprises on legitimate markets in Canada appears to be a research field which may deserve more detailed analysis.

The infiltration of organized crime in legitimate enterprises and markets is understudied particularly in Canada as well as at the international level. Literature from other countries has explored the patterns of infiltration of organized crime in the legitimate economy, while in Canada this field of research remains restricted to the field of money-laundering.

3.4.1 Organized crime infiltration in the renewable energy market

Renewable energy comes from natural resources such as wind, rain, tides and sunlight which are naturally refilled. Globally, about the 19% of total energy production came from renewable sources (REN21 2010, 15). Electricity and heat are generated from renewable resources and this energy is able to replace conventional fuels in different areas such as power generation, hot water/space heating and transport fuel. Power generation made by renewable resources is spread across numerous countries. The main generator of renewable resource energy is wind (Lewis and Wiser 2007). Renewable energy is cost-competitive with conventional energy but, despite this, it is not possible to tap its potential because of several factors (e.g., market situation, technical knowledge, and institutional status quo), which require long term planning to overcome. In developed countries, renewable energy is a growing market because of the lower environmental impact and the increasing energy request (Painuly 2001, 88).

Organized crime infiltration in renewable energy, especially in Italy, has recently come to the attention of the media. Increasing calls for crime prevention in this sector are launched. The renewable energy sector is extremely complex, and involves significant implications and risks for the environment, for development opportunities, for government infiltration by organized crime and even for threats to homeland security. As usual, organized crime groups are interested in this sector for the increasing profit opportunities, including the possibility of exploiting funding of renewable energies to launder illicit profits (Grillo 2011).

The efforts of the Canadian Government in the production of clean energy are increasing as well as the profitability of renewable sources. Canada has a great potential for renewable energy, due to the characteristics of its territory (e.g. massive supplies of water, sun, wind and biomass), to produce relevant amount of green energy. Canada is surrounded by oceans, which provide water resource, and its long coast is one of the best wind resources on the planet, while its forests provide a stable supply of bio-energy (Government of Canada - Invest in Canada 2010). New government policies with tax incentives have made substantial investments in renewable energy a breeze. This industry is experiencing a stunning increase and is creating extraordinary opportunities both for strategic partnerships and investment (Government of Canada - Invest in Canada 2010). Because of this market expansion and new opportunities that are increasingly created, it seems possible that organized crime infiltration in this sector is an understudied organized crime activity particular to Canada. It is further reasonable to assume the possibility of organized crime involvement in this activity in the international context due to significant profit opportunities.

3.5 The counterfeiting of goods

Counterfeit goods are imitations of products made with the intent to dishonestly pass as genuine. Counterfeit products are produced in order to benefit from the higher value of genuine products. The word counterfeit goods concerns the imitation of a variety of products such as art, clothing, software, pharmaceuticals, watches, electronics and company logos or brands and specifically implies the violation of intellectual property rights (Transcrime 2010, 6).

According to the World Customs Organization the largest portion of the world's counterfeit products can be traced back to China (World Customs Organization 2009). In 2008, nearly 200 million counterfeit goods were found and seized in Europe. More than half were clothes and accessories, while the remaining half included jewelry, watches, electrical items, CDs and DVDs (United Nations Office on Drugs and Crime 2010, 176-177).

Markets of counterfeit products impact on government tax income and weaken legitimate sector profits. The production of counterfeit goods is a global issue (Transcrime 2010). Frequently, when it comes to counterfeiting, people consider only the abuse of the intellectual property rights. However, counterfeiting results in many additional damages and costs. Indeed, counterfeit goods can be defective, which can result in blame being placed on genuine products and subsequent economic losses and damage to the market itself. In addition, counterfeit products can be dangerous for human health. Indeed, most counterfeit toys are made with toxic paints, while fake automotive parts do not comply with safety standards (United Nations Office on Drugs and Crime 2010, 173).

The global expansion of many markets has created a demand for both original and not original products. The counterfeiting of goods exploits this trend, increasing opportunities for profits. The possibilities of high profits, coupled with relatively low detection risk and penalties, just as in many other sectors, attract organized crime groups (Transcrime 2010).

The Canadian Chamber of Commerce has argued that organized crime groups are involved in counterfeiting in Canada, since this crime has shown high profit margins and involved a low risk of being caught (Breitkreuz 2007, 7; The Canadian Anti-Counterfeiting Network 2007, 8). As reported by the Criminal Intelligence Service (2010), organized crime groups usually use the Internet to acquire and sell counterfeit goods, and organized crime groups are mostly involved in distribution operations. Measurement of the counterfeiting of goods is an extremely difficult task, but it seems that the phenomenon is rising. In Canada, counterfeit products are usually routed from the US and Asia. New technologies, such as the Internet, have increased the accessibility to counterfeit products. Indeed, online stores, auction, and advertising sites as well as e-pharmacies can be made and managed in order to commit fraud and to expand the markets where counterfeit goods can be sold (Criminal Intelligence Service Canada 2010). Organized crime groups across Canada are implicated in producing and trafficking pharmaceuticals. These can be made with fake ingredients or with inappropriate dosages (Criminal Intelligence Service Canada 2007). The counterfeiting of pharmaceutical goods is highly profitable and usually requires the involvement of several people. Legal drugs are an interesting target for counterfeiting because they generate high profits, especially considering to the limited number of ingredients needed for their production. Indeed, once researched, developed, tested and approved, pharmaceuticals are relatively cheap to produce because non-medical ingredients can be easily replaced (Criminal Intelligence Service Canada 2006).

The counterfeiting of goods is an understudied organized crime activity in Canada as well as at the international level. The international literature is increasingly focusing on counterfeiting as a possible activity of organized criminal groups. To date, no study has specifically addressed the actual level of involvement of organized crime groups in counterfeit good operations in the Canadian context.

3.6 Online gambling

Gambling is defined as all types of bets (e.g. money or other material value) whose purpose is to win more than the value bet. Usually games of chance are played in authorized establishments, such as casinos or betting shops, where bets can be made in different ways. Inside casinos, people can play table games (e.g. cards, roulette), electronic games (e.g. slot machines) or any other types of games such as horse race betting and sports betting. Gambling can also take place outside authorized establishments. Indeed, new technologies, and particularly the Internet, allow people to gamble in new ways (e.g. online casino games, online poker, online sport betting, online lotteries). This makes gambling easily accessible to a higher number of customers (Griffiths 2003, 558; McMullan and Rege 2010, 54).

Many people engage in gambling as a form of recreation and/or to make profits. Risk is a part of gambling and it is possible, and even frequent, that people who participate in gambling lose

money at it. For these reasons, many jurisdictions either ban or strictly regulate gambling. This creates opportunities for illegal gambling. Illegal gambling occurs in areas where all forms of gambling are prohibited as well as where it is allowed only under specific conditions (Naylor 2002, 7).

Legal and illegal gambling may be attractive to organized crime groups because they represent a highly demanded service which can provide high profits. Furthermore, gambling provides a number of opportunities for launder money due, in part, to the presence of several related services on location at areas where people gamble, such as banking, currency exchanges and money transfers (Piscitelli and Albanese 2000; Ferentzy and Turner 2009, 126). Given the complexity of running legal and/or illegal gambling enterprises (they require facilities, managers, cashiers, supervisors and security), organized crime groups are frequently involved in it, due to the broad networks of criminal contacts and to their established reputation for the use of violence in case debts are not paid (Ferentzy and Turner 2009, 112).

Online gambling is currently a new market that is frequently in under-regulated in some jurisdictions, which may attract organized crime groups seeking to profit by swindling customers and misleading security commissions (McMullan and Rege 2010; Campbell, Hartnagel, and Smith 2005, 41). The difficulties associated with law enforcement for cybercrimes may create opportunities for individuals willing to exploit the vulnerabilities of online gambling systems (McMullan and Rege 2010, 55; Pontell, Geis, and Brown 2007).

Canadian policy makers have analysed some trends related to domestic illegal gambling. Particularly, studies have focused on the relation between illegal gambling and crimes within legal gambling, on specific aspects of gambling regulation and on the social costs of gambling. (Campbell, Hartnagel, and Smith 2005, 7).

Law enforcement agencies have argued that illegal gambling provides organized crime groups high profits with very low risk of detection and punishment (Campbell, Hartnagel, and Smith 2005, 40). This may account for the quick expansion of online gambling and the high untaxed profits produced from illegal electronic gambling machines (Campbell, Hartnagel, and Smith 2005, 40). Similar to other illicit goods and services (e.g. drugs, prostitution, smuggling), illegal gambling in Canada is frequently associated with organized crime groups. Reports often suggest that organized crime groups are behind illegal gambling (Ferentzy and Turner 2009; Criminal Intelligence Service Canada 2010). However, empirical evidence of the actual level of involvement of organized crime in illegal online gambling is very scant. Notwithstanding this, data reveal that Canadians increasingly gamble online (although Canada is not among the most gambling nations) and that online gambling is not clearly regulated (Rex and Jackson 2009, 122; Ferentzy and Turner 2009, 128).

It is reasonable to argue that online gambling is an understudied organized crime activity particularly in Canada and at the international level. Indeed, the relatively recent development of online gambling services has so far limited the availability of reliable information and evidence on the implications of organized crime in illegal online gambling.

4.0 Discussion

This study reviewed literature on organized crime activities to identify organized crime activities that are understudied in the Canadian context. The type of activity and the availability of information varied significantly across the activities selected for inclusion in this study. For this reason, it is difficult to make any assessment about the actual level of involvement of organized crime and/or how prolific these activities may be for organized crime in Canada.

The understudied criminal activities discussed in this report can be grouped for further understanding. Environmental crime, wildlife crime, the counterfeiting of goods and services, and online gambling all relate to **criminal markets and the illicit provision of goods and services**. Research has frequently shown that these types of activities are not exclusively undertaken by organized crime groups, but rather by a multitude of different criminal actors ranging from single, freelance criminals, to structured mafia-type organizations. The most researched organized crime activity is drug trafficking; research on drug trafficking has systematically criticized the view that organized crime groups dominate the criminal markets (Reuter and Haaga 1989; Reuter 2009; Dorn, Levi, and King 2005; Pearson and Hobbs 2001). Results from countries with a significant presence of traditional organized crime (e.g. the Italian mafias, the Japanese Yakuza), such as Italy, are in line with these findings (Paoli 2004; Becchi 1996; Paoli and Reuter 2008). The lack of significant organized crime control over illicit markets is frequently connected to the very nature of these markets. In illegal markets, suppliers of illicit goods and services cannot resort to legitimate instruments of conflict resolution (civil law, courts and other dispute settlement mechanisms). Further, illegal entrepreneurs prioritize security over economic efficiency. They cannot exploit economies of scale, advertising and vertical integration strategies, because this would inevitably attract attention of law enforcement agencies. Interestingly, studies have showed that in some cases a strong organized crime control over illicit activities may be actually found. One of these cases related to the organized crime controlling the numbers game (illicit type of lottery) racket in New York City (Liddick 2009).

When analyzing criminal markets, it is important to recall the distinction between “organized crime” and “crimes that are organized” made in the introduction of this report. In criminal markets, a number of different types of criminal actors are present and organized crime groups may not always be present or, if present, have a predominant role. At present, it is not possible to clearly identify which factors in a market may make it amenable to the development of structured powerful criminal organizations rather than of a wide range of more flexible criminal actors. The identified criminal markets may interest criminal organizations for the opportunities to make profits. The profit motive may attract groups of scattered criminals as well as single freelancers. Consequently, research efforts should be devoted to explore the factors which favor the development of organized crime groups instead of mere crimes that are organized (for this distinction, see the literature review above).

A second group of understudied organized crime activities identified in this study does not deal with specific criminal markets, but rather with **specific activities or crimes that may be directly committed by criminal organizations**. Specifically, how organized crime groups spend their money, and organized crime infiltration into legitimate enterprises and markets involve specific activities or crimes that may be directly committed by organized crime groups. Evidence from

countries other than Canada suggest that a limited number of organized crime groups may have the resources to actually infiltrate, for example, the public procurement sector or the renewable energy sector. These kinds of organized crime activities have profound implications on society. When intervening in the legal economy, organized crime may affect fair competition, market rules, the quality of legitimate goods and services. In general, the most problematic issue for this group of activities is the vulnerability of some legitimate markets to the infiltration organized crime groups. Indeed, organized crime may exploit vulnerable markets and opportunities for illicit behaviors.

5.0 Conclusion

The analysis of understudied organized crime activities in Canada aimed at highlighting involvement of organized crime in specific activities and markets. The assessment has been done on the basis of available literature, official reports and informed speculations. The findings aimed to bring attention on a set of activities and markets which may see the involvement of organized crime and currently appear understudied. Further research will be required to assess the actual presence and relevance of organized crime in the selected activities and markets.

5.1 Recommendations for future research

First, specific studies should focus on the criminal markets of environmental crime, wildlife crime, the counterfeiting of goods, and online gambling. Given the lack of empirical analyses about organized crime involvement in these markets, one priority should be to assess the actual participation of organized crime groups in such markets. In particular, research should analyse whether these criminal activities are mostly conducted by organized crime groups on an exceptional or occasional basis or rather on a systematic, entrepreneurial and continuous basis.

Second, if significant organized crime involvement is identified in environmental crime, wildlife crime, the counterfeiting of goods, and online gambling, research efforts should try to analyse the *modus operandi* of organized criminal groups. This may be done via multiple methods. In particular, script analysis and network analysis are increasingly emerging as two promising research methods that may allow for better insight into the dynamics of these criminal markets.

Third, specific studies should analyze how organized crime groups spend their money. Traditionally, this topic has been addressed from a law enforcement perspective, thus focusing on the offence of money laundering. An innovative approach of research should be to focus on how criminal organizations spend their money and the drivers determining the decision-making of criminal organizations, rather than on the constituent elements of the offence of money-laundering. Such analyses may use multiple methods of analysis, including quantitative analyses (merging multiple data sources such as data on suspicious activity reports, on seizures and confiscations, on tax evasion and on organized crime groups) and qualitative information (crime proofing of legislation of specific sectors, case studies of infiltration in criminal companies, interviews with experts).

Fourth, the infiltration of organized crime into legitimate companies and markets should be studied with a systematic approach. Empirical evidence is frequently lacking in these areas and allegations are frequently unsupported by empirically rigorous information and data. An important priority in this field should be the development of a knowledge base. This may require, for example, the undertaking of case studies, and the development of a database of reported cases of infiltration into legitimate companies and markets in Canada and related available information.

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