Special issue

“Improving knowledge on crime: towards better data”: proceedings of the meeting of the open-ended expert group on ways and means of improving crime data collection, research and analysis with a view to enhancing the work of the United Nations Office on Drugs and Crime and other relevant international bodies, Vienna, 8-10 February 2006
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FORUM ON CRIME AND SOCIETY

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Guest editor
ANNA ALVAZZI DEL FRATE

Special issue
“Improving knowledge on crime: towards better data”: proceedings of the meeting of the open-ended expert group on ways and means of improving crime data collection, research and analysis with a view to enhancing the work of the United Nations Office on Drugs and Crime and other relevant international bodies, Vienna, 8-10 February 2006

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NOTE FROM THE EDITORIAL BOARD


The present issue of *Forum*, devoted to monitoring crime and collecting data on crime, is the sixth issue. The first issue (vol. 1, No. 1, February 2001) focused on the outcome of the Tenth United Nations Congress on the Prevention of Crime and the Treatment of Offenders, held in Vienna from 10 to 17 April 2000. The second issue (vol. 1, No. 2, December 2001) was devoted to the theme of organized crime. The third issue (vol. 2, No. 1, December 2002) dealt with corruption. The fourth issue (vol. 3, Nos. 1 and 2, December 2003) was on trends in crime. The fifth issue (vol. 4, Nos. 1 and 2, December 2004) focused on terrorism.


GUIDELINES FOR THE SUBMISSION OF ARTICLES

The Editorial Board invites scholars and experts from around the world to contribute articles to *Forum* on criminological and socio-legal issues. Articles submitted for publication must be original; that is, they should not have been published elsewhere. Each article to be considered for publication should not exceed 6,000 words, should be submitted in electronic format and, preferably, in hard copy and should be accompanied by the curriculum vitae of the author and an abstract.

Submitted articles should follow the Harvard system of referencing, whereby the author and year of publication of a work appear in the text and full details of the work cited are provided in a list of references. All articles, reviews and correspondence should be addressed to the managing editor of *Forum*, either by surface mail (United Nations Office on Drugs and Crime, Vienna International Centre, Wagramer Strasse 5, P.O. Box 500, 1400 Vienna, Austria) or by e-mail (ras@unodc.org).
PREFACE

Crime statistics are expected to provide the foundation for assessing crime trends, and researchers may expect such statistics to be internationally comparable. In practice, however, crime statistics are still far from meeting those expectations. As Marvin Wolfgang has stated, “to make international comparisons by merely counting the number of violations of a specific type and dividing by a population constant reflects an arbitrary arrogance of assumed similarity that pays no attention to cultural diversities”. Indeed, there is no doubt that crime rates vary enormously from country to country and that better knowledge of such variations would be extremely helpful in analysing social development phenomena. Gary Becker, winner of the 1992 Nobel Prize in Economic Sciences, has observed that, while official crime statistics are often hard to interpret, poorer and more slowly developing countries generally have higher incidences of crime, often much higher. He continues by asking whether higher rates of crime also contribute to poverty and weaker growth and concludes that the answer is yes.\footnote{M. Wolfgang, “International crime statistics: a proposal”, Journal of Criminal Law, Criminology and Police Science, vol. 58, No. 1 (1967), p. 66.}

Despite developments in criminological research and the introduction of crime victim surveys in the past decades, the statistical basis necessary to assess the severity of crime problems in developing countries and to measure the extent of transnational organized crime is still lacking. The Secretariat of the United Nations started studies on crime statistics in 1948, as a necessary support to its crime prevention work. At the same time, Member States agreed to collect and share data on crime trends and the operations of criminal justice systems, at first on an ad hoc and later on a regular basis. Nevertheless, data on crime are not yet sufficient to provide an accurate description of emerging problems, especially with regard to organized crime, trafficking in persons and new forms of crime.

On the recommendation of the Commission on Crime Prevention and Criminal Justice, the Economic and Social Council adopted resolution 2005/23 on strengthening reporting on crime. In that resolution, the Council recommended that the Secretary-General convene an open-ended expert group to consider ways and means of improving crime data collection, research and analysis. That group, composed of 15 experts from all regions of the world, met in Vienna in February 2006 to recommend improvements in data collection, including with regard to administrative statistics and victim surveys, keeping in mind the needs of data users, in particular in developing countries.

This issue of 
\textit{Forum} contains a selection of the papers presented by the experts at that meeting, supplemented by a number of contributions on the methodological work currently being conducted by the United Nations Office on Drugs and Crime (UNODC) on developing indicators and tools for monitoring and reporting on the global crime situation.

In the first article, Anna Alvazzi del Frate gives an overview of the gaps that exist in crime statistics and tries to identify the main obstacles to the collection of reliable and comparable statistics. She suggests some ways forward, including options for collaboration between international organizations involved in crime data collection.

Ernesto Ugo Savona, in his article, draws upon experience gained through a number of European projects aimed at improving knowledge on organized crime to deal with the challenging issue of measuring organized crime from an international perspective. Through a description of the methodology developed by an international research consortium in the framework of Project IKOC (Improving Knowledge on Organised Crime), Mr. Savona’s contribution focuses on measuring the risk, probability and harm of organized crime.

In the next article, entitled “An enterprise modelling approach for assessing trafficking in persons networks”, Jay Albanese of Virginia Commonwealth University proposes a methodology to assess the risk and extent of trafficking in persons based on a three-stage model of criminal networks.

In another article, the perspective of developing countries on monitoring the crime situation is addressed by a group of experts from Latin America (Elias Carranza, Mariano Ciafardini and Tulio Kahn), Africa (Peter Gastrow and Masamba Sita) and Asia (Jianan Guo and Celia Leones).

The United Nations Survey of Crime Trends and Operations of Criminal Justice Systems, which initially covered the first half of the 1970s, is assessed in a paper that compiles comments from the following experts: Erik Grevholm, Beata Gruszczynska, Kauko Aromaa, Markku Heiskanen, Stephen Mihorean and Paul Smit. The experts examine response rates to the United Nations Survey, its range of users, issues of quality control, dissemination of survey results and questions of cross-national comparability.

Five short notes related to improving the quantity and quality of collected crime data, are also included in this issue of Forum. Police data problems and solutions are presented by Gordon Barclay, Michael Rose and Marilyn Rubin, while Roy Walmsley, Marcelo Aebi and Hiroyuki Shinkai look at strengths and weaknesses of prison statistics. The political relevance and methodological issues of crime victim surveys are analysed by Britta Kyvsgaard.

The last two notes are written by experts working for entities in the United Nations system: Alex Butchart of the World Health Organization writes about collecting data on violence, in particular with regard to methodological issues and victim surveys; and Laura Petrella of the United Nations Human Settlements Programme (UN-Habitat) writes about the interest of UN-Habitat in crime data collection.

None of the contributions to this issue of Forum should be regarded as official views or positions of the institutions for which the authors work.

Sandeep Chawla
Chief of the Policy Analysis
and Research Branch
United Nations Office on Drugs and Crime
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PART ONE

Articles
INTERNATIONAL CRIME DATA COLLECTION: PRIORITIES FOR THE UNITED NATIONS

By Anna Alvazzi del Frate*

Abstract
The challenge of collecting crime statistics that can be used in cross-national comparisons has faced the international community for over 150 years. While some form of administrative police statistics are generated in almost every country, criminologists and statisticians have long recognized the limitations such statistics as proxies for the measurement of crime. Different legal systems, capacities and methods of recording crime further complicate the cross-national comparison of figures. The author of the present article examines ways forward for international crime data collection, including innovative solutions such as crime victim surveys, and summarizes the proposals made at the meeting of the open-ended expert group on ways and means of improving crime data collection research and analysis with a view to enhancing the work of the United Nations Office on Drugs and Crime and other relevant entities, held in Vienna from 8 to 10 February 2006.

Information can be a valuable driver of change. It shines a light on any society. It can foster awareness and understanding of social injustices and it can provide evidence for people both within and outside government to argue for, to decide on and to implement successful reforms. Information is the lifeblood of transparent, informed and open societies – fundamental aspects of democratic and well-managed States [1].

INTRODUCTION

In order to better understand crime-related problems, it is necessary to have solid data on which policies and reforms can be based. Good, reliable and comparable time series data on crime and criminal justice are scarce at the international level. Many obstacles still limit access to quality information on crime and criminal justice trends. In the present article, the main obstacles are examined and some approaches to resolving them are suggested.

*Research Officer, United Nations Office on Drugs and Crime.
What should be measured

The first problem is to identify the type of data required to produce the particular kind of crime-related information needed by the final users. The term “crime trends” may be interpreted in several different ways. The strict measurement of crime cannot be separated from the response to crime. Since a criminal act is a crime because it is so defined by legislation, it is both the breaking of a law and the application of that law that make the act a crime. While most conventional forms of crime correspond to easily definable acts (such as killing, stealing or raping, which are almost universal concepts), some definitions of what constitutes a crime are so complex that it is extremely difficult to translate them into single acts to be measured as they happen. In practice, while it is relatively simple to count how many homicides occur during a certain period, counting cases involving trafficking in persons, for example, requires either a legislative provision that criminalizes such trafficking or the splitting of the concept into the different crimes that are committed in the course of the more complex trafficking action.

In order to assess how much crime there is, it may not be sufficient to measure the extent and the trends of a social phenomenon among others. Law enforcement and criminal justice specialists may interpret “crime trends” as the activity records generated by each component of the criminal justice system in virtually every country; in other words, as the measurement of the criminal justice system’s response to crime. Increasing and decreasing trends reflect how responsive the system is. Paradoxically, a higher degree of responsiveness may be recorded in situations of relatively little crime, as it is in such situations that the criminal justice system is able to operate more fluently and efficiently.

Comparable crime statistics are necessary. The international community has repeatedly underscored this need. It has given new impetus to efforts to improve global information on crime through, for example, the adoption of the United Nations Convention against Transnational Organized Crime and the Protocols thereto [2] and the United Nations Convention against Corruption [3]. Global crime data are also required to address the concerns of the High-level Panel on Threats, Challenges and Change, which has identified transnational organized crime as one of the six clusters of threats with which the world must be concerned now and in the decades ahead [4]. Finally, in his report entitled “In larger freedom: towards development, security and human rights for all” [5], the Secretary-General stated that information and communication technologies could significantly contribute to the achievement of the Millennium Development Goals.
What has been done so far

The international community started compiling comparable statistics on crime a long time ago. At the first International Statistical Congress, organized by Adolphe Quetelet in 1853, representatives of participating States started discussing how to make their official statistics comparable. After Quetelet, many statisticians from Europe and North America continued promoting international cooperation in the collection of statistical data. A mixed committee for the comparative study of criminal statistics in various countries was established in 1930 by the International Statistical Institute and the International Penal and Penitentiary Commission [6]. After looking at crime statistics from 40 different countries, the committee stated that “a material comparison of these statistics has been judged impossible from the very beginning because of the diversity of penal law and of the statistico-technical methods in the various countries” ([6], p. 254). In 1939, the work of the committee concluded with the production of guidelines in view of “a gradual harmonization of criminal statistics”.

In those years, most of the limitations of administrative statistics were already known. It was clear that judicial data were not sufficient for assessing the extent of crime. In 1931, in debating the possibility of a “crime index”, Sellin established that police data could best reflect the crime situation since they were closest to the actual occurrence of the crime (“the value of a crime rate for index purposes decreases as the distance from the crime itself in terms of procedure increases” [7]). Indeed, the International Association of Chiefs of Police started developing a plan for a national system of police statistics, including offences known and arrests, as long ago as 1927. On the basis of that plan, the International Criminal Police Organization (INTERPOL) started its collection of international crime statistics, which continued until 2006.*

In the United Nations, the Social Commission decided in 1948 to start collecting crime statistics as a basis for its work on the prevention of crime and the treatment of offenders. A statistical report on the state of crime, covering the period 1937-1946 [8], which resulted in an analysis of the difficulties of collecting international crime statistics rather than in a real assessment, was published in 1950.

Information on crime trends and the operations of criminal justice systems began being collected on a regular basis within the United Nations in the 1970s, pursuant to General Assembly resolution 3021 (XXVII). Initially,*

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*In 2006, the INTERPOL General Assembly decided to discontinue the collection of international crime statistics (AG-2006-RES-19).
States agreed to share general information on the crime situation and on measures to prevent and control crime. Subsequently, a detailed questionnaire was developed for collecting data; this became the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems. Through the United Nations Survey, police and judicial statistics are collected from virtually all Member States. Initially, the United Nations Survey was carried out at five-year intervals. Since 1999, however, it has been carried out every two years. Nine surveys have been carried out so far, collecting data from 1976 to 2004.* Although responses to the United Nations Survey have been received from a varied number of States over the years (see figure I), the rate of response has been low and predominantly from developed countries. In developing countries, the lack of information is not only an obstacle to the formulation of evidence-based policies and crime prevention strategies, but also represents an obstacle to accessing international development aid.

Figure I. Number of States responding to the United Nations surveys of crime trends and operations of criminal justice systems covering the period 1970-2004

Responses to the United Nations Survey have been presented regularly at United Nations congresses on crime prevention and criminal justice* and in many scientific publications. Despite the relatively low response rate, the database of the United Nations Survey is the most comprehensive collection of available international criminal justice statistics.

Towards comparable crime statistics

Many attempts at harmonizing data and developing international statistics on crime were made before some agreement was reached that comparability, rather than harmonization, should be the goal. Almost two centuries after Quetelet’s initial efforts, the international community is still struggling to collect internationally comparable data on crime. Direct comparisons among countries are still risky (and very often wrong). In addition, the quantity of available statistics is still very limited and the quality poor. This is in part attributable to the advent of computerization; some functions that used to be carried out with pencil and paper are now being carried out electronically. For some years, it was believed that computers would perform the miracle of facilitating the compilation of statistics. Sadly, however, it has become apparent that the States that are able to collect and share crime data in the twenty-first century are the same that were arranging numbers in neat columns already at the beginning of the twentieth century.

Administrative statistics are often the only data available; as a result, they may end up being used as proxies for the measurement of crime. Data are collected from the records of the police and of various other components of the criminal justice system. Over the last few decades, surveys of crime victims have added valuable information on the prevalence and incidence of crime.

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A fundamental distinction exists between quantitative and qualitative data. In general, quantitative data are presented in numerical form and are used to measure and quantify phenomena. Thus, they are important in monitoring trends and assessing the impact of crime prevention policies. Over the past few decades, more and more quantitative research has been conducted on crime issues. However, because of the illegal nature of the issues at stake (the activities tend to be hidden and their extent cannot be assessed regularly), qualitative information is also important and should always be considered along with quantitative data. Some types of crime, especially organized crime, can be studied only by adopting a qualitative approach.

For many years, the only quantitative information on crime that was available came from criminal justice records. These records deal with the response of law enforcement and criminal justice authorities to crime and have either incidents (crimes) or persons (offenders and, in some cases, victims) as units. In most countries, each component of the criminal justice system maintains records on the number of cases being dealt with as part of its normal functions. Examples of crime and criminal justice administrative data are as follows:

<table>
<thead>
<tr>
<th>Definition</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of crimes recorded</td>
<td>Incidents</td>
</tr>
<tr>
<td>Number of persons arrested</td>
<td>Persons</td>
</tr>
<tr>
<td>Number of persons prosecuted</td>
<td>Persons</td>
</tr>
<tr>
<td>Number of persons convicted</td>
<td>Persons</td>
</tr>
<tr>
<td>Number of persons incarcerated</td>
<td>Persons</td>
</tr>
</tbody>
</table>

Administrative data, however, can only reflect a part of the picture, namely the part being handled by the criminal justice system. For a number of reasons, quite a few crimes are not discovered by or reported to the police and therefore are never included in these official records.

The portion of crimes that is neither reported nor discovered is of unknown magnitude and represents what criminologists frequently call “the dark figure”: in other words, the estimated extent of crime that is not known by the police. The extent of the dark figure may vary greatly from country to country, depending on a number of issues, such as:

- The kind of legal system in use and the definitions applied to different crimes
• The level of efficiency of the law enforcement and criminal justice system in preventing and controlling crime

• The capacity of a criminal justice system to discover, record and investigate crimes

• The level of trust that citizens have in the institutions in their country

• The cultural and socio-economic environment that may affect the propensity of victims to report crimes

• The methods used to record crimes and collect statistics in different countries

• The level of development, education, urbanization etc.

• The geographical and climatic differences that may, at least in part, determine lifestyles in different countries

The police forces of 37 European countries record crime data at different points in time. In some countries, crimes are recorded immediately after the offence has been reported to the police, while in other countries crimes are recorded only at a later stage or at the end of the investigation:

<table>
<thead>
<tr>
<th>Point in time</th>
<th>Number of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately after the offence has been reported to the police</td>
<td>19</td>
</tr>
<tr>
<td>At a later stage</td>
<td>7</td>
</tr>
<tr>
<td>At the end of the investigation</td>
<td>10</td>
</tr>
<tr>
<td>Not available</td>
<td>1</td>
</tr>
</tbody>
</table>


It is known that the police may exercise discretion in formally recording a crime. In some cases, if it is considered that no crime has actually taken place, the report may be considered unfounded and the investigation discontinued. So-called “unfounded crimes” are not included in the total number of recorded crimes. Even assuming that the probability of this happening is the same in all countries, it is reasonable to expect the number of crimes that end up in statistics to be significantly lower in those countries in which offences are recorded at a later stage.
Victim surveys

Of all criminal justice statistics, the data reported by the police represents information that comes closest to the incident. However, these data alone do not provide sufficient information to measure the full extent of crime. One way to supplement administrative data and to overcome the dark figure is through victim surveys, which provide valuable information on crime as it is experienced by citizens in the context in which it occurs. Through the surveys, crime victims share information on their experiences and attitudes, including patterns in reporting crimes to the police and reasons for not reporting. The following are examples of the types of quantitative data produced by victim surveys:

<table>
<thead>
<tr>
<th>Definition</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of victims of crime</td>
<td>Persons</td>
</tr>
<tr>
<td>Number of victims reporting crime to the police</td>
<td>Persons</td>
</tr>
<tr>
<td>Number of crimes experienced</td>
<td>Incidents</td>
</tr>
</tbody>
</table>

Through responses to victim surveys carried out in different countries using similar methodologies, it is possible to obtain data that are comparable. According to data collected through the International Crime Victim Survey between 1989 and 2005, for example, in most parts of the world, more than half of victims did not go to the police to report crimes (see figure II). Even though it may be that such surveys only capture people’s experiences selectively and incompletely, victim surveys suggest that many incidents perceived by citizens as crimes are not reported to the police and thus do not appear in published crime statistics [9].

Figure II. Proportion of victims reporting crimes to the police (Percentage)

Conventional crime versus organized crime

Surveys on victims of crime (and, to a great extent, police statistics), however, deal primarily with so-called conventional crime, rather than with organized crime, trafficking in persons, corruption and money-laundering, which not only are notoriously underreported offences, but are also defined very differently in different countries. Although the general concept of organized crime has been almost universally agreed upon, the specifics of what constitutes organized crime remain ambiguous for the purpose of collecting data. Similar limitations apply to information on trafficking in persons, the smuggling of migrants, corruption and money-laundering, which all require the development of suitable indicators and instruments to enable the collection of reliable data (see box). For the time being, the assessment of the extent of these types of crime continues to be based largely on impressionistic media reports.

Analysing trends in conventional crime may, however, provide insight into more complex types of crime. The close connection between conventional and grand crime justifies a close monitoring of conventional crime statistics as the most readily available source of information on complex and interrelated social phenomena.

Analysing those parts of the survey that could provide some proxy indicators of organized crime (such as drug offences, bribery, fraud, embezzlement, homicide and car theft) might be used to establish patterns.

There is an urgent need to develop new research methods applicable to non-conventional crime. Despite the crucial importance of information on such phenomena, collecting data on organized criminal groups and their activities at the transnational level remains a challenging task.

While a wealth of crime data is available from developed countries, this is not the case for developing countries, especially as regards information on organized crime, trafficking in persons and the smuggling of drugs and other illegal commodities.

Measuring the extent of trafficking in persons: from impossible to credible

One commonly held belief is that it is difficult or impossible to know the extent of trafficking in persons throughout the world. Such statements are often followed by an “estimation” of the number of persons trafficked. If the number is difficult or impossible to obtain, then where did
the “estimate” come from? If an attempt is made to trace the “estimate” back to the methods used to produce it, it becomes clear that many if not most cases involving such so-called estimates are wild guesses or pure fabrications. Once published, the “estimates” are cited in other publications, and the numbers, whether fabrications or not, take on a credibility of their own.


Expert group on ways and means of improving crime data collection, research and analysis with a view to enhancing the work of the United Nations Office on Drugs and Crime and other relevant international entities

There are major impediments to the development of good-quality crime statistics at the global level. Some of those impediments are related to the type and quality of the information and others are related to expectations. With such challenges and constraints in mind, the Economic and Social Council, on the recommendation of the Commission on Crime Prevention and Criminal Justice, adopted resolution 2005/23, on strengthening reporting on crime. Pursuant to that resolution, the Secretary-General convened in Vienna from 8 to 10 February 2006 an open-ended expert group to consider ways and means of improving crime data collection, research and analysis with a view to enhancing the work of UNODC and other relevant international entities. It was expected that collecting better and more reliable crime data would lead to a better understanding of the underlying problems and help reduce the impact of crime on development.

Each component of the criminal justice system in virtually every country in the world generates records on its activities. Those raw numbers are then transformed into statistics through the collection and organization of the information. That kind of work is still considered a luxury in many countries, especially developing countries, where it is not given sufficient attention and resources, making the sharing of crime and criminal justice data at the international level an even more difficult task [10].

Statistical information may not be needed for each and every aspect of criminal justice work. It may be advisable to focus on a small number of variables and to improve the quality of data by developing accurate definitions, collecting metadata and promoting the sharing of information.
Ironically, the challenges in dealing with international crime statistics have increased because of advancements in information technologies, including the Internet. The daring comparisons that in the past were the exclusive domain of expert statisticians are now just a mouse click away. Dedicated websites proudly provide international crime data that can feed interactive tools producing attractive charts and maps. It has become very difficult to monitor the content and the quality of the information being disseminated, which may have a remarkable impact on citizens and policymakers.

At its meeting held in Vienna in February 2006, the expert group started by analysing the current United Nations data collection tool: the questionnaire for the United Nations Survey. The format of the questionnaire had been agreed upon by experts who had come together in Buenos Aires in 1997, at the time of the Sixth Survey, and had been subsequently used, with minor changes, for the Seventh Survey, the Eighth Survey and the Ninth Survey. Through the questionnaire, respondents were requested to provide primarily statistical information on the main components of the criminal justice system (police, prosecution, courts and penal institutions) for the period covered by the survey.

At the same time, the expert group looked at other methods of measuring organized crime, corruption and trafficking in persons, as well as at victim surveys.

The recommendations of the expert group, contained in its report [11], are summarized below.

**Questionnaire used for the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems**

The expert group agreed that the questionnaire used for the United Nations Survey should be revised by:

- Reducing its length
- Collecting data on the context and metadata
- Identifying the main issues to be covered
- Improving and clarifying definitions
It also agreed that expert consultations would be required to redesign the questionnaire. (These could include informal meetings on specific issues.)

The expert group also agreed that efforts should be made to improve the response rate to the United Nations Survey and to establish a more effective procedure for reaching the appropriate provider of information.

Also, a core annual version of the questionnaire for the United Nations Survey could be developed and topics for additional modules, to be distributed as supplements, could be identified. Further efforts should be made in interactive checking of data quality, and a study should be carried out to assess the extent to which the data are used by different users.

**Victim surveys**

The expert group agreed that victim surveys should be further promoted also among businesses and certain target groups (such as women), and that information should be gathered on the methodology adopted in all countries for conducting surveys.

**Measurement of non-conventional crime**

The expert group agreed that qualitative and quantitative measures on organized crime and corruption should be developed and that the scope of the following concepts should be defined for the purpose of collecting data: organized crime, trafficking in persons, smuggling of migrants and corruption.

**Analysis**

The expert group agreed that data collection and research should be promoted in order:

- To establish estimates, magnitude and trends of crime
- To assess risks and forecast trends
- To monitor trends in criminal justice operations and output
It also agreed that the United Nations should aim at combining findings based on statistics, victim surveys and relevant data on transnational organized crime and corruption.

**Capacity-building**

The expert group agreed that the United Nations should:

- Build the capacity of States to produce, collect and analyse data on crime and criminal justice
- Coordinate the provision of assistance to Member States for that purpose
- Act as repository of methodologies for data collection, analysis and dissemination (best practices)
- Develop guidelines and promote the use of the *Manual for the Development of a System of Criminal Justice Statistics* [12]
- Act as repository of information on victim surveys (in terms of the methodologies used, data collected, analyses carried out and dissemination)

**Inter-agency collaboration**

The expert group agreed that UNODC should collaborate with other United Nations entities, intergovernmental organizations and research institutions.

**Conclusions and way forward for the United Nations Office on Drugs and Crime**

In the strategy for the period 2008-2011 for the United Nations Office on Drugs and Crime (Economic and Social Council resolution 2007/12, annex), policy and trend analysis was identified as one of the three themes on which UNODC would concentrate, based on the principle that effective policy must be based on accurate information. In the strategy it was also stated that policy and trend analysis was essential to measuring trends, highlighting
problems, learning lessons and evaluating effectiveness. As a result, better data and improved national capacity to collect data were needed to support and enhance the international community’s responses to crime and illicit drugs.

In order to address the recommendations of the open-ended expert group on ways and means of improving crime data collection, research and analysis, UNODC has undertaken several initiatives, including a revision of the questionnaire used for the Tenth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems, conducted in 2007, based on the specific suggestions made with regard to the different criminal justice components. As regards police data, discussions were held between UNODC and INTERPOL during a meeting of experts on international crime data held in New York in February 2007, resulting in the inclusion in the United Nations Survey of items previously covered by the INTERPOL data collection instrument, for which a long data series is available.

Data on trafficking in persons, the smuggling of migrants, corruption and organized crime were collected starting with the Tenth Survey, using tentative definitions suggested by the Convention against Corruption and the Organized Crime Convention and the Protocols thereto.

The time is ripe for collecting better crime data, as witnessed by several initiatives at the international level. Crime indicators are in high demand. In the action plan of the European Union for developing a comprehensive and coherent European Union strategy to measure crime and criminal justice [13], approved in August 2006 as part of the strategy to implement the Hague programme on strengthening freedom, security and justice in the European Union in order, inter alia, to establish European instruments for collecting, analysing and comparing information on crime and victimization and their respective trends in the member States [14], efficient coordination with UNODC is identified as an objective to be achieved through reciprocal invitations to relevant meetings and bilateral contacts. Such collaboration is resulting in enhanced coordination with the Statistical Office of the European Communities (EUROSTAT) and other European Union bodies involved in the collection of crime statistics and in initiatives such as:

- A working group on crime statistics that has been established at EUROSTAT: member States of the European Union and the European Free Trade Association have appointed experts in each country to act as focal points for crime statistics. UNODC is ensuring that the members of the working group are involved in the development of the United Nations survey questionnaire and in the compilation of responses to that questionnaire.
- The European Sourcebook of Crime and Criminal Justice Statistics: UNODC has consulted with experts working on the Sourcebook in order to align some of the crime-related definitions used in the United Nations Survey and to avoid collecting the same data twice.

- Cooperation between UNODC and the Economic Commission for Europe on the development of a manual on victim surveys, including a core questionnaire: UNODC is contributing to the drafting of various parts of the manual and will ensure that the core questionnaire is used in its crime victim surveys (for example within the framework of its Data for Africa initiative).

- European Union initiatives, including the project on developing a European Union statistical apparatus for measuring organized crime (Project EUSTOC) and the project on improving knowledge on organized crime to develop a common European approach (Project IKOC).

Other initiatives at the international level include the development of consistent crime and victimization modules in regional barometers (for example, the Eurobarometer and the Afrobarometer) and the organized crime and threat assessment reports produced by several Governments and international organizations.

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MEASURING ORGANIZED CRIME: AN INTERNATIONAL PERSPECTIVE
By Ernesto Ugo Savona*

Abstract
The present article, the first of a series of three articles by the same author that appear in the present issue, contains a review of current approaches to the measurement of organized crime with a focus on key global and national studies. The author introduces the principles behind the measurement of organized crime from an international perspective. International comparisons of the risk of organized crime can assist policymakers in combating that phenomenon.

INTRODUCTION

If measuring and comparing “volume crime” at the international level is notoriously difficult, measuring organized crime is even more difficult, especially because the concept is so changeable. In trying to assess the extent of organized crime in a given country, region, or city, it is important to identify what information is needed, whether it is information on the number of organized criminal groups, the number of crimes or both. With regard to the groups, it is important to define what it is that makes them “organized”. And, with regard to the number of crimes committed by organized criminal groups, it is important to distinguish such crimes from those committed by individual offenders.

These are some of the main questions that surround the issue of the measurement of organized crime. The present article contributes to the debate on measuring such crime by analyzing the concept of risk, suggesting that the usefulness of the measurement process lies in the possibility of assessing the risk posed by organized crime in order to better manage resources for preventing it. The concept of risk implies knowledge of how crime is organized, how organized criminal groups operate in illegal markets and how organized crime infiltrates legitimate businesses.

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Organized crime risk

While different definitions of risk exist, in this article the definition used in the world of business is applied to social science research. The concept of (organized) crime risk has two main components. It can be defined as the result of the probability (threat) that an (organized) criminal act will occur and of its impact or harm (Organized crime risk = probability of an organized criminal act \times its impact). Threat and impact should be measured as two separate categories and may be kept separate or combined in a synthetic index at a later stage. It may be the case, for example, that a company has a 20 per cent risk of suffering two separate incidents of fraud at an average cost of 2,000 euros each. The total cost would be €4,000. Another company may have a 40 per cent risk of experiencing 20 incidents of fraud at an average cost of €100 each. The total cost would be €2,000. The question is, which risk (fraud or theft) should be addressed first and how many resources should be allocated to preventing it? On the one hand, multiplying the two elements (probability of occurrence \times impact) produces a synthetic measure of risk that can easily be compared. On the other hand, separating the variables facilitates the choice of which of the two components should be chosen as a priority for management (probability or impact).

Probability is a function of the number of organized criminal acts observed in a particular timeframe in a particular population. It represents the level of activity and characteristics of organized criminal groups and the capacity of law enforcement agencies to prevent organized crime.

Measurements of impact provide information on the relative cost of individual organized criminal acts or of all organized criminal acts in a particular period, for a particular geographical area.

The article in this issue of Forum on Crime and Society entitled “A methodology for measuring the probability that a given organized crime event will occur” deals with probability in further depth. The article entitled “A methodology for measuring the harm caused by organized crime” deals with impact.

It is helpful to measure the risk of organized crime using these two measures because information about risk is essential for the management of organized crime and because the more that is known about the risk of organized crime, the more targeted and focused prevention efforts by international organizations, Governments and law enforcement agencies can be. Given that organized crime covers a large spectrum of activities, it is relevant to assess how many such activities could occur and what kind of harm they could produce.
Carrying out risk analyses may assist in establishing priorities on how to allocate limited resources. Measuring risk is also essential to comparing different realities, for example in different countries and cities.

What has been done to date

Criminological literature presents a variety of models for assessing crime risk, sometimes focusing on organized crime. Highlights from the literature are presented here, with reference to the two analytical components described above: threat (or probability) and harm.

Models for assessing the threat of organized crime

Germany

The *Organized Crime Situation Report 2003* [1], published by the Federal Criminal Police Office of Germany, provides information on the “organized crime potential” of groups of perpetrators. The term “organized crime potential” is calculated using a system of weighted organized crime indicators and is represented on a scale from 1 (very low) to 100 (very high) ([1], p. 19).

Spain

In a 1999 study, F. Reinares and C. Resa (www.nato.int/acad/fellow/97-99/reinares.pdf) addressed the impact of organized crime on democracy and global governance. In their findings, they argued that under some specific circumstances organized crime could pose a direct threat to liberal democracy. The most serious threat posed by organized crime to democratic institutions was through organized criminal activities from outside the political system. Ironically, some of the risks involved in the domestic fight against organized crime were produced from the legislation designed to combat it. According to the authors, the danger of organized crime does not correspond to the traditional threat, in the sense that it sought the complete subversion of power distribution. There had been a shift in the threats to democratic governance throughout the world. Before, they were associated with the extensive accumulation of power, resources and territory. Then, they included the control and production of information.
Ross [2] developed a questionnaire to measure crime threat levels in United States overseas posts in which the probability of crime occurring is measured by taking into account: (a) the criminal environment; (b) perpetrator profiles; and (c) police effectiveness. According to the author, the criminal environment is made up of two factors. The first factor is ambient crime, which is the occurrence of all incidents in a given location. The second factor is the mobility of crime, which is the extent to which criminal elements from other quarters of the city intrude into areas of the city where diplomatic installations and residences are located. Further, the questionnaire looked at police effectiveness, which included both police deterrence/response and training/professionalism variables. The questionnaire is now used to assess threat and risk in the Bureau of Diplomatic Security of the United States Department of State ([2], p. 12).

Other threat assessments define threat in terms of capability and intention. Further, they also envisage countermeasures that would be necessary to thwart a potential attack. For instance, in a 1999 report of the General Accounting Office of the United States, it is argued that a threat analysis “identifies and evaluates each threat on the basis of various factors such as its capability and intent to attack an asset and the likelihood and the severity of the consequences of a successful attack” ([3], p. 6). In a 2001 report [4] the General Accounting Office considers risk management as a process to consider the likelihood that a threat will damage an asset and to identify actions that reduce the risk and mitigate the consequences of an attack. Accordingly, “a threat assessment identifies and evaluates threats based on various factors including capabilities and intentions”, past activities and the potential impact of an event ([4], p. 1).

The purpose of the State of Iowa Money-Laundering Threat Assessment [5], carried out in 2002, was to establish a threat-driven strategy to combat money-laundering, assessing the potential types of criminal activity that might be facilitated by such activity. In order to achieve that goal, the report considers, among other things, data about reported crimes in Iowa from 1997 to 2001. The report selects categories of criminal activity similar to those used by the Financial Crimes Enforcement Network of the Department of the Treasury to classify suspicious activity reports. The criminal activities considered are: bribery, fraud, counterfeiting/forgery, embezzlement, intimidation, extortion/blackmail, robbery, drug-related crimes, pornography, prostitution, gambling and weapon-related crimes ([5], p. 10).
Models for assessing the harm caused by organized crime

Global studies

In a paper entitled “Measuring governance, corruption and State capture: how firms and bureaucrats shape the business environment in transition economies”, Hellman and others [6] investigate the factors that facilitate or impede business investment and development in Central and Eastern Europe and the Commonwealth of Independent States. The authors analyse the results of the 1999 Business Environment and Enterprise Performance Survey (BEEPS), which measures how big of an obstacle organized crime represents to the operation and growth of businesses, focusing on governance, corruption, and State capture as the areas that organized crime is most likely to be able to penetrate. In the BEEPS, firms are also asked to assess how State institutions, physical infrastructure and financial institutions affect their business operations [7]. In Economic Crime Survey 2003 [8], the harm caused to the private sector by organized crime is measured. In 2003, a group of experts convened by the United Nations Office on Drugs and Crime looked at a series of indicators of organized crime to assess the impact of that type of crime on society and to examine the degree to which organized criminal groups were infiltrating legitimate businesses. It concluded that a high level of corruption facilitates organized criminal activities.

National studies

Australia

Walker, attempting to estimate the financial and economic costs of crime in Australia in 1996, concluded that the costs of crime or harm included “not only property losses and/or medical costs incurred during the actual incident and its immediate aftermath, but also costs of long-term and wide-ranging consequences of the incident, the costs of preventive efforts made to reduce the future incidence or severity of such crimes and the costs of the criminal justice system set up to deal with the offenders” ([9], p. 1). Walker separates the financial and economic costs of crime. He defines financial costs as the illegal transfer of purchasing power from victims to offenders and argues that, in the eyes of economists, these do not represent losses to the community. Economic costs, however, are damages that occur when crime causes society to divert time, energy and other resources from more productive purposes ([9], p. 2). Walker concludes that the minimum total cost of crime in Australia is between 11 billion and 13 billion Australian dollars per year, the majority of which is attributed to white-collar crime ([9], p. 6).
In her study, Mayhew [10] estimates the total costs of crime in Australia in 2003. In her estimation, she includes such intangible costs as fear, pain, suffering and lost quality of life ([10], p. 12). Mayhew argues that to understand the full impact of crime it is necessary to estimate the actual number of crimes that occur rather than the number recorded by the police ([10], p. 8), which is why she also uses victimization surveys to estimate the level of crime. She concludes that the cost of crimes total over $A 19 billion in 2003, while the total estimated bill could be as high as $A 32 billion. Mayhew elaborates on previous conclusions by further dividing the costs of crime into three categories: the costs in anticipation of crime; the costs incurred as a consequence of crime; and the costs in response to crime ([10], p. 7).

Canada

Brantingham and Easton [11] measure the costs of crime in Canada by separating those costs into two major categories: the cost arising from the physical and psychological distress caused by criminal acts, which, they argue, is almost impossible to measure; and the amount of money spent on the police, the courts and legal professionals, which the authors believe is much easier to quantify and calculate. The methodology used measures losses based on the direct monetary costs attributable to some specific crimes, including:

- The direct cost of victimization
- The cost of private security and public policing
- The cost of the courts
- The cost of correctional institutions

These costs were further divided according to the category of the offence committed and the costs of punishing and preventing a particular crime. In conclusion, Brantingham and Easton estimate the total cost of crime in Canada in 1993 to have been 42.4 billion Canadian dollars ([11], pp. 23-35).

In 1998, Porteous conducted a study on the impact of activities related to organized crime in Canada, focusing on the scope and impact of key activities that organized criminals participated in and helped perpetuate [12]. Those activities included: money-laundering, dealing in illicit drugs, criminal acts against the environment, trafficking in selected contraband, economic criminal acts, trafficking in migrants, dealing in counterfeit products and motor vehicle theft. The impacts were of an economic and commercial, socio-political, violence generation, health and safety and environmental nature ([12],
Porteous concludes that organized crime in Canada was pervasive and that it was not limited to drugs-related and mafia-type incidents, and that the illicit drug market had the greatest impact of all the illicit markets in Canada. However, he cautioned that organized criminal activities were varied and often hard to quantify, so environmental and economic crimes should not be ignored ([12], p. 21).

Finally, Richter-White [13] conducted a study in Canada to assess the direct and indirect impact of organized crime on youth. The study looks at youth as both offenders and victims, and was different from Porteous’s study in that it focused on specific segments of the population, in particular youth, in order to determine impact. It looked at many variables, including drug and alcohol use, gambling and gang affiliation, concluding that one of the major impacts organized crime had on youth was their recruitment into criminal activity” ([13], p. 5).

Germany

Von Lampe [14] examined organized crime in Germany by attempting to link organized criminal networks with certain criminal activities and assessing the impact that those activities had on society. He noted that the effects of organized crime were commonly lumped together in an undifferentiated concept of harm ([14], p. 5). For others, such as the Queensland Crime Commission and the Queensland Police Service of Australia ([15], p. 31), harm encompassed economic, emotional, physical, intellectual and political damage. However, von Lampe’s model showed a distinction between the impact on society, in terms of material and immaterial damages, and the specific effects of manipulating institutional decision-making processes ([14], p. 5). Von Lampe also stated that there were two kinds of harm (the infliction of damage and the manipulation of institutional decisions), but that they are not necessarily correlated ([14], p. 5). Von Lampe concluded that no overall trends were discernable regarding the nature and extent of organized crime ([14], pp. 25-26). Therefore, it is difficult to draw any definite conclusions about the impact that organized crime has on society.

Italy

The 1992 study on the economic burden of illegal activities carried out by the Centro Studi Investimenti Sociali [16] assessed the economic dimensions and turnover of criminal activities by considering organized criminal groups in the same way as one would assess a private company. The study estimated the turnover of organized crime starting from single criminal activities (offences) and using a multiplier representing the proportion of total crimes considered
not to have been committed by organized criminal groups. Therefore, the multiplier represented the ratio between the part of the criminal activity that was in the hands of organized crime and the part that was not [17]. The study took into account data from criminal proceedings and different types of property crimes, including theft, robbery, forgery, extortion, kidnapping, fraud, usury, money-laundering, corruption, illegal production of and trafficking in drugs, prostitution, illegal gambling, trafficking in weapons and smuggling of goods.

In a 1993 study, Rey [18] examined illegal activities in order to estimate the varieties of existing crimes, their concrete dimension and the impact that the illegal economy had on Italian national accounts. The author focused on two specific problems in particular:

- How to determine the number of workers employed in illegal activities
- How to determine the actual turnover of those activities

The author stressed that, in examining the number of workers employed in illegal activities, it was necessary to consider the typical Italian feature of *doppio lavoro* (double work), in which a worker was employed in more than one activity at the same time, sometimes even being employed in both legal and illegal activities. In order to determine the effective turnover of illegal activities, the actual time spent by the worker to carry out each activity needed to be taken into account. The author argued that there was an absence of precise indicators about quantities produced, it was difficult to know the costs, the role played by violence as a means of business administration was important and there were interactions between different and separate illegal activities.

Quantification is based upon several indicators:

- The number of crimes reported to the judicial authorities
- The number of persons involved in each illegal activity
- The economic value of the crime

**Prerequisites for measuring threat and harm**

There are different ways of measuring threat. From a comparative perspective, the methodology adopted should take into account at least two main issues: the minimum requirements for existing data sources to enable international comparison; and the user-friendliness of data sources. The main choices should take into account these two constraints.
There are also two prerequisites. The first requirement for measuring the probability that organized crime may occur is the existence, at the national level, of a separate system for the collection of data on organized crime. According to a recent report produced for the European Commission [19], such a data collection system exists in 9 of the original 15 member States of the European Union. Without such a separate data collection system, data necessary for applying this methodology cannot be distinguished from general crime data.

The second necessary requirement for making data available for comparative purposes (i.e. so as to reasonably enable a comparison of levels of probability and harm of specific organized crime activities across countries) is the existence of common definitions of behaviour patterns related to organized crime whose risk is to be assessed and of common criteria for the collection of related data.

The two papers that follow set the basis for such harmonization by proposing, for each of the identified indicators of organized crime (probability and harm), guidelines for promoting the uniform collection of data.

**United States of America**

Many studies conducted in the United States have focused specifically on the impact of or the harm caused by crime, often measured in terms of the cost of crime to society. One of the first studies aimed at measuring the harm caused by organized crime to the United States economy was conducted in 1986. It estimated the income generated through the activities of criminal organizations in the United States ([20], p. 4) and the impact of sustained higher price levels and continued underpayment of taxes on the United States economy ([21], p. 487). The study determined the total amount of income generated by organized crime by looking at the number of persons engaged in organized criminal activities and the average income of persons involved in criminal organizations. Fishman, Rodenrys and Schink [21] elaborated on and applied the method used in the 1986 study to assess the magnitude of organized crime also by measuring its income. They performed an impact assessment based on the income generated by organized criminal groups and suggested that there were two approaches to measuring income:

- Estimating gross receipts (sales) minus the cost of purchased inputs
- Measuring the income generated by criminal organizations as the product of the number of persons engaged in organized crime and of the average annual income of persons involved in criminal organizations
They further evaluated different income estimates for various types of criminal activity and found that the total income generated through organized crime in 1986 was over 75.3 billion United States dollars ([21], pp. 478-479). Further studies have expanded the idea of costs of crime from purely economic costs to include costs such as social and societal costs. One such study is that of Michael Maltz, entitled *Measuring the Effectiveness of Organized Crime Control Efforts* [22]. It represents one of the first quantitative and critical approaches to the evaluation of organized crime control efforts and contains a conceptual framework for understanding and measuring the harm caused by organized crime. Maltz defines harm as “the general term used to describe direct and indirect and tangible and intangible effects”. The study provides a description of five typologies of harm ([22], p. 41) and the difficulties encountered in measuring them. The five typologies of harm are:

- Physical harm (e.g. murders, physical injuries)
- Economic harm (e.g. property losses caused by theft)
- Psychological harm (e.g. intimidation of witnesses)
- Community harm (e.g. impairment of the business community by extortion/protection racket)
- Societal harm (e.g. corruption of public officials)

The author further describes why the nature of certain activities requires the use of criminal sanctions and why some fall under the label of “organized” crime. He concludes that there are many difficulties in identifying harm owing to the fact that “some activities are labelled as crimes because they generate harm (e.g. arson), while other activities generate harm because they are labelled as crimes (e.g. gambling)” ([22], p. 47). According to the author, both types of activities need to be addressed by law enforcement agencies but different methods need to be employed.

**Conclusion**

The methodology proposed in this article, and the two that follow, for assessing the risk of organized crime at the international level could be further explored and refined, including through adaptation to the different data sources on organized crime in existence at the international level. The greater the number of countries that implement the United Nations Convention
against Transnational Organized Crime [23], the higher the quality of data that will be produced and the more effective the data comparisons between countries will be. It is hoped that the development of data collection methodologies will be able to influence the adoption of harmonized data collection procedures. That depends, however, on policymakers’ and practitioners’ interest in assessing the risk of organized crime at the international level. Wherever policymakers promote the development of better data and analysis, they must also support the debate on the development of methodologies and appropriate data collection techniques.

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A METHODOLOGY FOR MEASURING THE PROBABILITY THAT A GIVEN ORGANIZED CRIME EVENT WILL OCCUR

By Ernesto Ugo Savona*

Abstract
The present article is the second in a series of three articles by the same author in this issue of Forum on Crime and Society. A methodology for measuring the probability of a given organized crime event occurring is presented in this article. The probability that organized crime will occur is one of two elements used to assess the overall risk that damage will be caused by organized crime. (The other element is the harm or cost of organized crime.)

INTRODUCTION

The methodology used in this article to measure probability is based on the methodological framework adopted for the project entitled “Improving Knowledge on Organized Crime” (Project IKOC) but has been adapted and simplified for comparative purposes.

Indicators of the probability that an organized crime event will take place may be grouped in two categories: those regarding the characteristics of organized criminal groups involved in a given crime; and those regarding the likelihood of a given crime being detected by law enforcement.

For each of the categories, the assumption linking the indicator to organized crime probability and the literature supporting the assumption are described below. Furthermore, modalities are given for the measurement of the indicator. Finally, some suggestions are made for promoting the uniform collection of data on each indicator in various countries in order to enhance the comparability of the findings. Given that this methodology was conceived for use in the European Union, the literature supporting the relevance of indicators is mainly based on European experiences.

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Characteristics of organized criminal groups

The likelihood that a given crime will occur is linked to an evaluation of the seriousness and level of organization of the criminal groups involved. The more dangerous and well equipped the criminal groups involved in a crime are, the more likely the crime will occur [1, 2]. Indicators that may fall in this category are set out below.

Links and cooperation between organized criminal groups

**Assumption linking the indicator to the probability of organized crime occurring**

The higher the level of cooperation between organized criminal groups, the higher the probability that organized crime will occur, especially at the international level.

**Supporting literature**

The international dimension of organized crime can be defined as international cooperation, either between non-indigenous* groups or between an indigenous** group and a non-indigenous group, or as international operations carried out directly by an organized criminal group [3].

In 2003, the European Police Office (Europol) reported a high degree of international cooperation between organized criminal groups, especially within European Union member States and accession States, as well as in countries such as Canada, China, Colombia, Iran (Islamic Republic of), Morocco, Nigeria, Pakistan, Suriname, Turkey, the United States of America and Viet Nam) [4]. For example, a common pattern in the European Union is for both indigenous and non-indigenous criminal groups to be active in trafficking in persons. This sometimes means that indigenous groups form a type of joint venture with non-indigenous groups. The initial tasks of contacting, recruiting and facilitating transport fall to non-indigenous groups, while the final phases of the process (which include transport, accommodation and

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*Within the scope of this categorization, a non-indigenous organized criminal group is a criminal group dominated by members not having a nationality, origin or ethnicity of any European Union member State.

**Within the scope of this categorization, an indigenous criminal group is a criminal group dominated by members having the nationality, origin and ethnicity of one or more member States.
engaging in sexual exploitation for profit) are handled by indigenous criminal groups within the European Union [4-7]. For example, in Poland it was noted that organized criminal groups exploited their international connections to traffic in human beings and smuggle migrants [8].

In relation to drug trafficking, in 2003 investigations into criminal associations identified in Austria revealed links to numerous other countries, both in Europe and in other regions, affected by cocaine trafficking [9]. There is also evidence that the crime of currency counterfeiting is becoming increasingly international in character, at times linking many continents together in criminal enterprises [10]. In a 2004 report on organized crime in Sweden, it was mentioned that the main common factor within advanced organized crime tended to be the need for networks to function efficiently as groups of individuals rather than being driven by a common geographical or ethnic background among network members [11].

According to Europol [3], the situation is even more complex when a non-indigenous organized criminal group acts in agreement with more established indigenous organized criminal groups. For example, criminal groups in the Italian region of Apulia have been cooperating closely with Albanian criminals since the early 1990s, smuggling drugs, migrants and arms into Italy. To run their businesses more successfully and avoid prosecution by Italian authorities, several Apulian gangsters have also travelled to Albania and the neighbouring country of Montenegro ([8], p. 545).

In conclusion, the greatest threat is posed when an indigenous criminal group resorts to international operations through cooperation with non-indigenous groups. This could be linked to troubling developments in the criminal environment where certain organized criminal groups are able to exploit noticeable communities of reference or have the capability to shield themselves behind their international dimension [3].

**Measuring the indicator**

The amount of links and the degree of cooperation between organized criminal groups can be measured by looking at the proportion of organized crime offences of a given type involving cooperation between two or more groups (between both non-indigenous groups and between indigenous and non-indigenous groups) reported each year. Although the number of offences that have resulted in convictions may provide a more reliable picture of crime (many reported crimes result in the acquittal of the defendant), it has been decided to rely upon the number of reported offences because it may take
many years to obtain a conviction, with the result that the use of sentencing data would make it impossible to link the level of probability of a given organized crime event in a given country to a given year.

The following scale, which ranges from 1 (no cooperation) to 5 (high level of cooperation), might be used to express results for this indicator:

<table>
<thead>
<tr>
<th>Level of cooperation</th>
<th>Proportion of organized crime offences reported each year involving cooperation between two or more organized criminal groups (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0-20</td>
</tr>
<tr>
<td>2</td>
<td>21-40</td>
</tr>
<tr>
<td>3</td>
<td>41-60</td>
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<tr>
<td>4</td>
<td>61-80</td>
</tr>
<tr>
<td>5</td>
<td>81-100</td>
</tr>
</tbody>
</table>

Geographical distribution of organized criminal groups

**Assumption linking the indicator to the probability of organized crime occurring**

The wider the geographical distribution of the organized criminal groups involved in a given crime, the higher the probability that an organized crime event will occur, especially in a country in the geographical range.

**Supporting literature**

This indicator could be considered one of the attributes of an organized criminal group [5, 12]. Criminal organizations using well-tested routes and with personnel located in different countries along those routes may use their knowledge and experience to seize new market opportunities and engage in new criminal activities. Research suggests that organized criminal groups in Asia in particular use the same routes, means and methods for smuggling people and drugs [13, 14]. Colombian criminal groups are also said to rely heavily on communities of Colombians living outside of their home country to facilitate trafficking in cocaine [15].

Furthermore, criminal organizations that engage in the smuggling of migrants often plan the systematic exploitation of immigrants in the destination country
[13, 14]. Poland, with Germany to the west and Belarus, Lithuania, the Russian Federation and Ukraine to the east, is both a destination country and a transit country for thousands of undocumented migrants and victims of trafficking in persons from the former Soviet Union, Asia and Africa ([8], p. 481).

In conclusion, whether they are transit or destination countries, there is a higher probability of organized crime occurring in countries along a trafficking route than in other countries. However, this indicator alone does not provide information on the actual level of probability that a given crime will occur in a given country (whether it is a country of origin, a country of transit or a country of destination). Rather, the indicator must also be combined with other indicators, such as the size of the market (in terms of demand and supply) and law enforcement efficiency (i.e. the likelihood of crime being detected by law enforcement, measured through data on seizures), in each country [16]. Such indicators are examined in greater detail below. This is because, all things being equal, reduced law enforcement success against an organized criminal activity in a given country may lead to increased trafficking flows (and seizures) in its neighbouring countries. The neighbouring countries would, in turn, be equally or more likely than before to identify that particular country as a country of origin or a transit country.

**Measuring the indicator**

The extent of the geographical distribution of organized criminal groups involved in a given crime can be measured by looking at the proportion of reported organized crime offences of a given type reported each year involving more than one country (both European Union member States and non-European Union member States).

As with cooperation between organized criminal groups, a scale ranging from 1 (limited degree of geographical distribution) to 5 (high degree of geographical distribution) might be employed to express indicator results:

<table>
<thead>
<tr>
<th>Extent of geographical distribution</th>
<th>Proportion of organized crime offences reported each year involving more than one country (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0-20</td>
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<td>2</td>
<td>21-40</td>
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<td>3</td>
<td>41-60</td>
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<td>4</td>
<td>61-80</td>
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<tr>
<td>5</td>
<td>81-100</td>
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</tbody>
</table>
Use of expert knowledge by organized criminal groups

Assumption linking the indicator to the probability of organized crime occurring

The greater the specialization or use of expert knowledge by organized criminal groups, the greater their capacity to perpetrate the crime and the higher the probability that such crime will occur.

Supporting literature

Organized criminal groups are becoming increasingly professional and reliant on expert knowledge [12]. While some organized criminal groups may employ specialized vehicles and individuals (such as trucks and drivers), others offer specialized services to other organized criminal groups that are unable or reluctant to carry out certain tasks themselves. Certain specialized services are in high demand and are crucial to the smooth running of organized criminal operations. These include the facilitation of contacts between buyers and sellers and the recruitment of immigration agents and sub-agents willing to identify routes, arrange transport, provide documentation and/or handle the needs of migrants on arrival in the destination country [3]. Thus, the term “specialization”, when applied to organized criminal groups, could mean the following:

• The acquisition of specialized functions to improve organized crime activities, increase professionalism and decrease the chances of detection and prosecution by law enforcement agencies

• The provision of specialized services to more than one organized criminal group [3]

Organized criminal groups often need people with specialized skills or know-how to facilitate their operations, such as chemists, accountants, financial experts, information technology specialists, people with access to particular goods and services (such as firearms or false passports) and people willing to carry out specific tasks such as murder or debt collection. As a result, organized criminal groups are able to quickly identify and adapt to market changes [17-19].* The specialists may be either low-level, expendable individuals.

*Major international criminal groups involved in drug smuggling and other activities use transportation specialists and legal experts to research commercial flows and to learn about tariff laws and administrative procedures in the world’s major commercial ports. With such information, they are able to exploit international air, sea and land shipping routes to move drugs, arms, other contraband goods, irregular migrants and even money past customs and law enforcement officers. International criminal organizations use financial experts (some trained in the world’s best business schools) to identify new money-laundering mechanisms, manage investments and establish fronts that can be used as covers for smuggling and fraud schemes. This has allowed criminal groups to increasingly diversify their financial operations on a global scale [19].
A methodology for measuring the probability that a given organized crime event will occur

used periodically or on a one-off basis or professional criminals offering their services on a continuous basis [3, 17, 20]. For example, organized criminals involved in both smuggling and trafficking conspire with experts who can assist them, including those in the legal profession ([20], p. 39). Legal expertise is used effectively by international criminals to protect themselves from investigations and prosecutions. Lawyers in the pay of organized criminal groups have used detailed knowledge of the law to manipulate the judicial system and to influence law enforcement legislation to protect criminal interests in countries around the world [19]. Lawyers, legal advisers, notaries, auditors, accountants and tax consultants may facilitate the activities of organized criminal groups by providing legal and financial expertise. It is difficult to eliminate the contact between these legal professions and criminals due to the indispensable functions performed by certain specialized persons or groups ([21], p. 286; [8], p. 25). In many cases, professionals are not aware that their services are being used for criminal purposes. Despite this, however, there are cases of culpable involvement.*

An increasing number of criminal networks have made their core business the provision of specialized services to more than one organized criminal group. They facilitate the activities of a range of organized criminal groups with high-quality services otherwise unavailable because, for instance, of high development or investment costs. The availability of specialized services in a particular niche area can provide an organized criminal group with the tools necessary to expand its activities into other areas of crime that would benefit from such skills. For instance, organized criminal groups specialized in the forgery of documents are also sometimes heavily involved in illegal immigration, trafficking in human beings and money counterfeiting [3]. Groups or individuals with particularly useful skills offer their services to a number of different organized criminal groups, thereby enhancing the expertise and sophistication of each group [12]. An analysis of 80 cases operating in the Netherlands revealed that many of the same individuals or groups often emerged as the main nodes in networks, owing to the consistent use of their illegal services by several organized criminal groups [24]. In the study, the names of the same facilitators appeared repeatedly in different cases ([8], p. 308). For instance, although most of the largest importers of heroin and cocaine tended to concentrate on one of the two drugs, many drug traffickers appeared largely unconcerned about the different types of drugs that they handled and, by inference, the different penalties faced should they be caught. Traffickers frequently moved commodities other than drugs such as cocaine

*For more information regarding the forms of culpable involvement of legal professionals, see Fijnaut and others [22] and Nelen and others [23].
and heroin and often moved multi-commodity shipments from the country of origin to the country of destination. Shipments of more than one drug were often found where specialist transporters were moving drugs for a number of customers [3]. Thus, the services of such providers were crucial to several different organized criminal groups ([8], p. 308).

One study on the situation in Poland identified specialization in particular crimes as typical of more sophisticated organized criminal groups ([25], p. 59; [8], p. 476). For example, motor vehicles were usually stolen by criminal groups led by someone who was well informed about the rules governing the importation of and trade in motor vehicles in a given country, including the requirements concerning legal documentation for imported vehicles. Other members of such groups included the thieves, the transporters and those who arranged for the forged documentation for the vehicles. There was a considerable increase in the level of professionalism among the perpetrators of that kind of car theft. Data provided by law enforcement agencies working on drug cases also indicated an increased level of professionalism in the activity of manufacturers of amphetamines in Poland. Criminal groups were no longer satisfied with creating just one laboratory: they were creating a whole network of legal laboratories. The laboratories operated around-the-clock since there was constant demand for the product and a reliable network of distributors. Data on criminal cases also indicated that amphetamine producers, who could be described as criminal entrepreneurs, managed their own distribution networks, consisting of several couriers selling the drugs in Poland and smuggling them into other countries (especially Germany, Sweden and the United Kingdom of Great Britain and Northern Ireland). They apparently managed the production of drugs in a very professional way, treating the activity as if it were just like any other form of economic activity. In one case, an entrepreneur who organized the manufacture of amphetamines was using professional help and equipment and had even examined the literature on the subject. In another case, police raided in September 2002 an illegal laboratory where amphetamine sulphate was being manufactured. In that case, five individuals were apprehended, one of whom was the owner of a large company specialized in building highways and shopping malls. As with the others, he was considered to be a respectable businessman in his community. In fact, he was also in charge of a drug trafficking scheme that benefited from a large network of domestic and foreign distributors ([8], p. 483).

Organized criminal groups will continue to exploit new market opportunities. Investigations and seizure statistics point to the fact that a variety of so-called “designer” drugs and medicines are being produced by circumventing legislation. As production increases and spreads across the European Union,
legitimate companies are likely to be exploited for the acquisition and subsequent criminal use of chemicals (both those that are under international control and those that are not), industrial equipment, special glassware and other materials [3].

**Measuring the indicator**

The level of specialization and use of expert knowledge by organized criminal groups involved in a given crime can be measured by looking at the proportion of organized crime offences reported per year involving one or more specialists: chemists, accountants, financial experts, information technology specialists etc. who are recruited as part of the group on a permanent basis or who cooperate with its members occasionally, as “external consultants” (and who might also be linked to other criminal groups).

A scale ranging from 1 (no specialization or use of expert knowledge at all) to 5 (high level of specialization and use of expert knowledge) might be employed to express indicator results:

<table>
<thead>
<tr>
<th>Degree to which specialists are involved</th>
<th>Proportion of organized crime offences reported per year involving one or more specialists (percentage)</th>
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<tr>
<td>1</td>
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<td>81-100</td>
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**Power that organized criminal groups have to intimidate by using or threatening to use violence**

**Assumption linking the indicator to the probability of organized crime occurring**

The more power that organized criminal groups have to intimidate by using or threatening to use violence, the more powerful and dangerous they become and the higher the probability that organized crime will occur.
Supporting literature

Organized criminal groups may use violence for several reasons: as an offensive or defensive tactic, as part of a conscious strategy or as a reaction to another event. The violence used might be extreme or limited and it might take place in or out of the public eye [3].

The violence (actual or threatened) might be aimed in one of three directions. Intra-group violence is perpetrated by some members of a criminal group against other members of the group in order to maintain discipline and submission. Intergroup violence is perpetrated by one criminal group against another criminal group and typically arises from territorial or cultural rivalry. Extra-group violence is perpetrated by criminal groups against non-criminals and is therefore typical of criminal activity directed at persons or property [3-5, 10].

According to the results of one study, these patterns were not maintained in all of the national reports where the use of violence was indicated [5]. In addition, there was little use of violence by groups in three member States.*

Intra-group violence in particular was used by groups in many countries to maintain discipline. In one State, approximately one fifth of groups resorted to such violence while in another State all of the main groups did. In one country, where several groups of foreign origin (Turkish, South American, Iranian and Chinese) were operating, the use of violence as a means of ensuring internal discipline was seen as more important than the use of violence directed at others, whether inside or outside the criminal world. The same was found in the Netherlands, where at least one of the criminal groups studied used intra-group violence to a greater extent than it used intergroup violence. Such violence is also used by organized criminal groups of domestic origin. In Italy, for example, more than 250 persons were killed in 1995 by the main criminal organizations (the Mafia, the Camorra, the ’Ndrangheta and organizations from Apulia). Many of the deaths were the result of intra-group violence used to punish behaviour harmful to the organization. The removal of key group members as a result of successful law enforcement operations led to internal conflict and caused a number of deaths.

*The Council of Europe, in its Organized Crime Situation Report 2002, briefly analysed the use of violence within organized criminal groups in connection with the structure and ethnic background of such groups. It found that the more sophisticated the structure of the group, the less violence was used, as in the case of organized criminal groups in Estonia. It also found that the extent to which violence was used sometimes depended on the ethnic background of the group’s members.
In yet another study, it was found that 37 per cent of organized criminal groups had used violence as a means of enforcing internal discipline during the period 1997-1999 [26].

The use of inter-group violence can be found throughout the European Union, and it seems that the calculated use of violence helps these groups to survive. However, extreme or spontaneous violence is more likely to be counterproductive, as it attracts the attention of law enforcement agencies, distracts the group from its core business activities and may result in group members being arrested or killed and assets lost. It is more likely that criminal groups will seek collaboration rather than engage in violent competition [3].

The use of violence against persons or companies not belonging to the criminal world (extra-group violence) is sometimes an intrinsic feature of crimes such as extortion, exploitation of human beings and robbery. Other activities, such as the facilitation of illegal immigration and trafficking in human beings, can take place without using extreme violence, but in these cases, too, the use of violence is endemic. Based on reputation or mere appearance, the threat of violence can also be exercised, especially against individuals. A clear distinction must be made between the use of violence as an intrinsic part of a specific crime and the planned use of violence by well-established organized criminal groups to hinder law enforcement efforts. To consider the organized criminal group or groups from certain countries to be more threatening than others simply because they use violence as part of their preferred criminal activity is problematic. However, certain areas are more violent than others, as are certain organized criminal groups or gangs, perhaps because some organizations have fostered a violent group culture [3].

According to some researchers ([8], p. 234) the use of violence has long been a characteristic feature of any form of organized crime. The gangs of the seventeenth and eighteenth centuries were feared because they frequently used violence, not only in order to perpetrate their crimes; they also used violence against those who were willing to help the authorities to fight them. It was only when gangs used exceptional levels of violence that victims and others were prepared to collaborate with the authorities, for example by providing information. Whether their cooperation proved successful obviously also depended on whether the authorities did or did not make a strong commitment to tackling serious crime. In countries where this took place and where tough criminal justice mechanisms were established, the gang system was substantially repressed.

In any case, recent empirical work on the drug trade in the United Kingdom suggests that violence is relatively rare and should be regarded as a means
of ensuring compliance, principally so that creditors do not default on their debts [27]. However, it has also been acknowledged that illegal markets are not purely economic systems and that many of those featuring in the middle market drug-dealing networks bring with them a reputation for violence [28]. Furthermore, their reputation is often acquired through involvement in non-instrumental criminal arenas. Overt violence, when it does occur, has been described as the result of market dysfunction and instability occurring when competitiveness is threatened by the breakdown of an established system of trust [27]. Little evidence has been found for the so-called theory of the “turf-war”. Kidnapping and torture, which often go unreported, have been regarded as a growing and comparatively recent development that complements the established use of violence and intimidation. These activities have been used to enforce contractual arrangements, in particular in the payment of debt, to intimidate and to reinforce a violent reputation. They have also been used as a form of extortion, to extract funds from rival dealers. The latter development should be regarded as an alternative to robbing individuals with a surfeit of readily available cash who are unable to turn to the police for assistance. However, there is a danger in exaggerating both rationality and instrumentality in illicit drug markets. Such a view might yet again inspire traditional organized crime clichés and lead to underestimation of the flexible, intricate relationships and constantly mutating nature of organized criminal networks. When those relationships are untangled, violence is often exposed as the expression of personal disputes and conflicts, as opposed to structural characteristics and aims. The articulation of a macho status within many of the environments that overlap with illegal markets cannot be ignored, for organized crime is both a social system and an economic system, pervading both commercial and personal lives [8].

To summarize, a major issue related to organized crime is the use of threat, intimidation and violence as enforcement tools. Organized criminal groups use some form of intimidation or physical violence to demonstrate power and maintain internal discipline by preventing disobedience, eliminating competitive groups from the market, collecting debt and facilitating the conduct of the organization’s criminal activities. Intimidation and violence are crucial instruments for resolving conflicts, silencing potential witnesses and eliminating business rivals and law enforcement authorities who interfere with the criminal organization’s operations [13, 29-35]. Nonetheless, extreme or spontaneous violence is more likely to be counterproductive, since it attracts the attention of law enforcement authorities and may increase the willingness of victims and others to collaborate with the authorities by exchanging information for protection. For this reason, to consider certain nationalities as more threatening simply because they have a reputation for using violence as part of their criminal activity is problematic. What does appear to be threatening,
however, is the increased power that organized criminal groups have, within and outside the criminal world, to intimidate through the use and, more often, the threat of violence.

**Measuring the indicator**

The amount of power that organized criminal groups have, within and outside the criminal world, to intimidate through the use or threat of violence* can be measured by looking at the proportion of organized crime offences reported each year involving the use or threat of violence. The term “violence” is used to include all forms of violence, whether physical or psychological, real or threatened.

A scale ranging from 1 (no power to intimidate) to 5 (large amount of power to intimidate) might be employed to express indicator results:

<table>
<thead>
<tr>
<th>Amount of power to intimidate</th>
<th>Proportion of organized crime offences reported each year involving the use or threat of violence, both within and outside the criminal world (percentage)</th>
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<td>1</td>
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**Use of corruption by organized criminal groups**

**Assumption linking the indicator to the probability of organized crime occurring**

The more corruption is used by organized criminal groups in committing a given crime, the greater the probability that the crime will succeed.

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*The term “threat of violence” indicates that the organized criminal groups may not use violence at that time but still have the power to intimidate due to past demonstrations of violence. This is why, in assessing the amount of power that groups have to intimidate, past use of violence should also be considered.
Supporting literature

The corruption of public officials frequently goes hand in hand with organized crime. Individuals involved in serious and profitable illicit activities (whether related to the smuggling of ancient sculptures, nuclear material, drugs or irregular migrants, or prostitution) invariably rely at some point in time on the support of corrupt public officials. Corruption is necessary for organized criminals to operate [4-6, 21, 36, 37]. Therefore, the ability of organized criminal groups to grow depends greatly on the relations they establish with corrupt officials [12, 38]. Most organized criminal groups owe their enormous success in illegal ventures to their success in corrupting public officials [19].

Criminal groups in Europe are known to use influence and engage in corruption in order to lower risks and gain opportunities, thereby ensuring a safe environment for their activities so that they remain undetected and avoid investigation, prosecution and conviction. Organized criminal groups pay bribes to receive preferential treatment from officials who provide a service, whether the officials are required to provide that service or are prohibited from providing it [3]. As McWalters said at the Ninth International Anti-Corruption Conference held in Durban, South Africa, from 9 to 15 October 1999, it does not require a huge depth of intellect by a criminal businessman to realize that he can increase the profitability of his enterprise by corrupting those whose job it is to combat it. The costs of his bribery need not even reduce his profits as he can pass it on to those who utilize his services or buy his product.

Organized criminal groups may try to influence and corrupt individuals at all levels, from low-level officials (e.g. police officers) to high-level politicians and government officials ([8], p. 486; [3]).

A criminal group may attempt to corrupt low-level officials in order to create a safe environment in which to conduct their criminal activities by obtaining false identities and documents, obtaining advance information about police activity, manipulating official records, causing evidence to disappear or ascertaining the identities of jury members. When such relations between organized criminal groups and low-level officials become regular (i.e. systematic), organized criminal groups gain constant access to confidential information that allows them to carry out illegal activities and remain one step ahead of the police [39].

Criminal groups seek to corrupt high-level politicians and government officials for a variety of reasons, including to gain high-level protection for
themselves and their activities, gain insider information about national law enforcement investigations and economic planning and influence legislation or statutory regulations that could affect their interests [19, 39]. For example, since the early 1990s, organized criminal organizations such as Cosa Nostra and the ’Ndrangheta have extracted a growing percentage of their income from entrepreneurial activities that depend on the exercise of regional political domination. They practice systematic extortion in their communities and, through intimidation and collusion with corrupt politicians, they have fought to control the market for public works. Unlike other western forms of organized crime, the danger of Sicilian and Calabrian mafia organizations is not only their involvement in illegal markets but also their willingness to exercise political power and their interest in exercising sovereign control over the people in their communities ([8], p. 277).

In fact, analysis has revealed a very strong connection between organized crime and both low-level and high-level corruption [40]. However, according to Europol, high-level corruption is clearly more threatening to the European Union as a whole, as it often involves large sums of money and is more difficult to combat. A criminal group attempting to corrupt low-level officials to create a safe environment to conduct their criminal activities poses a less serious threat than attempts to influence high-level law enforcement authorities, such as members of the judiciary and politicians. High-level corruption often involves paying money; however, it may also involve exchanging benefits of different kinds, including non-financial benefits, which is more difficult for law enforcement authorities to uncover. For this reason alone, high-level corruption poses a considerable threat to the European Union.

Also important in terms of the probability that an organized criminal event will succeed is the level of intensity of the use of corrupt officials by organized criminal groups. Corruption may appear in many forms and in many levels of intensity. The levels of intensity range from the occasional acceptance of bribes to systemic corruption, in which bribery is the accepted way of doing business and a country’s resources are looted on a large scale. Corruption also manifests itself as a personal and political phenomenon. Corruption becomes increasingly widespread if left unattended, making it harder to address [41]. Organized criminal groups have demonstrated a preference for systemic corruption designed to ensure the preservation of a congenial and low-risk home base and a comfortable environment in host countries. Such a method of operation may be characterized by widespread use of bribery and favours to ensure the malleability of key positions and agencies; political funding to ensure that politicians elected to office will be indebted to the criminal organizations; carefully targeted pay-offs to law enforcement personnel in exchange for intelligence; and the provision of financial incentives to
members of the judiciary to ensure that the penalties for criminal activities are either not imposed or are modest. Indeed, systemic corruption is one of the ways in which criminal organizations develop a symbiotic relationship with the State (i.e. State capture). Obstruction of justice is an offence committed by officials who seek to hide or cover up such illegal activities by misdirecting investigations or destroying evidence. Such misconduct is often linked to the operation of illegal enterprises and markets, and is usually considered a form of organized crime. The best-organized crimes are perpetrated discreetly, without risking scandals or public attention, and with the collaboration of officials. Whenever there is the suspicion of serious drug trafficking, arms trafficking or other smuggling operations on a grand scale, the collusion and illicit enrichment of some officials are to be expected. In dealing with such practices, legal tools used against organized criminal groups, such as the Racketeer Influenced and Corrupt Organizations Act in the United States, may prove useful in the punishment of corrupt officials [37, 42].

Infiltration of the public sector by organized criminal groups can be divided into five categories, which differ in the level of intensity in the use of the corrupt officials by the organized criminal groups. Each level needs to be addressed by policymakers. The first level of infiltration involves sporadic acts of bribery or abuse of public office at low levels of government by organized criminal groups. The second level involves acts of corruption occurring on a frequent basis, for example by having low-ranking State officials on the payroll of an organized criminal group. The third level occurs when organized crime infiltrates the managerial domain of public agencies in an attempt, for example, to influence the hiring of State personnel in order to favour the operations of criminal groups. The fourth level of infiltration compromises the heads of agencies responsible, directly or indirectly, for fighting organized crime and related activities (e.g. drug law enforcement agencies) or may involve cases of agencies (e.g. customs authorities) providing potential long-term benefits to a criminal group. This fourth level represents an increased perniciousness with long-term negative effects on the capacity of the State to eradicate corruption and organized crime. Finally, the fifth level of infiltration by organized crime encompasses the capture of the State’s policies by criminal groups that are then able to influence law-making, law enforcement and judicial decisions. This fifth type of State infiltration involves high-level officials such as senators, ministers or even presidents of countries usually compromised by organized criminal groups in order to influence policymaking. At the fifth level of infiltration, organized crime is involved in the financing of politicians’ campaigns, in other more common types of crime, such as extortion, and has family links to high-level officials. State capture represents the highest level of corruption in the public sector, one that paves the way for the expansion and consolidation of transnational organized crime [39, 40].
**Measuring the indicator**

The level of corruption used by organized criminal groups involved in a given crime can be measured by looking at the proportion of organized crime offences of a given type reported each year involving the use of corruption. The term “corruption” is to be interpreted broadly to include the occasional acceptance of bribes and systemic corruption.

As in the previous tables, a scale ranging from 1 (no corruption at all) to 5 (high level of corruption) might be employed to express indicator results:

<table>
<thead>
<tr>
<th>Level of corruption</th>
<th>Proportion of organized crime offences reported each year involving corruption (percentage)</th>
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<td>1</td>
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<td>61-80</td>
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<td>5</td>
<td>81-100</td>
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</table>

**Use of legitimate business structures by organized criminal groups**

**Assumption linking the indicator to the probability of organized crime occurring**

The greater the use of legitimate business structures’ by organized criminal groups (e.g. to launder their ill-gotten proceeds or to conceal illicit activity), the more economically powerful these groups become and the greater the probability that organized crime will occur.

**Supporting literature**

The use of commercial structures by organized criminal groups to assist them in their criminal activities has been recognized as a key feature of organized

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The terms “legitimate business structures” and “commercial structures” are used interchangeably to describe enterprises that are officially registered, e.g. legal companies or companies especially established for criminal purposes.
crime and one that occurs throughout the European Union [42-44]. For example, in Belgium, the use of commercial structures serves to facilitate criminal activities or to assist in the establishment of (inter)national money-laundering networks. By mixing legal and illegal activities, the most visible part of the fund flows are concealed and, in this way, organized crime can be offered effective protection [45].

Commercial structures may be used for a variety of reasons by organized criminal groups. They are mainly used to launder illicit proceeds, cover up and facilitate illegal activities, hinder criminal investigations, gain profits in order to finance criminal activities and conduct a legitimate business in an unlawful way [42-44]. The extent to which commercial structures are used may vary considerably in different locations; it may range from 40 per cent to about 80 per cent [5]. This characteristic of organized criminal groups has also been used in the threat assessment model of the Australian Crime Commission [12].

Organized criminal groups do not operate exclusively within the criminal underworld; they also make regular and widespread use of legal businesses to support and facilitate criminal activities. Organized criminal groups employ different methods for controlling and influencing, at varying levels, legal businesses [3]. It is possible to group the use of legitimate business structures by organized crime into three main categories:

- **Existing legal firms.** Several employees cooperate unknowingly and unwillingly with organized criminals by facilitating their illegal endeavours [3, 32].

- **Mixed legal and illegal activity within the company.** Criminals collude with or coerce employees, and sometimes even managers, in perfectly legal and trustworthy companies. Corruption or coercion can also be used to request the hiring of members of the criminal group, who then facilitate the use of that business for illicit purposes [3, 32].

- **Front companies.** These can be located either on- or offshore, and are almost devoid of any real commercial activity [32]. Criminals set up and run the businesses. In many instances, the chosen legal activity is linked to the type of crime that the group is involved in. This is the case of organized criminal groups involved in trafficking, whose front companies typically deal with the importation and exportation or transportation of goods, and of those involved in trafficking in human beings and the facilitation of irregular immigration, who sometimes work as travel agents, employment agents or entrepreneurs. However, if the purpose of the front
A methodology for measuring the probability that a given organized crime event will occur

company is to launder money or give a legal facade to illicit activities, the business of the company might have no relationship at all with the criminal sectors [3].

The three categories listed above are present, in varying degrees, in all countries where organized crime thrives. In Italy, organized criminal groups show an interesting use of these structures, as they make use of all three forms of corporate abuse [32]. According to Europol, however, the last category is the most threatening, as a business set up and run by criminals has a significant social and economic impact [3]. However, in terms of probability, all three forms are important in enabling organized criminal groups to successfully carry out their criminal activities.

Therefore, companies may act as victim, intermediary, accomplice or even offender when it comes to organized crime (at least when they are exclusively front companies). The distinction between the role of victim and the other roles mentioned might be hard to make [46]. Even if a business is victimized, the relationship with the offender might be full of ambiguity and contradiction if, for example, the criminals involved are also clients of the company, who normally add to its profitability [47].

To sum up, organized criminal groups appear to be making use of commercial structures operating within the legal market. Criminal enterprises seek to penetrate legitimate businesses by exploiting vulnerable points of entry in order to protect their funds, provide apparent legitimacy and, in a few cases, provide an option for a transition to licit business or retirement from criminal activities [43, 44]. However, legal businesses can also be excellent covers for various kinds of trafficking activities [45].

**Measuring the indicator**

The extent to which organized criminal groups involved in a given crime use legitimate business structures can be measured by looking at the proportion of organized crime offences reported each year involving the use of such structures. In such a measurement, the term “business structure” is to be interpreted broadly to include pre-existing legal firms, companies involved in both legal and illegal activities, front companies (including those located offshore and those almost devoid of any real commercial activity) [32].

A scale ranging from 1 (no use of legitimate business structures at all) to 5 (high level of use of legitimate business structures) might be employed to express indicator results:
<table>
<thead>
<tr>
<th>Level of use of legitimate business structures</th>
<th>Proportion of organized crime offences reported each year involving the use of legitimate business structures (percentage)</th>
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<td>1</td>
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Use of information and communication technology by organized criminal groups

**Assumption linking the indicator to the probability of organized crime occurring**

The greater the extent to which information and communication technology is used by organized criminal groups involved in a given crime, the greater the capacity of such groups to perpetrate the crime and avoid being detected by law enforcement agencies. In turn, this results in a higher probability that organized crime will occur.

**Supporting literature**

More and more, organized criminal groups are increasingly using information technology tools to commit their crimes and facilitate communication while obscuring the identity of group members, thus affording criminals considerable protection from law enforcement [4, 7, 12, 18, 19, 47].

Recent technological developments have given individuals a wide range of means by which to break the law. Technology not only facilitates the commission of traditional crimes (such as forgery, identity theft, drug trafficking, child pornography) in new ways, but also enables people to devise entirely new types of crime (such as cyberterrorism). One of the main fears is that the Internet and other modern communication technologies make it possible for organized criminal groups to come into contact with many more people, and to thus widen the pool of victims [48, 49]. In terms of information and communication technology, the Internet offers many advantages to organized criminal groups. The underground cultures that have emerged around activities such as hacking and cracking are perfect for providing support, contacts, recruitment, advice and clients to criminal groups [3]. Besides exploiting the
advantages provided by the Internet, organized criminal groups also make use of technologies such as pre-paid telephone cards, mobile telephones (which are frequently exchanged) and text messaging systems [4, 19, 50].

The capacity to network globally benefits organized criminal groups in the same way as it does legitimate organizations. Perhaps the most significant use of information technology by such groups is in the area of money-laundering. In fact, the equivalent of several hundred billion United States dollars are laundered each year and camouflaged by far larger legitimate transactions. Crime on such a scale threatens political stability and Governments’ ability to carry out macroeconomic policy. Information technology has the potential to make money-laundering even easier by allowing money to be transferred electronically, which makes it very difficult to trace transactions [51].

Another important aspect is that, by increasing the global potential for communication and illegal networks of criminal activity, these technologies have made it very difficult for law enforcement agencies to monitor crime [48, 49]. Organized criminal groups must communicate either in complete secrecy or in a way that is so difficult to penetrate that it makes it almost impossible for law enforcement agencies to find out what is planned and hinders them from piecing together evidence of a committed crime. Organized criminal groups may accomplish this by relying on fast means of communication, such as e-mail, Internet chat rooms and instant messaging services. By making use of encryption tools, criminal groups are able to achieve an unprecedented level of security for the data that they store and exchange [3].

To sum up, advanced communication networks and in-depth knowledge of information technology enable organized criminal groups to operate in a well-organized manner and, at the same time, to cover up legal and criminal activities. For this reason, information and communication technology has the potential to assist organized criminal groups in exploiting all possible avenues in both the traditional and new and unregulated sectors, while minimizing the risk of being detected and punished [3, 52].

**Measuring the indicator**

The extent to which information and communication technology is used by organized criminal groups involved in a given crime can be measured by looking at the proportion of organized crime offences of a given type reported each year involving the use of information and communication technology, either to perpetrate a crime or to avoid being detected by law enforcement agencies.
A scale ranging from 1 (no use of information and communication technology at all) to 5 (high level of use of information and communication technology) might be employed to express indicator results:

<table>
<thead>
<tr>
<th>Level of use of information and communication technology</th>
<th>Proportion of organized crime offences reported each year that involve the use of information and communication technology (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0-20</td>
</tr>
<tr>
<td>2</td>
<td>21-40</td>
</tr>
<tr>
<td>3</td>
<td>41-60</td>
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<tr>
<td>4</td>
<td>61-80</td>
</tr>
<tr>
<td>5</td>
<td>81-100</td>
</tr>
</tbody>
</table>

**Indicators regarding the law enforcement risk for a given crime**

In addition to indicators describing the characteristics of organized crime, indicators that address the likelihood that law enforcement agencies will detect organized criminal groups and prevent such groups from carrying out criminal activities are also relevant to the overall probability that an organized crime event will occur [18]. The more crime prevention efforts are focused on a specific crime, the less likely it is that that particular crime will be committed again [2, 3]. Law enforcement probabilities refer to the sum of the probabilities of being identified, arrested, convicted and having one’s assets confiscated [52, 53]. Indicators relative to the level of effort by law enforcement could include those listed below.

**Probability of being convicted of a given crime**

*Assumption linking the indicator to the probability of organized crime occurring*

The higher the probability of being convicted of a given crime, the lower the probability that the crime will be committed.
Supporting literature

Criminometric studies* and correlation and cross-section regression analyses, as a whole, indicate a negative association between crime and the probability of punishment [54-57], thus corroborating the theory that an increase in the probability of punishment will decrease the expected utility of criminal acts and, thereby, the level of crime ([54], p. 156).**

The first attempts to study crime as rational behaviour date back at least to 1764 [58] and 1864 [59]. Economists have produced a large corpus that examines the relationship between the degree to which the law is enforced and compliance with the law, also known as “criminometric studies” or “economics of crime”, including the classic 1968 article by Becker entitled “Crime and punishment: an economic approach” [60], in which the author employs the utility maximization approach developed earlier by the philosopher Jeremy Bentham. Becker also considers that an individual, as a rational maximizer in a situation where an offence is an optional risk, will take into account the probability of being caught, as well as various costs and benefits associated with the act. Whether the offence will be committed or not depends on the individual’s perception of those factors. The possibility that the individual’s beliefs about these factors are wrong does not ruin the model as a theory of subjective behaviour [54, 56].

Formal sanctions may deter people from committing crimes. The possibility of punishment is an aspect of the environment that determines, in a probabilistic manner, the outcomes of particular courses of action [54, 61-63]. Information about sanctions may be obtained through personal experience, by contacting people with experience in the criminal justice system, through the media and, more generally, through one’s cultural surroundings [54]. However, because criminals and potential criminals rarely have accurate information about the probabilities of arrest, conviction and imprisonment, their personal assessments of the expected punishments vary widely. Some

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* “Criminometric studies” are studies that use a model that: has a clear basis in criminological theory on the factors that influence crime; is expressed in a mathematical form; and is defined so that statistical theory can be used in empirical tests and estimations [54].

** Nonetheless, doubts persist with regard to the deterrence effect of punishment. Some authors have found that differences in punishment variables for one type of crime tend to have significant effects on other types of crime or trigger offenders to engage in so-called “avoidance activities”, in other words in activities that reduce the probability of being apprehended, convicted and punished [54, 55]. Although virtually all criminal legislation is based on the belief that punishment reduces crime, neither theory nor empirical studies have resolved with certainty the question of whether, or to which degree, punishment deters individuals from engaging in criminal behaviour [57].
overestimate their probability of success, while others underestimate it.* Despite the element of subjectivity, if the (objectively measured) expected cost of crime to criminals declines, crime increases and vice versa. This theory is consistent with the perceptions of potential criminals and it is supported by considerable statistical evidence [64-67]. In Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates, the National Research Council in the United States concluded that: “Taken as a whole, the reported evidence consistently finds a negative association between crime rates and the risk of apprehension, conviction or imprisonment” [68].

**Measuring the indicator**

The probability of being convicted for a given organized crime offence can be measured by looking at the ratio of the number of people convicted each year for a given organized crime offence to the number of people reported to have committed a given organized crime offence. The higher the ratio, the higher the probability of being convicted of a given organized crime offence and the lower the probability that organized crime will occur.

A scale ranging from 1 (high ratio of the number of people reported for a given organized crime offence to the number of people convicted for a given organized crime offence) to 5 (low ratio of the number of people reported for a given organized crime offence to the number of people convicted for a given organized crime offence) might be employed to express indicator results:

<table>
<thead>
<tr>
<th>Scale of the ratio</th>
<th>Ratio of the number of people reported each year for a given organized crime offence to the number of people convicted for a given organized crime offence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.81:1</td>
</tr>
<tr>
<td>2</td>
<td>0.61:0.80</td>
</tr>
<tr>
<td>3</td>
<td>0.41:0.60</td>
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<tr>
<td>4</td>
<td>0.21:0.40</td>
</tr>
<tr>
<td>5</td>
<td>0:0.20</td>
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</tbody>
</table>

*One of the criticisms sometimes levelled against economics of crime literature is that criminals may not be aware of the likelihood of arrest and conviction or the extent of penalties. While there is some evidence that criminals are more informed than the general public about enforcement and penalties [54], there may also be a tendency for individuals to think that they will not be caught or imprisoned (i.e. to underestimate the probability of harm and the likelihood of being caught). Although economic applications are often couched in terms of actual probabilities of conviction and penalties, they can also be applied to perceived values of these variables [56]. However, for example, a survey of drug smugglers conducted by the Office of National Drug Control Policy of the United States found that no one would continue to offend if there was a 25 per cent chance of being convicted [64]. Clearly, the prospect of conviction appears to provide a more powerful deterrent than arrest.
Probability of having the proceeds of a given crime confiscated

Assumption linking the indicator to the probability of organized crime occurring

The higher the probability of having the proceeds of a given crime confiscated, the lower the probability that a crime will be committed.*

Supporting literature

The confiscation of illegally gained assets is seen as a key element in any modern strategy to fight organized crime. By removing unjust enrichment and restoring the legitimate distribution of wealth in society, such a measure satisfies the retributive principles that crime should not pay and that no one should profit from an illegal act. It also reduces the attractiveness of crime by decreasing its expected monetary benefits, which constitute the main motive for illegal activity, and thereby acts as a deterrent [69-73].** By removing their working capital for investment in further criminal activities and infiltration of the legitimate economy, the probability that criminals will continue to commit crimes decreases.***

During the past few decades, the revival of confiscation as a crime control strategy has been noted not only in Europe, but worldwide [32, 74, 77]. That revival is the consequence of widespread concern about the increased financial power of criminals and their ability to penetrate and corrupt the legitimate sphere by introducing “dirty” money into the legal system [69, 78]. This led to the so-called “age of proceeds” ushered in by the “war on drugs” that

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*With regard to the proceeds of crime, the term “confiscation” can be defined as the permanent deprivation, by order of a court or some other competent authority, of any property (i.e. assets of all kinds, whether corporeal or incorporeal, movable or immovable, tangible or intangible, and legal documents or instruments evidencing title to, or interest in, such assets) derived or obtained, directly or indirectly, through the commission of an offence. Seizure powers are normally available in order to secure the proceeds from crime and to prevent them from being dissipated before confiscation. Seizure can be defined as temporarily prohibiting the transfer, conversion, disposition or movement of property, or temporarily assuming custody or control of property, on the basis of an order issued by a court or a competent authority [69].

** Nonetheless, doubts about the effectiveness of confiscation have been expressed by various authors. Some have noted that the confiscation of proceeds may simply induce criminals to refine their concealment techniques instead of deterring them, while others maintain that criminals are motivated by factors other than profit and that confiscation only intensifies their propensity to spend [69, 74, 75].

*** In the United States, a study assessing the threat posed by specific terrorist groups [76] considered, among other parameters, law enforcement responses such as the freezing of the group’s assets (e.g. arms, sources of military advice) and finances and the detention and arrest of members of the group and the effectiveness of such responses.
had been launched in the United States during the 1980s and had spread rapidly throughout the world [73, 78]. The “age of proceeds” was characterized by an awareness that monetary gain was one of the most important incentives for people engaging in serious crimes and that it provided criminals with the capital necessary to commit additional offences and to infiltrate and corrupt the legitimate economy [69, 77, 79].

Therefore, placing a criminal organization’s assets out of reach is an effective deterrent. As Shelley has noted [38], the ability to safeguard the proceeds of transnational criminal activity, tax evasion and corruption have served as significant incentives for the growth of money-laundering. There is limited risk and few deterrents for those who launder money and for the professionals who abet them; the limited seizures that take place are merely regarded as one of the costs of conducting such business. The Organization for Economic Cooperation and Development has sponsored international efforts aimed at limiting the ability of organized criminal groups to establish offshore havens and sanctioning countries that facilitate money-laundering. So far, those efforts have failed to have a significant effect.

The problem is that, after years of implementing such sanctions, there is a large difference between the amount of assets seized at the beginning of the criminal process, when criminals are prosecuted, and the amount confiscated once the accused have been convicted. Investigative problems, inadequate investigation techniques and procedural issues related to the burden of proof, hamper the effectiveness of legislation [80].

However, these problems need to be addressed at the national and international levels, as increasing the amount of confiscated assets would contribute to the international fight against organized crime [63, 69, 71-73, 80].

**Measuring the indicator**

The probability of confiscating the proceeds of a given organized crime offence can be measured by looking at the ratio of the value of confiscated assets for a given organized crime offence to the value of seized assets for the given organized crime offence. The higher the ratio, the higher the probability of having the proceeds from a given organized crime offence confiscated, and therefore the lower the probability of its occurrence.

A scale ranging from 1 (high ratio of the value of confiscated assets for a given organized crime offence to the value of seized assets for a given organized
crime offence) to 5 (low ratio of the value of confiscated assets for a given organized crime offence to the value of seized assets for a given organized crime offence) might be employed to express indicator results:

<table>
<thead>
<tr>
<th>Scale of the ratio</th>
<th>Ratio of the value of confiscated assets for a given organized crime offence to the value of seized assets for a given organized crime offence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>4</td>
<td>0.21:0.40</td>
</tr>
<tr>
<td>5</td>
<td>0:0.20</td>
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</table>

**Conclusion**

This article combines two traditional perspectives for measuring organized crime, one of which is based on groups and the other on activities. Both contribute measuring to the probability that a criminal event is perpetrated by an organized criminal group. Indicators outlined are accompanied by theoretical explanations that support their usefulness. The indicators were chosen to compare the presence of organized crime in different countries. As a result, each indicator (measured using a scale ranging from 1 to 5) could be compared, when sufficient data are available, with the same indicator in another country. At the moment, differences in data collection methodologies used in different countries make it difficult to calculate the overall probability that organized crime will occur. In the future, harmonized international data collection procedures could offer a way to overcome this problem. In the meantime, an intermediate degree of comparability might be achieved.

One solution may be to weight indicators to compensate for the fact that insufficient information may be available to allow the measurement of all nine indicators in each country. In other words, if one country were to provide information on only one indicator, another country on six indicators and yet another country on nine, all three country answers should be adjusted to 100 per cent. That means that the final score for the probability of an organized crime event could be expressed as a percentage. Using this system, a 100 per cent probability value for the country with one indicator would be 5 (or 1 × 5 the highest indicator value), the country with six indicators would have a 100 per cent probability value of 30 (or 6 × 5) and the country with nine indicators would have a 100 per cent probability value of 45 (or 9 × 5). In
turn, if the first country achieved a total score of 4, the second country 20 and the third country 40, then the results would be expressed using the following probability index: 80 per cent for the first country (4/5 × 100), 67 per cent for the second country (20/30 × 100) and 89 per cent for the third country (40/45 × 100).

Of course, this system would be sensitive to the particular indicators available for the different countries compared and, strictly speaking, the resultant probability measurements would not be directly comparable where they derive from different indicators. Nonetheless, such an approach would represent a first step towards the systematic measurement of the probability of an organized crime event occurring.

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A methodology for measuring the probability that a given organized crime event will occur


A METHODOLOGY FOR MEASURING THE HARM CAUSED BY ORGANIZED CRIME*

By Ernesto Ugo Savona**

Abstract
The present article is the third in a series of three articles by the same author in this issue of Forum on Crime and Society.

This article contains a discussion on a methodology for calculating the harm caused by organized crime, harm being the second proposed element for assessing “risk” (the first element being the probability of organized crime occurring). In order to allow the highest degree of comparability at the international level, the proposed methodology makes use of standard data that should be easily available to policymakers. The mechanism also aims to be as simple as possible, while maintaining the capacity to deal with future developments in the fight against organized crime.

A brief review of the relevant literature is provided. The meaning of the concept of harm and its implications for organized crime are explained. An original method for measuring harm is proposed.

Review of the relevant literature

A topic commonly dealt with in the existing literature is the estimation of the cost of criminal activities, which is usually carried out for a specific geographical area. Such an approach is understandable given the difficulty of collecting common and standardized data at the international level. According to Lee and Thorns [1], it is particularly difficult to compare results across countries because of the diverse approaches adopted and the various ways in which crime and cost are defined. Lee and Thorns also note that even where there are United Nations surveys for collecting data relating to expenses on criminal justice systems, such surveys should be developed further and

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*The article draws heavily on the work done to produce deliverable n. 14 in the framework of the Project Improving Knowledge on Organized Crime (Project IKOC), which was coordinated by Ernesto U. Savona. Pierre Kopp, Professor of Economics at the Pantheon-Sorbonne (Université Paris 1), together with Fabien Besson also at the Pantheon-Sorbonne (Université Paris 1), authored that deliverable with the cooperation of Barbara Vettori, Executive Project Manager of Project IKOC and coordinator of the Joint Research Centre on Transnational Crime (Transcrime) in Milan, Italy, and Areti Antoniou, researcher at Transcrime in Trento, Italy. Nicholas Dorn of Cardiff University, United Kingdom of Great Britain and Northern Ireland, gave advice.

**Professor, Università Cattolica del Sacro Cuore, Milan, Italy.
improved through the application of accounting principles in order to achieve data that can consistently be compared at the international level. In addition to the limited number of cross-country comparisons, some efforts have been made to estimate the cost of organized crime activities at the national level, including in the following countries: (a) Australia (Collins and Lapsley [2], Walker [3], Mayhew [4, 5], Queensland Crime Commission and Queensland Police Service [6] and Walker [7]); (b) Canada (Brantingham and Easton [8], Single and others [9], Porteous [10] and Richter-White [11]); (c) Germany (Von Lampe [12]); (d) Italy (Centro Studi Investimenti Sociali [13] and Rey [14]); (e) Switzerland (Godenzi and Yodanis [15]); (f) the United Kingdom of Great Britain and Northern Ireland (Home Office [16-17]); and (g) the United States of America (Anderson [18], Cohen [19], Cohen and others [20], Fishman and others [22], Maltz [23] and Shapiro [24]). The “non-international” approach adopted by the authors of those articles can be explained by the lack of harmonized methodologies for the collection of data and the calculation of estimates. Consequently, the results of international comparative studies should be used with caution. For example, Mayhew [4-5] argues that the similarity in crime profiles between Australia and the United Kingdom authorizes her to use British data to estimate the costs of crimes committed in Australia.

One particular concern regarding international comparisons is the method used to quantify the costs of crime. The main costs of crime are generally considered to be economic and financial [3, 7, 13, 15, 16, 25] and to include: (a) the loss and transfer of resources [4]; (b) consequent costs such as time off work or health-care costs; (c) the costs of anticipating crime, including the implementation of security measures; (d) administrative costs; (e) law enforcement costs incurred as a response to crime [5, 8, 9, 16, 20]; (f) the tangible and intangible costs of drug consumption [2, 9]; (g) costs in terms of harm, including physical, emotional, intellectual, economic and political damage [6, 8, 12, 16, 23]; (h) the direct and indirect costs of organized crime in various activities and on a specific population segment, such as youth (both as offenders and victims) [11]; (i) the fiscal costs of developing an estimate of income generated through the activities of criminal organizations [22]; (j) the tangible and intangible costs [12, 20-22] of pain, suffering and fear endured by victims of crime [19]; (k) the loss of reputation in business [25]; (l) the costs of manipulating institutional decisions [12]; and (m) the turnover of illegal activities [13, 14].

Approaches adopted to quantify costs vary from focusing on a total population [10] to examining a particular segment of the population [11]. The kinds of organized crime activities included in the calculation may also vary (for example, some but not all of the following might be included: money-laundering,
dealing in illicit drugs, environmental crime, selected contraband, economic crime, migrant smuggling, dealing in counterfeit products and motor vehicle theft). The kinds of costs ultimately calculated might also vary (depending on whether the focus is placed on the economy, socio-political aspects, violence, health and safety or the environment).

Although many researchers have made significant efforts to carry out rigorous and comprehensive evaluations of the impact of organized crime, several problems still remain. In the present article, a number of these problems are described in order to help the reader understand the difficulties involved in this kind of analysis.

One of the main problems lies in the difficulty of providing an acceptable definition and means of measuring the economic and financial costs of organized crime [25]. Data produced in this area, for instance, is often obtained through interviews, which entails a heavy reliance on subjective perceptions. This might, in turn, lead to underestimation or overestimation of the total costs.

Another problem is the difficulty of defining the indirect costs of organized crime [7]. For example, it is not easy to assign a monetary value to psychological or emotional variables. Clearly, victims of crime suffer emotional and physical stress, which also has an impact on family life, on behaviour at work and so on, but such costs are almost impossible to quantify. Brantingham and Easton [8], in particular, have underlined this problem. More generally, any value assigned to such costs may be biased, thus making it difficult to logically and consistently calculate the costs of all components of a given crime.

Moreover, researchers have not dealt in depth with so-called “systemic costs” (the costs to society as a whole), probably because they are not directly quantifiable in so far as they reflect particular perceptions of reality. Nonetheless, some researchers, such as Porteous [10] and, to a lesser extent, Maltz [23], have come close to adopting such an approach by examining, for example, the impact of crime on the basic values of society.

Another significant problem encountered in the literature concerns the gathering of data. In many studies, data were not available [12]. For example, Mayhew’s studies [4, 5] lacked data on irregular immigration and fraud, Walker’s study [3] lacked data on money-laundering, Single’s study [9] lacked data on property crime related to drugs, Fishman [22] and Rey [14] could not give
the exact number of people employed in organized crime, Rey [14] could not calculate the actual turnover generated by organized criminal groups, and the study carried out by the Centro Studi Investimenti Sociali [13] did not have data on the exact number of crimes or the estimated average value of crime. In other respects, the use of inadequate data may create problems, especially in terms of estimating economic costs. Lastly, the method used to gather data may be problematic if it relies on inappropriate techniques linked to the nature of the crime [11, 16].

Finally, the methodology used to estimate costs may also generate some difficulties. For example, “human capital method” approaches require the calculation of the future value of different variables. Since future values are, by their nature, uncertain, costs calculated for the future might be too approximate to be useful to public decision makers. More generally, no methodology is ever neutral. In-built biases will have repercussions on the final results. Indeed, many problems may occur in measuring costs and in determining units of analysis, time frames and population inferences. Decision makers must, therefore, keep all of these potential problems in mind when deciding to implement a particular public policy to deal with organized criminal activity.

**The harm caused by organized crime**

Before proposing a method for measuring the harm caused by organized crime that might be suitable for risk assessment, it is necessary to explain the concept of “harm” in this context. Organized crime has a number of consequences for society. These can be divided into tangible, intangible and systemic consequences.

**Tangible consequences**

The tangible consequences of organized crime may be subdivided into primary damages and costs of responses to crime (see figure 1). The primary damage refers to the loss suffered directly by the victims of crime, while the response to crime refers to the amount spent by Government agencies to fight crime and by insurance companies and private security agencies to prevent crime and compensate victims of crime.
These first two consequences (tangible and intangible) measure the monetary value that is spent by various stakeholders in order to cope with the consequences of crime. The result of including the cost of the public response to crime requires some thought. On the one hand, if policymakers decide to devote more public money to crime prevention, the tangible consequences of crime appear to increase; if public authorities are effective in combating crime, the systemic consequences of crime should decrease. On the other hand, if policymakers do not devote money to fighting crime, while the tangible consequences of crime increase only in terms of the primary damage suffered by victims, the systemic effect will also increase.

**Intangible consequences**

The intangible consequences (see the figure above) refer to the direct emotional and physical impact of a crime on the victim, including physical injuries, pain and suffering, psychological effects and worry. Intangible consequences do not refer to those costs which affect the victim indirectly, for example his or her inability to participate in the labour market or those costs related to the crime which must be borne by others.

**Systemic consequences**

The systemic consequences of crime include the destabilizing effects of crime on society.

Crimes and offences (such as drug abuse, the sale of organs and prostitution) are considered crimes and offences because they are morally condemned. The
cost of violating the law cannot be calculated by adding the perceived damage to each of the victims. In part, this is because it is sometimes difficult to assess who exactly may be labelled a victim, especially in situations in which persons engage in a particular behaviour for a multitude of reasons, including social pressure. It is society as a whole that is victimized by the existence of drug abuse and prostitution. However, individuals who are neither drug abusers nor customers of prostitutes cannot quantify the damage incurred to them because of the existence of drug abuse and prostitution. Such persons are not victims of a crime and therefore cannot express an opinion on the subject. As a result, the total cost of these types of crime cannot be evaluated by summing up the costs of individual damage and can only be considered at the level of society, as a systemic issue.

It should be noted that a small portion of people involved in these types of crime (prostitutes, for instance) can, however, be considered as victims. The damage to them is difficult to quantify but it may roughly be classified as part of the intangible consequences.

Other types of crime that have considerable implications for the functioning, or even the survival, of society are corruption and terrorism. In these cases too costs cannot be evaluated by summing up the costs of crimes to individuals.

The systemic part of a crime can be considered using the theory of public goods, according to which goods are deemed to have two characteristics: indivisibility and non-excludability. According to the principle of indivisibility, when a member of society suffers from the threat of terrorism, society as a whole also suffers. The same is true for corruption. However, it is probably not necessary to develop a theory for measuring “public negatives” such as crime in the same manner as the theory of public goods was developed. Doing so would entail summing up the willingness of individuals to pay in order to avoid a public negative. It would involve carrying out complex investigations to find out how willing individuals would be to pay in order to limit terrorism and corruption.

The systemic effect (indicated by the black circles in the figure above) can be divided into three layers. The outermost layer indicates the complete collapse of the system. This happens when corruption or violence become so pervasive as to make transactions in society completely unpredictable. When society comes close to reaching that level, any increase in the negative effect of crime leads to a dramatic degradation of all social interaction. Terrorism provides an excellent example of how a small but significant increase in this kind of activity can threaten the foundation of society.
A methodology for measuring the harm caused by organized crime

The intermediate layer illustrates a case in which society’s overall efficiency is negatively affected by an increase in crime. This is clearly the case with racketeering and extortion, which distort competition, narrow markets and distance society from competitive efficiency. Such an effect can be reduced by strong public intervention, which increases costs associated with the response to crime but can, in the short term, lead to overall improvement.

The innermost layer illustrates a case in which crime has only a marginal effect on society. In general, society can easily cope with this level of threat by increasing public spending.

In conclusion, organized crime affects society in several ways. The next step is to evaluate the methods available for measuring these consequences.

The social cost approach

The social cost approach measures the present cost of future consequences of crimes that took place in the past. Consider, for example, the case of a person who becomes a drug addict in 1970, subsequently becomes ill and then dies in 2010. If, in 2005, an effort is made to measure the social cost of the drug addiction, it would be necessary to consider the amount of wealth lost between 2005 and 2010. This calculation is known as a “prevalence-based” calculation. Another approach, referred to as “incidence-based” consists of measuring the present and the future social cost of consequences of events that take place in a given year. In terms of public policymaking, this is the most interesting calculation because it allows for a comparison of the costs incurred in two different years and thus shows how a public policy choice made today can affect the situation in the future. Unfortunately, this type of calculation is very complex, as it relies on the availability of precise data on the future characteristics of populations observed today. This is why all social cost studies continue to be prevalence-based, despite the fact that this approach is less satisfactory.

The first difficulty posed by the method of social cost calculation is that its scope can vary.
The main difference between the studies lies in the inclusion or exclusion of intangible costs, which are measured by using enquiry methods aimed at enabling individuals to quantify, in monetary terms, the pain that they feel. The measurement of indirect costs is fairly imprecise. It supposes the ability to place a value on human life either by calculating how much a person is willing to pay or by adopting the human capital approach. Of the two, the human capital approach is the simplest. It evaluates the worth of a human life on the basis of the salary of that person. Nonetheless, such an approach is subject to salary distortions because of the existence of markets that are more or less competitive than others. For instance, under usual market conditions, a person’s salary should represent the marginal individual productivity or contribution to the creation of wealth. If a market is imperfect, however, the salary of a particular person could be abusively high or low. For example, if the teaching of economics in France were to be carried out in English, French-speaking economics teachers would face new competition and salaries (all other things being equal) would go down. When a person’s revenue is used to calculate the value of his or her life, market distortions are integrated into the calculation.

The other method, the so-called “willingness to pay” approach, consists of asking individuals how much they would be ready to pay to avoid being a victim of a particular type of crime. Individuals are supposed to reveal the real price they allocate to their time. However, interpretation of results is again complex. Individuals must answer the question without considering their wealth constraints. The majority of individuals have a tendency to limit the amount that they announce to the level of their revenue, thereby distorting the calculation.

Moreover, the final result of the social cost calculation is dependent on certain parameters, such as the rate of actualization or the rate of inflation. Changing the actualization rate of any particular variable greatly modifies the social cost calculated. The actualization rate may be fixed conventionally in certain countries (such as France). Other countries, however, have chosen a value close to the long-term interest rate.

For these reasons, the calculation of social cost depends heavily on which method is used, which makes international comparisons extremely problematic. Comparing the social cost, for example, of tobacco in two countries makes no sense given that the results are so sensitive to the method chosen to carry out the calculation. Thus, the social cost approach is not appropriate for developing a risk assessment method for international comparisons.
Measuring the harm of organized crime

Harm versus cost

The objective of this article is to measure the harm caused by organized crime, not the cost of the consequences of organized crime. Cost is a notion borrowed from economics that is used to measure the quantity of resources used by an activity. A distinction is generally made between private costs, which are incurred by those organizing the activity in question, and external costs, which are sustained by third parties. The sum of private and external costs equals the gross social cost. An activity can engender private and external benefits, but still have a net social cost if the total cost is greater than the benefit.

In the case of organized crime, it is necessary to calculate, on the one hand, the benefits to criminals and, on the other hand, the cost to society, thus producing the net social cost of organized crime. Such a measure (which is faithful to the neutral approach adopted by economists interested in the creation of wealth but not in its distribution [26]) is not appropriate, however, when it comes to organized crime. What is necessary is not to estimate the overall welfare function but to obtain a simple and easy-to-use instrument for assessing the absolute harm caused by organized crime.

The notion of harm encompasses all costs that can be measured and easily understood by policymakers, irrespective of the potential benefits to criminals.

An approach in terms of social cost would lead public decision makers to adopt policies that result in decreasing social costs. These public decision makers would, however, be puzzled by economists’ advice that such calculations must take into account the actualized value over time of a crime committed today. The future consequences of committing a crime today simply do not seem important in making policy choices. Indeed, if a public decision maker wants to assess the damage caused by a certain organized criminal activity, it is often argued that the calculation horizon cannot legitimately exceed the period of one year.

As a result, the term “harm” is understood to be a measure that indicates the cost of consequences of a criminal activity, as perceived or evaluated, in a given year. The concept of harm, then, is less theoretical than the concept of social cost.
The ultimate result to be pursued is a comparison between countries of the risk presented by different organized crime activities, harm being one of two elements for assessing the risk.

**Calculation**

It is possible to calculate the harm caused by any organized criminal activity provided that a certain amount of up-to-date statistical data is available.

**Tangible consequences**

Tangible consequences can be divided into two categories: primary damages and costs of public responses to crime.

The primary damages from crime involve the direct costs of crime, in economic and social terms, to those affected. For example, the cost of the damage inflicted on companies and people are measured before the affected persons have received any compensation through insurance coverage. The measurement is quantitative. The approach is inspired by law and economics and based on the belief that the courts are able to measure the cost of crime by collecting important information and refraining from showing any particular bias in the way in which they perceive crime. All offences for which it is possible to receive compensation (in civil law) are subject to an evaluation by the courts. This evaluation considers both the objective aspects of damage (such as the value of merchandise) and the subjective aspects of damage (such as sentimental loss). An optimal compensation is one in which the individual perceives his or her situation after the crime to be no different from that prior to the crime because he or she has received sufficient compensation. In criminal proceedings, however, any obligation to pay damages and interest to the victim exists alongside the penal sanction. Indeed, the practice of paying for damages caused (including interest) in criminal proceedings is not very widespread. Usually, the focus tends to be more on the penal sanction than on reparations to the victim. Numerous thefts and acts of violence, for instance, do not result in a procedure for compensatory sanctions, while in cases involving tort and other aspects of civil law they do.

For some crimes and offences, insurance companies must compensate victims. In some instances, the amount paid may adequately compensate the victim for the damage suffered but in other cases it may not. Either way, the amount paid out in compensation is a reflection of the amount that the insured party is willing to accept. If insurance company payouts were systematically too low, premium payers would probably incentivize the creation of other insurance companies offering more generous payouts. Similarly, insurance premiums
reflect people’s perception of the probability of being a victim of a particular crime or offence. In other words, indemnities paid by courts and insurance companies seem to constitute a market value indication of the damage caused by different crimes.

The costs of the private and public responses to crime are the sum of the amounts spent by all public and private entities engaged in the fight against crime (the police, the judicial system etc.) and are not easy to calculate exactly. For example, some of the money spent by the judicial system is used to deal with family issues (such as divorces), not crime-related issues. Nonetheless, in general, most of these public expenses are devoted to the prevention and fighting of crime. With a few technical adjustments, it is possible to arrive at a good estimate of the aggregate cost of responses to crime.

Public spending does not necessarily reflect people’s willingness to pay for the fight against crime. People might prefer that less (or more) public money were spent for such purposes.

**Intangible consequences**

In practice, it is very difficult to calculate, in monetary terms, the value of intangible consequences. The absence of a market for such consequences means that it is not possible to observe a market price directly (this being the conventional way of measuring the monetary value of a product or service). Instead, economists use various tools to try to estimate what the market price would have been had the intangible consequences been traded, or to estimate the implicit market price in situations in which crime reduction is traded in other markets (e.g. housing). The aim is to try to estimate how much (as reflected in other goods and services) people would be willing to give up in order to obtain the increase in well-being that would result from the prevention of a particular crime. The monetary estimates of intangible consequences of crime are not a direct measure of the absolute change in quality of life. They are merely estimates of what people would be willing to forego to reduce the risk of victimization.

Academic studies in this area may be used. When such studies cannot be found, alternatives to measurement may be sought. Those studies which are used should be carried out by central administrations. When it is impossible to attribute a value to intangible consequences, it is preferable not to do so. International comparisons may then be carried out either by excluding the intangibles in all countries or by using an average value to compensate for missing country data.

The present methodology does not calculate the value of intangible costs because of such measurement difficulties.
Systemic consequences

Systemic harm could include harm to society as a whole (e.g. the corruption of public officials), to the community (e.g. impairment of the business community by extortion and protection rackets and the disintegration of neighbourhoods) and to the economy (e.g. through market distortions, lack of competition and barriers to market entry). Societal harm stresses the harm that organized crime causes to governmental integrity and the social fabric of a nation. Community harm refers to the disruption that organized crime causes to various aspects of a community. Economic harm describes the consequences of organized criminal activity on economic life.

Unlike tangible consequences, systemic harm does not show a linear cost-and-effect relationship. The level of crime can increase without resulting in a significant risk of the system collapsing. However, once a certain tipping point has been reached, a slight increase in crime can upset the whole social equilibrium.

For these reasons, it is proposed that the systemic consequences of organized crime should not be included in an international risk comparison of organized criminal activity. Indeed, the objective of assessing risk is to optimize public policies, making them as efficient and effective as possible. Estimating the costs of organized criminal activities makes it possible to take better-informed decisions about which policy measures are most worthwhile and cost effective by allowing meaningful comparisons of the costs and benefits offered by alternative crime reduction measures. Estimations can help decision makers prioritize and allocate scarce resources to the implementation of those policies which have the greatest impact on harm caused by crime, rather than on just the number of crimes. It is often the case that a few very costly offences may cause the most harm; it might be better to target those few high-cost crimes rather than many low-cost offences.

Systemic consequences cannot be combated easily. The level and nature of systemic consequences derives from the specific interaction between the intensity of organized criminal activity, the affected country’s history and the functioning of its institutions. In this sense, there is no competition for public funds between policies that could be devoted to the struggle against systemic consequences and other types of consequences. As such, it is methodologically sound to exclude systemic aspects from an assessment of harm or risk. This is particularly true given that the objective of harm assessment is to facilitate policymaking.
Main crimes imputable to organized crime

This subsection contains information on the main crimes imputable to organized crime. The crimes mentioned are grouped into one of the two categories of tangible consequences: primary damages or cost of responses to crime.

In one scenario, the courts award compensation to a company that has been the victim of counterfeiting. It is assumed that the compensation is a good proxy of the market value of the loss suffered and that it corresponds to the primary damages element of the tangible consequences.

All primary damages follow, in one way or another, the national trend regarding compensation. Courts and insurance companies may or may not be generous. In order to make international comparisons, it would be interesting to benchmark the various levels of compensation between countries. Applying a mean value to all countries would allow a (risky) comparison exercise, once the national amounts are calculated on a per capita basis. Such a comparison is particularly complex when legislation differs greatly from one country to another. However, such a calculation might be possible between two similar countries or for one specific type of crime.

It is not easy to break down the total amount spent by type of crime with the aim of estimating the cost of the response to crime element. Most police force activity is not devoted to a specific type of crime but, rather, to crime in general. Only a few squads focus their efforts only on drugs or terrorism. Breaking down general public spending for police by the number of arrests assumes that the cost of discovering all types of crime is the same. But, as noted at the beginning of this article, the prerequisites for this methodology to function, both for probability and for harm, are that countries have separate data collection systems for organized crime.

The cost of correction is also difficult to establish. However, while most criminals face sentences on many counts at the same time (for example, for fraud, violence and possession of weapons), one of the crimes is the main crime and that is the one that can be used when breaking down public spending.

Private spending is easier to compute. Private insurance companies can provide data on the evolution of their premiums and indicate the correlation to the rise in crime and compensation.

The total accountable cost of a given organized crime activity is the sum of the primary damage of crime plus the cost of public response (see tables 1-8).
### Table 1. Counterfeiting

<table>
<thead>
<tr>
<th>Consequence of the organized crime activity</th>
<th>Indicator of harm</th>
<th>Type of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of turnover (income or benefit) for the companies and suppliers whose production has been counterfeited</td>
<td>Range of compensation given by the courts</td>
<td></td>
</tr>
<tr>
<td>Loss of taxes that would be paid by the businesses if their declared turnover included the income from illegal activities</td>
<td>Loss of taxes</td>
<td>Primary damage</td>
</tr>
<tr>
<td>Increased public expenditure for policing</td>
<td>Increased public expenditure</td>
<td></td>
</tr>
<tr>
<td>Increased cost of judicial system</td>
<td>Number of cases multiplied by the cost of prosecution per case</td>
<td>Increased cost of public response</td>
</tr>
<tr>
<td>Increased cost of correctional institutions</td>
<td>Number of prisoners multiplied by the cost per prisoner</td>
<td></td>
</tr>
</tbody>
</table>

### Table 2. Drug Trafficking

<table>
<thead>
<tr>
<th>Consequence of the organized crime activity</th>
<th>Indicator of harm</th>
<th>Type of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpaid income taxes (turnover) of the criminal activity</td>
<td>Loss of taxes</td>
<td>Primary damage</td>
</tr>
<tr>
<td>Increased public expenditure for policing</td>
<td>Increased public expenditure</td>
<td></td>
</tr>
<tr>
<td>Increased cost of judicial system</td>
<td>Number of cases multiplied by the cost of prosecution per case</td>
<td>Increased cost of public response</td>
</tr>
<tr>
<td>Increased cost of correctional institutions</td>
<td>Number of prisoners multiplied by the cost per prisoner</td>
<td></td>
</tr>
</tbody>
</table>

### Table 3. Fraud

<table>
<thead>
<tr>
<th>Consequence of the organized crime activity</th>
<th>Indicator of harm</th>
<th>Type of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct loss for the victims of fraud</td>
<td>Average compensation given by the courts</td>
<td>Primary damage</td>
</tr>
<tr>
<td>Loss of taxes on illegal income</td>
<td>Loss of taxes</td>
<td></td>
</tr>
<tr>
<td>Increased public expenditure for policing</td>
<td>Increased public expenditure</td>
<td></td>
</tr>
<tr>
<td>Increased cost of judicial system</td>
<td>Number of cases multiplied by the cost of prosecution per case</td>
<td>Increased cost of public response</td>
</tr>
<tr>
<td>Increased cost of correctional institutions</td>
<td>Number of prisoners multiplied by the cost per prisoner</td>
<td></td>
</tr>
</tbody>
</table>
With a respect to tobacco counterfeiting or smuggling (see table 4), a good indicator of the ratio of smuggled or counterfeit cigarettes to legally traded tobacco is given by empirical research. Collecting empty packs of cigarettes in the main public places of a city gives a clear idea of the ratio.

Table 4. Tobacco counterfeiting or smuggling

<table>
<thead>
<tr>
<th>Consequence of the organized crime activity</th>
<th>Indicator of harm</th>
<th>Type of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct loss for the victims</td>
<td>Average compensation given by the courts</td>
<td>Primary damage</td>
</tr>
<tr>
<td>Loss of taxes on illegal income</td>
<td>Loss of taxes</td>
<td></td>
</tr>
<tr>
<td>Increased public expenditure for policing</td>
<td>Increased public expenditure</td>
<td></td>
</tr>
<tr>
<td>Increased cost of judicial system</td>
<td>Number of cases multiplied by the cost of prosecution per case</td>
<td>Increased cost of public response</td>
</tr>
<tr>
<td>Increased cost of correctional institutions</td>
<td>Number of prisoners multiplied by the cost per prisoner</td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Trafficking in stolen vehicles

<table>
<thead>
<tr>
<th>Consequence of the organized crime activity</th>
<th>Indicator of harm</th>
<th>Type of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct loss for the victims</td>
<td>Increased average compensation awarded by insurance companies</td>
<td>Primary damage</td>
</tr>
<tr>
<td></td>
<td>Increased number of prosecutions</td>
<td></td>
</tr>
<tr>
<td>Loss of taxes on illegal income</td>
<td>Increased insurance premiums for consumers</td>
<td>Loss of taxes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased public expenditure for policing</td>
<td>Increased public expenditure</td>
<td></td>
</tr>
<tr>
<td>Increased cost of judicial system</td>
<td>Number of cases multiplied by the cost of prosecution per case</td>
<td>Increased cost of public response</td>
</tr>
<tr>
<td>Increased cost of correctional institutions</td>
<td>Number of prisoners multiplied by the cost per prisoner</td>
<td></td>
</tr>
</tbody>
</table>
Table 6. Trafficking in arms

<table>
<thead>
<tr>
<th>Consequence of the organized crime activity</th>
<th>Indicator of harm</th>
<th>Type of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct loss for the victims</td>
<td></td>
<td>Primary damage</td>
</tr>
<tr>
<td>Increased public expenditure for policing</td>
<td>Increased public expenditure</td>
<td></td>
</tr>
<tr>
<td>Increased cost of judicial system</td>
<td>Number of cases multiplied by the cost of prosecution per case</td>
<td>Increased cost of public response</td>
</tr>
<tr>
<td>Increased cost of correctional institutions</td>
<td>Number of prisoners multiplied by the cost per prisoner</td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Money-laundering and corruption

<table>
<thead>
<tr>
<th>Consequence of the organized crime activity</th>
<th>Indicator of harm</th>
<th>Type of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of taxes on illegal income</td>
<td></td>
<td>Primary damage</td>
</tr>
<tr>
<td>Increased public expenditure for policing</td>
<td>Increased public expenditure</td>
<td></td>
</tr>
<tr>
<td>Increased cost of judicial system</td>
<td>Number of cases multiplied by the cost of prosecution per case</td>
<td>Increased cost of public response</td>
</tr>
<tr>
<td>Increased cost of correctional institutions</td>
<td>Number of prisoners multiplied by the cost per prisoner</td>
<td></td>
</tr>
</tbody>
</table>

Table 8. Smuggling of migrants and trafficking in human beings

<table>
<thead>
<tr>
<th>Consequence of the organized crime activity</th>
<th>Indicator of harm</th>
<th>Type of harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of taxes on illegal income</td>
<td></td>
<td>Primary damage</td>
</tr>
<tr>
<td>Increased public expenditure for policing and social service provision to refugees</td>
<td>Increased public expenditure</td>
<td></td>
</tr>
<tr>
<td>Increased cost of judicial system</td>
<td>Number of cases multiplied by the cost of prosecution per case</td>
<td>Increased cost of public response</td>
</tr>
<tr>
<td>Increased cost of correctional institutions</td>
<td>Number of prisoners multiplied by the cost per prisoner</td>
<td></td>
</tr>
</tbody>
</table>

The approach suggested is compatible with that carried out in certain countries, notably in the United Kingdom [17].
The harm of each activity should be given a value on a scale from 0 to 5 so that the same measurement scale as that of the probability index can be used.* Both indices (for probability and harm) could be kept separate or multiplied together in order to produce the overall measurement of risk. However, given that at the moment countries have very different data at their disposal, it may be preferable to measure probability and harm separately.

**Remaining problems**

In this article, it is suggested that the cost of crime should be calculated on a positive basis as opposed to a normative basis. Using a positive basis makes it possible to estimate the current level of harm done to society by crime. It does not lead to giving a market value to crime. Any difference between positive and normative bases is due to market distortion. Payments made by insurance companies can be too low (or too high) if the market is not perfectly competitive. The level of public spending does not necessarily correspond to the level desired by the people, if political decisions are made in order to satisfy the preferences of members of the elite. Such a positive calculation gives a good approximation of the sacrifice that society is really making to compensate for the cost of crime to people and to prevent and fight it. It does not clarify what the cost of crime would be if the preferences of all individuals were met and if the market were perfectly efficient.

A degree of overlap between dates from different years introduces further problems. In any one particular year for instance, insurance companies may refund victims for crimes committed some years previously, when public funds were spent to fight crime. The calculation presented in this article is prevalence based. It gives the cost of crime of a given year for crimes committed both during that year and previous years. If refunding from insurance companies occurs a long time after the crime has been committed, the court might compensate for the inflation. Then the calculation is consistent. Past value is expressed in current money and added to current public spending. According to the margin of error of crime calculation, inflation and actualization must not be considered as being too serious a problem.

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*See Ernesto Ugo Savona, “A methodology for measuring the probability that a given organized crime event will occur”, *Forum on Crime and Society*, vol. 5, No. 1 (2006), pp. [[…–…]].
A measure of perceived crime more than of real crime

A significant number of crimes are not discovered. Others are ignored and yet others are not investigated carefully. Some trafficking activities remain unknown. Some victims are not aware of their loss and do not claim any form of recompense. The harm caused by hidden crimes cannot be calculated by using this methodology, which focuses instead on calculating the harm caused by detected crime. This is not, however, a serious problem because society needs, first and foremost, to put a figure on the harm of that crime of which it is aware, in order to optimize the level of spending dedicated to fighting it.

References


AN ENTERPRISE MODELLING APPROACH TO ASSESSING NETWORKS FOR TRAFFICKING IN PERSONS*

by Jay Albanese**

Abstract
Developing a rational and transparent method to estimate the extent of trafficking in persons is fundamental to understanding the scope of the problem, changes in its occurrence and its appropriate place on the legal and policy agenda. In the present article, the problems of existing estimates of trafficking in persons are examined and reasons for the disjunction between those estimates and known cases are reviewed. Three methods for understanding and measuring trafficking in persons are assessed. The first extrapolates the risk of trafficking in persons from other known risks, the second uses specific known cases to estimate the full extent of trafficking, and the third uses a network enterprise model of human trafficking as an illicit enterprise that reacts to known and measurable pressures. The network enterprise model approach focuses on understanding the criminal networks that organize to exploit victims, rather than on solely predicting victim counts. Examples of each of the methods are presented in terms of their strengths and limitations, and a combined approach is proposed to produce the most accurate picture of trafficking in persons. It is shown that a good estimation model can be used to document the risk and extent of trafficking in persons as an illicit enterprise, trends in its occurrence and the effectiveness of measures designed to reduce its incidence.

What is trafficking in persons and what is a criminal network approach?

According to various press reports, trafficking in persons is a reality in many countries. Migrant farm workers have been smuggled from Mexico into Florida, United States of America, where they have been threatened with beatings and housed in remote areas to prevent them from knowing where they were and from escaping [1]. In Slovakia, women are lured abroad most frequently by job advertisements for positions as bartenders, waitresses, cleaners and au pairs. These women come from low-income families in regions with high unemployment rates, are stripped of their travel documents upon arrival at

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** Professor, Virginia Commonwealth University, United States of America.
destination and are forced into prostitution [2]. In Romania, advertisements appearing in the press promise employment abroad and 75 per cent of known victims of trafficking in persons are sold into white slavery. Attempts are being made to prevent the sexual exploitation of youth by introducing a code of conduct for hotel staff [3].

These desperate and often horrifying stories have become common in all areas of the world, as imbalances in the labour market, post-conflict situations with Governments in transition, growing migration flows, a globalized economy of both legal and illegal products, existing criminal networks and corruption combine to exploit people for profit.

Trafficking in persons takes different forms, but its essence is coerced servitude. In 1904, an international agreement was adopted to suppress “white slave traffic”. This was followed by other national and international efforts to reduce the exploitation of workers and women, including the adoption, in 2000, of the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime.* There are three basic elements to trafficking in persons: exploitative labour (e.g. sex, manual labour, servitude), the harbouring of victims (whether through recruitment, transportation or reception) and coercion (whether through deception, force or threat).

Trafficking in persons differs from migrant smuggling because of the added elements of coercion and/or fraud. Migrant smuggling suggests voluntary participation by those being smuggled, but there is evidence to suggest that the distinction between such smuggling and trafficking in persons is not significant. This is because in a number of cases smuggled migrants have become trafficked and, therefore, exploited contrary to the original agreement [4-6]. The International Organization for Migration (IOM) has found that it was common in the Bahamas, Barbados, Guyana, Jamaica, the Netherlands Antilles, St. Lucia and Suriname for women and girls to be deceived by being offered work as waitresses, cashiers, bartenders, dancers, salesclerks or masseuses, only to be told soon after arrival that they would have to engage in prostitution [7].

In such cases, the voluntary component of smuggling can be removed at the whim of the smuggler, who then uses the victim for his or her own purposes by means of fraud, threat or force, thereby making a case of smuggling into a case of trafficking in persons.

The network enterprise model approach described in the present article attempts to account for interconnected criminal networks at the recruitment, transportation and destination stages of trafficking in persons. The pressures under which they are put by competitors, police officers, customers and others can be quantified to help explain both the existence of and changes in such trafficking over time.

**A problem of unknown size**

The desire to estimate the incidence of trafficking in persons has exceeded our ability to deliver useful data. The State Department of the United States has calculated the following worldwide estimates that have fluctuated widely from year to year [8].

- In 2002, over 700,000 persons were estimated to have been trafficked across international borders.
- In 2003, between 800,000 and 900,000 persons were estimated to have been trafficked across international borders.
- In 2004, between 600,000 and 800,000 persons were estimated to have been trafficked across international borders.

In 1999, the Central Intelligence Agency of the United States calculated an original estimate, on which the State Department figures are based, but since the original estimate was not based on any actual count, it is not known whether the volume is increasing or decreasing [9]. The methodology used is said to have changed over the years. Moreover, the methodology is not transparent and cannot be reproduced, so it is not useful to those looking for more substantial evidence of trafficking flows.

Estimates become more troubling when they are compared to counts of actual cases. Between 1990 and 2000, for example, there were at least 38 documented incidents of trafficking into the United States involving at least 5,500 women [10]. That number is far smaller than estimates for a 10-year period would suggest. Table 1 shows the number of prosecutions for trafficking in persons between 2002 and 2005 in the United States. Although the numbers of cases filed, defendants and convictions increased, the numbers were quite small compared to existing estimates of the extent of the problem.
Table 1. Cases filed, defendants and convictions in prosecutions for trafficking in persons in the United States, 2002-2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases filed</th>
<th>Defendants</th>
<th>Convictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>10</td>
<td>41</td>
<td>28</td>
</tr>
<tr>
<td>2003</td>
<td>13</td>
<td>32</td>
<td>26</td>
</tr>
<tr>
<td>2004</td>
<td>29</td>
<td>59</td>
<td>43</td>
</tr>
<tr>
<td>2005</td>
<td>34</td>
<td>95</td>
<td>35</td>
</tr>
</tbody>
</table>


Efforts to generate data on trafficking in persons from other sources have also resulted in comparatively low numbers. Using open-source information (e.g. Government statistics, reports of non-governmental organizations, research findings and news accounts) from nearly 300 sources, the United Nations Office on Drugs and Crime found that 3,671 cases of such trafficking had taken place; although that is a significant number, it is far smaller than existing estimates indicate [11, 12]. Another significant effort is being undertaken by IOM, which has a global database of more than 5,000 documented victims (discovered between 2001 and mid-2005). These cases were referred to IOM by non-governmental organizations, police or other organizations [13]. Other kinds of databases including information on actual cases from various regions of the world are under development, and some of them hold great promise for understanding the circumstances under which trafficking in persons occurs [14]. However, documented cases are not necessarily representative of all cases worldwide. Furthermore, it is not clear what accounts for the disjunction between the number of estimated victims and the number of documented cases.

Reasons for differences in data

The history of criminology is in many ways a history of accounting for an elusive phenomenon. Crime is typically a hidden behaviour, which is why it has always been difficult to document and estimate it accurately. Victimization surveys, self-reports and official statistics have attempted to measure the extent of crime from the perspectives of the victim, the offender and the police—perspectives that are difficult to reconcile. Of course, victims of trafficking in persons are under some form of coercion, so they often do not come forward, either because they choose not to or because of fear, ignorance.
or intimidation. There are also large variations in law enforcement preparedness and willingness to address trafficking in persons across jurisdictions, so police probably miss many cases of such trafficking.

Nevertheless, better data will lead to a better understanding of the problem. And better understanding will produce more enlightened detection, enforcement and prevention strategies.

**Why count at all?**

Precise counts of trafficking in persons cases are unlikely to emerge, but this is not unlike the situation for illicit drugs, illegal gambling and stolen property. So why bother? Because without good estimates of trafficking in persons, it is not possible to answer the following three fundamental questions:

- How do States and agencies determine the level of resources to commit to initiatives aimed at countering trafficking in persons?
- How do States assess the place of trafficking in persons on the public policy and legal agendas?
- How can the impact of prevention and intervention efforts be assessed?

Answers to these questions must be found if States and private citizens are to judge the comparative seriousness of the problem in their region, decide how many resources to put into it and assess whether prevention and intervention efforts are having any impact. As a result, there is no escaping the need for accurate estimations of trafficking in persons.

**Is there a better way to count?**

It is impossible to count all cases of trafficking in persons, or of any other kind of crime, so estimates must be used instead. Estimates always involve error, of course, due to the hidden nature of all criminal activity. Reliable estimates are based on known data (facts) rather than on secondary information (hearsay) or speculation (guesses).

Three methods for calculating estimates can be envisioned:

1. The risk of trafficking can be extrapolated from other known risks;
2. Known cases can be used to estimate the whole;
Model trafficking networks can be assessed as criminal enterprises and the factors that affect trafficking operations and changes in them over time can be measured.

Consideration of those three methods will lead to the adoption of a combined approach and a better understanding of the true nature and extent of trafficking in persons.

**Extrapolating the risk of trafficking in persons from other known risks**

One estimation method aims to measure risk rather than extent. Using this approach, the objective is to identify risk factors and measure them against a specific population, thereby estimating the population at substantial risk of being trafficked. This method is illustrated in figure I.

**Figure I. Estimating the population at risk of being trafficked**

<table>
<thead>
<tr>
<th>Composite index of risk factors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender-related development, corruption perceptions index, income inequality index, unemployment rate, known migration flows, age/crime victimization risk, known organized crime presence and police preparedness.</td>
</tr>
</tbody>
</table>

Measure, combine and weigh risk factors according to their importance in a specific location.

Result: transparent estimate of the number of persons at risk of being trafficked.

Risk factors might include gender-related development, a corruption perceptions index, an income inequality index, the unemployment rate, known migration flows, age/crime victimization risk, known organized crime presence and police preparedness in particular areas. There is both anecdotal and statistical evidence to suggest that such factors lead to an increase in the risk of people being trafficked. For example, in a report on trafficking in women and children from Nigeria to Italy, it was found that the reasons for the trafficking included the low valuation of women reflected in limited access to
education, employment and income earning opportunities. Other reasons were poverty, greed, peer group influence, polygamy, large family sizes, poor moral upbringing of children and ignorance of the types and conditions of work in Italy [15].

The data to measure many of these risk factors are already being collected regularly in databases. Data on other risk factors would have to be developed from local sources. The result would be a transparent estimate of the population at risk of being trafficked. Such a risk estimate could be useful for assessing the impact of prevention and intervention efforts in terms of observing changes, over time, in the size of the population at risk.

Using known cases to estimate the whole

A second way to estimate the extent of trafficking in persons is to use known cases to make a projection of the number of unknown cases. This can be done using periodic counts and interviews with known victims. Over time, the group of known victims includes people known to victim service providers, official recoveries and trafficking-related arrests. Interviews with victims, police and service providers provide valuable information regarding the number of victims per incident, the source of recruitment information, routes taken, methods of transit and movement of victims after arrival at destination. The database developed by IOM in the countries where it operates is perhaps the best example of developing knowledge from systematic interviews with known victims [13, 16, 17].

Figure II displays the logic model in developing an estimate based on known cases. The weakness of this method, of course, is that known cases consist of non-random samples (i.e. more serious cases are often selected for enforcement, cases occur in jurisdictions where public awareness is highest and cases occur more often in locations where the presence of victim service providers is well established). Nevertheless, adjustments can be made to samples of known cases to account for differences from known cases in other jurisdictions, based on input from service providers, researchers, police and others who have first-hand information about the nature of unreported cases in a particular area.
Figure II. Using known cases to estimate the whole

As noted in figure II, the information on known victims can be adjusted by taking into consideration the accounts of those with first-hand information about unreported cases. For example, victim service providers, business owners, staff of non-governmental organizations, captured offenders, victims and police may have information about cases that have not resulted in arrests for trafficking in persons because of fear on the part of victims, lack of public awareness of the problem, untrained police, problems in securing cooperation in trafficking investigations across borders, inadequacy of local laws or other reasons. Depending on the quality of the information (whether it is reliable across sources in number and kind), a modification to the estimate can be made to include this “dark figure”. One way to accomplish this would be to develop a comparative index of the size of the dark figure based on the results of interviews in multiple jurisdictions.

A preliminary effort has been made in the United States to estimate the gap between reported and unreported cases of trafficking in persons. Eighteen large cities located near the border were selected. A search using key terms was carried out among the archives of the largest circulation newspapers for each city (the key terms were “human trafficking”, “drug trafficking”, “smuggling”, “prostitution”, “illegal immigration”, “alien” and “refugees”). The content of the articles containing those terms was analysed to see if potential cases of trafficking in persons were being lost among other kinds of cases, such as cases of prostitution, smuggling and immigration. Surprisingly, only 51 distinct cases could be found during the 2002 calendar year that were clearly or very probably cases of trafficking in persons [18]. No effort was made to estimate the entire number of cases from this known figure because the numbers were so small and the extent to which they were representative could not be determined. Of course, there are serious methodological limitations to looking for cases of trafficking in persons in newspaper accounts.
It is important to have more experience with human trafficking laws, better trained law enforcement officers and more service providers for victims to observe their impact and to determine the actual size of the gap between reported and unreported cases of trafficking in persons.

**An enterprise network model approach**

A third way to estimate the extent of trafficking in persons is through an enterprise network model approach, in which the push and pull factors that promote and prevent trafficking in human beings are combined. Changes and trends in each factor over time contribute to trafficking in persons. The enterprise network model approach attempts to account for the contribution of push and pull factors in a systematic way.

Figure III illustrates that the criminal enterprise of trafficking in persons is organized like any other kind of organized criminal enterprise and that, as such, its purpose is to survive and make a profit. The four push and pull groups affecting organized crime operations are suppliers, customers, regulators and competitors. A supply of illicit “goods” is needed (potential victims at high risk of being trafficked), and the trafficking enterprise is pressured by regulators (the law and the police who enforce it) and by competitors (other criminal groups at the recruitment, transport and destination stages). Finally, a stable quantity of customers (demand) is needed to justify the criminal operation [19, 20].

**Figure III. An enterprise network model of an organized criminal enterprise**

![Diagram of an enterprise network model of an organized criminal enterprise.](image-url)
The results of prior studies can be used to obtain an indication of how this model of organized criminal structure is adapted to carry out trafficking in persons. Traffickers have been found to use a “chain” of operations involving small groups at the recruitment, transport and exploitation (destination) stages. These groups are often unrelated except for by informal arrangements to supply victims to destination markets. Several studies have shown that smuggling and trafficking occurs via networks instead of via more organized, enduring, traditional criminal groups [21-24]. Figure IV illustrates these three interconnected operations required for human trafficking.

**Figure IV. Trafficking in persons: a three-stage criminal network**

The model of organized crime presented in figure III is repeated three times in the case of trafficking in persons, because separate operations are required at the recruitment, transport and exploitation (destination) stages of these criminal enterprises. Figure V is a comprehensive diagram of how these three stages are linked together into a network, providing an overview of trafficking in persons. Each stage will be explained separately below in order to illustrate the unique pressures at each stage and how they can be affected by prevention and intervention efforts.
Figure V. A model of human trafficking operations

The recruiter’s environment ...

Organized crime as business enterprise
Goal: recruitment, sale, and delivery of women workers

Customers
Transfer of victims to transporter groups

Suppliers
Connection with recruitment groups
- Threats and violence to control women
- Ability to bribe police

Competitors
Opportunities for legitimate employment in source countries, other recruiters

Regulators
- Due diligence by those accepting ads?
- Police surveillance of suspected recruiters
- Culture, vulnerability link to family “selling”

Customers
Transfer of victims to transporter groups

Suppliers
Connection with recruitment groups
- Threats and violence to control women
- Ability to bribe police

Competitors
- Other criminal groups connected to customer markets;
- Other “goods” to smuggle

Regulators
- Border security
- False identity documents
- Smuggling routes

Suppliers
- Connections with transit groups
- Capacity for ongoing intimidation of victims
- Ability to bribe police

Competitors
- Local prostitution enterprises
- Internet prostitution
- Undocumented workers from other sources

Regulators
- Police: prostitution, brothels, language
- Business regulation: sweatshops, false documentation of workers, immigrants

Organized crime as business enterprise
Goal: control, transport, and sale of women/workers

Customers
Exploiter of criminal groups

Suppliers
- Connections with transit groups
- Threats and violence to control women
- Ability to bribe police

Competitors
- Local prostitution enterprises
- Internet prostitution
- Undocumented workers from other sources

Regulators
- Police: prostitution, brothels, language
- Business regulation: sweatshops, false documentation of workers, immigrants

Organized crime as business enterprise
Goal: control and sale of women and workers to customers

Customers
Those seeking prostitutes
- Employers of undocumented workers

Suppliers
- Connections with transit groups
- Threats and violence to control women
- Ability to bribe police

Competitors
- Local prostitution enterprises
- Internet prostitution
- Undocumented workers from other sources

Regulators
- Police: prostitution, brothels, language
- Business regulation: sweatshops, false documentation of workers, immigrants

Organized crime as business enterprise
Goal: control and sale of women and workers to customers

Customers
Exploiter of criminal groups

Suppliers
- Connections with transit groups
- Threats and violence to control women
- Ability to bribe police

Competitors
- Local prostitution enterprises
- Internet prostitution
- Undocumented workers from other sources

Regulators
- Police: prostitution, brothels, language
- Business regulation: sweatshops, false documentation of workers, immigrants

Organized crime as business enterprise
Goal: control, transport, and sale of women/workers

Customers
Transfer of victims to transporter groups

Suppliers
Connection with recruitment groups
- Threats and violence to control women
- Ability to bribe police

Competitors
Opportunities for legitimate employment in source countries, other recruiters

Regulators
- Due diligence by those accepting ads?
- Police surveillance of suspected recruiters
- Culture, vulnerability link to family “selling”
Figure V shows how the four main groups exerting pressure on criminal enterprises (suppliers, customers, regulators and competitors) affect each of the three stages of trafficking in persons. The only difference lies in the way in which those pressures are manifested at each stage of the operation. For example, maintaining a supply of persons to be trafficked at the recruitment stage involves active solicitation through personal and family contacts, as well as advertisements aimed at those at high risk of being trafficked either because of their unstable employment status, national unrest or other factors (see figure I). Similarly, criminal groups operating at the transport and exploitation (destination) stages also have supply concerns because they need to maintain control over their victims and transport routes, and avoid detection. Figure VI illustrates how the nature of the pressures exerted by suppliers, customers, regulators and competitors force criminal operations to work continuously in order to survive and make a profit.

Figure VI. Developing a comprehensive estimate of trafficking in persons

Recruiters’, transporters’ and exploiters’ environments

As shown in figure V, trafficking networks can be affected by suppliers, access to customers and the threat of regulation leading to law enforcement actions. The recruiter’s environment can be quantified by assigning values to the current situation and then repeating that process periodically to assess changes and the impact of efforts to affect suppliers, customers, regulators and competitors. For example, prevention efforts aimed at the supply end of recruitment might consist of putting pressure on newspapers and Internet advertisers to screen the placement of questionable ads. Without carrying out an assessment of the current difficulty of placing such ads (by assessing the ease
with which fraudulent ads can be placed) it is not easy to measure the true impact of such a prevention effort. In a similar way, a police programme for the surveillance of suspected recruiters must be preceded by an objective assessment of the current level of surveillance carried out through existing police operations. Similar routine assessments of important factors affecting suppliers, customers, regulators and competitors at each of the three stages of trafficking in persons would generate baseline data against which the impact of changes in law, enforcement tactics, public education, victim services and other interventions could be assessed. Table 2 provides a summary of that concept by demonstrating how the influences on trafficking in persons networks can be quantified.

Table 2. Quantifying the influences on trafficking in persons networks

<table>
<thead>
<tr>
<th>Stage of trafficking in persons operation</th>
<th>Suppliers</th>
<th>Customers</th>
<th>Regulators</th>
<th>Competitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment</td>
<td>Difficulty of placing false/misleading</td>
<td>Known connections to transporter networks</td>
<td>Strength of existing legal provisions prohibiting trafficking in persons</td>
<td>Opportunities of legitimate employment for potential victims in source areas</td>
</tr>
<tr>
<td></td>
<td>advertisements</td>
<td>Extent to which exploiters travel to recruitment point to locate victims</td>
<td>Extent of police surveillance of suspected recruiters</td>
<td>Existence of other criminal groups seeking similar victims</td>
</tr>
<tr>
<td></td>
<td>Level of awareness among at-risk population</td>
<td></td>
<td>Local traditions regarding the sale of people as acceptable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ease of making contact with victims</td>
<td></td>
<td>Relative ease and profit of trafficking in persons instead of goods</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(through families, clubs etc.)</td>
<td></td>
<td>Intensity of competition from other criminal groups</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>Status of connections to recruiters</td>
<td>Known connections to exploitative criminal groups at destination</td>
<td>Strength of border control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Easy access to vehicles and routes</td>
<td>Extent to which destination groups stay the same or change</td>
<td>Ease with which it is possible to obtain false identity documents</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Level of local corruption facilitating the movement of victims</td>
<td></td>
</tr>
</tbody>
</table>


Exploitation (destination)

- Strength of connections with transport groups
- Capacity to keep intimidating victims in order to maintain control
- Ease with which victims can be moved after reaching destination

Local demand for:
- Prostitutes
- Undocumented workers

Awareness of trafficking in persons at destination

Police knowledge of:
- Local prostitution and illegal labour activities
- Regulations against sweatshops and forced labour
- Effort made by law enforcement agencies to discover trafficked persons

Local prostitution enterprises using non-trafficked women

Extent to which the local demand for illicit sex work and other illicit forms of labour is met by non-trafficking suppliers

Measures of each of the 30 variables identified in table 2 (and others that may be identified as important) can be developed through existing data and information obtained through interviews with police, victim service providers, potential victims, researchers and others with first-hand information about trafficking in persons in their area. Quantitative measures can be developed by ranking each of the variables through a comparison across jurisdictions (for example, by identifying the variable as “low”, “medium” or “high”). Using ratings on each variable from multiple sources would result in a consensus ranking for each variable. The variables could then be combined mathematically, on the basis of the enterprise network model presented in figure V, to produce a quantitative indication of risk. The value would lie in repeating those calculations over time to assess the effect on risk of initiatives and interventions at the recruitment, transport and exploitation (destination) stages.

As long as the protocols and data collection methods are standardized, they can be repeated to provide reliable assessments of changes in trafficking in persons enterprises in particular locations. Naturally, such assessments must be done locally since it is quite likely that trafficking in persons takes place in much the same way as other forms of organized crime do, by adapting to local conditions that must always take into consideration suppliers, customers, regulators and competitors.

The need for ongoing, objective, quantified and transparent assessments has already been recognized. For example, in a study carried out in South-Eastern Europe, it was observed that the impact of public awareness campaigns on trafficking in persons is unknown ([25], p. 14). In fact, it was noted that awareness-raising activities also continue to be mainly ad-hoc information campaigns implemented by many different organizations. Although their work is valuable, few campaigns are developed or implemented effectively.
Almost none of the awareness-raising campaigns carried out has been properly evaluated and the lessons that have been learned have not been shared. Therefore, an assessment of the approaches, strategies, materials and results is needed.

The need for more quantifiable and comparable data has also been recognized [26-29]. The present article represents an effort at establishing a framework for identifying the data to be collected and a comprehensive model for organizing that data are needed.

Do data support the notion of criminal networks of traffickers?

Trafficking in persons networks can operate successfully only where there is some kind of coordination of effort among recruiters, transporters and exploiters. These three interconnected groups are separated only by their “product,” which in this case is individuals at risk of being exploited. The existence of distinct recruiter, transporter, and exploiter groups has been documented by court cases and studies in different parts of the world.

One study, for example, found that Albania was primarily a transit point between the Republic of Moldova, Romania, Serbia and Ukraine on the one hand and Italy and other Western European countries on the other hand. Interviews conducted with 371 girls and women (174 of whom had been apprehended in Italy and 115 in Albania) revealed that known entrance and exit smuggling routes were used (and that bribery was common). Of those girls and women, 35 per cent had been recruited of their own free will, 35 per cent by false promises of marriage, 25 per cent by being deceived about the job they would do and 5 per cent by being sold or abducted. Almost all (98 per cent) had been brought across the border without legal documentation and two-thirds had experienced sexual or physical abuse. Some had developed dependency relationships due to coercive drug use [30]. After those findings became known, an Albanian initiative against trafficking in persons was implemented, reducing the problem; Albania is now generally viewed as a source of trafficking, no longer as a significant transit or destination country [31, 32]. That case illustrates the importance of measuring the risk of people being trafficked over time, in order to assess objectively the impact of prevention and prosecution efforts.

In another study (involving Belgium, Italy and the Netherlands) the case files of 481 victims of trafficking were analysed. The types of promises that recruiters made, the nationality of recruiters, transporters and exploiters, the
nationality of victims and the mode used to transport victims were studied. It was found that, once arrived at destination, two thirds of victims had been forced into prostitution and half had been battered in some way. In that study, five source countries, six transit countries and four destination countries were identified, pointing to the clear transnational nature of trafficking in persons [22].

For studies like those mentioned above, large numbers of people with first-hand experience in trafficking in persons were interviewed. As a result, such studies offer clear insights that can be used in prevention and intervention efforts. In particular, they provide information on the methods and promises used in recruitment and the amount paid to recruiters for travel and documents, and revealed that trafficking networks generally consisted of small groups (in half the cases, the groups comprised no more than three persons and in 90 per cent of cases the groups had seven or fewer participants). Through the studies, it was also found out that in most cases recruiters first came into contact with a victim no more than two weeks before departure and that the routes and methods used to smuggle persons were similar to those used in other kinds of trafficking. Such information is clearly useful for training police and prosecution officers, identifying victims, assisting service providers and educating the public, which is why it needs to be gathered in other locations that have not yet received systematic attention and analysis [33-35].

Combining risk, criminal networks and estimates based on known cases

So where does this leave the lawmaker, the policymaker, the police officer, the service provider and the researcher trying to develop a comprehensive picture of trafficking in persons that can be implemented for prevention and intervention purposes (and whose effectiveness can be reliably determined)? The answer lies in combining the three existing estimation methods, both conceptually and in practice.

Figure VI illustrates how the three methods of estimation can be combined. First, risk factors need to be identified, collected and measured in all parts of the world where trafficking is suspected to be a problem (as in figure I). This is a substantial but worthwhile undertaking, as enterprises involved in trafficking in persons appear to have similarities and differences whose importance can only be understood through the collection of more data from a wider range of locations. Periodic (annual or biannual) measurements of the
risk factors can give an indication of whether the size of the pool of those at risk of being trafficked has increased or decreased over time and which factors are contributing more (and which less) to the risk.

Second, the recruitment, transport and exploitation (destination) stages of trafficking in persons can be quantified by developing indicators for suppliers, customers, regulators and competitors at each stage. A standardized method of measurement would make it possible to carry out reliable assessments over time and in different locations. A major contribution of adopting a modelling approach to trafficking in persons networks is that adopting such an approach would make it possible to evaluate the impact of prevention and intervention measures at each step of the trafficking process. The impact of changes in immigration policies, enforcement strategies and victim service approaches could be evaluated across time and place [7, 36-38]).

Third, information on known cases of trafficking in persons (both reported and unreported) from various places should be collected to inform assessments of the recruitment, transport and destination stages and then be used to calculate estimates, within a definable margin of error (based on reporting rates derived from interviews with victims and from the size of the at-risk population covered by data-gathering and assessments in different places around the world).

Thus, an assessment of trafficking in persons should occur in three stages. First, in line with the “at risk” circle in figure VI, it is necessary to develop an estimate of the size of the “risk pool”, i.e. the pool of people at risk of being trafficked. That level of risk is to be assessed using indicators such as those presented in figure I. In a way similar to that used in the Corruption Perceptions Index of Transparency International, factors associated with human trafficking can be identified and measured comparatively [39]. Changes over time in the size of the pool of potential victims are important indicators of the success of efforts to prevent and reduce trafficking in persons.

The second stage of assessment (the middle three boxes in figure VI) consists of evaluating trafficking in persons through an enterprise network model (see figure V). The variables that underlie that model can be quantified (see table 2) and measured to determine the impact of changes on supply, demand, regulation and competition in human trafficking enterprises. Treating trafficking in persons as an activity carried out by entrepreneurial networks that react to pressures affecting profit and survival corresponds to a number of existing empirical studies. Assessing the changes that trafficking enterprises undergo over time will provide an indication of the impact had by strategies used to prevent and disrupt trafficking networks.
The third stage of assessment (the circle on the right in figure VI) indicates that once the size of the risk pool has been estimated (including changes over time) and once the impact that the above-mentioned strategies have on trafficking networks has been measured (over time), it will be possible to generate a better estimate of changes in trafficking activities as a whole (by assessing the proportion of the risk pool that is ultimately exploited by trafficking networks). This can be accomplished once data are gathered from several regions to test and refine the model.

**Future needs**

The solution to the problem of estimating trafficking in persons lies in a dedicated effort to gather data systematically over time, using a combination of approaches, as outlined in the present article. The following steps need to be taken: (a) the number of people at high risk of being trafficked needs to be estimated; (b) the pressures on supply, demand, regulation and competition that influence activities at the recruitment, transit and exploitation (destination) stages of trafficking need to be accounted for, and (c) reported and unreported known cases of trafficking in persons should be used to estimate the full extent of trafficking.

Two things have been lacking in research on trafficking in persons so far: a clear research approach and data gathered systematically from multiple sources and regions. The present article has offered a research approach, but the will and resources to fund and carry out the research and analysis necessary to better understand and measure trafficking in persons systematically continues to be lacking.

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MONITORING THE CRIME SITUATION: A DEVELOPING COUNTRY PERSPECTIVE

by Elias Carranza,* Mariano Ciafardini,** Peter Gastrow,*** Jianan Guo,**** Tulio Kahn,***** Celia Leones,† and Masamba Sita††

Abstract

The systematic collection of data on crime and justice can pose a serious challenge for developing countries. Many such countries lack regular national mechanisms for the collection, analysis, publication and utilization of crime data. When funding choices are to be made, there may be a perceived stark choice between allocating valuable resources to data collection and putting police officers on patrol in the streets. In the context of frequent low rates of response by developing countries to international data collection initiatives such as the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems, the present article draws on the experience of practitioners to suggest ways to establish effective crime data collection systems in developing countries. The importance of capacity-building, computerization and the technical support of the relevant international actors are highlighted.

INTRODUCTION

Statistics on crime and the criminal justice situation are an important tool for all Governments in formulating and implementing coherent and effective criminal policies. For developing countries, such data are vital not only because they illustrate the crime situation in the country but also because they can assist in gauging progress in overall development. Crime data are a useful indicator in measuring and evaluating the effectiveness of programmes for good governance and poverty alleviation.

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However, many developing countries face serious obstacles in producing data on crime and criminal justice, as is evidenced by frequent low rates of response to regional surveys on the issue. A case in point is the Fourth Survey on crime trends in Africa, carried out by the African Institute for the Prevention of Crime and the Treatment of Offenders. Of the 44 Governments invited to participate in the Survey, only nine (about 20 per cent) responded: Botswana, Ghana, Madagascar, Mauritius, Seychelles, South Africa, Uganda, Zambia and Zimbabwe. Such low response rates are by no means unique to Africa; they can also be found in other regions of the developing world.

The causes of such low response rates are manifold. One of the main reasons is that in developing countries, qualitative and quantitative data that can be readily processed are often unavailable. Many developing countries lack established national mechanisms for the collection, analysis, publication and utilization of crime data. In such circumstances, collecting data on crime becomes a difficult exercise at both the level of design of data collection mechanisms and that of actual data collection.

Lack of resources is often cited as a factor contributing to the current situation. Even if reporting crime is considered an essential function because it provides the public with information about the safety of the community, some Government agencies that are particularly limited financially may forgo such routine activities in order to save resources for patrolling the streets. Budgetary restrictions require some activities to be cut, and crime reporting is often the first casualty. In addition, staff at small centres where there is little crime to report may feel that crime reporting is an unnecessary exercise.

In most cases, responding to surveys is a time-consuming activity. Differences between domestic categories of crime and the standard definitions figuring in international surveys complicate the completion of questionnaires; consequently, such exercises may be abandoned before they are even begun. For crimes related to recent United Nations conventions on drugs, crime and terrorism issues, such differences are usually less pronounced, partly because the provisions of those international instruments have been translated into national legislation.

In addition, most data require further processing before they can be used. For example, officials compiling data for a questionnaire might have to bridge gaps and calculate estimates if source data are incomplete. In addition, more often than not, such exercises are carried out by officials who have little relevant experience or lack suitable training and are therefore not in a position to undertake such a task.
Some of the challenges that developing countries face in reporting data relate to the request for data itself. The absence of a broad shared vision of what is being measured makes that exercise difficult. The survey instruments contain definitions based on a wide range of crimes experienced in different countries. Organized crime, for example, encompasses a wide variety of divergent criminal activities. In fact, a United Nations Office on Drugs and Crime (UNODC) report entitled “Results of a Pilot Survey of Forty Selected Organized Criminal Groups in Sixteen Countries” (September 2002), found that the most striking outcome of that data collection exercise was the variety of groups on which information had been collected, which suggests that when transnational organized crime is referred to, the references are to very different phenomena in different localities, for example, cigarette smuggling in one country and trafficking in human beings in another.

In addition, crimes that are rare in developed countries, such as car hijacking, theft of livestock and robbery with the retention of the victim (short kidnapping), may be more frequent in developing societies. Even the counting of homicides may be done differently in different developing countries.

Current international comparative surveys may overlook other issues. For example, in some developing countries it is not uncommon for crime victims to suffer police brutality. A victimization survey carried out in 39 cities in the state of São Paulo, Brazil, has shown that 9.4 per cent of crime victims suffered aggression by a police officer.

Likewise, in almost all countries of Latin America, as a result of the overcrowding of prison systems, many detainees are incarcerated in police facilities. Such detainees are not included in prison statistics, and, consequently, prison population rates submitted to the United Nations may be lower than the actual rates of incarceration. Thus, collected data may not always fully reflect the special crime situation in some developing countries.

The underreporting of crime appears to be another problem in some developing countries. In victimization surveys, for example, interviewees may declare that they reported the commission of a crime while, in fact, they did not file a formal report. The victimization survey carried out in the cities of the state of São Paulo, Brazil, showed that 86.4 per cent of victims of car hijacking claimed to have contacted the police after the crime, but only 4.5 per cent of those had actually called the police or approached an officer.

Given the low level of resources allocated to crime reporting, developing countries may also face enormous challenges in consolidating crime information at the national level. In countries formed by a federation of independent
states, such as Brazil, and in countries where police departments are organized at the state or local government level, national Governments may have difficulties obtaining crime data from local authorities. Further, citizens might report crimes to two or more law enforcement agencies, thus leading to double counting, which can be eliminated only through further verification of the data, a process for which resources are often not available.

Crime data may also be perceived to be confidential and as not to be shared with other Governments or international organizations. In the example of the survey carried out by the African Institute for the Prevention of Crime and the Treatment of Offenders mentioned above, one respondent expressed regret that he was unable to submit a full report since the Government had not approved the request.

Governments may allocate inadequate resources to the collection and reporting of crime data because they give low priority to the issue. Often, Governments fail to see the importance of the exercise, and policymaking in the field of crime prevention and criminal justice is given low priority.

Ways to address the problem

The establishment of effective systems for data collection is a prerequisite for improving the current situation. Programmes on good governance provided to African countries in the framework of the United Nations Development Assistance Framework should incorporate technical assistance for the production, storage and dissemination of data on crime and criminal justice. Capacity-building in the field of statistics is essential for the establishment, institutionalization and production of good-quality statistical reports. Capacity-building efforts should cover both national and local government agencies and should include training activities on statistics, special courses on survey operations and analysis and research, among other things. Building capacity includes methodological improvements in major surveys, data compilation and all activities geared towards building the capability of statistical agencies to respond to needs.

Where such systems already exist, efforts should be made to further improve them and remove inconsistencies. To address data gaps, among other activities, the reporting systems of all agencies that are part of the criminal justice system should be improved, allocating budget resources for that purpose.
The automation of processes for collecting statistics on crime is equally important. Computer databases on crime, criminal offences and criminal justice administration should be established. Related databases containing criminological information such as research studies and publications should be established. Governments should also provide opportunities for statisticians and researchers to discuss ways to improve reporting systems, data collection and estimation procedures.

Experience has shown that the United Nations has an important role to play in addressing the problem of the low interest in exercises for crime data collection. Regular requests from the United Nations for crime-related data have the potential to spur local activities and create awareness of the importance of collecting data on crime. In that context, both the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems and the International Crime Victim Survey may serve as a starting point for institutional development. Moreover, in order to strengthen activities promoting the use of statistics, the statistical community should review how statistics are presented to the general public and consider how best to package its products and services. Statistics are better appreciated if they are easily understood. Advocacy for the use of statistics can raise the public’s awareness of the role of statistics in their lives. Such advocacy includes activities such as data appreciation workshops and presentations for both government officials and individuals. Stronger partnerships with educational and research institutions must be developed. Increased awareness of the importance of statistics will result in a higher priority being given to funding statistical activities.

The United Nations can play an important role in those activities because of its long history of collecting, analysing and publishing data and because of its long-standing cooperation with Governments and other actors, including non-governmental organizations, on data collection issues. In such cases, the United Nations can act as a catalyst in strengthening national capacities for statistics on criminal justice. UNODC plays a key role in providing technical assistance to States that embark on creating a proper mechanism for collecting and reporting crime data. The United Nations can also provide training at the national and regional levels and manage an effective mechanism to ensure that Member States have access to collected data and that information is shared among different organizations and agencies.

UNODC can also play a role in assessing the need for training programmes, designing and coordinating such programmes, assisting in the design, development and implementation of projects and providing other needed expert advice as requested. UNODC could also assess the feasibility of creating regional offices responsible for data collection in the various parts of the
world, to promote better understanding by Governments of the importance of international data collection efforts carried out by the United Nations and to assist United Nations information-gathering activities more effectively.
THE CURRENT DATA COLLECTION EXERCISE: AN ASSESSMENT

By Erik Grevholm,* Beata Gruszczynska,** Kauko Aromaa,*** Markku Heiskanen,**** Stephen Mihorean***** and Paul Smit†

Abstract

International data collection initiatives in the area of crime and criminal justice include the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems and regional initiatives such as the European Sourcebook of Crime and Criminal Justice Statistics. While such cross-national data collection efforts offer a unique insight into reported crime at the international and regional levels, they suffer from considerable challenges, including the need to maintain response levels, to ensure full questionnaire completion and to control for differences in national interpretation. This article contains suggestions from a number of experts in crime statistics on how to improve current cross-national data collection exercises. Issues of questionnaire design, survey periodicity, timeliness of data, quality control and the needs of data users are addressed.


The United Nations started carrying out the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems pursuant to requests by the General Assembly. The first of those United Nations surveys covered the period 1970-1975. Since 1984, data on the incidence of reported crime and the operation of criminal justice systems have been collected at regular intervals through the Survey (see table 1), in accordance with Economic and Social Council resolution 1984/48 of 25 May 1984. Survey results provide an overview of trends and interrelationships of the various parts of criminal justice systems and thus promote informed administrative decision-making, at both the national and international levels.

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****European Institute for Crime Prevention and Control, affiliated with the United Nations.
*****Department of Justice of Canada.
†Ministry of Justice of the Netherlands.
The questionnaire used for the Survey contains a series of questions mostly requesting statistical data on the main components of criminal justice systems. Through the Survey, considerable amounts of data are collected, with a wide coverage of important indicators of crime and criminal justice, including data collected from police, prosecution services, courts and prisons.

<table>
<thead>
<tr>
<th>Survey</th>
<th>Period covered by the Survey</th>
<th>Year in which the questionnaire was distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>1970-1975</td>
<td>1978</td>
</tr>
<tr>
<td>Fourth</td>
<td>1986-1990</td>
<td>1992</td>
</tr>
<tr>
<td>Fifth</td>
<td>1990-1994</td>
<td>1996</td>
</tr>
<tr>
<td>Sixth</td>
<td>1995-1997</td>
<td>1999</td>
</tr>
<tr>
<td>Seventh</td>
<td>1998-2000</td>
<td>2001</td>
</tr>
<tr>
<td>Eighth</td>
<td>2001-2002</td>
<td>2003</td>
</tr>
<tr>
<td>Ninth</td>
<td>2003-2004</td>
<td>2005</td>
</tr>
</tbody>
</table>

Possible reasons for the low response rate of the Survey

The low response rate of the Survey, which appears to be declining even further, is a major concern. Only 65 countries had responded to the questionnaire for the Eighth Survey by 2005, despite the fact that three years had passed since the period covered by that Survey (2001-2002) had ended. While it is true that additional responses continued to be received even after 2005, they were few in number. For the Sixth Survey, 75 responses were received within three years after the end of the period covered by that Survey, with only a few additional countries submitting their results after that time. If those figures are taken as a guideline for the final expected number of responses for the Eighth Survey, a total of some 72 responses can be expected, far lower than the 92 countries that submitted responses to the Seventh Survey and the 83 countries that submitted responses to the Sixth Survey.

The reasons for the low response rates are manifold; the burden on Survey respondents is a major factor. A large number of questions in the current Survey questionnaire require comments and supplementary notes, a task that greatly increases demands on the time and resources of the respondent.
Another reason for low rates of response to the Survey may be its perceived lack of utility for the Governments concerned. Often, Governments use international crime data only to compare rankings and the relative positions of the participant countries, and rarely to inform the development of policy. As users are aware of the vast differences in crime legislation, the organization of criminal justice systems and statistical systems among regions, international crime data compiled by the United Nations are seldom used for comparing patterns of crime and criminal justice systems in various countries. Instead, regional information, such as the European Sourcebook of Crime and Criminal Justice Statistics, is consulted. It is probable that some Governments perceive the act of completing the Survey questionnaire as a way of providing a service to the United Nations and not as an activity that will ultimately benefit them and other members of the international community.

Submission of partial answers

Another concern is that, on average, respondents provide answers to only about two thirds of the questions contained in the Survey questionnaire. As shown in table 2, both developing countries and developed countries have low rates for the number of Survey questions answered. The validity of a questionnaire in which less than a third of the questions have been answered is doubtful.

Table 2.  Percentage of questions answered in the Sixth Survey, covering the period 1995-1997

<table>
<thead>
<tr>
<th>Country or area</th>
<th>Survey questions answered (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovenia</td>
<td>89</td>
</tr>
<tr>
<td>Tonga</td>
<td>88</td>
</tr>
<tr>
<td>China (Hong Kong only)</td>
<td>87</td>
</tr>
<tr>
<td>United Kingdom of Great Britain and Northern Ireland (England and Wales only)</td>
<td>86</td>
</tr>
<tr>
<td>Japan</td>
<td>86</td>
</tr>
<tr>
<td>Estonia</td>
<td>85</td>
</tr>
<tr>
<td>New Zealand</td>
<td>84</td>
</tr>
<tr>
<td>Romania</td>
<td>84</td>
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<tr>
<td>Finland</td>
<td>83</td>
</tr>
<tr>
<td>Singapore</td>
<td>83</td>
</tr>
<tr>
<td>Canada</td>
<td>82</td>
</tr>
<tr>
<td>Republic of Moldova</td>
<td>82</td>
</tr>
<tr>
<td>Country or area</td>
<td>Survey questions answered (percentage)</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>80</td>
</tr>
<tr>
<td>Sweden</td>
<td>80</td>
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<tr>
<td>Bulgaria</td>
<td>78</td>
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<td>Israel</td>
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<td>Cyprus</td>
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<tr>
<td>Azerbaijan</td>
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<td>Latvia</td>
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<td>El Salvador</td>
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<td>Argentina</td>
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<td>Croatia</td>
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<td>Ukraine</td>
<td>73</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>72</td>
</tr>
<tr>
<td>United Kingdom (Scotland only)</td>
<td>72</td>
</tr>
<tr>
<td>South Africa</td>
<td>70</td>
</tr>
<tr>
<td>Spain</td>
<td>70</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>68</td>
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<tr>
<td>Costa Rica</td>
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<td>Norway</td>
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<td>Slovakia</td>
<td>67</td>
</tr>
<tr>
<td>Netherlands</td>
<td>66</td>
</tr>
<tr>
<td>United Kingdom (Northern Ireland only)</td>
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<tr>
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<td>Denmark</td>
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<td>Turkey</td>
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<td>Ireland</td>
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<td>Colombia</td>
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<tr>
<td>Greece</td>
<td>53</td>
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<tr>
<td>Italy</td>
<td>52</td>
</tr>
<tr>
<td>India</td>
<td>51</td>
</tr>
<tr>
<td>Country or area</td>
<td>Survey questions answered (percentage)</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>----------------------------------------</td>
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<tr>
<td>Mauritius</td>
<td>50</td>
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<tr>
<td>United States of America</td>
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<tr>
<td>Malaysia</td>
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<td>Fiji</td>
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<td>United Republic of Tanzania</td>
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<td>Lesotho</td>
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<td>China</td>
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<tr>
<td>Panama</td>
<td>40</td>
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<tr>
<td>Switzerland</td>
<td>39</td>
</tr>
<tr>
<td>The former Yugoslav Republic of Macedonia</td>
<td>38</td>
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<tr>
<td>Uganda</td>
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<td>Chile</td>
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<td>Peru</td>
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<td>Albania</td>
<td>20</td>
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<tr>
<td>Australia</td>
<td>19</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>19</td>
</tr>
<tr>
<td>Occupied Palestinian territory</td>
<td>17</td>
</tr>
<tr>
<td>Belize</td>
<td>16</td>
</tr>
<tr>
<td>Uruguay</td>
<td>16</td>
</tr>
<tr>
<td>Senegal</td>
<td>14</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>6(^a)</td>
</tr>
<tr>
<td>Kuwait</td>
<td>3(^a)</td>
</tr>
</tbody>
</table>

Source: Stephen Mihorean.

\(^a\)Percentages based on incomplete information.
As is the case with overall Survey response rates, there could be several reasons why States provide partial answers. There could be a lack of suitable data, even in countries with highly developed data collection systems. There may be problems of comprehension or definition: often the information sought by the questionnaire is not precisely defined. To improve the percentage of comprehensive responses, it might be relevant to consider reducing the number of questions in the questionnaire, making the definitions contained in the instructions more precise, more extensively collecting information on the nature of the data and coordinating more closely with similar data collection initiatives.

**Possible solutions**

In addition to the factors contributing to the low Survey response rates identified above, there may be other important causes. The reasons for the low response rates should be evaluated and addressed. If they are not, and the response rates decline even further, it is likely that even fewer countries will respond in the future.

**Scope and design of the Survey questionnaires**

The large number of questions could create an obstacle for States. Part of the solution is a more focused Survey questionnaire and perhaps more coordination with other initiatives for collecting data of this kind.

One key factor to consider is whether data from various sources are comparable. Data on expenditure items may, for the most part, not be comparable. Questions relating to that issue should be reviewed, and those questions that will not produce comparable data should be eliminated.

Similarly, the data collected on police-recorded crime and other areas of interest within the criminal justice systems are organized in a way that seems logical, according to the flow of the criminal justice process. Given the often limited value of data of that nature for comparisons between countries, as well as the low response rate, it can be argued that consideration should be given to reducing the number of questions. The Survey questionnaire could, for example, focus on fewer types of crime.

**Periodicity of the Survey**

The periodicity of the Survey should be decided taking into account its effect on the response rate. A two-year cycle is considered appropriate, as such a questionnaire requires less work than would a questionnaire covering a five-year cycle.
The present periodicity of the Survey seems reasonable, taking into account the rhythm of production of statistics in most countries, the often limited possibilities for making conclusions based on that data and the smaller degree of change that can be measured in shorter periods. The present periodicity, however, accompanied by rather slow production, results in a source of data that is not useful for detecting and following changes that occur in shorter time spans.

**Timeliness of the Survey data**

For the purpose of developing policies, data should be as recent as possible. To have statistics on 2005 in January 2006 would be ideal. However, it is not realistic. Publication of results (following the collection of data, checking quality and conducting analysis) takes place at least a year and a half after the end of the reporting period.

It would be sensible to make the collection of data a continuous process and publish results in annual intervals. To ensure adequate data quality, a contact person (focal point) in each country is required.

**Needs of the Survey users**

A review of the scope and design of the Survey should be undertaken bearing in mind the needs of the users. The primary users of the Survey results are the policymakers of Governments and researchers. Those groups are interested in defining new policies and evaluating policies by examining the situation in other countries. To do so, they need reliable, comparable and up-to-date statistical information. The distinction between policymakers and researchers is often blurred as the researchers often work for policymakers.

Other actors influence the political process. Government policymakers are often influenced by the media, and it is often the case that crime issues are given serious consideration only when they have attracted media attention. While the media is not the primary user of crime data, their influence should not be underestimated, as the general public tends to obtain much of its information on crime and crime-related policy issues from the media. Accordingly, information must be presented clearly and intelligibly to the uninitiated.

Nevertheless, Governments and the relevant authorities remain the primary potential users of information on crime: the relevant international forums are where the records of countries are compared and pressure for action can be created.
Sources and quality control

Much is lost if the Survey relies completely on information provided by Governments. Lack of knowledge or expertise often results in the unavailability of information, and on some occasions attempts are made to conceal information or provide biased information. Independent expert sources should therefore be used to supplement Government information. While that step will increase workload, as it involves cross-checking various sources, it will significantly improve the overall quality of the data. Comprehensive and validated data will be more frequently used.

The United Nations Office on Drugs and Crime (UNODC) could approach this dilemma by joining forces with existing expert groups and networks. In Europe, the European Institute for Crime Prevention and Control, affiliated with the United Nations, and networks such as the expert group of the European Sourcebook for Crime and Criminal Justice Statistics, the national contact points of the European Union Crime Prevention Network and the national Eurostat contact points should be considered for cooperation. The validation of national crime data received from other sources is the core problem of the issue.

UNODC should adopt strict procedures for checking the data that it receives, not only by communicating with individual countries but also by comparing such information with other sources. The results of such quality checks should be presented in the publication of the data. As the nature of crime and the way that crime statistics are prepared vary considerably from region to region, checking quality, including the accuracy of data interpretation, could best be done at the regional level.

The distribution of responsibilities varies from country to country, making it difficult to create a common system for collecting data that is optimally suited to all countries. One option would be to consider the possible advantages of the system using reporters such as the system used in preparing the European Sourcebook.

If the differences in the data are small, adjustments can be made by UNODC. In the case of large discrepancies, local representatives should be consulted with respect to the reliability of the different data sources. If there is no response from local representatives or if the response does not contribute to a solution, UNODC should exercise its judgement and provide an explanatory note to accompany the data.
Role and priorities of the United Nations Office on Drugs and Crime

In line with its mandate, UNODC collects and disseminates global crime data on several dimensions of crime and thus promotes the knowledge-based formulation of crime policy among Member States. However, it may not be the core priority to continue to collect and disseminate general data on, in particular, police-recorded crime. If crime statistics are available from other international sources and if that information is collected with sufficient quality control, there is no need for UNODC to collect such information from the countries involved.

It would be more productive to focus on the most relevant and most comparable information. Core areas could be the use of incarceration in all its forms for alleged crime-control purposes, comparable homicide and assault-type victimization data on personal security and corruption-related problems experienced by the population. Of course, there are other important concerns in that area. Separate development work should be initiated to identify existing concerns and how those concerns could be monitored at the international level. Particular care should be taken to speed up the process so that the published data are as recent as possible.

Comparative crime information is useful for promoting knowledge-based criminal policy. To that end, it is important to be able to carry out reliable and valid comparisons of updated information, and it is in that area that an international organization is best able to contribute. Some countries find the data on their own and are not in need of UNODC sources. But many other countries are not able to carry out such an exercise on their own. However, even countries with no immediate need for UNODC support in collecting information would benefit from joint initiatives for comparing data. Such countries may be collecting and processing data in ways that may not fully conform with the ideal of knowledge-based crime policy.

Dissemination of the Survey results

Data collected through the Survey should be published regularly, not least because reporting and publishing require a thorough review of data. Survey results should be presented in freely accessible publications, both in print and on the Internet. Such publications must present all data in addition to information on what those data mean and how they are collected – the so-called metadata – as well as the results of quality checks. The European Sourcebook of Crime and Criminal Justice is a good example. Publications could also contain some basic analysis, preferably done at the regional level. If Member
States receive a condensed comparative and interpreted report of the results, it could increase their interest in the data collection exercise.

It may not be advisable to make the original data freely available, for example, in the form of a database that can be downloaded. All analyses using the results of UNODC-collected data should refer to the official UNODC publications (because the metadata and the quality checks are part of those publications). The only way to ensure that that is done properly is to make UNODC publications the only source of the information. However, the presented information should not prevent users from gaining access to the data.

In the case of the publication of processed and interpreted data, the reliability and objectivity of the source is of the utmost importance. Written documents are useful if those reports include the most important results and interpretations of the results. Misleading, false and biased interpretations must be avoided, while openly stating the objectives of collecting, publishing and making available the information.

Furthermore, it is important that UNODC fully apply the Manual for the Development of a System of Criminal Justice Statistics* to the presentation of statistics on crime and criminal justice.

**Comparability**

Since the holding of the International Congress on the Prevention and Repression of Crime in London in 1872, the comparability of crime data has been one of the most important issues considered at the international level. Progress has been made in this area. United Nations surveys cover countries worldwide, while the European Sourcebook and the United States Sourcebook of Criminal Justice Statistics concentrate on regional areas. Surveys on victimization show different perspectives, such as individual perceptions of crime and opinions concerning police and law enforcement. Vital statistics of the World Health Organization are useful in comparing and verifying statistics on homicide and other violent offences.

However, many crime statistics produced in different countries are, by nature, not comparable. While some efforts should be made to harmonize definitions of crimes such as organized crime and corruption, definitions are only one aspect of the issue of comparability. Also to be taken into account are the way law enforcement is organized in a country and the statistical methods used.

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*United Nations publication, Sales No. E.03.XVII.6.
The current data collection exercise: an assessment 127

The number of police-recorded offences and offenders is the result of many factors, among which the criminal justice system and the rules of statistics play a significant role. Law enforcement priorities, cultural and socio-demographic differences, as well as the public attitude towards the police and the propensity to record crime, should also be considered.

Police-recorded crime rates, in particular, are affected by factors that render information incomparable. Unfortunately, police-recorded crime rates are the type of crime statistics most frequently used, mainly as a proxy for the “real” crime rate. It would be better for UNODC to place more emphasis on other types of statistics, such as victim surveys and convictions, sanctions and prison statistics.

From the point of view of methodology, for the comparison of the dynamics and structures of crime data, using data from international databases, such as that of the United Nations Surveys, is better than comparing crime statistics drawn from national sources for different countries. It should be taken into account that crime trends calculated on the basis of administrative data may also reflect the impact of criminal policy and the modification of statistical procedures.

It is important to integrate information with victim survey data, improve data collection techniques and discuss the methodological aspects of the quality and comparability of data. The Meeting on Crime Statistics held jointly by UNODC and the Economic Commission for Europe from 25 to 27 February 2006 was a step in the right direction.

**Need to balance administrative and survey data sources**

There is no single optimal solution for balancing administrative and survey data sources, given the large differences between countries. Government representatives should be notified about possible problems, but solutions should be left to individual countries. Only general guidelines should be provided for the solution, perhaps with actual examples.

Experience shows that surveys that are optimized for one country may not be applicable in another country, even if two countries may be comparable in many other respects. For example, work in Sweden to create a national crime survey was very much inspired by the design of the British Crime Survey. Nevertheless, the methodologies ultimately chosen turned out to be quite different with respect to, among other things, methods of data collection and periodicity.
International Crime Victim Survey

The aim of the International Crime Victim Survey is to provide information on crime and victimization through a standard questionnaire, the results of which are internationally comparable. To ensure that, all aspects of the methodology have been standardized to the maximum extent possible. The first round of international surveys was carried out in 14 countries in 1989. Further rounds were undertaken in 1992, 1996 and 2000. To date, more than 140 surveys have been carried out in more than 70 countries. Preparation for a fifth round of surveys started in 2004, with the involvement of UNODC.

The International Crime Victim Survey is less affected by the problems described above because it is supported by the countries that have made the decision to carry out that Survey. The problem of respondent burden is largely eliminated, since data are collected by survey companies and the surveys are financed by the requesting Governments. Problems of data comparability are also greatly reduced through the use of a single questionnaire. Surveys that are designed and carried out according to the prescribed methodology will provide comparable data that can be used to address policy concerns. However, problems are bound to occur if data are not collected in accordance with basic standards of methodology (representative sample, accurate timing of data collection periods etc.). It is vital that technical methods of data collection are uniform, because varying systems of information infrastructure could result in considerable problems. If those requirements are observed, the International Crime Victim Survey is of great value for measuring those types of crime victimizing individuals and thus most crime committed against the general population.
PART TWO

Notes and action
POLICE DATA

By Gordon Barclay,* Michael Rose** and Marilyn Rubin***

INTRODUCTION

Several institutions collect national police statistics. The numbers reported to such institutions may not be consistent over time and vary in terms of when the numbers are reported.


The police statistics section of the questionnaire for the most recent United Nations Survey of Crime Trends and Operations of Criminal Justice Systems covers the areas of police personnel, recorded crime and persons brought to justice based on a standard set of definitions formulated by the United Nations Office on Drugs and Crime (UNODC).

Tables on the following four themes are included in the police statistics section of the Survey:

- Table 1. Police personnel, by sex and financial resources
- Table 2. Crimes recorded in criminal (police statistics), by type of crime, including attempted crimes

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*Central Intelligence Hub, Home Office, United Kingdom of Great Britain and Northern Ireland.

**Chief, Communications and Publications, International Criminal Police Organization (INTERPOL).

***Professor and Director, Public Administration Program, John Jay College of Criminal Justice, City University of New York, United States of America.
• Table 3. Persons brought into initial formal contact with the police and/or the criminal justice system, by type of crime, where the initial formal contact might include being suspected, arrested, cautioned etc.

• Table 4. Persons brought into formal contact with the criminal justice system, by sex and age, where formal contact might include being suspected, arrested, cautioned etc.

At John Jay College of Criminal Justice in New York, data for 58 of the 66 States responding to those four tables were analysed, for use by UNODC. That analysis revealed that more States provided data under table 2 than under any of the other three tables: 52 States provided data on at least one item in table 2, 48 States provided data on at least one item in table 1, 40 States provided data on at least one item in table 3 and 41 States provided data on at least one item in table 4. This pattern of response was similar to that of all of the previous United Nations surveys. Many of the States that provided responses gave inconsistent information in tables 1-4 when the responses were compared with those of the fifth, sixth and seventh surveys.

Other data sources

1. International Criminal Police Organization

   Every year, the International Criminal Police Organization (INTERPOL) collects information on recorded crime and the number of persons committing the crimes from its member States. The data are collected by INTERPOL country bureaux, which are staffed by national police officers. Analysis has shown differences between this data and information collected by both the United Nations and the Council of Europe’s European Sourcebook of Crime and Criminal Justice Statistics. The data collected by INTERPOL are not currently available to the general public.


   Information on recorded crime and police personnel covering the main States members of the Organization for Economic Cooperation and Development (30 countries) is collected from Government sources. The collection has now been passed to the Statistical Office of the European Commission (Eurostat); the next publication, which includes data for 2004, is due for publication in 2006.
3. European Sourcebook of Crime and Criminal Justice Statistics

Information on recorded crime and police personnel is collected at intervals for European Union member States using a system of national correspondents. The data collected include both numerical and definitional information. The next issue of the European Sourcebook of Crime and Criminal Justice Statistics is due for publication in summer 2006.

4. World Health Organization

The World Health Organization (WHO) collects homicide data based upon national death registration information. Although for many countries the data are similar to those collected by the United Nations, in some countries (e.g. the United Kingdom) there are major differences.

The United Nations Survey includes information on 26 countries that are not included in either the European Sourcebook or the Home Office/Eurostat survey. Although WHO includes information on 70 additional States, the data are often considerably out of date.

Main issues

The main issues relate to data collection procedures and methodologies used regarding the requested data.

1. Data collection methods

For each survey, the way that information is gathered differs. For the Ninth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems, the request for information was sent to the permanent missions to the United Nations (for forwarding to the appropriate Government departments) and national statistical institutes. INTERPOL sends out requests to its national bureaux in each member State. The European Sourcebook group uses selected experts in each country. In many cases, the Survey is completed by a junior official with no previous experience in criminal justice statistics who is, therefore, unable to provide any quality control or comparisons with previous replies.
2. Methodologies

The following questions concern police personnel and budgets:

- Differences in the responsibilities of police officers, particularly uniformed police officers, may influence the kind of data that is reported. For example, in many countries uniformed police officers include staff who are also part of militia groups and who carry out support functions.

- If organized crime is not dealt with by a specialist group of police officers, it is difficult to collect data on how many police officers in a given country are involved in fighting such crime.

- There is no commonality between countries with regard to the categories included in the police budget; for example, whether they include capital costs.

The following questions concern recorded crime:

- There is wide variation in what is included as major/minor assault or theft; burglary-related offences are often not identified separately in criminal law; definitions of drug-related offences are too broad; and total recorded offences relate more to collection procedures than crime levels.

- In different countries, authorities record statistics at different times, adopt different rules for counting multiple offences and report varying levels of crime.

- Often, not all the data collected by all the police forces are included (e.g. the crimes recorded by transport police are sometimes omitted).

- No information is collected through the questionnaire on crime victimization surveys carried out in each country.

The following questions concern persons brought into formal contact with the police and/or other parts of the criminal justice system:

- There is no common definition for enabling useful comparisons to be made in terms of establishing when persons come into formal contact with the criminal justice system: in some countries, such contact is understood to have been made if a suspect and a police officer are at
the same incident, while in other countries such contact is made when a case file is passed to a prosecutor or when the suspect is present in court.

- The term “formal” may be interpreted in different ways.

**Recommendations on the way forward**

The objective should be to provide a comparable and consistent series of police data without the need for several international bodies to request the same information. Since comparisons are often made across the criminal justice system, an understanding of the comparability of statistics at each point within the system is essential. To achieve this, it is suggested that the following steps be taken:

- Data should be collected from all police personnel and crimes should be recorded according to the main types of offences.

- Information on definitions used in the European Sourcebook should be collected.

- Establishing a continuous process of sharing data between institutions to reduce data collection requirements from countries and ensure comparability should be considered.

- Organizing a second meeting, which could be coordinated by John Jay College, among persons involved with all surveys (representatives of the National Institute of Justice of the United States, INTERPOL and entities of the United Nations system, including WHO, as well as Australia, Canada and the United Kingdom) should be considered.

- An effort should be made to ensure understanding and, if possible, comparability of statistics on the different parts of the criminal justice system.
COLLECTING STATISTICS ON PRISONS: STRENGTHS AND WEAKNESSES OF THE UNITED NATIONS SURVEY OF CRIME TRENDS AND OPERATIONS OF CRIMINAL JUSTICE SYSTEMS

By Roy Walmsley,* Marcelo Aebi** and Hiroyuki Shinkai***

The section of the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems on prisons enjoys a relatively high rate of response, with an average of 47 per cent of variables completed for 2003 and 2004. However, the results of the Survey are far from being satisfactory in terms of quantity and quality. The Survey represents a unique data collection exercise through which relevant information could be collected from all Member States. It reaches the main agencies and sources of data in the criminal justice systems of Member States and, for countries providing complete responses, it allows for an analysis of the rate of attrition in the administration of justice.

Nevertheless, in absolute terms the overall response rate is low and most of the replies are received from developed countries. On average, replies to the Survey were received from 9 per cent of Member States in Africa, 26 per cent of Member States in the Americas, 21 per cent of Member States in Asia, 60 per cent of Member States in Europe and 21 per cent of Member States in Oceania. Moreover, not even those States which had submitted replies had managed to provide information for all parts of the questionnaire. An analysis of the information on prisons collected through the sixth, seventh and eighth surveys reveals that the overall response rate for that section was just 30 per cent. It is likely that some States do not even record the kind of information requested through the questionnaire.

Suggestions on the way forward

In order for the results to provide a good overview of the world situation, much effort should be placed into increasing the number of replies from

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States outside Europe, for which a simplified questionnaire might be needed. In addition, the following suggestions are made with a view to increasing the capacity of Member States to respond to the questionnaire:

- Assistance should be provided to States to enable them to strengthen their capacity for collecting relevant information.

- Education may be necessary, for both policymakers and practitioners, on the usefulness of statistics: good information should be collected to be made available for effective policymaking, not solely for filling out questionnaires. The usefulness and merits of completing the questionnaire should be articulated on the first page of the questionnaire.

- Field offices of the United Nations Office on Drugs and Crime may assist States in responding to the questionnaire.

- For developing countries, cooperation and coordination among donor countries might be helpful.

- The current two-year interval between questionnaires might represent too much of a burden for States, especially considering other reporting requirements of the United Nations (for example, those concerning the United Nations standards and norms in crime prevention and criminal justice and the reports mandated through the United Nations human rights treaties).

- A clear definition of the terms used is necessary to avoid confusion (for example, some authorities might find it difficult to distinguish between transnational crime and domestic crime). Questions should be well articulated and translated to avoid misunderstandings.

With regard to improving the quality and quantity of data collected through the section of the questionnaire on prisons, some technical aspects need to be addressed. In particular, questions need to be made clear so as to avoid confusion and increase the rate of response. For instance:

- Question 12.1 should clearly request information on the number of prisons, not prisoners.

- Question 12.2 should request information on the number of places that would be available if detention facilities were not overcrowded.
- Question 13 should clearly request information on the number of juvenile detainees who are incarcerated in institutions or sections of institutions that are separate from those used to detain adults. The above-mentioned suggestions regarding questions 12.1 and 12.2 should apply to questions 13.1 and 13.2.

- Question 12 should be reworded to cover all institutions, for adults and for juveniles, and question 13 should request information on the number of institutions and spaces within those institutions available for detaining juveniles.

- The total number of prisoners given in response to question 15.1 should equal the total given for the following categories of prisoners: untried prisoners (question 15.2); persons convicted but not yet sentenced (question 15.3); prisoners with an unconfirmed provisional sentence (question 15.4); sentenced prisoners (questions 15.5); and prisoners in other categories (question 15.6).

- Question 16 should be reworded to request information on all people held in penal institutions; not providing information on the total number of women, juveniles and foreigners in penal institutions could be regarded as the most serious deficiency of the section on prisons of the questionnaire.

**Reliability**

The reliability of the information submitted by Member States would increase if:

- Questions were phrased simply.

- The questionnaire was forwarded to the appropriate agency in each Member State.

- The questionnaire was given to the appropriate person (someone willing to give the right answers).

- Responding States were required to clearly identify the source of their information in order to allow for verification.

- The use of various sources were encouraged (for example, INTERPOL and the World Prison Population List).
Validity

The information submitted by Member States would have greater validity if:

- The purpose of the data collected were clearly articulated.
- Questions were phrased simply.
- Questions were not oversimplified, since that would not facilitate data analysis.
- Certain questions were introduced with the aim of eliciting information that would accurately reflect the true nature of the criminal justice system in a given country. For example, questions could be introduced on the following topics: type of sentence imposed (death penalty, life imprisonment, deprivation of liberty, fine etc.); average length of sentence handed down by the court (possibly by type of crime); type of diversionary measures (police, prosecution, sentencing stage and corrections); percentage of sentences actually served.

Any new questions, however, must be sufficiently clear to enable as many Member States as possible to reply to them.

Improvements in data analysis and dissemination of data collected

Data analysis

With regard to analysing data, the following should be kept in mind:

- The quality of the analysis of the data is largely dependent on the quality of the data.
- Although the nature of the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems may not allow researchers to use advanced statistical techniques, simple and thorough analyses would be useful.
- The institutes of the United Nations Crime Prevention and Criminal Justice Programme network might be able to carry out such analysis.
• Regional analyses should be encouraged since policymakers and practitioners might be more interested in the situation in neighbouring countries than in the situation in distant countries.

**Dissemination of analysed data**

The results of the analysis should be written in the clearest and most useful way possible. The use of the website of the United Nations Office on Drugs and Crime for disseminating the data should be encouraged.
INTRODUCTION

Crime victim surveys are of enormous political relevance. Today, such surveys are being used, both at the national and international levels, largely due to the general increasing tendency to use research results in politics.

It is generally known that official crime data only tell part of the story and the concept of “dark figures” is widely accepted. As a result, discussions on increases in the number of reported crimes are nearly always followed by questions on whether such increases reflect an actual increase or whether they are the result, for instance, of a greater inclination to report offences to the police.

Through crime victim surveys, it should be possible to answer the following questions:

• What is the actual level of crime?
• To what extent are crimes reported to the police?
• Why are crimes not reported to the police?

In fact, those fundamental questions can only be answered through crime victimization surveys.

Changes in the level of crime often attract more attention than in the actual level of crime, which means that, from a political point of view, it is important to carry out crime victim surveys at short intervals.

Furthermore, politicians also find crime victimization surveys useful for improving their knowledge on the behaviour of the police through replies to questions on whether the police dealt satisfactorily with a specific case and

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on whether a victim was happy or unhappy with the way in which the police handled it.

Questions on why some people are at a higher risk of victimization than others are seldom asked in political or general debates. In general, it is the overall results and trends that are of primary concern.

**Types of crime included**

Usually, different types of property crime, robbery, rape and other forms of violent crime are included in crime victim surveys. However, those crimes are also reported to the police, albeit to a varying degree. In Denmark and in many other countries, the rate of reporting is close to 100 per cent for car theft. Similarly, crimes like domestic burglary have a very high rate of reporting. Given that crime victim surveys tend to be too long and to include too many questions, serious consideration should be given to examining whether crimes with high reporting rates should be included in crime victim surveys, especially since statistics provided by the police often provide sufficient information on the risk and the actual level of such types of crime.

Contact crimes like violence and rape have a much lower reporting rate. That is one reason for making sure that crime victim surveys deal more with contact crimes than with property crimes. Another reason is the increasing political importance given to those types of crime. Violent and sexual crimes and crimes involving female or child victims have, over the past decade, become much more important politically in many European countries and that trend is likely to continue. If it does, new challenges might arise regarding the ability to include other forms of contact crimes in victim surveys or to measure the rate of victimization resulting from, for instance, the use of different degrees of violence. Politically, it would undoubtedly be interesting and convenient to know the actual number of serious, as opposed to minor, assaults committed or the number of incidents involving paedophilia in society.

**Distinguishing criminal from non-criminal acts**

Another essential issue is that of defining acts accepted as crimes. How should questions about crime be phrased? What should be done to ensure that reported incidents really are crimes and not just unpleasant experiences?
With regard to property offences, the problem is minor, as theft and similar offences result in distinctive and visible signs: a car is gone, a door has been broken open etc., which means that victims do not have to interpret whether the act was a crime or not. In addition, in all European countries penal law considers the taking of another person’s property without the consent of the owner to be a crime. Thus, comparative surveys should not cause problems regarding property offences.

Requesting information about violent and sexual offences through crime victim surveys, however, constitutes a great challenge because such offences often only become crimes when they are defined as such by the victim, which means that there are variations depending on the perception of the victim.

At present, there is no uniformity concerning methods used for requesting information about violence. Methods range from asking about “criminal violence” to asking questions about specific forms of aggressive behaviour and threats.

The International Crime Victimization Survey includes a question on “violence and threats”. In the introduction to the question, it is emphasized that the concern is about “crimes of violence”.

Especially in victim surveys on violence against women, it is common to include a number of questions on physical attacks. The International Violence against Women Survey includes no fewer than 12 questions about different forms of threats and physical and sexual attacks.

Different methods of gathering information produce very different victimization rates. For example, crime victim surveys carried out in Denmark show a difference in prevalence that is close to 1:10 when asking about “criminal violence” in general instead of asking about specific acts, including threats and certain types of minor aggressive behaviour. Similarly, there have been big differences in Denmark when comparing the information gathered through the International Crime Victimization Survey and the International Violence against Women Survey. Martin Killias of the University of Zurich in Switzerland has even demonstrated that different responses are given depending on whether information about a given type of act is requested in two or more questions. Dividing up the specific forms of physical attack into several questions results in a higher prevalence rate than splitting them into just two questions.

The problem with the technique used in surveys like the International Violence against Women Survey is that it allows for a divergence from the point
of the study, which is to measure the prevalence of violence. The International Violence against Women Survey maps out a number of acts, like grabbing and pushing, that could never or would never be defined as offences in a penal code. The fact that incidents captured by the International Crime Victimization Survey are of a more serious nature is also reflected in differences in reporting frequencies, which in Denmark were twice as high for the International Crime Victimization Survey as for the International Violence against Women Survey.

It is probably not a coincidence that studies on violence against women often use techniques that reveal high prevalence rates. What such studies show is that violence against women is a hot political issue and that surveys can be powerful tools in pursuing political aims. Yet to include a very wide range of acts in a crime victim survey destroys the validity of the survey. The concept of violence becomes misleading, including for politicians.

In comparative surveys, linguistic problems regarding contact crimes arise due to the fact that violent and sexual offences are defined differently in different countries. For instance, the information contained in the European Sourcebook of Crime and Criminal Justice Statistics shows that in some countries violence includes acts that cause pain, while in other countries it includes the infliction of bodily injury.

How, then, is it possible to carry out international comparative surveys on the prevalence of criminal violence? Should questions in surveys differ from country to country in order to reflect national legislation? Surveys like the International Crime Victimization Survey contain similar questions for all countries, thus facilitating the task of carrying out comparative research. As a result, however, such surveys do not provide information on national rates of violence in a legal sense. To some extent, the problem can be solved by submitting follow-up questions on the seriousness of the incident and on whether the incident is seen as a crime or not. Incidentally, it is remarkable that even though the questions contained in the International Crime Victimization Survey elicit information on violent crimes, only about 60 per cent of respondents regard the victimizing incident as a crime.

Generally, there is a need for more uniformity and more testing of different methods in constructing questions concerning sexual offences and violence. And it is necessary to discuss further how answers to those questions should be presented. The prevalence rates now published are presented as prevalence rates for different types of crimes, but in actual fact the prevalence rates often reflect more than just crimes. Should a greater effort be made to limit results to mirror penal law? Or should crime prevalence rates include acts that are
not seen as offences, neither from an objective viewpoint nor from the viewpoint of the respondent?

**Prevalence period**

With regard to the prevalence periods used in crime victim surveys, should we ask for information on victimization incidences that have occurred during the previous year, the previous 5-10 years or all previous years? Fortunately, crime victimization is rather rare, at least when it comes to crimes like robbery, violence and rape. One might therefore be tempted to use a very long prevalence period in order to be sure that there is a sufficiently large number of victims, but using long prevalence periods might yield results like those presented in the figure.

**Figure I. Denmark: prevalence rate of violence, by age of respondent**

![Graph showing prevalence rates of violence by age](image)

*Source: International Violence against Women Survey*

The figure shows a one-year and (nearly) lifetime prevalence rate of physical violence in Denmark. The lifetime prevalence seems to indicate that older women have been much more protected throughout their lives than younger women, while the reality is that such a prevalence rate is a reflection of short-term memory with regard to less serious incidents.
Currently, a one-year period is used in crime victim surveys; in the future, if such surveys were to concentrate more on serious types of contact crimes, it would be worthwhile considering a two-, three- or even a five-year prevalence period. First, because serious assault, rape and similar forms of serious crime are not forgotten within a short period of time and, second, because such crime is very rare.

Sample sizes

The size of the sample needed in a crime victim survey depends on the type of crime being studied. If the study is concerned with the overall rate of victimization, or with crimes for which the prevalence is known to be high, such as theft, the sample size does not need to be large. A sample of 2,000 will normally be sufficient. But there is a growing focus on rarer types of crime, for which it is important to work with rather large sample sizes. Increasing the prevalence period will not be sufficient. If we do not have large samples, it is impossible to demonstrate any differences between countries or between replicated national surveys. In the latest International Crime Victimization Survey, fewer than 400 of 27,000 Europeans reported incidents of physical violence during the previous year.

More than 25,000 respondents were included in the latest national violence victim survey carried out in Denmark.

Taking into consideration the cost of conducting crime victim surveys, it may seem rather unrealistic to ask for big samples. It would be feasible, however, if the length of the questionnaires was reduced by keeping to the primary purpose of the survey, which is to measure the actual level of crime.

Reducing the size of the questionnaire also has the advantage of increasing the response rate. The importance of the length of the questionnaire has been clearly demonstrated in the pilot study carried out in Denmark on the International Violence against Women Survey, which was calculated to have a net interview time of at least half an hour. Many women refused to participate simply because of the length of the interview. In order to secure a high response rate, interviews should not last much longer than 10 minutes.

The rather limited sample sizes used in many national and international surveys represent one of the biggest problems in this area.
Sampling procedure

Most crime victimization studies are based on computer-assisted telephone interviewing methods, which draw samples by randomly dialling listed telephone numbers. Even though face-to-face interviewing based on random household samples gives a higher response rate and there is some indication that high response rates are associated with lower victimization rates, the problem is not serious and such computer-assisted methods seem to provide an acceptable solution when there are few resources.

A bigger problem is the fact that a growing number of telephone numbers, many of which are for mobile telephones, are not listed. Since it is reasonable to assume that victims of violence are particularly likely to have unlisted telephone numbers, the problem can be quite overwhelming for those carrying out surveys. The obvious solution to this problem is to generate telephone numbers, which will, however, increase costs, as survey companies will require extra time, because of the quantity of non-existent numbers.
INTRODUCTION

The World Health Organization (WHO) is interested in crime data collection for the following three reasons:

- WHO works with Member States to develop health information systems, including systems to identify and record data on fatal and non-fatal violence, as a basis for national violence prevention policy development and programming.
- WHO draws upon country-level vital statistics and survey findings when developing regional and global estimates on mortality rates, including on homicides, and the burden of disease.
- WHO uses the findings of the United Nations crime surveys and other population-based surveys to inform global and regional advocacy work aimed at the prevention of violence.

National capacity to prevent violence

At the national level, WHO promotes the development of evidence-based policymaking and violence prevention programming, including by continually monitoring rates of homicide and suicide, rates of violence-related injuries for which hospital treatment is received and rates of reports filed by victims of violence. Such monitoring requires that all data collection systems and findings meet basic epidemiological criteria and contain sufficient detail to inform and monitor risk factors and rates of violent victimization. These rules are set out in the instruction manual to the second edition of the International Statistical Classification of Diseases and Related Health Problems: Tenth Revision.

*World Health Organization.
The international data collected through the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems and the International Crime Victimization Survey do not meet these epidemiological criteria, nor do they have the required level of detail to be useful for the purposes outlined above.

More specifically, WHO notes that police records, rather than representing a reliable measure of trends in violence, are a product of police activity—increasingly prompted by better surveillance and targeting, increased numbers of police officers and changes in recording practices. They are therefore of limited value for the purposes of evaluating the impact of violence prevention programmes that target underlying causes and risk factors. By contrast, injury-related data from emergency departments are a more objective measure of harm and should be used to target local violence prevention resources. This has been scientifically demonstrated in high-income countries and is likely to be even truer in low- and middle-income countries. In high-income countries, combining information generated by police and emergency departments can give a relatively complete picture but in poor countries, because of discrimination among the police and other areas of the criminal justice system, corruption, minimal resources and public distrust, such sources of information are unlikely to give an accurate picture of the situation. This means that health facility-based injury data and population-based survey data are the most reliable measures in such countries.

**Estimating the burden of disease**

For estimating the burden of disease, the data collected through the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems cannot be used since they reflect the incidence of crime recorded in police statistics, in which, especially in low and middle-income countries, homicides are significantly undercounted when compared with data from vital statistics and demographic and health surveys.

**Advocating the prevention of violence**

To date, WHO has made limited use of findings from the International Crime Victimization Survey for advocacy purposes. Survey findings have been used in a table on intimate partner violence contained in one of the editions of the annual *World Report on Violence and Health* and Survey findings on fear of
crime have been used in the context of advocacy work aimed at preventing firearm-related violence. WHO has not used data from the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems for advocacy purposes.

Other international surveys

1. Multi-country study on domestic violence against women

WHO has recently issued a first report on findings about domestic violence against women collected during the last decade from over 20,000 women at 15 sites in 10 mainly low and middle-income countries. The research protocol and questionnaire were developed through extensive consultation to ensure cross-site acceptability and comparability. While the resulting data are highly comparable and contain detailed information about risk factors and consequences, the interview procedure is time-consuming and resource-intensive.

2. Demographic and health surveys

When looking for data on violence more broadly that is comparable across countries, WHO refers to national demographic and health data collected through the Monitoring and Evaluation to Assess and Use Results (MEASURE) DHS project (www.measuredhs.com/), as such data also meet the criteria for information to be included in burden of disease estimates; at the country level, WHO provides technical support for the development of violence modules for inclusion in DHS questionnaires. In order to triangulate on best estimates of violent deaths, DHS data can also help in countries where there are wide discrepancies between the number of homicides recorded in death registries and the number of homicides recorded in police sources.

3. Safer city surveys

The information gathered through the Safer Cities Programme of the United Nations Human Settlements Programme (UN-Habitat) is of considerable value in understanding and preventing violence at the level of clearly defined urban populations. It represents a useful resource for local and national governments in planning their violence prevention efforts.
4. Adverse childhood experiences study

WHO promotes a developmental approach to violence prevention based upon the occurrence of social adversities (including parental criminality and violence), victimization, high-risk behaviour (including the perpetration of violence) and health consequences across the lifespan. To promote such an approach at the country level and produce internationally comparable data, WHO advocates the use of questionnaires and surveys modelled on the Adverse Childhood Experiences Study (www.cdc.gov/nccdphp/ace/). To date, the Study has been implemented in China and the United States of America.

Recommendations to the Commission on Crime Prevention and Criminal Justice

Revisions of United Nations crime surveys should ensure that surveys are seen by Governments as valuable for their own policy agenda and capacity development needs; that of serving the needs of the United Nations should be a secondary goal.

Revisions to the International Crime Victimization Survey should stress the need for questionnaires, survey designs and sampling frames that conform to epidemiological principles. Such revisions should also explore the possibility of maintaining comparability and increasing flexibility by providing a small set of core items that all States must use and a series of optional modules that explore particular forms of violence and crime in greater detail.
THE UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME AND ITS INTEREST IN COLLECTING CRIME DATA

By Laura Petrella*

INTRODUCTION

The United Nations Human Settlements Programme (UN-Habitat) is the United Nations agency in charge of coordinating the implementation of the Habitat Agenda ([1], Chap. I, resolution 1, annex II) and of monitoring target 11 of the Millennium Development Goals, which is to have achieved, by 2020, a significant improvement in the lives of at least 100 million slum dwellers ([2], annex). In carrying out these tasks, UN-Habitat uses data for monitoring trends and conditions in human settlements in general and in slums in particular. In that regard, data on crime and violence in cities are collected and analysed. These activities are coordinated by the Global Urban Observatory and by a network of local urban observatories.

In the framework of its Safer Cities Programme, UN-Habitat also supports the implementation of crime prevention policies at the local level, for which data are collected and used. In particular, data are collected and analysed at the local level to identify the phenomenology of crime and violence, the perceptions and responses of various actors and the capacity to deliver security. The ensuing diagnosis, which is informed by quantitative and qualitative data, as well as by stakeholder feedback, usually includes specific recommendations related to data collection, analysis and dissemination. In terms of crime prevention efforts at the local level, data collection and management are important because they lead, for instance, to the creation of local observatories on crime. Finally, data are used to monitor the impact of policies and interventions. In future, UN-Habitat will continue to look into the situation with regard to crime and violence in cities (see, for example, the Global Report on Human Settlements 2007: Enhancing Urban Safety and Security [3]). In addition, a modelling software for analysing and depicting, in urban settings, correlations between variables related to crime and other factors is also being developed. The development of an urban safety index to rank cities is also being discussed.

International Crime Victimization Survey

Victim surveys provide important information that other sources of data on crime are not able to provide: such surveys can, in a reliable way, uncover the so-called “dark figure”, which is not captured in police records, particularly for petty crimes (which, since they do not cause injuries, tend to be under-reported). Victim surveys also provide details on reporting practices, satisfaction with services, perceptions etc. Finally, and of particular importance for UN-Habitat global monitoring activities, they often represent good proxies of urban crime victim surveys since they are administered in urban areas. However, it seems that victim surveys per se are not studied. Another advantage, which may only be a potential advantage, is that the information gathered is highly objective and scientific, characteristics of enormous value when fed into a consultative process to overcome preconceptions about crime and paving the way to innovative strategies.

Although victimization surveys present various advantages, their format is not suitable for collecting information on certain types of crime, such as sexual or domestic violence. In addition, they do not adequately cover crimes such as corruption and vandalism (victimless crimes), nor do they provide information on the location of crime (an important element for policymaking). Moreover, victim surveys are expensive exercises that produce huge amounts of data that are hard to transform into information that is valuable for policymaking. In many cases, results are not available to policymakers.

Lastly, the victimization surveys initially developed by the United Nations Interregional Crime and Justice Research Institute have been adapted to various policy and resource contexts. They are presently implemented by a number of entities, including private sector agencies, non-governmental organizations, Government bodies etc. UN-Habitat has developed its own methodology, which is based on the International Crime Victimization Survey but has been adapted to meet local needs (for example, in terms of policy interests and the constraints faced in developing countries) and is solely implemented in urban settings.


It would be valuable for the following types of information to be gathered through the United Nations Survey of Crime Trends and Operations of Criminal Justice Systems:
• Information on the institutional set-up of the justice system (reporting and accountability, for instance) and on the levels and types of law enforcement officers; also the articulation between the national (or federal) and local (or municipal) levels (issues of governance related to the justice system are rarely included).

• Territorial aspects of the services offered through the criminal justice system (the number of police stations and courts, for instance).

• Working strategies adopted by the police (for instance, how many police officers are actually working in the streets, whether they adopt a problem-solving approach or some other type of approach, whether they mainly perform roadblocks etc.); also, information on the extent and type of coordination with the private sector.

• Options available to the criminal justice system for punishment (legal framework), including the presence of juvenile justice mechanisms and data on the actual implementation of alternative forms of punishment etc.

UN-Habitat data

Urban indicator database and safety indicators (Global Urban Observatory databases)

Data on certain urban indicators are collected regularly in a sample of cities worldwide in order to report on progress made in the 20 key areas of the Habitat Agenda at the city level. Data are collected through local and national urban observatories, as well as through selected regional institutions. The global urban indicators database contains policy-oriented indicators for more than 200 cities worldwide. The information contained in the database has been analysed and incorporated in the reports on the state of the world’s cities since 2001.

Security and urban violence is an urban indicator that contains 12 sub-indicators measuring different aspects of safety and security. As UN-Habitat has been charged with monitoring the attainment of Target 11 of the Millennium Development Goals, a close eye is being kept on developments in slums. Therefore, data differentiated on the basis of subsectors within a city is needed and is being now collected through partnerships with entities carrying out specific household survey programmes.
Data at the local level: Safer Cities Programme data collection tools

Through the Safer Cities Programme, qualitative and quantitative data are gathered to support the development and implementation of crime prevention strategies at the local level that target causes of crime and risk factors. Data are gathered as part of a process of consultation, analysis, policymaking and strategy development and during a particular phase of the project cycle called “diagnosis” or “local safety appraisal”.

A local safety appraisal is an integral part of a process based on participatory governance methodologies. It includes the following steps:

- Identification and mobilization of key partners at the local level who can contribute to the reduction and prevention of crime.

- Creation of a “local safety coalition”.

- Carrying out of a rigorous assessment of the crime situation through a local safety appraisal based on institutional, informal and social research data, as well as on direct surveys through which quantitative and qualitative data are gathered; using the appraisal to identify, assess and prioritize safety problems and develop adequate policies.

- Formulation and development of a local strategy.

- Institutionalization of participatory crime prevention approaches at the local level.

- Implementation of the local strategy through a range of short and long-term initiatives and projects that address the causes of crime and the fear that crime engenders.

- Monitoring and evaluation.

Through the Safer Cities Programme, a set of tools that help to determine the extent and nature of crime and locate unsafe areas in the city, as well as perceptions and policy responses, has been developed. The main purpose of that information is to help understand crime and define priority areas for prevention. The following tools are used for collecting data:

- **Victimization survey.** For this survey, the methodology used in the International Crime Victimization Survey was adapted to reduce costs, allow local stakeholders to provide input for the design of the survey and include
the possibility of organizing the data according to a city’s subsections. In
the experience of UN-Habitat, such elements are particularly valuable
in cases when there is little consensus on the crime situation and when
crime issues are controversial and manipulated. The objectives of the sur-
vey are to gather data that complement the official crime records and
statistics, provide a comprehensive picture of victimization and people’s
perceptions and fears of victimization, function as a tool for mapping
crime and, when repeated on a regular basis, measure changes in a given
population. The victimization survey of the Safer Cities Programme has
three phases: (a) victimization street scan (analyses the types of crimes
committed and rates of victimization); (b) pilot survey (getting the correct
interview schedules and adapting the questionnaire); and (c) main survey
(in-depth interviews in three sample groups: individual, household and
commercial entity).

• **Youth offender profile.** This is a tool used to provide in-depth information
on youth in trouble with the law and youth at risk of becoming involved in
crime. Through the youth delinquent survey, qualitative and quantitative
data for a specific population of offenders and control group are collected
on the following aspects: (a) the background of youth offenders; (b) expe-
riences in crime of youth offenders; (c) motivations of youth offenders for
becoming involved in criminal activities; (d) experiences of youth offend-
ers with the police, prisons and the justice system; and (e) opinions, hopes
and fears for the future of youth offenders. Such information can help
decision makers to understand the problem better and, thus, to improve
service delivery. The data are collected through in-depth interviews with
young offenders, questionnaires and focus group discussions in collabora-
tion with non-governmental organizations and the youth justice system.

• **Violence against women survey.** This qualitative survey can fill the informa-
tion gaps that persist on the subject for a variety of social and cultural
reasons and as a consequence of low reporting. The aim of carrying out
such a survey is to identify the types of violence and abuse suffered by
women, the characteristics of abusers and victims, and victims’ sugges-
tions regarding support services, the police, the justice system and Gov-
ernment authorities. Through the survey, four types of abuse affecting
women are assessed: economic abuse, physical abuse, emotional abuse
and sexual abuse.

• **Women’s safety audit.** This tool, which was originally developed in Canada,
was adapted by the Safer Cities Programme to meet the needs of develop-
ing countries (in Africa in particular). It responds to the fact that women
fear crime to a much higher degree than men do. This audit is used to
detect which corrective actions need to be taken in the urban environment to make it safer for women (safety audits can, however, also involve other vulnerable groups such as children, the elderly, the handicapped and people from ethnic minorities). As part of the audit, groups of between three and six people, mainly women, go for exploratory walks through the particular urban environment being studied. City planners, architects and city councillors may also be involved with the aim of sensitizing them, building their awareness and informing decision-making processes. Audits are meant to increase awareness of crime and violence against vulnerable groups and to help decision makers to understand how men and women experience their environments differently and how to respond to their concerns. The audits give legitimacy to women’s concerns and are effective in strengthening community safety. The outcome of safety audits is the visualization of insecure public spaces through mapping.

- **Hot spot analysis.** Identified through victim surveys, hot spots are analysed through exploratory walks and the gathering of official/administrative data, as well as through questionnaires submitted to users.

- **Local crime and insecurity diagnosis report.** This represents the synthesis of the results of the data gathering and analysis exercise and is heavily influenced by information received through consultations held with stakeholders. Besides the data gathered from the surveys, the following types of administrative data are also used: (a) crime-related statistics (data on urban crime and delinquency); (b) statistics on socio-economic characteristics not related to crime; and (c) service delivery data (on police and criminal justice officials and other providers of services to victims and residents in general). The information is used to provide a multi-sectoral analysis of manifestations, impacts and responses to crime and to develop a common understanding of causes and priorities for intervention. This is a highly sensitive exercise in which objective data and political agendas and interests have to be taken into account.

**Recommendations on data collection, analysis and use**

Data on crime are also important for those outside the justice system, in particular for social service and urban planners. Law enforcement authorities operating in cities also need information on crime for planning purposes. The uses made of data at the city level should be considered important and relevant. In many instances, local governments are the only ones to compile data from different sources on the specific population and area under their responsibility (through local crime observatories).
Data collection

In future, an effort should be made to collect data not only at the national but also at the local level, or to at least include data on one major city. The information collected should reflect a focus on service delivery and policies, as well as on institutional set-ups. It should be possible to map and visualize crime-related data and such an activity should be considered an important dimension of the data-collection process. The tailoring of the data collected to local (national and city) needs should also be considered important. The data collected through the many victim surveys that are currently being designed, carried out and used by various entities should be tapped into. The United Nations Office on Drugs and Crime should promote the production, at the country level, of data disaggregated on a territorial basis; such data are the most useful kind for national planning and policy development.

Data analysis

In order to make use of the data collected for the development of strategies and policies, those data should be crossed with information on socio-economic aspects, service delivery/infrastructure and governance structures. Also, the capacity for analysis should be ensured at the local and national levels and data should be made available to local stakeholders. One option could be to compile a set of analytical methodologies to be used directly by national and local governments, so as to ensure the decentralization and comparability of results.

Data use

Equal importance should be given to the use of data for raising awareness, conducting research and developing policies. At the moment, data are used more for conducting research than they are for anything else, thus probably making Governments less interested. The United Nations Office on Drugs and Crime should consider watchdog institutions at the international level (such as Amnesty International and Transparency International) as users of its data and consult with them. The capacity to use data in a relevant way is a key element of the whole rationale for data collection. Efforts should be focused on supporting the development of such capacity in countries that need it.
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2. “Road map towards the implementation of the United Nations Millennium Declaration: report of the Secretary-General” (A/56/326).

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