

CHILDREN AND FAMILIES

EDUCATION AND THE ARTS

ENERGY AND ENVIRONMENT

HEALTH AND HEALTH CARE

INFRASTRUCTURE AND TRANSPORTATION

INTERNATIONAL AFFAIRS

LAW AND BUSINESS

NATIONAL SECURITY

POPULATION AND AGING

PUBLIC SAFETY

SCIENCE AND TECHNOLOGY

TERRORISM AND HOMELAND SECURITY

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

This electronic document was made available from www.rand.org as a public service of the RAND Corporation.

Skip all front matter: <u>Jump to Page 1</u> ▼

Support RAND

Browse Reports & Bookstore

Make a charitable contribution

For More Information

Visit RAND at www.rand.org

Explore RAND Europe

View document details

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND electronic documents to a non-RAND Web site is prohibited. RAND electronic documents are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see RAND Permissions.

This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.

TECHNICAL R E P O R T

Development of a European Crime Report

Improving safety and justice with existing crime and criminal justice data

Priscillia Hunt, Beau Kilmer, Jennifer Rubin

Prepared for the European Commission Directorate-General Home Affairs

Contract Reference N° JLS/2009/ISEC/PR/001



This study has been carried out for the Directorate-General Home Affairs in the European Commission as result of the procurement procedure JLS/2009/ISEC/PR/001 for an amount of 144.896,35 €. The report expresses the opinion of RAND Europe who performed the study. These views have not been adopted or in any way approved by the European Commission and should not be relied upon as a statement of the European Commission's or the Home Affairs DG's views. The European Commission does not guarantee the accuracy of the information given in the study, nor does it accept responsibility for any use made thereof. Copyright in this study is held by the European Communities. Persons wishing to use the contents of this study (in whole or in part) for purposes other than their personal use are invited to submit a written request to the following address:

European Commission
DG Home Affairs
Directorate A
Rue du Luxembourg 46
B-1049 Brussels
HOME-PROCUREMENT-A4@ec.europa.eu <mailto:HOME-PROCUREMENT-A4@ec.europa.eu>

RAND Europe is an independent, not-for-profit research organisation whose mission is to improve policy and decision making for the public good. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND[®] is a registered trademark.

© Copyright 2011 European Commission

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the European Commission.

Published 2011 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665
Westbrook Centre, Milton Road, Cambridge CB4 1YG, United Kingdom
RAND URL: http://www.rand.org
RAND Europe URL: http://www.rand.org/randeurope
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org

Preface

Cross-national comparisons and benchmarking of crime and criminal justice (CCJ) data provide real opportunities for countries to learn from each other and assess their own efforts to address CCJ challenges. However, there are numerous data sets from which to choose and making such comparisons is a complex endeavour. Comparisons must be

undertaken and reported carefully to inform evidence-based policies and changes.

To promote these efforts in the field of CCJ policy, European Commission Directorate-General Home Affairs (DG HOME) commissioned RAND Europe to create a framework for developing a European Crime Report (ECR). The main aims of this study are to inform on the available data and reports for which to build an ECR; clarify analytical

challenges in writing an ECR; and outline design and implementation options for an ECR.

This report will be of interest to government officials, policy analysts and academics and researchers seeking to understand and address CCJ challenges at the local, regional,

national and international levels.

RAND Europe is an independent, not-for-profit research institution that helps to improve policy and decision-making through research and analysis. Its clients are European governments, institutions and firms with a need for rigorous, impartial, multidisciplinary analysis. This final report has been peer-reviewed in accordance with RAND's quality assurance standards.

For more information about RAND Europe or this document, please contact:

Dr. Jennifer Rubin

Director, Communities, Safety and Justice Programme

RAND Europe

Westbrook Centre

Cambridge, CB4 1YG

Tel: +44 1223 353 329 |Email: jkrubin@rand.org

i

Contents

Prefa	.ce		i
Cont	ents		ii
Figu	res		vi
Tabl	es		vii
Boxe	s		viii
Abbr	eviations	S	ix
Exec	utive Su	mmary	xiii
Ackr	owledge	ments	xix
CHAPT	ER 1	Improving Safety and Justice in the EU with Existing Crime	
		and Criminal Justice Data	1
1.1	A Mov	ve Towards Harmonisation	1
1.2	Europ	ean Crime Report: Facilitating Harmonisation and Harnessing the	
	Power	of Existing Crime and Criminal Justice Data	4
1.3	Appro	ach	6
1.4	Conclu	usions	6
CHAPT	ER 2	Data Collection on Crime and Criminal Justice for the	
		European Union	8
2.1	Introd	uction	
2.2	What I	Data are Currently Collected?	8
2.3	What	is the Data Reporting Process and what are the Validity Checks?	12
2.4	How a	re these Data Formatted and Used?	12
2.5	Reasor	ns for using Crime Data	13
	2.5.1	Academics and Crime Data	14
	2.5.2	Policymakers and Crime Data	15
	253	By Media	16

2.6	Curre	nt Weaknesses of the Data and Data Systems	18
	2.6.1	Awareness of New Crimes	18
	2.6.2	User-friendly and Informative Database	19
	2.6.3	Central Location of an EU Database	19
	2.6.4	Crime Database linked with Contextual Information	21
2.7	Recen	t Data Collection Efforts	24
	2.7.1	National Initiatives	25
	2.7.2	Trans-boundary Initiatives	25
	2.7.3	EU Level Initiatives	25
2.8	Concl	usion	27
CHAPT	ER 3	Reporting on Crime and Criminal Justice for the European	
		Union	29
3.1	Introd	uction	29
3.2	Memb	per State Reports	29
3.3	Repor	ts in Various Contexts	30
3.4	Repor	t Access	32
3.5	Additi	onal Sources of Information	32
3.6	Concl	usion	33
CHAPT	ER 4	Challenges to Creating a European Crime Report	35
4.1	Introd	uction	
4.2	Diffic	ulties with Comparability	35
	4.2.1	Statistical Factors	
	4.2.2	Legal Factors	42
	4.2.3	Substantive Factors	45
4.3	Lack o	of Accuracy or Mistrust	46
	4.3.1	Capability to Validate	46
	4.3.2	Transparency	
4.4	Concl	usion	
CHAPT	ER 5	Smart Aggregation of Crime and Criminal Justice Data	49
5.1	Introd	uction	49
	5.1.1	Comparing Crime Carefully	49
	5.1.2	Informed yet Accessible Comparisons	50
5.2	A Fran	nework for Key Factors in Comparing Crime and Criminal Justice	
	Pheno	mena Across Countries	51

5.3	Conte	xtualisation: An Overview of Factors Affecting Crime Rates5	2
	5.3.1	Macro Factors	3
	Econo	mic Context5	i 4
	Demog	graphic Context: Population Age5	6
	Gende	r Balance of the Population5	6
	5.3.2	Meso Factors5	7
5.4	Introd	ucing "Smart Aggregation"5	9
	5.4.1	Smart Aggregation with Contextual Factors	60
	5.4.2	Smart aggregation of Definitional Differences	0
	5.4.3	A Framework for Smart Aggregation	52
	5.4.4	Smart Aggregation of Measures to Produce Smarter Indicators6	55
5.5	Conclu	uding Comments6	5 8
CLIADT	ED /		
CHAPT		Dissemination and Implementation Options	
6.1		uction	
6.2		oping a European Crime Portal	1
	6.2.1	Responsibility for Designing and Creating the European Crime Portal	72
	(22		2
	6.2.2	Criteria for Inclusion of Digital Objects on the European Crime Portal	72
	6.2.3		
	6.2.4	Languages	9
	6.2.4	Data Archiving and Search Engine Optimisation for the European Crime Portal	7 /.
	6.2.5	•	
	6.2.6	Updating the European Crime Portal	
		Feedback Mechanisms for Ongoing Improvement	
	6.2.7	Advanced European Crime Portal Application: Allowing for	
(2	D1-	Online Analysis of Microdata	
6.3	6.3.1	oping a European Crime Report	
	6.3.2		
	6.3.3	Content	
		Language	
	6.3.4	Responsibility to Create and Validate	
	6.3.5	Peer Review and Soliciting Feedback	
	6.3.6	Developing an Interactive European Crime Report	
6.4	C	t About Costs	
	6.4.1	Printed Edition of the European Crime Report8	4

	6.4.2	Internet	85
6.5	Timeli	ne for a Possible Course of Action	85
CHAPT	ED 7	Conducions	97
CHAF		Conclusions	
7.1	Introd	uction	87
7.2	Key Fi	ndings	87
7.3	Dissen	nination and Implementation Options	89
7.4	Limita	tions	89
D - C			01
Referen			
Refe	rence Lis	t	92
Append	lices		104
App	endix A:	Process for Data Reporting and Potential Reporting Gaps	105
App	endix B:	Descriptions of Report Structures	110
App	endix C:	Findings of Interviews, Surveys and Conference Session	117
App	endix D:	Data Matrices	120
App	endix E: 1	Methodology	135

Figures

Figure S.1:	Sample Screenshot for the European Crime Portal	xvii
Figure 5.1:	Member States for which One Can Compare Levels of Incarceration, Including Remand and Youth Prisoners in Remand	.63
Figure 5.2:	Member States for which One Can Compare Levels of Incarceration, Including Remand and Youth Prisoners In Remand	. 64
Figure 6.1:	Sample Screenshot for the European Crime Portal	.72
Figure 6.2:	Screenshot of SDA Online Analysis Tool for US Criminal Victimisation Survey	.77
Figure 6.3:	Example of OECD eXplorer platform, which could be used for the <i>i</i> ECR	. 84
Figure 6.4:	Potential Timeline of Events to Implement Options	. 86
Figure A.1:	Process Map of how Crime and Criminal Justice Data Flow to End Users	106

Tables

Table 2.1: Summary of Number of Datasets, by Category
Table 3.1: Crime and Criminal Justice Reports, by Member State
Table 3.2: Summary of Reports with Crime and Criminal Justice Data
Table 4.1: Factors for Understanding Comparison Difficulties in Crime Statistics 36
Table 4.2: When Member States Record Offences
Table 5.1: Factors Highlighted in the Academic Literature as Affecting Crime Rates 53
Table A.1: Whether Responses to the 2008 CEPEJ Scheme for Evaluating Justice Systems Were Complete, by Subject Area, Netherlands and Sweden 107
Table D.1: Private Crime and Criminal Justice Databases, Data Collection by Survey
Table D.2: Public Crime and Criminal Justice Databases, Data Collection by Survey or Compiling Existing Data, Single Country Only
Table D.3: Public Crime and Criminal Justice Databases, Data Collection by Survey or Compiling Existing Data, Multiple Countries Only
Table D.4: Public Crime and Criminal Justice Databases, Data Collection by Compiling Recorded Data
Table D.5: Public Crime and Criminal Justice Databases, Studies with Data Collected by Survey
Table D.6: Public Crime and Criminal Justice Databases, Studies with Data Collected by Compiling Recorded Data

Boxes

Box 4.1: Bibliography for Further Reading on Imputation	42
Box 5.1: Some Criminologists Take a View on Setting Up an ECR	51
Box 6.1: Insights from a public interest web developer about soliciting user	
feedback	75
Box 6.2: A European Monitoring Centre on Crime?	82

Abbreviations

CARDS - Community Assistance for Reconstruction, Development and Stabilisation

CARPO - CARDS Regional Police Project

CCJ – crime and criminal justice

CEPEJ - Council of Europe Scheme for Evaluating Justice Systems

CoE – Council of Europe

DG ESTAT – Directorate-General Eurostat

DG HOME – Directorate-General for Home Affairs

DG JLS - Directorate-General for Justice, Freedom and Security

DG JUST – Directorate-General for Justice

DG RTD - Directorate-General Research

EC – European Commission

ECP – European crime portal

ECR – European Crime Report

EEA – European Economic Area

EFTA – European Free Trade Association

EMCDDA – European Monitoring Centre for Drugs and Drug Addiction

ESRC - Economic and Social Research Council

EU – European Union

EULOCS – EU Level Offence Classification System

FP – Framework Programme

FRA – Fundamental Rights Agency

FRONTEX – European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union

GDP – gross domestic product

ICPSR - Inter-university Consortium for Political and Science Research

ICVS - International Crime Victims Survey

IDA – International Development Association

iECR – interactive European Crime Report

IMF – International Monetary Fund

INCB - International Narcotics Control Board

INTERPOL or ICPO - International Criminal Police Organisation

JHA – Justice and Home Affairs

NACJD - National Archive for Criminal Justice Data

NCVA - National Centre for Visual Analytics

OCCRP - Organized Crime and Corruption Reporting Project

OCTA - Organised Crime Threat Assessment

ODCCP – UN Office for Drug Control and Crime Prevention

OECD - Organisation for Economic Co-operation and Development

OECD FATF - OECD Financial Action Task Force

ONDRP - National Observatory of Crime and Criminal Reponses

OSAC – US Overseas Security Advisory Council

OSCE - Organization for Security and Co-operation in Europe

PWC – PricewaterhouseCoopers

RePEc – Research Papers in Economics

SDA – Survey Documentation and Analysis

SPACE – Annual Penal Statistics of the Council of Europe

TE-SAT – EU Terrorism Situation and Trend report

TI – Transparency International

UN - United Nations

UNDCP - UN Drug Control Programme

UNDEF - UN Democracy Fund

UNECE – UN Economic Commission for Europe

UNHCR – UN High Commissioner for Refugees

UNICRI - UN Interregional Crime and Justice Research Institute

UNODC - UN Office on Drugs and Crime

U.S. - United States

USAID - U.S. Agency for International Development

WODC - Wetenschappelijk Onderzoek- en Documentatiecentrum

Executive Summary

Introduction

Understanding crime in the European Union (EU) is a complex endeavour. National differences in how crime data are collected and reported are important, albeit partial, explanations for the complexity. To improve cross-national comparisons and benchmarking in the field of CCJ policy, former Directorate-General for Justice, Freedom and Security (DG JLS) – now this project is within Directorate-General for Home Affairs (DG HOME) – commissioned RAND Europe to create a framework for developing a European Crime Report (ECR).

The inherent usefulness of the ECR will be manifold: by allowing a picture of trends over time and across countries it will be possible to map these onto other key variables such as inequality to get a more sophisticated understanding than we have to date of drivers of and associations between different types of crime.

The development of the ECR also presents an opportunity to forge a long-term strategy for thinking about the future of crime statistics in Europe, and propose possible ways of achieving this vision. The development of the ECR is a first step, albeit the most critical, in paving the way for future innovations.

Approach

RAND Europe has undertaken this study to scope data availability issues; identify the range of current projects and information that could feed into an ECR; collate views from a variety of stakeholders; analyse and synthesise insights; and provide guidance for the creation of an ECR. Specifically, we:

- reviewed existing literature on methods to analyse and synthesise CCJ data
- reviewed literature and other information sources to identify datasets on CCJ (with at least one Member State)
- reviewed national ministries' websites and linked institutions to identify a crime report supported by the relevant ministry in each Member State

- conducted a targeted review of annual or biannual reporting mechanisms in a range of contexts
- interviewed key stakeholders, including early career researchers, academics, policy analysts, crime statisticians and officials in ministries of justice or interior
- surveyed academics and officials in ministries of justice or interior
- solicited feedback in a session at the 2010 European Society of Criminology conference.

Based on these efforts as well as our own experiences conducting cross-national CCJ research, we offer the following findings and recommendations.

Key Findings

Research in this study reveals weaknesses that an ECR could address and aspects of its content that could increase its visibility and sustainability. We develop these in detail below.

No New Data Collection is Necessary to Begin Developing a European Crime Report

There are many people, groups and organisations across the EU and globally who are interested in drawing on CCJ information to compare crime-related phenomena across countries and over time. These interested parties include policymakers, journalists, scholars and even the wider public. The number of data sets is relatively large; however, there are few places where existing CCJ data is brought together in an informative and accessible way. Meanwhile, those collecting data already face serious recording and reporting burdens. The limited availability and accessibility of CCJ reporting is not surprising given the many well-established challenges of using CCJ data in an informed manner for the purpose of making cross-country comparisons and analysing trends. Therefore, there is a strong impetus for an ECR that would bring together existing data and reporting on CCJ matters in the EU to allow comparison over time and across Member States. There is also a case for establishing a website collecting data and reporting in one location and presenting them in a "smart" way that allows users to see and work with the data to undertake their own analyses.

"Smart Aggregation" Could Improve Comparative Analysis

Research finds the key report gaps on the contents of an ECR are i) a report pulling together various elements of CCJ to form a more complete picture, and ii) a report that explains plainly the problems with making comparisons over time and across countries. Given these two main needs, an ECR could contain contextual information that highlights definitional differences in a more intelligent way.

In this report we introduce the idea of "Smart Aggregation" for bringing together existing CCJ data and reporting in a manner that facilitates informed comparisons and discourages less useful comparisons and analysis.

The forms that this smart aggregation could take include:

- Building in contextual factors. There are social, economic and political factors that can lead to differences in CCJ situations across countries and over time. For example, research finds large gaps between the poor and rich tend to result in more elevated overall crime rates. Using indicators for poverty (e.g. at-risk-poverty rates) and income inequality (e.g. Gini coefficient) when describing overall crime rates and potentially offence types could improve understanding of crime trends; this could lead to improved policies in more than just the area of CCJ.
- Introducing innovative ways of highlighting definitional differences. A report and/or database in CCJ could be well served by not allowing for misleading comparisons and explaining why some comparisons may be misleading. For example, an ECR would explain why reporting of "per 100,000" rates of incarceration leads to an inaccurate comparison of countries because some countries include foreign nationals in their overall population numbers and some do not. Thus, comparing countries that differ in this recording of population figures leads to using different baselines across countries.
- Producing smarter indicators. Rather than developing new indicators, generating indicators with already available data would be a useful role of an ECR. For example, an indicator reported for police performance is "arrests for a specific offense as a proportion of offences known to the police". A smarter indicator to use in an ECR could be the number of arrests for a specific offence as a proportion of reported *victimisations* for that offence. By changing the denominator from offences known to the police which is currently widely used to offences reported in victimisation surveys, this smarter indicator would eliminate differences in victims' police reporting propensities across countries over time and provide more insight into how police are performing overall.

Three Key Decision Areas to Address in Considering the Sustainability of a European Crime Report

Sustainability of an ECR depends on a number of factors. Three deserving special consideration include:

• Funding streams. As discussed earlier, producing a report over time, even if

periodically, would be an advantage to an ECR. For example, despite the usefulness and high-quality data generated in the European Sourcebook, its limited funding security threatens its sustainability into the future. Having a report that is sustained over an extended period and produced with some regularity is desirable for deepening an evidence base in comparative CCJ.

- Model of implementation. The model of implementation is important because it
 is the vehicle for reaching a larger audience. For example, research indicates that
 expert working groups and independent, rigorous and quick peer review results in
 greater use of particular datasets, thus leading to greater likelihood of
 sustainability.
- Dissemination and communication strategy. If few are aware of the ECR's
 merits, policymakers and researchers will be less likely to use the information to
 improve policy and approaches to addressing CCJ challenges. As CCJ information
 can be very easily misinterpreted and often controversial, the way in which the
 objectives and findings of an ECR are communicated becomes an important facet
 of sustainability.

Recommendations

The European Commission (EC) has a number of options for collecting crime-related information from existing sources and presenting it in a way that facilitates meaningful comparisons. Based on the evidence gathered and insights discovered in this study, we offer four main recommendations.

Recommendation 1: Address Challenges of Cross-national Comparability Through "Smart Aggregation"

We propose a framework termed smart aggregation, for allowing CCJ comparisons and therefore learning across the EU in the context of a wide variation in legal systems, definitions, reporting practices and social, economic and policy contexts. We have developed this framework for facilitating meaningful comparisons and highlighting challenges to comparability building on the framework outlined by Von Hofer (2000) and European Sourcebook. The framework we propose for smart aggregation would facilitate comparison of countries that share similar legal systems and definitions of particular crimes, highlight data collection issues that otherwise undermine comparability, and draw attention to wider contextual factors associated with CCJ practices within countries. Much of this could be presented visually to provide a rapid overview of cross-national comparisons that are and are not possible or recommended with existing CCJ information.

In addition to facilitating useful comparisons and highlighting challenges to comparability this smart aggregation framework proposes the creation of whole new indicators (and suggests a few examples) that informatively draw together CCJ reporting.

Recommendation 2: Develop a European Crime Portal on the Internet

The European crime portal (ECP) would be a new website that would collect and organize links to several EU crime resources on the web. As noted in the EC solicitation for this project, "Within Member States there are various crime reports originating from various public and private sources, carried out on a regular or once-off basis, addressing general and/or specific aspects of crime and criminality." Thus, there is a need for one source where policymakers, practitioners and researchers can go to get CCJ reports, statistics and microdata for multiple Member States. Figure S.1 presents a sample screenshot of what the ECP could look like.



Figure S.1: Sample Screenshot for the European Crime Portal

Recommendation 3: The Inaugural Print Edition of the European Crime Report should Focus on Violent Crime

Given the numerous crime types and challenges with definitions, a first edition could focus on core crimes where the definitions are less controversial. This is because research suggests there are many difficulties in building an ECR and an approach that could facilitate its launch and subsequent sustainability could be to start with straightforward core crimes and

allow learning over time. In particular, the first iteration of an ECR could focus on violent crime because literature and interviews indicate there is more consistency intentionally over homicide and robbery than over property damage and larceny. Also, violent crime imposes larger social costs per crime (see Heaton, 2010).

Recommendation 4: Develop a Web-based Interactive European Crime Report based on Data from Printed Edition and Other Sources

By developing a website or web portal that includes datasets and reports, there is an opportunity to permit users to create bespoke reports that would promote insightful comparison and smart aggregation. In addition to serving as digital clearinghouse for European CCJ reports and datasets, the ECP could also host a web-based interactive European Crime Report (*i*ECR). An *i*ECR could include all of the data from the print version as well as data from other sources. To facilitate visualisation and allow for mapping capabilities, those developing the *i*ECR should consider using the same technology used for the dynamic and visually stunning Organisation for Economic Co-operation and Development (OECD) eXplorer.

This is a possible timeline for implementing these recommendations:

- **→** 2011
 - EC produces tender for ECP.
 - EC produces tender for the 2013 ECR focused on violent crime.
- **→** 2012
 - Contractor launches beta version of ECP, solicits feedback.
 - 2013 ECR draft final starts peer review process.
 - EC puts out tender for next ECR.
- **→** 2013
 - Inaugural 2013 ECR published.
 - Add *i*ECR capabilities to the ECP.
 - Launch official version of ECP.

Acknowledgements

First and foremost, we would like to thank the EC for funding this research. Furthermore, we are grateful to the members of the expert panel who offered their expertise and experience at various crucial stages of the study: David Farrington (Cambridge University), Martin Killias (University of Zurich) and Letizi Paoli (Leuven University).

The authors would like to thank the research support they received from Janice Pedersen, Helen Ridsdale, Deirdre Culley, Mihaly Fazekas and Samuel Drabble. We would also like to thank those who kindly offered their time and country-specific knowledge including Barbara Janta (RAND Europe), Dimitris Potoglou (RAND Europe) and Philip Gounev (Institute for the Study of Democracy).

We thank those who selflessly provided their time and expertise to this project. In no particular order, we thank the following interviewees and survey respondents: Gordon Barclay (British Home Office), Jaap de Waard (Dutch Ministry of Justice), Rebecca Endean (British Ministry of Justice), Monika Olsson (Swedish Ministry of Justice, speaking personally not on behalf of Ministry), Geoffrey Thomas (Eurostat), Ireen Winter (European Crime Prevention Network/University of Vienna, Department of Law and Criminology), Jörg-Martin Jehle (Professor of Criminology, Gottingen University), Jonathan Caulkins (Professor of Operations Research, Carnegie Mellon University), Michael Vishnevetsky (Vice-chair of the European Society of Criminology Postgraduate and Early Stage Researchers Working Group), Richard Kempster (PhD candidate, Sheffield Hallam University, UK), Ernesto Savona (Università Cattolica/Transcrime, Italy), Richard Blath (Bundesministerium der Justiz (BMJ), Berlin/Bonn), Anne-Julie Boesen Pedersen (Fuldmægtig Justitsministeriets Forskningskontor, Denmark), Markianos Kokkinos (Cyprus Police – Statistical Office, Cyprus) and Michel Marcus (European Forum for Urban security, EU).

The authors are grateful to the quality assurance reviewers, Dr. Emma Disley and Stijn Hoorens, for their time and thoughtful input, which improved this report.

Authors thank Susannah Wight for copyediting support for this report.

All errors remain the responsibility of the authors.

CHAPTER 1 Improving Safety and Justice in the EU with Existing Crime and Criminal Justice Data

1.1 A Move Towards Harmonisation

Understanding crime in the European Union (EU) is a complex endeavour. National differences in how crime data are collected are an important, albeit partial, explanation for the complexity. Definitions of what constitutes a crime (especially an economic crime) vary by country, and the apparent rise in significance and complexity of transnational and organised crimes, and other illicit phenomena that are inherently difficult to measure, must be taken into account if one is to understand the dynamics of crime in Europe. EU enlargement to include a more diverse group of countries and cultures is likely both to influence crime trends, and increase the complexity of assessing and comparing trends across space and time. Accurate, reliable and comparable data on crime over time and across countries are currently unavailable because of differences in recording, reporting and classifying crime. For this reason the EC has requested the development of a blueprint for a European Crime Report (ECR), which would pull together data and reporting on CCJ in the EU, allowing comparison and learning across and within countries.

It is important to think about any new development of a coherent and common framework for harmonised data collection or reporting on crime in the context of the Stockholm Programme and Lisbon Treaty (EC, 2008). The main objectives of the Stockholm Programme are to demonstrate "common priorities and objectives for the EU in the area of freedom, security and justice" and to develop a strategy to best achieve these objectives at the EU level (Council, 2010). European leaders endorsed 170 initiatives in the Stockholm Programme that provide the framework for EU police and customs cooperation, rescue services, criminal and civil law cooperation, asylum, migration and visa policy for the period 2010–2014. The Commission has now turned these political objectives into an action plan for 2010–2014, including set timetables.

Importantly for the visioning of an ECR, within the Stockholm Programme the European Council invites the EC to:

continue developing statistical tools to measure crime and criminal activities and reflect on how to further develop, after 2010, the actions outlined and partly implemented in the EU Action plan 2006-2010 on developing a comprehensive and coherent EU strategy to measure crime and criminal justice, in view of the increased need for such statistics in a number of areas within the field of freedom, security and justice (Council, 2010).

The overall objective of the Lisbon Treaty is to "provide the Union with the legal framework and tools necessary to meet future challenges and to respond to citizens' demands". One way in which the Lisbon Treaty aims to achieve this is through the provisions of Chapters 1, 4 and 5 of Title IV of Part Three of the Treaty on the Functioning of the European Union (replacing Articles 29 to 39 of Title VI), which relate to judicial cooperation in criminal matters and to police cooperation. In essence, "EU action is facilitated by the abolition of the existing separate policy areas - also known as 'pillars' – that characterise today's institutional structure with regard to police and judicial cooperation in criminal matters." It is understood that this will assist Member States in responding to citizens' demands for more coordinated criminal justice systems. The provision of an ECR would support the aims of the Lisbon Treaty by providing statistics and reports that include the activities of police and courts, as well as other aspects of government in which the Lisbon Treaty seeks coordination (such as health).

The Lisbon Treaty has implications for policies within the remit of Directorate-General for Justice (DG JUST) and DG HOME. The Lisbon Treaty seeks to clarify and make legally consistent the relationship between fundamental rights,2 leading to the consistent implementation of a range of other policies affecting fundamental rights;3 this aspect was welcomed in a 2008 report by the Committee on Civil Liberties, Justice and Home Affairs of the European Parliament (EP, 2008).

Under the Lisbon Treaty the qualified majority voting rule and co-decision procedure between the European Parliament and Council of Ministers will apply to the control of the Union's external borders. The provision of an integrated management system for external

¹ See http://europa.eu/lisbon_treaty/glance/justice/index_en.htm, (accessed December 31, 2010).

² As outlined in the Charter of Fundamental rights of the European Union.

³ Such as the right to data protection, social rights and the right to human dignity and protection against any form of discrimination.

borders is in development,⁴ as is the strengthening of measures to combat illegal immigration and trafficking in human beings.⁵ Minimal rules defining crimes and punishment for a number of cross-border offences (such as terrorism, drugs and arms trafficking, money laundering, sexual exploitation of children and cyber-crime) are being decided using the co-decision procedure (Fondation Robert Schuman, 2007). The implementation of these integrated management systems and minimal rules could both be facilitated by and facilitate the establishment of more systematic and harmonised data on crime in the EU.

This more systematic and harmonised data approach will be necessary for and relevant across the range of types and areas of crime. The need is perceived as especially pressing for transnational and organised crime. The 1997 EU action plan set out a list of resolutions and Council acts on aspects of the fight against organised crime. There was significant concern "that individual Member States of the EU, and thus the EU itself, are in serious danger of being infiltrated or subverted in certain areas by organized crime". The Council identified two actions to combat transnational organised crime:

- Give priority to improving cooperation between the Member States.
- Aim for harmonisation in those areas in which the opportunities for cooperation between the Member States have already been fully exploited and have still produced no satisfactory results.

Each of these actions can be made more robust with an understanding of and evidence about transnational crime operations. The main challenge to developing a concrete understanding is the lack of clarity around definitions of transnational crimes. The relative vagueness of official definitions for transnational crimes in most European countries hampers the ability to combat transnational crime:

Even in typically transnational illegal trades, such as drug trafficking, transnationality usually refers exclusively to the transportation of commodities, communication between exporters and importers and the eventual laundering of profits. Crucial phases, such as production and processing, wholesale and retail distribution and final consumption of the drugs take place locally (Fijnaut and Paoli, 2004, p. 39).

⁴ Through an amendment on the Council Regulation (EC) No. 2007/2004 establishing the European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union (FRONTEX).

⁵ For example, through the proposal for a Council Framework Decision on preventing and combating trafficking in human beings, and protecting victims, repealing Framework Decision 2002/629/JHA.

However, the EC is making efforts in this area by funding research through the Framework Programme (FP) instrument in Directorate-General Research (DG RTD).⁶ Examples of ongoing projects of the current framework (FP7) that touch on the area of crime and/or criminal justice include:

- surveillance and the challenges for the security of the citizen
- best practices for enhancing security policy in urban zones
- scientific indicators of confidence in justice.

1.2 European Crime Report: Facilitating Harmonisation and Harnessing the Power of Existing Crime and Criminal Justice Data

The ECR has the opportunity to build on useful existing models of crime reports, and indeed other pan-national reports such as OECD Outlook, to create an EU level data infrastructure, creating the capacity for harmonised data collection, interpretation of data and reporting on CCJ.

This study on the development of the ECR presents an opportunity to forge a long-term strategy for thinking about the future of crime statistics in Europe, and propose possible ways of achieving this vision. The development of the ECR is a first step, albeit the most critical, in paving the way for future innovations.⁷ Crime and criminal justice comparisons can influence crime policy and improve safety and justice.

As will be discussed in Chapter 5, comparisons and benchmarking provide real opportunities for countries to challenge themselves and learn from others. Through engaging in such benchmarking and comparisons, learning lessons and changing practice where possible, some countries have made changes to their national crime policy that have improved safety and justice. For example, in the 1950s, Finnish policy officials and academics observed that Finland had a much higher prison population than its Nordic near neighbours. They also noted that the high rates of incarceration in Finland did not appear to be associated with lower crime levels than their neighbours. This observation raised questions about the cost-effectiveness of imprisonment as a means of reducing crime. Over the following decades Finnish crime policy was consciously transformed; there was a move away from the use of prison as the main form of punishment, reducing prison

⁷ Complete harmonisation of data is important, but not the goal or focus of this project. Instead the focus is on how existing data can be brought together to facilitate the development of an ECR.

⁶ For information on the current FP7, see http://ec.europa.eu/research/fp7/index_en.cfm (accessed December 31, 2010).

numbers and costs significantly, apparently without increasing crime (Lappi-Seppälä, 2006; Disley and Rubin, forthcoming).

Canadian crime policy also demonstrates the potential for learning from benchmarks and comparisons with near neighbours, albeit in somewhat different form. As the hue and instincts of Canadian government changed after the 1990s there was a flurry of activity in crime policy seeking to increase levels and severity of punishment (Doob and Webster, 2006). However, Canadian officials were keenly aware of the escalation of rates and length of imprisonment in the United States, and while there is evidence that a 15 percent increase in prison numbers can be associated with a small reduction in crime (Levitt, 2004), Canadian policy officials noted that increasing prison numbers did not appear to be a cost-effective way of reducing crime. The existence of a strong evidence base of which experts are the primary stewards, and an instructive comparison, have according to Canadian crime experts played roles in informing responses to, and ultimately played a role in the failure of, many attempts to increase punishment through sentencing policy (Disley and Rubin, forthcoming; Levitt, 2004).

While there are important instances in which crime data has been used well to inform the shape of policy and decisions, CCJ data are sometimes used by those who draw on them (including policymakers) to make inaccurate comparisons. For example, in the United Kingdom offence definitions and recording rules were changed in 2001/02 so that more offences were recorded than previously. Some used this increase in recorded crimes to suggest there had been a large rise in crime, when in fact the effect was caused by changing statistical routines.8 Thus, we can see that good data and useful comparisons can be informative and help improve policy and practice. Poor quality or poor use of data can be misleading and opportunities to contribute to the state of knowledge and improvements in policy and practice might be missed. In Europe the European Sourcebook, Eurostat, UN Office on Drugs and Crime (UNODC), Council of Europe (CoE) and others have for years or decades been advancing the field by presenting CCJ data for most or many European countries. However, there is room for pulling together much more CCJ information, making further analytic progress and sharing this information widely and accessibly to enhance opportunities for useful comparisons within and across Member States.

⁸ See http://www.timesonline.co.uk/tol/news/politics/article7013303.ece and http://www.guardian.co.uk/politics/2010/feb/03/tories-violent-crime-statistics (accessed December 31, 2010).

1.3 Approach

This study applies multiple methods to identify relevant evidence. The intent of this study is to take into account the views of a variety of stakeholders and to analyse and synthesise documented evidence. Our approach was to:

- review existing literature on methods to analyse and synthesise CCJ data
- review literature and other information sources to identify datasets on CCJ (with at least one Member State)
- review national ministries' websites and linked institutions to identify a crime report supported by the relevant ministry in each Member State
- conduct a targeted review of annual or biannual reporting mechanisms in a range of contexts
- interview key stakeholders, including early career researchers, academics, policy analysts, crime statisticians and officials in ministries of justice or interior
- survey academics and officials in ministries of justice or interior
- solicit feedback in a session at the 2010 European Society of Criminology conference.

1.4 Conclusions

The policy context, shaped by the Lisbon Treaty, Stockholm Programme and 2010–2014 Action Plan, has created an environment that could both facilitate and be facilitated by progress in cross-national criminal justice data, research, analysis and reporting. Reporting on existing criminal justice data and research in ways that can inform useful comparisons across countries and allow countries to track trends over time can foster better understanding of the scale and scope of criminal justice challenges. Doing so could inform decisions about how to address those challenges, within countries, and across countries in the case of transnational and organised crime. This is important, as crime significantly affects citizens' lives and countries' resources, and is costly to individuals and criminal justice systems. However, in order to report CCJ information which can best inform policy and practice it is important that the widest, existing CCJ data are drawn on. Further, this information must be used carefully, in order to draw appropriate, informative comparisons. When appropriate and informative comparisons are drawn in this way the learning for research, policy and practice can help foster appetite for more harmonised definitions of crime and more aligned collecting and reporting of data. The development of a blueprint for an ECR aims to make progress on these requirements. In order to do so, the rest of this report discusses existing Member State CCJ data in the EU and some possible approaches to an ECR, aggregating this data in informative ways to facilitate comparisons and learning.

CHAPTER 2 Data Collection on Crime and Criminal Justice for the European Union

2.1 Introduction

Data about CCJ processes has been collected for many years in several Member States to enable policymakers, academics and others to examine crime trends and the functioning of Member State criminal justice systems. With a variety of data collection mechanisms currently in place at different levels (local, regional, national, international), as a first step in thinking about the development of a European Crime Report (ECR) it is worth understanding how data are collected and the various data collections across Europe. The discussion of existing data collections in this chapter is not exhaustive but represents the key, over-arching CCJ data collections in place throughout the EU.

We begin this chapter by presenting the data that are currently being collected. With many data collection programmes throughout Europe, it is valuable to present the range of systems in place. We then go into further detail about the processes through which the main, cross-country data are reported and quality checked. In order to understand the purposes of these key cross-country datasets, we then describe some ways in which academics and policymakers use current data. Through this process, we are able to identify data gaps and weaknesses in the data currently available. In the final section, we present new data collection efforts that are currently in discussion.

2.2 What Data are Currently Collected?

In order to identify datasets that are being, or have been, collected, we conducted searches for datasets using Google Scholar and Research Papers in Economics (RePEc).⁹ The aim of the search was to develop a general idea for the number of datasets and basic characteristics

⁹ An economic and finance site housing over 850,000 items around the world. See http://ideas.repec.org/ (accessed December 31, 2010).

for those datasets; it was not intended to be a comprehensive or systematic search. A full explanation of the methodology can be found in Appendix E.

We found databases online and reviewed some literature (working papers, peer-reviewed journal articles, book chapters) that discusses the statistical, legal and substantive factors affecting international CCJ statistics. We then searched four key crime and criminology journals¹⁰ to ensure we had taken into account the most relevant pieces of the literature using CCJ statistics in Europe. This is not an exhaustive list of all the CCJ datasets collected throughout Europe; however, we believe that we located a representative list of datasets because we found datasets used or referred to once and others many times.

There are generally two aims for the development of datasets: to answer research questions of a particular study or to build data available for a wider set of research questions that may arise. Those datasets designed to fulfil the objectives of a study usually have a set of research questions set *a priori*. Other datasets were developed with an understanding that specific research questions arise over time.

The methodology to gather observations for a dataset can generally be broken down into two categories: survey-based and recorded. Survey-based data relate to a sample of people responding to questions in a particular survey instrument. Recorded data relate to administrators or officials registering their accounts.

Generally, most datasets we located were survey-based. Table 2.1 summarises a selection of unique datasets identified as part of our search. We identified 83 unique datasets that were developed either for a specific study or as a standalone dataset for analysis. The table indicates that private organisations, unsurprisingly, commission surveys rather than record instances of criminal activity. The method used by most public organisations was to build a dataset through surveys or focus groups. In Appendix D we provide more detail about each of the categories set out in the table, including the crime or criminal justice variables, the year(s) of collection, the countries involved and a hyperlink.

¹⁰ European Journal of Crime, Criminal Law and Criminal Justice; Journal of Scandinavian Studies in Criminology and Crime Prevention; and British Journal of Criminology; Journal of Quantitative Criminology.

Table 2.1: Summary of Number of Datasets, by Category

	Data collections			For particular s	tudies	Total
	Surveys or focus groups	Recorded		Surveys or focus groups	Recorded	
Public	47		11	18	3	79
Private	0		0	4	0	4
Total	51		11	18	3	83

Many of these datasets have specific objectives – they were conducted in a single country at a single point in time to understand a particular issue. For example, one dataset is the "Analysis of Arrests in Paris, June 1848" (Tilly and Lees, 1998), a database built out of criminal justice records of the insurrection in 1848. Another example is the "Collective Memory in Lithuania" (Schuman and Gaidys, 1993) data collected in 1989, which explores opinions of crime in adults aged 16 years and over in Lithuania and their memories of historic events in the preceding 60 years.

Although many data collection efforts are not conducted continuously and are conducted in one country, there are several international databases with continuous information of either repeated cross-sections or longitudinal data. Not all of these are survey-based; some collect police-, court-, probation- or correction-recorded data. Using some of the key international databases, we consider the overall range of offence types that can be categorised in the following way:

firearms, residence)	
• UNDCP • UNDCP • INTERPOL • CoE (C	CEPEJ,
• World Bank • INTERPOL • ODCCP SPACE	E)
• IMF • ODCCP • European • Europe	an
• INTERPOL • UNHCR Sourcebook Source	oook
• OECD- • INCB • ICVS • UN-C	ΓS
FATF • UNODC • UN-CTS • FRA	
• TI • OCTA	
• CoE • UN-CTS	

¹¹ For example, the Finnish Teacher Victimisation Survey performed in 1997 was focused on the anti-social behaviour of children and violence against teachers as well as teachers' attitudes towards young people's criminal behaviour. See http://www.fsd.uta.fi/english/data/catalogue/FSD1214/meF1214e.html (accessed December 31, 2010).

(Moneyval) • EMCDDA

Several databases collect across subject areas, such as the International Criminal Police Organisation (INTERPOL) and European Sourcebook; on the other hand, there are some databases such as those of the Transparency International (TI) and Fundamental Rights Agency (FRA) that focus on core areas of expertise – financial crimes and criminal justice, respectively. The international CCJ datasets that collect information on "police, prosecution, courts and prisons" are:

- UN-CTS, UNODC¹²
- European Sourcebook¹³
- Eurostat¹⁴ (excluding prosecution)
- Annual Penal Statistics of the Council of Europe (SPACE) I and II, Council of Europe Scheme for Evaluating Justice Systems (CEPEJ), all from CoE.¹⁵

As an example of the variables for which data are collected, we set out the variables for which data are collected in Eurostat's dataset:

Crimes

- Number of police recorded offences (1993–2007) by country for:
 - o homicides
 - by cities
 - violent crime
 - o robbery
 - o domestic burglary
 - o motor vehicle
 - drug trafficking
- Historical: number of crimes recorded (1950–2000) by country

Police

• Number of police (1993–2007) by country

Prison

- Number of individuals in prison (1993–2007) by country
- Historical: number of individuals in prison (1987–2000) by country

As shown, there are ten variables covering recorded crimes, police presence and use of

¹² See http://www.unodc.org/unodc/en/data-and-analysis/Crime-Monitoring-Surveys.html?ref=menuside (accessed December 31, 2010).

¹³ See http://www.europeansourcebook.org/ (accessed December 31, 2010).

¹⁴ See http://epp.eurostat.ec.europa.eu/portal/page/portal/crime/data/database (accessed December 31, 2010).

¹⁵ See http://www.coe.int/T/dghl/cooperation/cepej/default_en.asp (accessed December 31, 2010).

prison; only the number of police recorded offences is broken down by crime type. This is important to consider for an ECR because it demonstrates that if only EU-funded data are used, the report would be rather limited.

2.3 What is the Data Reporting Process and what are the Validity Checks?

The process by which CCJ statistics are provided to a supranational aggregator of statistics, such as Eurostat, depends on the data management systems in place in each Member State. Generally speaking, the relationship between Member State recording bodies (e.g. police departments, courts, hospitals), Member State national correspondents (e.g. National Office of Statistics) and an international data aggregation entity (e.g. Eurostat, Europol) follows a particular process we outline in Appendix A in Figure A.1.

It appears that there are considerable redundancies in validity checks. In particular, both the national correspondent and database perform some type of validity check. If the international data aggregation entity notices a problem, it may have to go through the national correspondent.

2.4 How are these Data Formatted and Used?

The uses of raw data are heavily influenced by the formats available and the extent to which a user can generate fit-for-purpose information. For example, academics may need to perform certain types of in-depth analysis that require statistics over time and across countries for a variety of crime types. On the other hand, a policymaker or journalist may be more interested in readily available statistics, such as how much a particular crime has changed over a ten-year period. Furthermore, policymakers may find a visual representation useful, such as a graph showing changes in crime rates over time, so they can better understand whether the change in recent years is similar to that which has occurred in previous years.

The way in which raw data are provided to users (e.g. researchers, makers) depends on the database. Table 2. shows the downloadable formats of data and various other characteristics about how data are displayed or can be used.

	Down- load formats	User choice of variable display	Links to other data or report on website	Analysis on website	Types of output styles	All volume or years of data grouped together	Location of definitions
Eurostat	.xls, .dta, .csv, .spss, .html, .txt	Yes	No	No	Tables, figures, raw data spreadshee ts	Yes	As separate document
Sourcebook	.pdf, .doc	No	No	No	Documents , raw data spreadshee ts	No	As tables within data document
UNODC	.jpeg, .pdf, .doc, .xml, .xls, .tiff, .csv, .mhtml	Yes (for drug crimes only)	Yes	Yes	Tables, figures, raw data spreadshee ts	Yes (for drug crimes only)	As tables within spreadshe et
CEPEJ	.pdf	No	No	No	Documents	No	As text within document
UN-CTS	.xls, .pdf	No	Yes	Yes	Documents , spreadshee ts	No	As separate document
ICVS	.pdf, .doc	No	Yes	No	Documents	No	As tables within document

Table 2.2: Format Characteristics of Key International CCJ Datasets

As the table suggests, Eurostat seems to be the most flexible in addressing the needs of a variety of users. Academics and policymakers alike may find the user interface of Eurostat preferable to the other databases. On the other hand, there is limited CCJ information from Eurostat that addresses the pressing policy questions being asked by the public or researchers.

We describe in further detail below how each of these main groups of users – academics, policymakers, and those in the media, local and national administrations – use international databases on CCJ.

2.5 Reasons for using Crime Data

In this section we used evidence from the review of grey and academic literature as discussed earlier, as well as interviews with key stakeholders, including early career

¹⁶ See http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/Annexes/crim_esms_an1.pdf (accessed December 31, 2010).

¹⁷ See here- http://www.unodc.org/pdf/crime/eighthsurvey/8sct.pdf (accessed December 31, 2010).

¹⁸ See http://rechten.uvt.nl/icvs/pdffiles/ICVS2004_05.pdf (accessed December 31, 2010).

researchers, academics, policy analysts, crime statisticians and officials in ministries of justice or interior.¹⁹

Crime and criminal justice data has users and audiences beyond criminologists or criminal justice professionals. Various stakeholders (e.g. academics and policymakers) are interested in using CCJ data, albeit for different purposes. This may influence the extent to which an ECR is used and therefore its sustainability.

2.5.1 Academics and Crime Data

A review of several abstracts in the academic literature and interviews with academics, students and policy analysts indicate that academic analysis is more interested in demonstrating reasons why people do things and how certain factors are interrelated. In particular, the focus of research tended to be on addressing puzzles and testing hypotheses, explaining paradigm shifts, and developing and modifying predictions.

To the first point, one reason academics use criminal databases is to test proposed ideas and uncover conflicting findings, or to investigate academic "puzzles". For example, data are used to test several hypotheses about the dynamics between social welfare spending and crime (Zhang, 1997).

On the second point, there are journal articles relating the development of criminology to cultural and political changes in particular Member States or regions (Estrada, 2004;Smith, 2004). Other articles seek to identify country clusters; for example, one study compares victimisation and the prevalence of delinquency across countries and clusters of countries (Enzmann et al., 2010). Another study examines some differences in frequency of suicide and other unnatural causes of death among prisoners in England and Switzerland and finds similarities between the two countries (Sattar and Killias, 2005). Another study attempts to provide insights towards the "argument that developments in criminal justice policy have been uneven because the Estonian state was re-established at a time when the role and nature of the state were everywhere undergoing transformation" (Saar, 2004).

For the third point, academics attempt to understand what their models say about the future and what to expect. From an intellectual point of view, this is either to provide policymakers with a framework to understand the future implications of their policies or to have an estimate to check against in the future to see the predictive capacity of models. For example, it is argued that the possibility of predicting or explaining trends in crime by individual data are quite limited (Tham and Von Hofer, 2009). In one study, authors find:

¹⁹ In the interest of anonymity, we do not provide names of interviewees.

the predictive power of individual childhood or teenage properties is too weak to explain total crime or specific types of crime. Second, changes in aggregate measures of conditions during upbringing are not easily compatible with changes in trends in crime. Third, other variables relating to changes in the opportunity structure than changes in the family of upbringing can account for the development of crime trends (Tham and Von Hofer, 2009).

All of this suggests that academic users, including students, will be interested in both a European crime web portal (to access statistics and documents) and a European crime report (to read about the state of play and identify potential research topics).

2.5.2 Policymakers and Crime Data

Interviews conducted with policy analysts and academics providing information for policymakers and grey literature reviewed suggests policymakers are typically more interested in best practice, effective or efficient interventions, and monitoring performance.²⁰ Specifically, interviews with policy analysts tended to reiterate that the following were core areas of interest: offender management, interventions for reoffending, and state of organised crime.

As it may be worth considering the policymakers at both the local and national levels, we provide greater detail at those levels below.

Local administrations. The wider CCJ context can influence operations at a local level. In particular, research shows that globalisation, political and institutional changes and demographic trends can influence local government and governance (Andrew and Goldsmith, 1998). For example, nationalist pressures may operate at a local or regional level within a country (e.g. Basques and Catalans in Spain; Flemish and Walloons in Belgium) and local officials may refer to CCJ data on their actions in order to take decisions (Andrew and Goldsmith, 1998). This is supported by more recent research evaluating local commissioners' use of information and evidence in decisions around commissioning interventions to reduce crime (Disley, Rabinovich, and Rubin, 2009). Local officials state many factors influence their decisions on which interventions and providers to commission (Disley, Rabinovich, and Rubin, 2009). For example, the local officials state they use information showing a reduction in crime correlated with work by the provider and indicating performance targets were met or that users and/or commissioners were satisfied with service.

²⁰ Based on interviews.

According to Disley, Rabinovich, and Rubin (2009), on the basis of interviews with local authority representatives, one factor that was consistently missing for local commissioners was an evidence base that they could use to inform their understanding of what might be most effective and best value for money in tackling certain criminal justice challenges. Specifically, local commissioners state they use typical evaluation criteria and proportionality to award contracts; however, they found there was still a lack of formal evaluation criteria (Disley, Rabinovich, and Rubin, 2009).

National administrations. The development of criminal justice policies at the national level are, in part, prepared through data and analysis. In RAND's four-country study of criminal justice interventions (Disley and Rubin, forthcoming), authors note countries that maintained what they considered to be an evidence-based approach to crime policy, such as Finland and Canada, perhaps unsurprisingly tended to have relatively strong evidence bases around criminal justice matters. These were readily available to be drawn on by crime policy officials and the media when issues arose that generated interest in criminal justice data. Indeed, in Canada senior crime policy officials noted that it was the ready availability of strong evidence that allowed them to rapidly inform crime policy in its incipience, and at times impede policy proposals that the available evidence base suggested would have been likely to lead to worse criminal justice and individual outcomes (Disley and Rubin, forthcoming).

2.5.3 By Media

Although concern about the economy and unemployment has come to the fore among the European public in recent years, crime has been an enduring public concern, with nearly as many respondents to Eurobarometer's 2007 survey reporting crime as a top concern as reported the economy and unemployment as top concerns (Eurobarometer, 2010). In spite of the growing significance of economic issues in the last two to three years, between 16 percent and 20 percent of Eurobarometer respondents still consider crime to be one of the two most important issues facing their country.

Media reports can play a significant role in shaping public interests and concerns. Public knowledge of and perceptions about important criminal justice issues are at least in part influenced by media reporting, and policymakers are frequently concerned about how policies and measures will be perceived by the public and reported by the media (Curran et al., 2010). As a source of information for the public, the overall character and quality of reporting on crime issues differs between countries. For instance, the crime reporting of some countries tends towards the more sensational while that of others tends to be more measured. As Reisinger describes in her book on crime and media in contemporary France,

"criminal acts have not actually multiplied [in recent years], but the increased mediation of crime has heightened the public's perception of violent acts and in turn increased its concern" (2007, p. 1). In another example, Rasinger (2010) shows how in the UK, migrants are consistently presented in a negative light in the media by accentuating the idea of insecurity and criminality, using headlines such as: "Lithuanian Migrants Send Crime Rocketing" and "Migrants Put More Strain on to Police". In fact, Rasinger (2010) finds the second most common word in the sample of headlines after migrant is police. Therefore, the media outlets can and do use CCJ information to persuade readers and listeners to be concerned about crime.

Of course the degree to which the media present information in a certain light depends in part on media ownership and partisanship in broadcasting in each country of the EU.²¹ "There are no Europe wide media ownership rules" (Noam, 2009, p. 24), meaning public—private ownership schemes vary across Member States and the policymakers may have more influence in some Member States than others; for a specific example of this, see Durante and Knight (2009).

These differences in reporting style are in themselves associated with a range of factors, including how the public accesses its news (the proportion of people in a country who buy newspapers from the news stand versus the number subscribing to a paper that is delivered at home influences whether or not newspapers are competing to put out the most dramatic, eye-catching headlines), educational levels of the population, and so forth.²² However, while there are certainly many other influences at play, the quality and accuracy of available crime data, and the availability of reports about crime will affect the clarity and informational content of what journalists are able to access and report, as well as what the range of media and commentators are able to draw on to make sense of crime trends and one-off events that catch the public eye.

Although there appears to be an audience interested in an ECR, there may be some objections. In particular, it is not costless to generate an ECR and public systems may be facing budget difficulties that make it challenging to support an ECR. These costs and further challenges are addressed in Chapters 5 and 6. In summary, an ECR could help inform the media and policymakers operating in time- and media-pressured environments.

²² Conclusions from an Institute for Government seminar conducted under Chatham House Rule on the role of the media, available at:

²¹ For a more in-depth discourse on models of media systems in Europe, see Hallin and Mancini (2004).

http://www.instituteforgovernment.org.uk/pdfs/are_our_media_threatening_the_public_good_IFG_0210.pdf (accessed December 31, 2010).

It could do so (as described further in subsequent chapters) by pulling together available data and synthesising it in a way that makes evidence readily available and accessible to those in the media, local and national administrations who would like to be able to use such a report to inform the public and policymakers on the state of play in a given crime policy area, to provide a comparative overview where possible, to inform policy design and to report on apparent changes in outcomes.²³

2.6 Current Weaknesses of the Data and Data Systems

Given the advantages and disadvantages of existing CCJ data management systems and interfaces, the future authors of an ECR may want to initiate the collection of some new data. By highlighting gaps in the data currently available, we can identify what would make an ECR sustainable.

By pooling information on advantages and disadvantages we have identified thus far, we identify some significant gaps that could be filled in the process of developing an ECR.

2.6.1 Awareness of New Crimes

Through an online and literature search for crime data, there appears to be an important gap in available information on "up-and-coming", "non-convention" or "fad" crimes around Europe. Importantly, what is happening in one country today may be another country's problem tomorrow and yet none of the datasets were flexible enough to take on board "new" types of crimes or comprehensive enough to be useful at a European level.

The EC could play an important role in highlighting potential CCJ issues before they become more serious problems by accessing more data sources and compiling information in a "topical" issue of the ECR (separate from the main issue of the ECR examining "core" crimes on which data have long been collected, such as homicide or robbery). This would be useful for Member States and increase the profile of the ECR.

In order to play this role effectively in practice, it will be important to have the most up-todate information. This implies those collecting data have a way to submit data as soon as they have it and that they believe the ECR is a good way to disseminate it.

Of particular importance for some countries at the moment, for example, are technological-based crimes, such as cybercrime. In particular, an EC Communication in

²³ In addition to hearing similar comments about the need for information in the crime policy field in other countries for other research projects, criminal policy experts in Member States interviewed for this project indicated there would be demand for some form of synthesised report that would then be a useful tool.

2007 states "for many reasons, there are no reliable statistics on cyber crime: cyber crime is a vast area and covers innumerable crimes and no common statistics system exists" (EUROPA, 2007). There are, however, potentially useful data from a survey in the United States that are collected across states. The survey has been conducted annually since 1996 by the Computer Security Institute. The Computer Crime and Security Survey collects data from computer security practitioners in corporations, government agencies, financial institutions, medical institutions and universities on the nature of security incidents (financial fraud, proprietary information, viruses, etc.), amount of losses, and number of computer intrusion reports. If such a survey is performed in Europe, it would be useful if there was a mechanism to provide the statistics (a crime web portal) and produce a report that meaningfully described how this crime is developing. That being said, the EC is working on a proposed directive that repeals Framework Decision 2005/2222/JHA and adds various provisions including "the obligation to collect basic statistical data on cyber crimes" (EC, 2010d). We discuss this in greater detail in a later section on current data projects.

2.6.2 User-friendly and Informative Database

One key weakness is that none of the cross-national datasets both has a variety of variables and is user friendly. Although Eurostat has a range of variables in other data collection fields, such as employment, it is not as wide-ranging on CCJ statistics. Equally, the European Sourcebook has a very interesting and informative range of variables; however, the interface makes analysis and statistical description of situations challenging and slow. A model of a potential user-friendly database format is in the field of drugs – the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) provides a relatively wide range of variables in a way that allows academics and policymakers to retrieve data on variables in which they are interested.

2.6.3 Central Location of an EU Database

A major weakness is the lack of a central place to store and access Member State and EU data related to crime. There are many datasets and it would have been useful to access them from one website so as to not duplicate efforts.²⁴ In our literature review, it appears the EMCDDA, in addition to wide-ranging data availability, has on its website a user-friendly interface with reports built on data collected by the EMCDDA, and data from other sources are presented as well. This is particularly relevant because crime does not happen in isolation from other factors. The economic, social, political and legal

²⁴ This view was also expressed by students, policy analysts and academics in our interviews.

circumstances must necessarily be taken into account. It would be necessary to use information from other databases, such as measures of income or health inequality, and from other publications to provide reliable analysis and recommendations.

A reliable CCJ database, however, cannot efficiently and effectively gather all the other contextual information that is necessary for a thorough analysis. With other datasets focused on gathering economic data, for example Eurostat collects unemployment rates, it is better to leave them to specialise in this collection and then simply present hyperlinks to an ECR database. Furthermore, the changes may be regional and important events in one region or Member State may not be picked up simply by national indicators; Member State reports with insights into particular events throughout the year may be useful. Again, this is a feature of the EMCDDA, in which each year there are reports on the state of affairs for each Member State.

When bringing together information into one web portal it is likely that several sources will provide data on the same indicator; for example, both Eurostat and European Sourcebook provide figures on homicide. It may still be important to provide figures from each source because the way in which the indicators were collected may vary.

We compared the UNODC, European Sourcebook and Eurostat considering the variety of offences covered, formality of the data collection approach, response rate, consistency of organisational structure and frequency of publication. We discuss each below:²⁵

- Crime types. The UNODC and Sourcebook have more than the 11 variables collected at Eurostat.
- Formality of data collection approach. The Sourcebook is operated by an expert
 group with national contact points that were developed through personal contacts;
 missing or irregular data are reviewed and followed up. Eurostat has regulations to
 follow, yet is able to pursue any data issues with relevant parties (because of
 established relationships). UNODC indicates information is sourced from a
 variety of locations, including online data and reports.
- Response rate. As a proxy, we consider the proportion of 27 Member States that respond to the "number of assault offences recorded by police" for the most recent data available for Eurostat (2010), Sourcebook (2003) and UNODC (2010b).²⁶

²⁵ These findings appear to be consistent with the views of a high ranking statistical officer.

²⁶ For Eurostat we use "number of violent offences recorded by police".

The response rate for Eurostat and Sourcebook is 96 percent (or 26 of 27 Member States responded), and for UNODC is 78 percent (or 21 of 27 Member States).

- Consistent organisational structure. As the funding of European Sourcebook is
 not secured for any length of time, its future is relatively more tenuous. UNODC
 and Eurostat CCJ statistics are set by regulations and funded.
- Frequency of data. Eurostat and UNODC publish information annually. Sourcebook publishes every few years (1999, 2003, 2010), although data covers the entire period (1999–2003).

Since none of the existing datasets has all the data to write an ECR, it may be valuable to have one database that collects all of these various datasets in order to generate an ECR.

2.6.4 Crime Database linked with Contextual Information

Crime does not happen in isolation of other factors and there is currently a gap in the delivery of other contextual information. This is important because the contextual data should provide potential explanatory information about the crime statistics, for example, describe causes for national differences.

None of the datasets identified provide other contextual information. It may be valuable to provide access to other important factors when presenting statistics or preparing analyses.²⁷

We highlight three sets of contextual factors determined to be important by the (former) DG JLS Expert group:²⁸ opportunities, facilitators and private sector involvement (EC, 2009b).

Opportunities

The opportunities for committing crime (or opening of situations that lead to someone committing a crime) and opportunities for becoming victim to a crime are different across countries and over time (Clarke, 2004; Wall, 2007; EC, 2009b). Research suggests there are generally three important ways of thinking about how the opportunity to commit become a victim of crimes can change.

First, with more people in an area, there are potentially more opportunities to gain from committing crimes, which may affect the interpretation of CCJ data – there are potentially more people to become victims of crime.

²⁷ These can be considered as potential control variables for empirical analysis.

²⁸ This group includes 15 academic and policy experts in the field of CCJ statistics and policy analysis.

Second, as science progresses in some geographic regions faster than in others, the types of crimes or ability to commit and become victim to crime may be affected (Bogner, 2006; EC, 2009). For example, the crime types piracy and counterfeiting may depend on the advancement of science (and legal instruments available to "protect" the right to be the only producer or distributor). For example, the development of stem cell research presents occasions for violation of crimes for countries where the science of cloning is more developed and there are still many debates on how to govern scientific and technological advances (Bogner, 2006). In another example, scientific evidence can influence the ability for police to detect offenders and may reduce the incentive to commit crimes, thereby reducing levels of crimes recorded in official statistics. Giannelli (2006) indicates that scientific evidence is more reliable than other types of evidence such as eye witness statements; however, the science and practical use of scientific evidence, such as DNA, is still developing and some convictions are actually the result of poor science, incompetence, poor training and carelessness (Giannelli, 2006; Giannelli, forthcoming). The level of science may be important contextual information to provide to readers because it will improve the reliability of their analysis or improve the reliability of their policy recommendations.

Third, the growth in communication and computing technologies creates opportunities and challenges to would be criminals (Clarke, 2004). In more technologically advanced countries there may be more potential crimes that can be committed, such as identity theft. It is important to remember, however, that if the criminals have better access to technology so do police (Clarke, 2004; Garicano and Heaton, 2010).

In summary, there are three potential attributes to consider including in an ECR:

- population density (e.g. urbanisation)
- science (e.g. patents, DNA testing)
- technology (e.g. proportion of households with computers, mobile phones).

Facilitating Factors

In order to become involved in crime, one may need social connections. Furthermore, some groups may be more vulnerable in one country than in another and academic or policy analysts will want to consider these factors.

Research tends to show that the involvement of people in their community – social capital – plays a role in crime rates (Sampson, Raudenbush and Earls, 1997; EC, 2009). Sampson and Groves (1989) show, for example, high levels of trust within communities lead to more cooperation with the police, which affects reporting and clearance rates. Although

the association between crime and social capital has been established, there is no consensus on the direction of this association (Forsaith et al., forthcoming).

Research tends to show that the maturity of social networks can influence the propensity to commit crimes (Sampson and Groves, 1989; Calvó-Armengol and Zenou, 2004; Schneider and Windischbauer, 2008). Even with identical economic situations, different social groups and/or locations can have striking differences in crime rates; one explanation has been that individuals' decisions feed into each other so those social interactions can generate a premium of observed aggregate outcomes such as crime rates (Sutherland, 1947; Calvó-Armengol and Zenou, 2004).

Literature finds there is an association between rates of crime for particular offences and social exclusion (for a meta-analysis, see Hsieh and Pugh, 1993). In particular, there appears to be a stronger relationship between poverty and income inequality changes with homicide and assault than with rape and robbery (Hsieh and Pugh, 1993).

In summary, there are three potential attributes to consider including in an ECR:

- social capital (e.g. multi-dimensional indicators including a combination of trust in government, voting trends, membership in civic organisations, hours spent volunteering, newspaper readership)
- social networking (e.g. number of friends, number of friends in management positions)
- social exclusion indicators (e.g. one-person households, being at risk of poverty, income inequality, early school leaving).

Private Sector Involvement

Some countries may have more involvement of the private sector in matters of public safety and order (Hughes, 1998; de Waard, 1999). The extent to which a country engages with the private sector may affect its statistics. For example, some countries such as the United Kingdom have "private" prisons that are operated by private firms (White, 2001). Statistics on the cost of operating prisons may be higher or lower depending on the contracts arranged with the private prisons, rather than the "true" costs of operating prisons in these countries. Thus statistics may be misleading because in some countries the private sector is involved in the CCJ system. Examples of areas in which the private sector may be involved are:

- ownership of security and protection (e.g. investigation licences or certificates, prisons, security agencies)
- consumer safety (e.g. product)

• corporate security (e.g. IT, physical, risk management).

Recommendations of Indicators

In relation to each of these sets of contextual factors we recommend indicators which could be provided in or linked to an ECR.

These were the criteria for choosing these indicators:

- They are already collected so no new data collection efforts are needed and the data could be immediately provided.
- They need to be collected for all Member States over a relatively generous period
 of time to meet the needs of most analysts.
- They cannot be "topical"; rather they need to be part of data collections with planned funding streams and thus be sustained into the future for prospective versions of an ECR.

These are the indicators that could be readily available:²⁹

Opportunities

- Population density [under statistics subtheme section "Population" at Eurostat]
- Number of patents

[under statistics subtheme "Science, Technology and Innovation" at Eurostat]

 Percentage of households with Internet access

[under statistics subtheme "Income, Social Inclusion and Living conditions" at Eurostat]

Facilitating factors

Income inequality

[under statistics subtheme "Income, Social Inclusion and Living conditions" at Eurostat]

Private sector involvement

 Private sector security services as proportion of security and investigation activities

[using industry statistics for NACE³⁰ codes that are a subset of code 80: Security and investigation activities at Eurostat]

2.7 Recent Data Collection Efforts

A sustainable ECR must be useful for long-standing CCJ issues, as well as incorporate current challenges facing nations and regions. This implies the ECR must be flexible and incorporate new initiatives. In this section we describe some of the national and

²⁹ To search for this data, see http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database (accessed December 31, 2010).

³⁰ NACE refers to the Classification of Economic Activities in the European Community.

international efforts to collect data.

2.7.1 National Initiatives

There are many data initiatives ongoing throughout the EU. We provide examples of some activities from two Member States that produce a variety of reports or use statistics outside the usual channels. We provide information on the reports generated by every Member State in the next chapter.

In France statistics are made available monthly by the Ministry of Interior. As discussed earlier, a non-governmental body, the Institut National des Hautes Etudes de la Sécurité and de la Justice, is the lead body publishing information on the activities of the police and national security police (gendarmerie). This bulletin includes statistics and analysis of trends and new efforts are continuously being made.

In the UK there have been efforts outside the CCJ system to provide information to support CCJ. For example, Jonathan Sheppard, a maxillofacial surgeon, noticed a high incidence of violent (criminal) facial wounds, which had not been reported to police. Seeking to address the high rates of violent wounding he began gathering two additional bits of data at intake interviews to the emergency ward at the hospital in Cardiff where he worked: where the event occurred and whether a weapon was involved. He passed on this information, in an anonymised form, to police. As a result police could proactively identify violence hotspots and thus where they should focus preventive policing attention. They did so and were able to reduce violent crime by 40 percent. This is an excellent example of where an individual outside the criminal justice system noticed a source of data that was informative for understanding crime and could thereby inform policing (Shepherd and Brennan, 2008).

2.7.2 Trans-boundary Initiatives

The United Nation's Regional Project Office for South Eastern Europe is developing standards in justice and home affairs statistics.

TransMONEE collects data on total crime rates and crimes against and committed by juveniles in Central and Eastern Europe and the Commonwealth of Independent States.

2.7.3 EU Level Initiatives

DG HOME has established a number of area subgroups of experts to examine the development of indicators on specific crime types, such as money laundering, human trafficking, criminal justice, police cooperation and cyber crime.

DG HOME is involved in an effort to propose a new directive on cyber crime.³¹ This includes repealing Framework Decision 2005/222/JHA and adding further provisions. In particular,

the proposed directive will retain its current provisions, including the penalisation of illegal access, illegal system interference and illegal data interference. It will include the following new elements: penalisation of the use of tools (such as malicious software – e.g. botnets – or unrightfully obtained computer passwords) for committing the offences; introduction of "illegal interception" of information systems as a criminal offence; improvement of European criminal justice/police cooperation by strengthening the existing structure of 24/7 contact points, including an obligation to answer within eight hours to urgent requests; and the obligation to collect basic statistical data on cyber crimes.

DG HOME and Eurostat have been working on providing statistics on money laundering in addition to the other statistics provided on CCJ; a working paper and dataset on this proposal were released in December (Tavares et al., 2010).

An updated implementation report on the EU Action Plan relating to the trafficking of human beings is expected in October 2010. It is intended to "pave the way for a new integrated strategy in 2011", which is likely to include improvements to statistics in human trafficking.³²

Eurostat indicates a purely European instrument on victimisation (an EU safety survey)³³ is in development with DG HOME. Early indications suggest it will possibly be implemented in 2013 with the Working Group of Eurostat leading and the Group on Policy Needs being consulted on the indicators to be calculated and published. Data collection would be operated by the statistical offices in the Member States.³⁴

There are useful cross-national efforts to build reliable offence data with shared definitions and reporting mechanisms. For example, there is a European Homicide Monitor, an EC-funded project to develop understanding of lethal violence across EU Member States, led

³¹ For more on DG HOME's activities in cyber crime see http://ec.europa.eu/home-affairs/policies/crime/crime_cybercrime_en.htm (accessed December 31, 2010).

³² See http://ec.europa.eu/home-affairs/policies/crime/crime_human_trafficking_en.htm (accessed December 31, 2010).

³³ Note this is not the same as the European Crime and Safety Survey, the European part of the fifth ICVS 2005.

³⁴ Communication with Directorate-General Eurostat (DG ESTAT).

by the National Council for Crime Prevention in Sweden.³⁵

In the Netherlands there is an initiative to study reoffending across several countries – the Recidivism Monitor. There are now around 10–14 countries gathering data and participating in the initiative at some level. The Fundamental Rights Agency is currently piloting (to be conducted through 2010 and 2011) a survey on the experiences of women and domestic violence. Following the EU action plan 2006–2010, the former DG JLS set up a group of experts to support and advise the EC. The aim of the expert group is to consider the policy needs for data on CCJ. The group stated that one motivation for greater cooperation between Member States in relation to crime data is to reduce the administrative burdens on Member States. If it is not possible, however, the group may need to explore further use of Eurostat.

DG RTD has been funding EURO-JUSTIS,³⁶ a project that will provide survey data on the perception of justice and develop indicators for assessing public confidence in justice.

2.8 Conclusion

In summary, there are many data collection efforts throughout the Member States – from local to international levels – and a strong appetite for CCJ data. On the other hand, there are few places for interested parties to go where the information is collated in an informative and/or useful way. Furthermore, those collecting data have recording and reporting burdens.

With so many data collection schemes in place, few, if any, organisations and/or individuals know about all the CCJ data being collected across the Member States. Therefore one central source or portal providing data may be an important step forward in the improvement of information sharing for Member States. In the next chapter we consider the reporting instruments in place and the structure of annual reports that present the data.

³⁵ The research is a collaboration between the National Council for Crime Prevention in Sweden, the National Research Institute of Legal Policy in Finland, and the Institute of Criminology and Criminal Law of Leiden University in the Netherlands. Further information can be found at http://www.bra.se/extra/news/?module_instance=22&id=18 (accessed December 31, 2010).

³⁶ See http://www.eurojustis.eu/ (accessed December 31, 2010).

CHAPTER 3 Reporting on Crime and Criminal Justice for the European Union

3.1 Introduction

Pulling together CCJ data into a report is no simple task. The more detailed a report becomes, the less likely it is to have wide geographic coverage. Presenting figures and tables, while describing changes in laws, regulations and policing strategies, can be a difficult task. It is, however, important to examine what is available regarding CCJ reports across the Member States and cross-check whether the structure of reports mimics that of other fields. By doing this, we can learn lessons about what may and may not work for a European Crime Report (ECR).

We begin this chapter by presenting a report in each Member State that uses crime and/or criminal justice data and is provided through its Ministry of Justice or Interior (depending on the more relevant body in the Member State). We then explore the structures of other reports in CCJ and other fields, such as science and technology and international migration. In the next section we discuss accessibility to reports and the websites that provided the reports. Lastly, we present lists of further potential sources of information.

3.2 Member State Reports

By searching Member States' relevant websites (Ministries of Interior, Justice, Home Affairs, etc.) and contacting officials we were able to identify a CCJ report in all Member States but Greece and Malta (see Table 3.1 for the list).

With the exception of Ireland, these reports have all had at least two editions. The exact frequency and period of publication varies by Member State, but all Member States include data in the form of graphs and/or tables.

Table 3.1: Crime and Criminal Justice Reports, by Member State

Member State	Report	Frequency	Graphs?

Member State	Report	Frequency	Graphs?
Belgium	Justice in Figures	Annual	Υ
Bulgaria	Crime Trends in Bulgaria 2000–2005	Unscheduled, irregular	Y
Czech Republic	Crime in [year]	Unscheduled, irregular	Y
Denmark	Crime Level in Municipalities and Police Districts	Unclear	Υ
Germany	Crime Situation ReportCrime and Crime Control	Unscheduled, irregular	Υ
Estonia	Crime in Estonia [year]	Annual	Y
Ireland	Crime in Ireland: Trends and Patterns, 1950 to 1998.	Unscheduled, irregular	Y
Greece	n/a		
Spain	Statistical Yearbook of the Ministry of Interior [year]	Annual	Y
France	Monthly and annual bulletin	Monthly, annual	Υ
Italy	Annual Report on Organised Crime	Annual	Y
Cyprus	Criminal statistics <year></year>	Annual	Υ
Latvia	[year] Annual Report	Annual	Υ
Lithuania	Information on Police Activity during [year]	Unclear	Y
Luxembourg	Crime and Victimisation in Luxembourg	Unclear	Y
Hungary	National Strategy for Community Crime Prevention	Unclear	Y
Malta	n/a ³⁷		
Netherlands	Crime and Justice [year]	Annual	Υ
Austria	Security Report	Unclear	N
Poland	Crime Atlas	Unscheduled, irregular	Y
Portugal	Intelligence Report [year]	Annual	Υ
Romania	Evaluation Activities Conducted by the Ministry of Administration and Interior in the year [year]	Annual	Y
Slovenia	Annual Crime Report	Annual	Υ
Slovakia	Crime Prevention Strategy in the Slovak Republic for the years 2007–2010	Unscheduled, irregular	Y
Finland	Crime and Criminal Justice in Finland	Annual	Υ
Sweden	Swedish Crime Survey	Annual	Υ
United Kingdom	Inited Kingdom Crime in England and Wales		Υ

3.3 Reports in Various Contexts

The ECR needs to be fit for purpose and therefore take on a structure that serves its particular audiences and objectives. In order to understand what an ECR may contain, we consider the elements of other, mainly annual, reports produced within the area of crime and safety, and in other subject areas such as international migration, employment, and science and technology. Table 3.2 provides a summary of the reports.

_

 $^{^{37}}$ One source was located, "Criminology and Criminal Justice in Malta" by Calafato (2009); however, this is not a Ministry report.

Table 3.2: Summary of Reports with Crime and Criminal Justice Data

Agency	Report	Level of organisation	Style
UNDEF, USAID	Organized Crime and Corruption Reporting Project	Regional	Journalistic
European Sourcebook	European Sourcebook Key Findings	International	Statistical
France - ONDRP	Annual Bulletin	Country	Policy
German Federal Ministry of Justice	Criminal Justice in Germany	Country	Policy
Hungary – National Crime Prevention Committee	Crime Situation Report	Country	Policy
OSAC	Crime and safety reports	International	Policy
Europol	Organised Crime Threat Assessment	International	Policy
OECD	Outlook	International	Policy
PwC	Global economic crime	International	Policy
UNODC	Forum on Crime and Society	International	Academic
	World Drug Report	International	Policy
Eurostat	Statistics in Focus: Crime & Criminal Justice	International	Policy
UNODC-HEUNI	Report Series 64	International	Policy

NOTE: For more details on findings from each of the reports in Table 3.2, see Appendix B.

Former DG JLS funded Unysis (Belgium) to build on the work undertaken for the European Criminal Records Information System. Unisys has developed an EU benchmark offence classification called EU Level Offence Classification System (EULOCS) against which to measure equivalent Member State systems of classification. Apart from EULOCS, Unisys delivered two other key documents: a detailed inventory of the Classification Systems currently in use in the EU-27, and an inventory of the national authorities involved in the collection and production of crime statistics. The detailed inventory seeks to present information on crime types across Member States to support understanding of differences, rather than to harmonise crimes into each code. As a follow-up to the Unisys project, a Task Force on Crime Classification is being set up, including the EC, UNODC and UN Economic Commission for Europe (UNECE).

Eurostat continuously publishes findings from its data in the reports *Statistics in Focus*, three of which have been published thus far.³⁸

UNODC, with financial assistance from the EU's project for the development of monitoring instruments for judicial and law enforcement institutions in the Western Balkans, is working towards bringing countries and territories of the Western Balkans into compliance with relevant international and EU acquis standards and best practice. One project seeks to provide guidance to existing national statistics mechanisms in the field of

³⁸ See http://epp.eurostat.ec.europa.eu/portal/page/portal/crime/publications (accessed December 31, 2010).

justice and home affairs, as part of the Community Assistance for Reconstruction, Development and Stabilisation (CARDS) Regional Action Programme 2006 (UNODC, 2010).

3.4 Report Access

The key medium for the presentation and exchange of information is the Internet. Not all reports can be accessed at one website or through a similar website for each Member State (e.g. Ministry of Justice). In order to obtain complete information, it may be necessary to access:

- ministries' websites
- research institutes or universities' publications sites
- Member States' data or report archives.

One exercise from which to draw lessons is that of a project funded by former DG JLS to improve information sharing between practitioners, policymakers and researchers. In 2009, a research, software and web development consultancy known as j4b developed the specifications for an online crime expert web platform. The portal should respond to the policy needs of CCJ research by establishing cooperative links between Justice and Home Affairs administrations, law enforcement authorities and the crime research community. A test version of the portal is under development using the EC's existing technologies and facilities.

Furthermore, an additional example may be drawn from those at DG HOME involved in the current launching of an anti-trafficking policy website for practitioners and the public. It is an opportunity to explore the inclusion of data and/or discussions for improving data collection in this field, which may link to the ECR in the future.

3.5 Additional Sources of Information

There are other websites and projects under way with reports that may have relevant information for policy analysts, academics, journalists and so on. These may not produce reports that are similar across the Member States, but they may provide a rich source of information on their particular region or country of interest. The potential sources of information are:

- crime indicators and statistics:
 - national statistical offices

- CCJ institutes, university departments
- legal frameworks:
 - o national laws, Departments of Justice or Interior
 - European Arrest Warrant
 - European Enforcement Order
- survey manuals:
 - UN Manual on the Development of a System of Criminal Justice Statistics
 - UNODC-UNECE Manual on Victimization Surveys
 - Institute for Development Research and Alternatives surveys
- strategies and action plans:
 - o national action plans in the area of CCJ
 - national strategies for combating trafficking in human beings
- projects and reports:
 - o CARDS Regional Police Project (CARPO) situation reports
 - EC progress reports and communications
 - o Group of States against Corruption reports
 - o Organization for Security and Co-operation in Europe (OSCE) reports
 - Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism reports
 - South Eastern and Eastern Europe Clearinghouse for the Control of Small Arms and Light Weapons reports.

3.6 Conclusion

Although there appears to be a variety of data sources (as identified in Chapter 2), publications reporting on trends in CCJ seem less easily available. Reports for each Member State are far more difficult to obtain than data. It is not surprising that reports are not presented all together on one site, given the challenges to using CCJ data. In the next chapter we present these challenges in order to understand and develop ways of overcoming the obstacles.

CHAPTER 4 Challenges to Creating a European Crime Report

4.1 Introduction

As described in earlier chapters, there are some crimes and criminal justice data and reports available across Europe that are being used for both academic and policy purposes. We identified some gaps that may need to be filled. Even if those data gaps are addressed, there will still be challenges facing interested policymakers and academic researchers seeking to use this information. To some degree, these challenges have limited the use of valuable information in the public domain.

In this chapter we demonstrate the current issues facing any system seeking to collate CCJ statistics and reports and fill the gaps previously identified. We identify which obstacles may be faced in attempting to use available data for the European Crime Report (ECR). This chapter has been informed by academic and grey literature,³⁹ as well as interviews conducted with policy researchers and academics. We begin by examining the most highly cited problem analysing CCJ data – comparability over time and across countries. We then discuss, from the perspective of Member States, the mistrust that exists and why some may be apprehensive about providing data and/or reports.

4.2 Difficulties with Comparability

In his review of rape statistics in Sweden, Von Hofer (2000) provided a very useful framework for understanding the difficulties of comparability, and much of this section draws on the research of Von Hofer (2000), and the studies of Aebi (2008), Barclay (2000)

³⁹ We use the definition of the Grey Literature Network Service, which is the system of information on grey literature in Europe. Grey literature is defined as "information produced on all levels of government, academics, business, and industry in electronic and print formats not controlled by commercial publishing" (OpenSigle, 2010). This may include technical reports from government agencies, working papers, white papers, etc.

and Farrington, Langan, and Tonry (2004), which provide clear accounts of the challenges of comparability.

Von Hofer (2000) identified three main areas that need to be addressed in understanding difficulties in comparing crime statistics within a country over time and across countries:

- statistical factors; the way in which crime statistics are developed
- **legal factors**; *inter alia* the way the crime itself is defined in the relevant legislation, and various related aspects of the judicial process
- substantive factors; the actual level of crime and the reporting and recording
 predilection of each country.

Each of these broad factors can be broken down into a number of points that affect comparability. In Table 4.1 we present the broad factors and details. This section provides a fuller explanation of each of these "details" and provides context by using examples from international databases in Europe.

Table 4.1: Factors for Understanding Comparison Difficulties in Crime Statistics

Factors	Details
Statistical	 Point at which statistics are collected How offences are counted and the point in time to which statistics refer Changes in statistical routines
Legal	 The significance of legal definitions The effects of the legal process The legality principle rather than the expediency principle
Substantive	 The propensity of the population to report offences The propensity of the police (or other recording bodies) to register offences Actual crime levels

SOURCE: Von Hofer (2000).

In this section, we discuss these challenges in more detail.

4.2.1 Statistical Factors

The statistical factors affecting CCJ data are the timeframe, manner in which offences are counted, and changes in statistical routines (Von Hofer, 2000; Aebi, 2008).

Point at which Statistics are Collected

By timeframe, the issue can be either (Aebi (2008); Barclay, 2000; Von Hofer, 2000; Farrington, Langan, and Tonry, 2004):

 differences in when an offence is recorded – "early" (the time of reporting to the police) or "later" (once the police investigation has begun), or differences in when an offence is discovered and when it occurred.

Countries record an offence at different stages in a criminal justice process, which affects statistical reports of crime. Aebi (2008) examines the UN Survey of Crime Trends and Operations of Criminal Justice Systems (UN-CTS) and Sourcebook to find there are three ways of recording offences – using input, output and intermediate data. Countries recording input data note the details of offences on the date when they come in to the police, or are reported to the police; this implicitly assumes they assume the crime happens on the date it is reported to the police. Countries recording output data note the details of offences after they have been investigated. Countries recording intermediate data note details of offences after a police report is filed and before investigation is launched. Sweden is an example of a country that uses input statistics:

In Sweden, once an act has been registered as rape for example, it retains this classification in the published crime statistics, even if later investigations indicate that no crime has been committed or that the offence must be given an alternative judicial classification (Von Hofer, 2000, p. 79).

Aebi (2008) examines the European Sourcebook document (the 2006 version for most countries) and finds that European countries mostly use input data (Table 4.2). Table 4.2 suggests there is no geographic clustering by type of statistics a country uses. Furthermore, Member States generally use input or output data, although there is a non-negligible number that are intermediate recorders. It would be useful for an ECR to provide information on whether a country uses input, output or intermediate data when recording offences.

Table 4.2: When Member States Record Offences

Member State	When data are recorded
Belgium	Output
Bulgaria	Input
Czech Republic	Input
Denmark	Input
Germany	Output
Estonia	Input
Ireland	Output
Greece	Input

Member State	When data are recorded
Spain	Input
France	Output
Italy	Output
Cyprus	N/A
Latvia	Intermediate
Lithuania	Intermediate
Luxembourg	Input
Hungary	Output
Malta	N/A
Netherlands	Intermediate
Austria	Output
Poland	Output
Portugal	Intermediate
Romania	Output
Slovenia	Output
Slovakia	Input
Finland	Input
Sweden	Output
United Kingdom	Input

SOURCE: Adapted from Aebi (2008).

When an offence is reported is important because an investigation of an offence can be completed in a different year from that in which the crime was reported. If a country alters its recording practice over time, the statistics are not comparable; any cross-country differences that do not take this into account will not be comparing like for like and will provide misleading results. In particular, in cross-country analysis, it should be noted that Aebi (2008) finds countries using input data present higher crime rates than those using intermediate data, and those using intermediate data present higher crime rates than those using output data. This is consistent with the findings in Sweden, which uses input data, in which the recorded number of rapes is three times the average of the other 35 European

countries⁴⁰ for which data are collected in the European Sourcebook's first edition (Von Hofer, 2000).

Regarding the second comparability issue – offence discovery and occurrence – data collection and reporting may differ from the time period in which the offence (or offences) actually happened. This will affect both within country comparisons and those across country. There may appear to be a sudden jump or plummet in one year, thus affecting comparisons between that country and another and those of the rate of change within a country.

This can happen if the police force identifies many offences that occurred several years ago or if there are delays in reporting. For example, some of the questions in SPACE I ask for the situation on September 1, 2000. Yet, countries deviate and provide the value on a different date, such as the "situation on December 31, 2000" or even that in 2002. According to Eurostat,

raw figures are requested on an annual basis for crimes recorded by the police, the number of police officers and the prison population \dots nearly all of the EU Member States, EU Candidate, EU Potential Candidate and European Free Trade Association (EFTA) and European Economic Area (EEA) countries are able to meet the request for data to be provided at N + 1 year; other countries deliver at their earliest convenience.

Where countries cannot meet the date, they provide "provisional" statistics that are revised in following years. In this case, analysts may decide not to analyse the most up-to-date data because it is not particularly accurate.

The actual date of collection may also be important when considering some countries may provide amnesties or other early or executive release arrangements.⁴¹ Another way in which the point in time matters is through the concept of fiscal and calendar year. In most cases, the data requested use the calendar year as the recording period and countries note when they refer to some other time frame.

How Offences are Counted and the Point in Time to Which Statistics Refer

Whether offences are counted for police, prosecution, convictions or corrections, there

⁴⁰ Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovenia, Spain, Switzerland, the F.Y.R.O. Macedonia, Turkey, England and Wales, Northern Ireland, and Scotland.

⁴¹ See http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/Annexes/crim_esms_an1.pdf (accessed December 31, 2010)

may be differences across countries in how to count offences. Particular problems arise when a criminal event includes more than one offence (multiple offences) or when more than one person was involved in the criminal event.

The problems with multiple offences are the way "secondary" offences (such as rape in a murder case) and the numbers of incidents that are counted in cases of serial offences (such as ongoing child abuse, violent abusive relationships, or drug transactions that have lasted over time) are counted. The questions in data collection schemes often ask for the principle rule for how multiple offences are counted, either as one offence, two or more offences, or uncertain.

As to how an offence committed by more than one person is counted, again it can be recorded as one offence, two or more offences, or uncertain. Importantly, an ECR can categorise countries from the onset and consider demonstrating how comparisons of those countries with the same way of counting offences leads to different (or not) conclusions.

Changes in Statistical Routines

There are very real challenges to acquiring statistical information that is accurate and non-biased. Errors in the measurement of CCJ statistics such that the actual value is different from the one obtained in the recording instrument can occur for a number of reasons, which are described below.

Non-response

It can happen that a Member State's national correspondent does not receive a response from a particular police statistical agency. When this is systematic (e.g. response is not given because a country is worried about high crime rates), any analysis performed on the data may be misleading — only those countries that appear to be doing well are in the dataset (for more reading on ways to mitigate non-response, specifically imputing data, see Box 4.1). Any findings of such an analysis could provide a misrepresentation of the actual CCJ situation across Europe. In order to mitigate this issue, a pan-ECR would need to have internal controls to limit the non-response to less important variables. Although it is outside the scope of this study, we offer two possibilities for discussion:

- Limit the variables to those that are most important.
- List the variables in order of importance.

If the ECR presents information on new crimes, for example, and a survey is conducted to inform the report, it may be useful to keep the survey to a couple of variables and use contextual information from another source, thereby gaining important contextual information and limiting the burden on the respondent.

Poorly Designed Questionnaires

When a questionnaire does not suit the respondents, the responses may be inaccurate. One way in which this happens is through language translation; the questionnaire may originally be devised in English to be translated for all the countries of interest. In the field of CCJ, it is not enough for the translator simply to know English and the other languages – there needs to be an understanding of the criminal justice systems. An example provided in interviews related to the crime of "rape" – the crime of "rape" as known in English for the UK is different from what can be translated into German and the German criminal justice system; there are several terms and crimes in German and the translator must necessarily be aware of this for proper translation on the questionnaire (for more on interview findings see Appendix C). The risk of this error can be mitigated through piloting questionnaires first, using similar questions from previously successful surveys, and maintaining communication with national correspondents. Importantly for an ECR, the report must be aware that this can drive some of the statistical findings.

Respondent Bias

There is a possibility of respondent bias in which the desire to demonstrate a positive or negative crime outlook makes the statistics unreliable. For example, funding may be attached to results and respondents may have incentives to report in a certain, biased manner.

Processing Errors

The way in which data are entered at different stages and transferred to other bodies may result in loss of data integrity. Examples of processing errors where statistics on offences reported to police are inaccurate include (Statistics Norway, 2010):

- merger of police districts or border reconfiguration; for data collected at country level (e.g. NUTS 1), it becomes important if the national borders change, and crime levels before the change may not be comparable to those after
- **double counting**; if police re-register people after transfer from one prison to another, they may appear as "new" offenders in the statistics

• foreign crimes; if some countries record crimes in which their residents were

Box 4.1: Bibliography for Further Reading on Imputation

The following bibliography may assist in the imputation of non-response or missing data that authors of an ECR may want to perform:

- P. Allison, Missing Data, London: Sage Publications, 2002.
- M. Maltz, "Analysis of Missingness in UCR Crime Data," U.S. Department of Justice, 2006.
- J. Honaker and G. King, "What to do About Missing Values in Time Series Cross-Section Data," *American Journal of Political Science*, Vol. 54, No. 2, 2010, pp. 561–581.
- J. Honaker, G. King, and M. Blackwell, *Amelia II: A Program for Missing Data*, 2010. As of December 31, 2010: http://gking.harvard.edu/publications/amelia-ii-program-missing-data
- M. Huisman and H. Goudriaan, "Handling Missing Item Responses due to Item Nonresponse and Incomplete Designs," in J. Bethlehem and S. Van Buuren, eds., Missing Values. Proceedings of the Tenth Symposium on Statistical Software, Utrecht: Faculteit Economie en Bedrijfskunde, 2001.
- R. Little and D. Rubin, Statistical Analysis with Missing Data, 2nd ed., New York: Wiley, 2002.
- J. Schafer, *Analysis of Incomplete Multivariate Data*, London: Chapman & Hall, 1997.
- P. Von Hippel, "Imputing Skewed Variables," Ohio State University, unpublished manuscript, 2009.

victims overseas, while other do not, then the basis for comparing the statistics for those countries is flawed.

4.2.2 Legal Factors

The Significance of Legal Definitions

In order to record the crime, there must be a clear understanding of what defines the crime and what type of activities fit into that crime. Some crimes are clearer than others – homicide is homicide virtually everywhere. However, for most crimes there is scope for differences of interpretation about what constitutes a particular crime and who fits within that definition. For example, in Sweden, sexual assaults on children can also be classified as rape (Von Hofer, 2000), whereas in the United Kingdom, only sexual assaults of adults are considered rape.

A further complication is that classifications may change over time within countries, so that a legislative change will influence the level of a crime. For this reason, it is argued that rates per capita "should not be used for comparisons, except in the case of homicide and the prison population, where the nature of the information suggests that the figures may be more readily comparable".⁴²

In the Eurostat's Statistics in Focus publications, homicide and prison population are presented as rates per 100,000 head of population averaged over three years. Where EU trends are calculated, only countries without a break in the series (no significant change in definition) are considered and EU trends are presented as an approximate figure. This may limit the number of variables collected because differences exist everywhere. It may be for this reason that Eurostat presents statistics across three broad areas – crimes, police and prison – with few variables in any one area. For a database, this means there will be a box labelled "other" and countries will provide details of who is included in this figure. For example, a question in SPACE I on the population of penal institutions based on legal status has an option of "other" legal status (compared with convicted prisoners, sentenced but appealing prisoners, and so on). Some countries provided information that their figures for "other" included mental patients, civil imprisonment, persons detained under immigration law, and so on.

Although the crime in European Sourcebook of Crime and Criminal Justice is consistently measured, there are some minor differences between the criminal justice practices of countries. For example, the standard definition of homicide is "intentional killing of a person". According to this definition, euthanasia should be included as homicide, since euthanasia involves killing intentionally. However, euthanasia is not considered homicide by the legal system of some countries.

Similarly, an attempt to kill a person should not be counted as homicide, but there are conflicting practices about doing so in different countries. The European Sourcebook handles these minor differences by providing information about responses of legal systems to such controversial actions for each country. Specifically, each country's legal practices for certain types of actions, such as euthanasia and attempts to kill, are reported (whether they are counted as crime or not).

As another example, a question on the prison population 15 years of age and older may have some countries in which "the data exclude the population of penal institutions for juveniles" and other countries include juveniles at 15 years or older.

In another example looking at figures on the prison population, a country might include

43

⁴² See http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/crim_esms.htm (accessed December 31, 2010)

those serving their sentence in institutions other than prisons (for example, residential drug treatment institutions, secure hospitals), and might include escaped prisoners, while other countries will not include these people.

Importantly, the crime definitions used by the judicial system and the police are not identical. Although offence definitions adopted by the various police systems present uniformity among countries, rules for recording sentences can vary substantially.

The Effects of the Legal Process

The legal process influences the level of offences and criminal justice costs we observe in different countries. In some countries, the right to prosecute is not left up to the victim as some countries decide that victims may be too vulnerable to make prosecutorial decisions. In other countries, victims have an important role in the decision to prosecute.

A central reporting mechanism across Member States will necessarily be facing differing legal processes. Differences across legal processes can affect the extent to which prison systems are used and the figures associated with prison populations, for example. Some legal processing factors affecting the figures that a central reporting mechanism will need to consider are:

- the extent to which the accused were remanded in custody
- the length of pre-trial detention
- the extent to which courts impose custodial sentences
- the length of custodial sentences (more precisely, the length of time served)
- length of sentence
- the extent to which custodial sentences were suspended.

The "Legality Principle" rather than the "Expediency Principle"

The underlying principles of a prosecution system and the power thus given to the prosecution authority can affect the comparability of data across different systems. This is because one system may inherently lead to fewer offences. Specifically, there are two key principles of the prosecution system — "legality" and "expediency". Under the legality principle when the authorities (e.g. police, prosecution) are alerted to an offence they are required to prosecute. Under the "expediency principle" there is more discretion to prosecutors and the classification of offences can be negotiated (e.g. "plea bargaining").

In the strictest interpretation of the legality principle, the only responsibility of a country's prosecuting authority is to prepare cases for court. An example of this type of legal model is Sweden (Von Hofer, 2000). Moving away from this strict interpretation and towards the expediency principle, most European countries have a prosecuting authority with the

power to decide whether or not to prosecute (Sourcebook, 2003). This means that in practice a criminal receives a warning for small scale thefts or burglaries, rather than the full legal consequence. Lastly, there are countries in which the prosecuting authority has even greater power not only to drop cases, but also to impose conditions or sanctions on an offender. The Netherlands, for example, in the case of drug crimes, "requires that prosecution only proceed when it is positively in the public interest to do so" (Kerley, 2004, p. 4).

4.2.3 Substantive Factors

The Propensity of Population to Report Offences

In order to be able to compare CCJ statistics, crimes need to be reported and some countries have higher reporting rates than others. This can make it appear as though some countries have higher actual crime rates, when in fact they simply have a stronger propensity to report.

Underreporting is more serious for developing countries and especially for low-value property crimes, such as theft and for crimes carrying a social stigma for the victim, such as rape (Soares, 2004). Social norms in developing countries may be such that communicating to anyone, let alone police, about a crime may be unacceptable. For example, perceptions of rape and sexual abuse mean low reporting in some countries and higher in other countries where it is more encouraged (Thümmler et al., 2009).

The reporting of crimes to police is not necessarily consistent across countries. It is, in part, affected by the likelihood of contacting police, which is a factor of telephone ownership, number of police stations, insurance and trust in police (Goudriaan, Lynch, and Nieuwbeerta, 2004). Furthermore, reporting a crime may be based on victims weighing the costs and benefits of the amount of time and effort it will take them to report the crime and the risk of the perpetrator learning of who reported and retaliating. If a victim believes the likelihood of arresting the offender is low and/or the value to be recovered is low (formally, the expected value of reporting a crime is low), it makes perfect sense that reporting is low for crimes with a low value and/or low arrest rate.

On the other hand, researchers have techniques for correcting for under-reporting within datasets (e.g. regression analysis) (Fajnzylber, Lederman and Loayza, 2002a, b).

The Propensity of Police to Register Offences

When a crime is reported to the police, details are not necessarily immediately recorded for statistical purposes, and this can lead to the appearance of lower crime rates than occur in reality. In England and Wales, for example, a study in 2000 found that less than 40

percent of all violent incidents brought to the attention of the police were actually recorded by them (Burrows et al., 2000). In countries where (minor) assault is prosecuted only at the request of the victim, police data on reported offences tend to closely match police counts of suspects, suggesting that offences are recorded only once a suspect is known and when their prosecution is being demanded by the victim.⁴³

On the other hand, political pressure may also encourage the police to record all incidents in serial offence cases, even if their number needs to be extrapolated, which leads to the appearance of higher crime rates. This was the case for domestic abuse of females in Sweden where police officers assessed the number of offences by multiplying their monthly or weekly frequency by the duration of the relationship (Von Hofer, 2000).

Actual Crime Levels

A further consideration is that crime may actually differ across countries and within a country over time. There are many factors influencing why populations commit more or less crime, for example the underlying propensity to commit crime (risk perceptions), the perception of criminal behaviour, and the willingness to accept crime.

4.3 Lack of Accuracy or Mistrust

In this section, we provide insights from interviews with statistical officers and academics involved in providing data to examine how the lack of accuracy or mistrust in statistics could lead to data being underused. Although there may be many factors influencing actual or perceived inaccuracies, we describe in greater detail two key areas that surfaced in the interviews: capability and transparency.

4.3.1 Capability to Validate

The lack of accuracy in the data may be due to the capability (experience or expertise) of those responsible for validating the data.

One interviewee believed it is not necessary to obtain the official statistics from the Member States because the data may be wrong. According to the interviewee, it is more important and efficient that a reliable source, such as an academic panel, validates the accuracy of the data and the changes observed over time. Those who have worked with CCJ data are able to spot when values are seemingly inaccurate. This can simply be due to mistyping or coding error; therefore, values need to be checked.

⁴³ See http://www.europeansourcebook.org/sourcebook_start.htm (accessed December 31, 2010)

Members of the European Sourcebook and Eurostat believe they have improved their efficiency over time because with experience comes an eye for spotting problem areas quicker. Therefore it may be relatively less labour intensive to identify problems with the data (e.g. coding errors) if there are some experienced people in the working group validating data.

4.3.2 Transparency

Any research endeavour faces limitations. It is challenging to achieve both comprehensive and in-depth data and analysis, and readers are likely to be sceptical of any data or analysis that does not provide the caveats of their database or research and analysis. In order to provide reassurances and gain acceptability of a database, it is important to be clear about the limitations of data and analysis.

On the one hand, members of European Sourcebook and Eurostat have learned that providing reliable statistics and/or analysis to the public, policymakers or researchers means providing the limitations of the data. The interviewees stated that transparency about the potential limitations allows policymakers and researchers to know the extent and direction (positive or negative, overestimate or underestimate) of these limitations. As discussed, it does not make the research invalid to have caveats; however, in order for people to trust the research and understand the implications of their decisions, they need to know if they get it wrong in which direction it may be wrong.

On the other hand, interviewees acknowledged that it can be challenging to be open about limitations in the data because, if not communicated properly, it may send the message that the data are of poor quality and not worth using. As shown in the mapping of the data collection process (see Figure A.1), there are three main bodies involved in international data collection – recording bodies, national correspondents and databases – and limitations may emanate from any one of these entities.

Each of these local and national level bodies (police, courts, national correspondents) may be concerned with the outcome of providing statistics. Further potential drivers discussed in interviews (which we discuss in greater detail in the next chapter) were:

- financial implications
- value judgements made on their organisations
- diversion from their focus on operational statistics.

4.4 Conclusion

This chapter has covered a range of potential challenges for creating a central source of CCJ data and reporting for the EU. From the ability of a report to compare across countries to the nature of Member States' worries of being judged, an ECR may face a variety of challenges to getting off the ground.

However, it is not impossible to overcome these challenges, which will depend crucially on funding, model of implementation, and dissemination and communication strategy. In the following chapters, we discuss some of these challenges further and some possible approaches to overcoming them.

CHAPTER 5 Smart Aggregation of Crime and Criminal Justice Data

5.1 Introduction

5.1.1 Comparing Crime Carefully

As discussed in previous chapters, when making or assessing crime policy it is useful to know what is happening with crime rates over time within a country and to see how that country's crime rates compare with those of other countries. For example, in the 1950s, in spite of many other similarities, Finland had a much higher rate of incarceration than its Scandinavian neighbours. As a result of identifying this discrepancy, crime policy experts and academics in Finland decided to undertake an extensive review of criminal justice policy. This review was to inform a successful criminal justice transformation that brought incarceration rates in Finland in line with those in neighbouring countries like Sweden and Denmark (Lappi-Seppälä, 2009). Clearly this kind of comparison can provide valuable information for policy officials and researchers seeking to build an evidence base and inform policy.

Given the wide range of CCJ data available in the EU, and the potentially great utility of undertaking comparisons such as that by Finnish crime policy experts, it is worth considering why a European Crime Report (ECR) does not already exist. Making such comparisons between countries is fraught with diverse and complex challenges discussed in the previous chapter and at length elsewhere (see, for examples, Barclay, 2000; Shaw, van Dijk and Rhomberg, 2003; Murray et al., 2007). Drawing on criminal justice data in abstraction, without knowing about the range of factors that may influence actual levels of crime and levels of reported or recorded crime, can produce an incomplete or misleading picture. For example, in France over the last 30 years levels of violent crime appear to have been rising, and without understanding the context it would be easy to assume that this indicates an increasingly violent turn in French society. However, on closer inspection, if one knows something about social changes that have influenced definitions of crime and

policing of crime, it becomes clear that much of the domestic and sexual violence that make up the violent crime statistics today is not new. Instead, it is most likely that it existed in previous decades but went largely unreported and unprosecuted – so never showed up in crime statistics.

Similarly, if one were to compare French violent crime statistics with those in a country in which domestic and sexual violence are not well recognised and considered important priorities for policing and justice, France may look as if it has a surprisingly high rate of violence by comparison, when knowledge of the context suggests that this relatively high rate may more accurately reflect the serious attention considered to be merited by these crimes in France.

5.1.2 Informed yet Accessible Comparisons

Attending to the wide range of statistical, definitional and contextual factors can render existing rigorous reporting of CCJ data too detailed and technical to be readily useful for non-experts. Rigorous and informative reporting of CCJ data are frequently also provided with a preponderance of caveats warning the user against using the information for comparing across countries. The aim of the ECR is to find ways to provide as much informative access as possible to the plethora of European crime data that are currently available, yet find ways to use knowledge of differences in definitions, legal context and counting rules to make that data comparable where possible. The aim is to draw on what is known about what makes up, drives and influences those figures that are reported and actual levels of crime, to be able to generate reports in ways that facilitate informed interpretation and make facile or unhelpful comparisons less likely or more difficult.

It will not be possible to provide a perfect solution – the data presented in an ECR can still be used inappropriately. However, there is currently a great distance between the most informed and least informed use of criminal justice data. The ECR could go some way towards filling that gap, providing a tool that improves the informed use of data when tracking trends and making comparisons, but remaining more accessible to non-research and non-expert audiences than the very detailed assessment and alignment that informs initiatives such as the European Sourcebook and other academic research initiatives which an ECR would certainly seek to include. For a more detailed discussion of CCJ experts' opinions on these issues, see Box 5.1.

Box 5.1: Some Criminologists Take a View on Setting Up an ECR

According to interviewed experts and seminar participants, some people have to use crime statistics without having the in-depth knowledge of how the data were collected or what they can and cannot say. Ultimately, however, experts agree there is nothing the European Commission or anyone in the CCJ community can do to actually stop people using information to make bad comparisons – there are many unaware customers out there.

But that is not the end of the story. The CCJ community should actively help others along. Some of the poor comparisons occur because the producers of CCJ statistics and analysis are at times asking the wrong questions and producing information that takes a lot of work to use accurately. With some users potentially having unclear ideas about CCJ data and analysis, experts say the ECR can play an important role in bringing people up to speed on the dos and don'ts of using crime and criminal justice statistics.

The process in which the ECR does this is an important consideration. One thing is clear from all the experts interviewed in this study: since there are so many challenges to getting the ECR off the ground and because it is so important to do so, the first editions of the ECR should not try to do everything. The functionalities should be phased in over time, through some trial and error, and not get bogged down in trying to solve everything at once.

5.2 A Framework for Key Factors in Comparing Crime and Criminal Justice Phenomena Across Countries

As we have seen, in addition to statistical, definitional and criminal justice systemic factors, it is also important to acknowledge that there are many aspects of the wider social, political and economic context in which crime occurs that influence reported and actual levels of crime. The authors of the European Sourcebook, engaging in comparative assessment of crime data, articulate this clearly:

- (O)fficial crime and criminal justice statistics are fundamentally dependent upon three sets of circumstances:
- (i) actual circumstances such as the propensity of individuals to commit crimes, the opportunity structure, the risk of detection, the willingness of the public to report crimes, the efficiency of criminal justice authorities; (ii) legal circumstances such as the design of the Criminal Code, the Code of Criminal Procedure and other relevant legislation; the formal organisation of criminal justice agencies and the informal application of the law in everyday life; and (iii) statistical circumstances such as the formal data collection and

processing rules and their practical implementation.⁴⁴

The ECR would seek to identify and provide information on the widest possible range of important contextual factors that heavily influence the significance of CCJ data. For example, when seeking to understand how rates of theft and burglary have changed over time there are enormous definitional challenges across EU Member States. However, even if definitions could be standardised (and this is a big "if") there are changes in social and economic trends and in policy that could inform understanding of what appear to be changing burglary rates. These include the implementation of measures to achieve "target hardening" (making it more difficult to access and steal goods) through increasing use of burglar alarms, changes in consumption patterns (such as the growing availability of high value handheld devices such as iPhones and the increasing size of televisions) that may have contributed to a shift towards street crime and away from household burglary, and a growing concern over more serious violence and crime against the person, which have entailed a move away from prosecution for property crime in some countries.

The rest of the chapter first considers some of the key known contextual factors affecting crime rates that are relevant when describing crime in different countries, and then goes on to describe what we have termed "smart aggregation", or pulling together existing data in ways that allow them to be expressed accessibly yet relatively comparably.

5.3 Contextualisation: An Overview of Factors Affecting Crime Rates

There is an extensive literature assessing the causes and correlates of crime. The aim of this section is not to provide a comprehensive review of this work.⁴⁵ Instead, this section provides an overview of some of the key contextual factors that have been identified as important drivers and correlates of levels of crime and violence, of the type that we would envisage encompassing the data and reporting provided in the ECR. The aim is to set the backdrop for the discussion that follows about how to help users of any future ECR make useful sense of data they are likely to access. Sections of this review are drawn from previous related reviews by the RAND research team.

Table 5.1 provides a schematic outline of some of the factors influencing crime rates highlighted in the wider criminological literature, ⁴⁶ separating them into factors operating

⁴⁴ See http://www.europeansourcebook.org/chapter_0/01.pdf (accessed December 31, 2010)

⁴⁵ Previous RAND reports for the National Audit Office provide more detailed reviews and discussions, see Disley et al., forthcoming, 2009.

⁴⁶ For useful summaries of this literature see for example Brookman and Maguire (2005) and Halpern (2005).

at the macro-, meso- and micro-level.⁴⁷ This section focuses on macro and meso level factors, as the individual level will be less informative for national and regional level reporting that will be the focus of an ECR.⁴⁸ Thus, when presenting CCJ data for different countries, the ECR would wrap contextual information around any data provided by flagging key aspects of the main factors identified by CCJ experts, starting with the wider environment in which crime occurs, such as the economic context, and moving down into more mid-level structural factors that are known to influence levels of crime, as discussed in the following section.

Table 5.1: Factors Highlighted in the Academic Literature as Affecting Crime Rates⁴⁹

Macro (e.g. broad country- population and wi contextual facto	ider system, other infrastructure	is,
Economic contextDemographic charactersuch as age and get		Peer affiliations and close relationships Attachment to moral codes
of the population	such as designing out crime	

5.3.1 Macro Factors

that potentially affect crime rates.

This section provides an overview of some of the main macro factors that are routinely mentioned in the academic literature on crime as associated with and potentially driving levels of crime and violence, which would therefore be included as an important context for those seeing to understand and make CCJ comparisons in the EU. Findings reported in this section suggest that some of the key factors an ECR would want to report alongside crime rates, comparisons and trends are rates of unemployment, poverty, inequality, spatial characteristics such as levels of urbanisation and concentration of the population, and

⁴⁷ Some other factors, such as tougher gun control laws, the legalisation of abortion and changes in the market for crack cocaine, which are explored in the predominately North American research, are excluded from discussion in this study planning document, because of questions over their transferability to an EU context. Much of the research in this area is based on data from the United States. There are limitations to the transferability of U.S. findings to an EU context, but the findings are useful to the extent that they flag factors

⁴⁸ If the focus of an analysis were to shift from crime trends and comparisons to risk of victimisation, then micro-level factors could become of more significance.

⁴⁹ This framework is to provide a broad means of categorising some of the routinely mentioned factors associated with crime rates. There may be other useful ways of categorising these factors. However, the aim here is to provide an indication of their range and variety. The ECR and this report on the development of a blueprint for an ECR do not propose to undertake causal analysis or make claims about the particular role or importance of any one factor. Pointing to possible analyses, and generating interest in and support for such analyses, could be outcomes of developing and implementing an ECR, and it is hoped would be undertaken by CCJ experts and researchers.

demographic factors such as age and gender of the population.

Economic Context

Research on the relationship between aspects of the economy, such as income inequality, wage rates, unemployment and crime, has found that they are associated (see Reiner, 2007, on income inequality). When considering the relationship between unemployment and crime, Levitt (2004) concludes that, controlling for other factors, almost all the studies considered in his review found a small but statistically significant relationship between unemployment rates and property crime, and similar findings have been reported elsewhere (Reiner, 2007). Violent crime, however, was not found to vary systematically with unemployment rate (Levitt, 2004, p. 170).

While Levitt did not find a systematic association between violence and unemployment, sociologists have long noted that poverty, on the other hand, is strongly positively associated with rates of violent crime (Braithwaite, 1979; Eisner, 1999, 2001). Countries with high levels of poverty as well as a wide gap between the wealthy and the poor tend to have even more elevated rates of crime (Hsieh and Pugh, 1992; Pickett et al., 2005). The gap between rich and poor is described in much of the social science literature as "relative deprivation". This term does not describe absolute poverty, but poverty relative to others. In investigating the relationship between inequality, poverty and violent crime or homicide, inequality has been found to have demonstrable effects on violent crime rates. Work of a similar vein by Eisner (2001) and Fajnzylber, Lederman and Loayza (2002a) looks at national changes over time and differences across countries in inequality (measured as Gini coefficient) and rates of violent crime (measured especially by rates of homicide). They found that over time when inequality went up, so did rates of violent crime.

A strong effect was also found in the cross-national comparison in which countries with higher rates of inequality were found to have higher rates of violent crime. Given the concern that unobserved factors might be simultaneously driving the two measures, Fajnzylber, Lederman and Loayza (2002a) controlled for other factors such as levels of education and urbanisation in order to rule out some of these other potential driving forces. However, they found that the results were robust when they controlled for other crime-associated factors. They concluded that "[i]ncome inequality, measured by the Gini index, has a significant and positive effect on the incidence of (violent) crime" (Fajnzylber, Lederman, and Loayza, 2002a, p. 25). ⁵⁰ Further, when inequality decreases, rates of violent

 50 Although it is worth noting that Kelly (2000) did not find inequality to be positively correlated with violent

crime go down. Other studies suggest that there is a statistically significant relationship between wages and crime rates and that as real wages increase, crime decreases (Gould, 2002; Machin and Meghir, 2004).

Interestingly, Fajnzylber, Lederman and Loayza (2002b) found that there is a cumulative effect such that when income inequality and poverty are both alleviated, the reduction in crime rates is accelerated. This finding is in accord with Eisner's (2002) discussion of the work of Messner and Rosenfeld (1997) and Esping-Andersen, which suggests that "social welfare expenditures are negatively related to homicide rates in a comparative analysis of forty-five countries" (1990, p. 217). DeFronzo (1998, p. 396) also concludes from a review of the international evidence that increasing welfare reduces rates of homicide and that "government assistance to the poor can limit homicide". Further, there is growing evidence that reductions in unemployment benefits (Jobseeker's Allowance) had a worsening effect on crime (Machin and Meghir, 2004). However, it is important to interpret these findings with care as it is not necessarily clear why government benefits may reduce violent crime. The fact that authorities show concern for a deprived community might be enough to have an impact in itself, irrespective of the exact nature of the intervention. Or the type of assistance implemented may reduce other factors that are driving homicide and crime rates, rather than directly reducing violent crime. Further evaluation of such interventions is necessary to understand why they are effective and what aspects of them are most effective.

Other research has shown that in addition to disadvantage *per se*, the spatial concentration of disadvantage is also related to homicide rates. Parker (2004, p. 625) disaggregated the data on homicide, looking at the impact of industrial restructuring in U.S. cities, including a move away from manufacturing to service industry, growing urbanisation and concentrated disadvantage, and found that these changes affect black men and women, more than their white counterparts. Increasing disadvantage led to rising homicide rates for black men and women, while decreasing racial segregation, and thus decreasing concentrated black disadvantage, led to a decrease in homicide among black men and

crime in the United States, by contrast with Fajnzylber, Lederman, and Loayza's (2002) finding that this was the case in their study, which covered 39 countries.

⁵¹ Neumayer (2005) argues that while low average income levels do affect rates of homicide, inequality does not; he further suggests that some of the links found in the research cited above may therefore be spurious, and policies aimed at reducing inequality do not necessarily reduce crime rates. The analysis he presents is not on its own strong enough to countermand the findings of multiple studies that argue to the contrary. However, further research is recommended to unpick the relative significance of the different factors cited in Neumayer's and others' research exploring the relationship between poverty, inequality, welfare provision and violent crime.

women. The study concludes that "spatial concentration of disadvantage in urban areas" was significantly associated with homicide offending by ethnic minorities in the affected communities (2004, p. 634), and that reducing the concentration of disadvantage reduced rates of offending by ethnic minorities.

Demographic Context: Population Age

Crime is mostly committed by young people – adolescents and adults in their 20s.⁵² For example, among respondents to the UK Offender, Crime and Justice Survey, the peak rate of offending was by 14–17-year-olds (a third had committed a core offence), followed by 12–13-year-olds and 18–19-year-olds (both a quarter). Males aged between 10 and 25 (14 percent of the sample) accounted for almost half (47 percent) of all offences committed (Budd et al., 2005). Because the elderly have lower rates of victimisation and offending, and given the increase in this sector of the population, we might expect to see a decline in the crime rate.

A study in Canada that mapped projected crime statistics for the period 2000–2041, based on changes in population age demographics, found that reductions of 15 percent in the level of recorded crime can be expected by 2026, increasing to 29 percent by 2041. This study predicted that there would be a significant reduction in crimes characteristic of teenagers and young adults, such as robbery and breaking and entering (Carrington, 2001). Similar trends were predicted in Australia, with a decline in homicide rates of around 16 percent between 2002 and 2050, forecast solely on the basis of the ageing population (Healy, 2004). Again, crimes associated with younger offenders are predicted to drop significantly, with assaults, robberies, vehicle theft and drug abuse highlighted as likely to decline.

Levitt (2004) argues that any effect an ageing population may have had on declining rates of crime in the United States in the 1990s was offset by increases in the number of teenagers and in the racial and ethnic mix of the population; yet his analysis still assumes some relationship between an ageing population and declining crime rates.

Gender Balance of the Population

Women and girls generally offend less frequently than men and boys, start offending later, and stop offending sooner. There are also differences in the types of offences committed by men and women. Women tend to commit acquisitive rather than violent crime. While

⁵² It is possible to argue that the crimes of older people are more costly, but do not appear in crime statistics (for example, fraud, financial crime etc.). "Ordinary" property and violent crime experienced by members of the public is predominantly committed by young men.

arrest statistics in the United States have shown rates of violent crimes committed by women versus men converging (Schwartz, Steffensmeier, and Feldmeyer, 2009), analysis by Rennison (2009), based on crime victimisation reports as opposed to recorded crime, finds the ratio of male to female violent offending has remained stable. Because of the sustained lower rates of violent offending by women, the gender mix of the population is considered relevant when assessing crime rates and trends.

5.3.2 Meso Factors

(Eades, 2006).

This section provides an overview of some of the main meso factors that appear to be associated with and may be driving levels of crime and violence. Findings reported in this section suggest that some of the key factors an ECR would want to report alongside crime rates, comparisons and trends are substance availability, affordability and misuse, criminal justice system factors such as police numbers and proclivity to use imprisonment.

Substance availability, affordability and misuse is a well-recognised criminogenic risk factor. Drugs, weapons and alcohol are key factors associated with the incidence of violent criminal offences (Prideman, 2002; Halpern, 2005; Brookman and Maguire, 2005). In the United Kingdom, knife crime is of concern⁵³ and drugs are also considered "dangerous substances" because of the observed or perceived relationship between drug use, trafficking and violent crime (Hosking and Walsh, 2005, p. 31). Drug users are more likely than non-drug users to commit crimes, and to commit crimes at a higher rate (Bennett, Holloway, and Farrington, 2008). However, Stevens (2008) reviews the international evidence on the relationship between drugs and violence, concluding that the relationship between them has generally been overstated.⁵⁴ This is because while many criminals also engage in illegal drug use, and drug use may amplify criminality, both drug use and criminality are strongly associated with other, potentially more significant, underlying factors such as poverty and inequality.⁵⁵

⁵³ Although it is impossible to assess accurately what the actual levels of knife carrying and use in violence are

⁵⁴ This finding is supported by other research on the relationship between substance use and violence or delinquency, for example as concluded by D'Amico et al. (forthcoming).

⁵⁵ However, while drugs may not be primary drivers in themselves (over and above poverty and inequality, for example) in the context of understanding possible foci for intervention, drug-related activity may nonetheless exacerbate the problem of violent crime in a given area. Gaviria (2000, p. 24) shows that drug-related crime in Colombia represented a small proportion of the overall crime rate; it played a key part in rapidly escalating crime rates in large part because it indirectly generated violence through externalities including "congestion in law enforcement, spillovers of knowledge, supply of weapons, and the creation of a culture that favors easy money and violent resolution of conflict over more traditional values".

Many violent incidents are also alcohol-related. Violent criminal offenders and victims in many cases have been drinking alcohol, often to excess (Prideman, 2002; Brookman and Maguire, 2005) and many instances of homicide and violence occur near drinking establishments (Brookman, 2005; Hosking and Walsh, 2005). However, as with drugs and weapons, it is possible that alcohol may partly be a symptom as well as cause. Bingedrinking related violence may occur because of underlying factors making individuals more likely to engage in binge drinking instead of, or as well as, engaging in violent behaviour. As with drugs and weapons, the substance is likely to amplify the severity of incidents, yet underlying drivers of the substance use may be significant, and the specific interactions and context in which the violence occurs are also important. For example, the highest proportion of violent crime occurs on routes between drinking establishments and public transport (Halpern, 2005). In such cases it is not necessarily the drinking per se that causes the violence, but the interactions such as "masculine honour contests" that may arise along these routes, plus a lack of public transport or disorganised queuing at taxi ranks, combined with alcohol's disinhibiting effects (Gilligan, 1996; Brookman and Maguire, 2005).

Policing and Police Numbers

Understanding the effect of police numbers on crime is complicated by the fact that the number of police may affect the amount of crime – but the amount of crime may also affect the number of police, if for example, more officers are hired in a time of high crime (Levitt, 2004). However, a review of several studies controlling for this endogeneity problem concluded that increases in the number of police officers are associated with reductions in crime (Yamamura, 2009).

It is difficult to discuss links between policing strategies and crime without talking about the most (in)famous example of this: the use of zero tolerance policing in New York in the 1990s. The premise of this approach was that serious crimes could be reduced by tackling minor offences and public disorder. The introduction of zero tolerance policing coincided with a significant reduction in crime levels in New York.⁵⁶ Whether there was a causal relationship between zero tolerance and declining crime levels, however, has become a contentious issue. A competing explanation is that reductions in crime were caused by a marked decline in crack use (Bowling, 1999). Alternatively, the reduction in crime could also have been in part accounted for by displacement of criminal behaviour into other

⁵⁶ Between 1993 and 1997 there was a 60.2 percent reduction in homicides, a 12.4 percent reduction in incidents of rape and a 48.4 percent drop in robbery; see Greene (1999).

areas. Research into the application of zero tolerance policing in the UK found that, during the period of time covered by the research at least, there was evidence that reductions in burglaries could be attributed to police crackdowns in an area (Farrell, Cheney, and Pease, 1998). This is supported by studies, again based on U.S. experience, which suggest that proactive patrols and crackdowns can reduce crime rates, at least in the short term and when properly targeted (Sampson and Cohen, 1988; Sherman, 1990).⁵⁷

Rates of Imprisonment and Proclivity to Use Prison

Imprisonment has been shown to affect crime to some extent through incapacitation, but available evidence suggests that the overall influence of imprisonment is small, and is further reduced where sentences are not targeted on those offenders who commit the most crime. In the UK, it was estimated that a 15 percent increase in the prison population achieves a short-term reduction in crime of 1 percent, although if particular groups of offenders, such as drug offenders, could be targeted, the same 1 percent reduction in crime could be achieved by an increase in the prison population of only about 7 percent (Halliday, 2001, p. 130).

Designing Out Crime

The design of environments and buildings can be a factor in crime reduction. For example, increased lighting or the use of CCTV cameras can decrease levels of crime through increasing fear of observation.⁵⁸

The following section discusses ways of pulling together existing CCJ data so that they are at once informative and useful for making comparisons, yet remain accessible for non-technical users of data.

5.4 Introducing "Smart Aggregation"

In this section we begin to outline what we have called "smart aggregation". That is, the gathering together of existing CCJ data in ways that report information about crime accessibly, while at the same time ensuring that reporting is sufficiently sensitive to contextual, definitional and methodological differences to be useful and informative, where

⁵⁷ Though there is also evidence that the effect of crackdowns tends to be short term (Rubin et al., 2006).

⁵⁸ This approach to crime reduction is supported in the UK by a police initiative, Secured by Design, owned by the Association of Chief Police Officers. The initiative was established in 1989 and brings together a group of national police projects focusing on the design and security of new and refurbished homes, commercial premises and car parks. Secured by Design also accredits the quality of security products and crime prevention projects.

possible excluding spurious comparisons.

5.4.1 Smart Aggregation with Contextual Factors

Smart aggregation of CCJ data will take many forms depending on the variables of interest. In some cases it may just be providing background information for users of data to give them a context for understanding why some comparisons may be more accurate than others. One example of this kind of information that might be provided is information about gun control laws and gun availability in particular jurisdictions when analysing and comparing homicide rates. Other examples of this kind of smart aggregation have been discussed above, including how violent crime statistics take on different meanings depending on the extent to which a country acknowledges and seeks to address and punish domestic and sexual violence. However, there are other kinds of smart aggregation to be discussed in more detail in the following sections.

5.4.2 Smart aggregation of Definitional Differences

As noted, definitional differences can be an obstacle to comparability across countries and jurisdictions. An example in which bringing together or aggregating national measures that are otherwise confounded by definitional differences may be done "smartly" is provided by data on rates of incarceration, or numbers in prison per 100,000 of the population. There is excellent information provided by Walmsley and his colleagues at the International Centre for Prison Studies at King's College London on variations across countries of numbers in prison. As experts in this field will be well aware, some of this variation is "real", indicative of real differences in countries' likelihood of imprisoning offenders. Wider contextual information such as some of those macro and meso factors discussed in the previous section could be wrapped around the numbers to help users of data interpret such "real" differences in prison numbers.

However, some of the variation may be accounted for by other kinds of differences, for example in how countries count and report their prison populations. For instance, some countries include remand prisoners in their total prison populations and some do not. Also, some countries count incarcerated youth, even those in specialist youth facilities rather than adult prisons, and some do not. These differences in how prison numbers are counted would then be further confounded if a user of criminal justice data wished to obtain a figure for rates of incarceration per 100,000 of the population in different countries and were to take the prison population numbers and divide them by total population for the countries in question. This is because before making this calculation it is important to know whether the total population is the total adult population or all people in the country including youth, whether it includes foreign nationals or only those

holding that country's citizenship, and so on, before the rate of incarceration per 100,000 can be a meaningful figure for comparisons.

The ECR's smart aggregation of comparative data on rates of incarceration across different countries would not allow the user to call up comparisons of two countries' prison population numbers if one country's data included remand prisoners and the other did not, if one country's data included those in youth custody and the other did not. Nor would it allow reporting of "per 100,000" rates of incarceration if one country included foreign nationals and the other did not, and so on.

This does not mean that it would not be possible to compare many countries on prison population and on prison population per 100,000. Most of the information needed to make sensible comparisons of these numbers is available. For example, it is possible to find country by country reports of prison numbers, youth in custody, remand prisoners, foreign prisoners, and so on in the highly respected and much used online World Prison Brief based at the International Centre for Prison Studies.⁵⁹ However, in the World Prison Brief each country's prison numbers, broken down by these component numbers, are reported separately. Thus, what would be needed in this instance is for the ECR to pull in all of this data already reported for each of the countries in question, maintaining separate underlying columns (for example in underlying spreadsheets) for numbers in adult custody, numbers in youth custody, numbers in remand for adults and numbers in remand for youth, numbers of adult nationals in the population as a whole, numbers of youth nationals in the population, numbers of foreign national youth and numbers of foreign national adults, of course using the same age cut off in each instance. These various factors could then be aggregated as appropriate for each comparison requested. The aggregation would be done before the comparison was presented, so that the comparison generated for the two countries would be useful and informative to the user.

At the same time, the component parts of the figure that is generated (convicted adult offenders in prison) would then need to be reported alongside the numbers (almost like ingredients in a recipe), so that users did not then attempt to add or take away component parts of the figures themselves without knowing that this had already been done. Examples such as the extensive and well-established work of the World Prison Brief would provide invaluable resources for the ECR to draw on and pull in to its reporting.

⁵⁹ At King's College London. For "World Prison Brief Europe" see http://www.kcl.ac.uk/depsta/law/research/icps/worldbrief/?search=europe&x=Europe (accessed December 31, 2010).

5.4.3 A Framework for Smart Aggregation

As noted in Chapter 4, years of consideration and detailed analysis have been given by many expert criminologists and scholars to the challenges of comparing reporting about diverse CCJ phenomena from diverse EU (and other) countries and jurisdictions. As noted above, an ECR should not seek to reinvent the wheel, and in this instance does not need to find new facets or ways of presenting these challenges. Instead, a useful starting point is the outline of broad facets of concern presented by Von Hofer (2000) and the authors of the European Sourcebook, which can be broadly summarised as: legal and definitional issues, statistical and reporting issues, and substantive and contextual issues. These facets map well onto the areas we have discussed in Chapters 4 and earlier sections of this chapter, with the modification that to the "substantive" issues discussed by Hofer and the Sourcebook, we would add broader aspects of context as discussed above.

Taking these three facets as a starting point, an ECR could then usefully build on this a framework for developing an approach to aggregating CCJ reporting across countries in ways that facilitate informative, and discourage misleading, interpretations. Building an approach to smart aggregation from these facets (definitional and legal, statistical and reporting, and substantive and contextual areas) requires a prioritisation exercise: the developers of the ECR will need both a point of departure and a route through these areas that enables presentation of more informative comparisons. An overview of how this might occur is given below, providing an illustration of how this might apply in the particular example of a criminal justice indicator that is frequently the subject of comparisons (and of misleading comparisons) – prison statistics.

The following model provides an indicative approach the ECR could take to assessing and presenting informative prison statistics based on existing reporting and a smart aggregation framework. To facilitate useful comparisons and discourage misleading comparisons, the ECR could depict many of the definitional and data differences visually. This is not intended as a finished depiction of prison data across the EU, but as an indication of how steps in the proposed ECR approach may look in practice, depicted through a particular example.

Step 1 The ECR could first take account of definitional and legal systemic variations

If countries are similar along the relevant parameters they can be placed into the same definition bins. For example, parameters in this heading would include whether reporting

⁶⁰ See for example: Farrington, Langan, and Tonry (2004); Aromaa and Heiskanen (2008); van Dijk (2007); von Hofer (2003); and Aebi et al. (2010).

of a particular country's prison statistics includes its foreign population, youth and remand (for example in reporting of prison numbers provided by European Sourcebook, World Prison Brief or other relevant reports). If countries have different legal systems or if the statistics for the area being compared (prison numbers) do not include the same component parts, then the ECR would visually separate those countries (give them different colour codes on a map), as in the case of component parts of prison numbers, below.

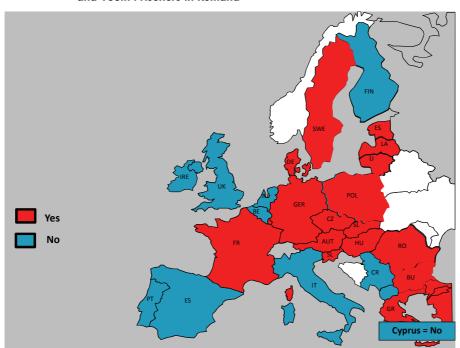


Figure 5.1: Member States for which One Can Compare Levels of Incarceration, Including Remand and Youth Prisoners in Remand

SOURCE: Authors' adapted from World Prison Brief, International Centre for Prison Studies. 61

Step 2 The ECR could then take account of data issues such as counting and timing of reporting

It would be misleading if an ECR did not distinguish between countries counting phenomena at different points in the criminal justice process. In order to make this explicit, where appropriate countries could be clustered according to whether they record offences at input, output or intermediate time frames, as discussed in Chapter 4. However, it is also important to ensure that the reporting that is available is not taken from very

⁶¹ World Prison Brief, International Centre for Prison Studies, King's College London. As of December 31, 2010: http://www.kcl.ac.uk/depsta/law/research/icps/worldbrief/

different time frames or points in the year. In order to incorporate these statistical factors into an aggregation of existing data, countries could be presented together only if available figures were from the same, or at least not significantly different, points in time. For example, the graphic depiction could add a different form and/or depth of shading on top of that generated for Step 1. One way of doing so would be to shade with speckling for countries using input data, lines for countries using intermediate data and both for countries using output data where appropriate, and with strong shading for countries using similar time frames and weak shading for those using very different time frames.

For example, in Figure 5.1, data are drawn from World Prison Brief,⁶² in which the current most recent statistics for France are from 2007/8, whereas many countries have 2010 data reported. This would have to be highlighted in some way, and a visual approach is recommended, for example shading France more lightly to indicate that its comparability is relatively weaker than some, even though it is within the same definition bin, as shown in Figure 5.2.

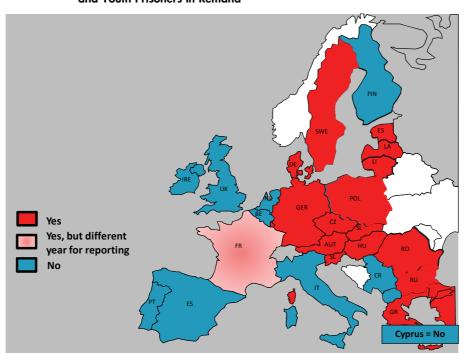


Figure 5.2: Member States for which One Can Compare Levels of Incarceration, Including Remand and Youth Prisoners In Remand

⁶² World Prison Brief, International Centre for Prison Studies, King's College London. As of December 31, 2010: http://www.kcl.ac.uk/depsta/law/research/icps/worldbrief/

SOURCE: Authors' adapted from World Prison Brief, International Centre for Prison Studies. 63

Step 3 The ECR could then take account of the wider context

At this point any more informed understanding of changes in rates of incarceration, even for relatively comparable countries, would need to include important contextual factors. Of course, which aspects of context require foregrounding will vary by crime type or the criminal justice area under consideration.

For example, in the case of prison statistics, there are expert prison demographers and criminologists who have devoted extensive resources to analysis of drivers of prison population levels and understanding the constituents of prison populations (Yablon, 1991; MacKenzie and Piquero, 1994; Greer, 2000). Such scholars and practitioners have found that the prison population in many countries has changed noticeably in recent years, and is increasingly made up of those convicted of violent crime. This is an important piece of information for interpreting prison statistics, and then needs further contextualisation through for example understanding that this may not necessarily indicate higher incidence of violence, but may be driven at least in part by changing attitudes to domestic and sexual violence that increase the proclivity of people to report such crimes, of police to police such crimes and of the legal system to arrive at conviction for such crimes.

All three of the above steps requires expert input, and the input that may be most informative is likely to vary both by facet (statistical, legal, contextual), and by CCJ area (there are experts on prison statistics, experts on recidivism, experts on violent crime and so forth). Indeed, each new aggregation is likely to require a working group of experts drawn from the appropriate facets and areas. For example, those implementing an ECR may wish to draw on existing expertise on international crime comparison to consider macro contextual features found to be significant such as inequality; and those implementing an ECR may wish to draw on existing country and subject experts to add in consideration of meso level factors such as use of alcohol and development of transport networks if considering an area such as violence where expert assessment has found these likely to be of particular relevance.

5.4.4 Smart Aggregation of Measures to Produce Smarter Indicators

In addition to bringing together existing reporting in ways that take account of challenges to comparability as discussed in the previous section, smart aggregation could also involve

⁶³ World Prison Brief, International Centre for Prison Studies, King's College London. As of December 31, 2010: http://www.kcl.ac.uk/depsta/law/research/icps/worldbrief/

the creation of whole new indicators based on careful combination of existing variables. Here we are thinking about more than just normalising crime and arrests by population or demographic groups.

One example of this would be calculating the conditional probability of a drug arrest to better understand the risk to drug users of violating drug laws. This is important for comparative drug policy analysis since the laws on the statute books do not necessarily correspond with the expected sanction faced by drug users. A handful of researchers have attempted to measure this punishment risk by dividing the number of possession arrests by the number of drug users (Kilmer, 2002; Reuter, 2010; Room et al., 2010). This requires combining administrative arrest data with information about the number of drug users in a particular jurisdiction. Of course, there are limits to this analysis (especially if the jurisdictions being compared used different techniques to estimate the number of users), but it may be more informative than comparing the per capita arrest rates, which in essence hold the consumption rate constant.⁶⁴

Another example involves combining victimisation information with administrative CCJ data. There is an extensive literature in Europe examining discrepancies between victimisation surveys and official crime reports (see e.g. Van Dijk, 2007; Aebi, Killias, and Tavares, 2002). Here we describe a possible alternative measure that could help us better understand the effectiveness of the criminal justice system at getting criminals off the street. Most police departments collect information on the share of officially reported crimes that lead to arrests; others use a crude alternative which simply divides arrests for a specific offence by the number of crimes reported to police. This is known as the clearance rate and it is often used as an indicator for measuring the effectiveness of law enforcement.

However, another measure would be the number of arrests for a specific offence divided by the number of reported victimisations for that offence (changing the denominator from offences known to the police to offences reported in victimisation surveys). There could be a systematic bias in the types of crime that get reported to police, which this measure would help address. For example, in a jurisdiction where citizens have minimal faith in the criminal justice system, they may be less likely to report crimes. At the extreme, if police then only focus on crimes they as police observe, the clearance rate for these crimes could be high even though in fact the police are not doing a good job of getting criminal

66

_

⁶⁴ As noted in Chapter 3, those wishing to make comparisons using data on drug trafficking arrests should note that the insights may differ depending on whether this information is pulled form Eurostat or EMCDDA (Disley, Rabinovich, and Rubin, 2009).

offenders off the street. If this alternative measure was used instead (arrests for offence divided by reported victimisations for the offence), the number of crimes that come to light would be higher, increasing the denominator and reducing the quotient – in this case reducing the police's clearance rate to more accurately reflect the proportion of criminals they are getting off the streets. This of course depends on availability of data and definitional issues, as discussed previously; even within a country there may be challenges to developing this indicator. However, an ECR presents an opportunity for discussion; in particular, it may be a platform to propose an indicator and flush out its strengths and weaknesses.

A final example based on what we know about the range of factors that contribute to prison numbers is that it could be useful to come up with a measure of incarceration days per year per crime per capita of different population groups (such as adults versus youth, foreigners versus domestic nationals, males versus females) in the population. Such a figure would allow policy officials to compare the different likelihood of incarceration across different countries, as well as different likely length of incarceration for various index crimes across countries,⁶⁵ providing this information for different population sub-groups where possible, so that within countries we could see whether there appeared to be systematic differences in how different types of offenders are sentenced, but across countries we would also be able to see whether some countries incarcerate less for some crimes than other countries, whether some countries incarcerate women less than other countries, and so on.

Of particular interest for some analysts is the ability to compare different population subgroups in Western and Central European countries to those in Eastern European countries. As an early career researcher from Eastern Europe highlighted, it would be useful to know why there are regional differences (do cultural differences from Eastern Europe influence definitions?), and whether there may be some terms that are similar or dissimilar to Western Europe (for more on this subject, see Box 5.2).

⁶⁵ This is provided to some extent in disparate sources such as Barclay and Tavares (2003) and Hartney (2006, p. 6), but is not provided systematically across EU countries for different crimes, groups, etc.

Box 5.2: Early Career Researchers From Eastern Europe Chime In

"European criminology is completed disconnected with Eastern Europe", said one of the researchers we interviewed for this project. From this researcher's point of view, a European Crime Report may want to prioritise by disseminating the first issues on organised crime elements, such as smuggling, illegal economy and human trafficking – linking together what is happening on the ground in Eastern Europe with the Member States of the European Union.

From an Eastern European view, since the enlargement was to countries so linked with Russia, it seems necessary to perform analysis in this area, even if qualitatively. By getting a better understanding of the links from both points of view, it might lead to uniting Member States and uniting Member States to rest of Europe.

The human rights issues in Eastern European countries and the treatment of prisoners is particularly important. A European Crime Report should be involved in discussing how there may be European standards but local culture, history and finances in Eastern Europe make it such that these standards may or may not be followed.

This information could be extremely useful if those using the data would like to use this information to then look further to understand, for example, how one country has achieved either preferable rates of incarceration to their own, or if they would like to try to understand changes over time and how those may have been achieved. This kind of indicator would also allow the user to distinguish between those who incarcerate a lot, but for only a short period, versus those who incarcerate a lot and for longer periods.

5.5 Concluding Comments

In this chapter we have indicated how useful it could be for the ECR to facilitate meaningful comparisons to facilitate learning. We have also acknowledged the many and complex challenges involved in generating intelligent and therefore useful comparisons. We have discussed some of this complexity, including a broad range of the social, political and economic contextual factors that need to be understood to make sense of crime rates and data. We have also explained that an ECR would seek to overcome some of the challenges to comparability through what we have termed smart aggregation. In order to illustrate what this would mean in practice we have provided a brief description and some examples of smart aggregation, from wrapping context around numbers, to breaking out component parts of national figures that may vary partly as a result of definitional differences, to creation of whole new, smarter, indicators that build on expert knowledge

to make useful information accessible for reporting to a wide audience. The next chapter begins to describe some of the possible ways of implementing an ECR drawing on existing criminal justice data and reporting, and facilitating comparability through these different types of smart aggregation.

CHAPTER 6 Dissemination and Implementation Options

6.1 Introduction

The EC has a number of options for collecting crime-related information from existing sources and presenting it in a way that facilitates meaningful comparisons.

The European Crime Report (ECR) will generate a lot of attention and we expect that most readers will access it via the Internet rather than consulting the hard copy in a library or picking up a copy at a conference or meeting. The EC could create a stand-alone website where ECR users can access and download the report (e.g. at http://www.ecr.europa.eu); however, we advise that the EC harnesses the energy and interest around the ECR to draw attention to all the other criminal justice resources available within the EU. To this end we suggest the development of a European crime portal (ECP), which would host the ECR as well as several other criminal justice resources.

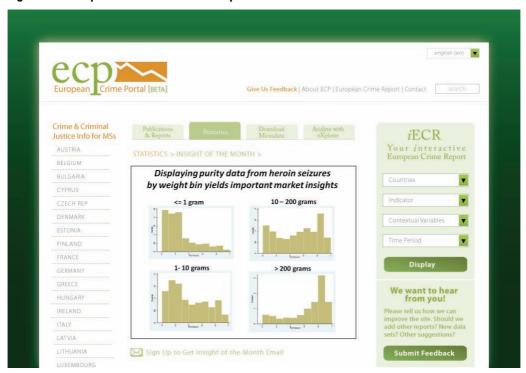
This section includes a number of ideas for creating and publishing the ECR as well as other initiatives and options that would help facilitate smart comparisons. Some of the options were generated from our interactions with policy experts, analysts and academics; others are based on RAND's assessment of best practices in crime reporting across the globe. This chapter discusses each of the options and then in the last section offers a potential timeline for implementation.

6.2 Developing a European Crime Portal

The ECP would be a new website that would collect and organise links to several EU crime resources on the web. As noted in the EC solicitation for this project, "Within Member States there are various crime reports originating from various public and private sources, carried out on a regular or once-off basis, addressing general and/or specific aspects of crime and criminality." Thus, there is a need for one source where policymakers, practitioners and researchers can go to get CCJ reports, statistics and microdata for

multiple Member States. Figure 6.1 presents a sample screen shot of what the ECP could look like.

Figure 6.1: Sample Screenshot for the European Crime Portal



This section presents the ideas for a digital clearinghouse for European CCJ reports and datasets and discusses important implementation issues:

- responsibility for designing and creating the ECP
- criteria for inclusion of digital objects on the ECP
- languages
- data archiving and search engine optimisation for the ECP
- updating the ECP
- feedback mechanisms for ongoing improvement
- advanced ECP application; allowing for online analysis of microdata.

6.2.1 Responsibility for Designing and Creating the European Crime Portal

The EC has the infrastructure to build and update a ECP, and DG HOME has the substantive knowledge to make sure it includes most of the relevant documents. The real question is whether or not DG HOME would prefer to do this internally, or put it out for tender. Since contractors may change over time, it will be critical that the EC maintains ownership. A promising model is that DG HOME could award the contract for a

minimum of one year with annual evaluation and renewal if appropriate, but with a maximum of five years, after which it has to be publicly tendered again. This would promote efficiency and consistency in contrast to putting the portal out for public tender every one or two years.

6.2.2 Criteria for Inclusion of Digital Objects on the European Crime Portal

The base of the ECP will include CCJ documents and datasets published by international organisations (e.g. UNODC, EC, CoE, EUROSTAT), Member States and sub-national government entities. A decision will have to be made about whether documents published by universities, research organisations and independent researchers will be included. Including publications from these non-governmental agencies will increase costs, but dramatically increase the type of information available on the site. Aside from the cost, there is also the issue of quality control. Thus, the entity charged with creating the ECP will have to develop criteria for the types of digital objects that are included.

As a point of comparison, the public health portal of the EU "links to relevant pages and websites of the EU institutions, national governments and sub-national authorities, international organisations and European non governmental organisations". 66 Consulting similar institutions and also including reports from universities would be a reasonable place to start for the ECP.

6.2.3 Languages

Since the current DG HOME page is only available in English, it does not seem controversial to initially create the ECP interface in English, and perhaps one other language such as French. As for the several hundred documents and datasets incorporated into the site, it would be prohibitively expensive to translate all of them into different languages.

The public health portal of the EU is translated in 22 languages, but this is a website targeted at EU citizens, not the research and policy communities.⁶⁷ If eventually there is a decision to make EU citizens the target audience for the ECP instead of researchers and policymakers, serious attention should be devoted to considering additional translations.

⁶⁶ See http://ec.europa.eu/health-eu/faq_en.htm (accessed December 31, 2010).

⁶⁷ "The main objective of this thematic Portal is to provide European citizens with easy access to comprehensive information on Public Health initiatives and programmes at EU level" (http://ec.europa.eu/health-eu/about_en.htm; accessed December 31, 2010).

6.2.4 Data Archiving and Search Engine Optimisation for the European Crime Portal

Archiving and providing access to digital objects is a complex task, and requires much more than simply saving PDFs to a server. Consulting digital archiving experts during the design process will not only guarantee that users will be able to access these documents, but also make it easier for internal and external search engines to identify relevant documents.

6.2.5 Updating the European Crime Portal

Important decisions will have to be made about the frequency of updates as well as the process for identifying documents and datasets that should be included. One possibility would be to ask members of the EU Expert Group on Policy Needs for Data on Crime and Criminal Justice to send an email once a quarter to the contractor with a list of newly released publications in their country that should be included on the web page. Another option, which is not mutually exclusive, is to ask ECP users to recommend documents that should be included on the site. Simply paying someone to scour the web for relevant documents is also a possibility.

6.2.6 Feedback Mechanisms for Ongoing Improvement

Allowing for a feedback mechanism will ensure that the ECR remains responsive to its emerging audience base and the needs of its users, accessible and useful to them, and flexible enough to be able to change and innovate with new means of providing data. Some websites, or certain functions of some websites, fail at the point of user interface, when users find challenges to accessing information or functions, and budgets for implementation of online and other facilities have been depleted. Highly successful websites and user platforms set aside significant portions of budget, or build an organisation model that incorporates ongoing funding, for post-launch amendments in response to user suggestions (Robinson, Oranje-Nassaue, and Botterman, 2009). Box 6.1 gives some suggestions about soliciting user feedback from a public interest web developer.

Box 6.1: Insights from a public interest web developer about soliciting user feedback

The developer who played an important role in creating http://www.mysociety.org and a suite of websites designed to improve access to governance information and democratic participation notes, "In implementing we expect to spend at least the same amount 'making a site good' as we spend on making it in the first place. This rough 50:50 distribution seems like a sensible arrangement for any service-providing site."

Certain other recommendations are also worth noting in the context of an ECR. For example, there are a range of formal and informal approaches to gathering and harnessing feedback from users to make websites user-friendly. First, it is useful to place clear feedback boxes and links all over the site. Another suggested practice is to email the first users to engage with them directly. This developer cites the example of Flickr.com, whose staff personally emailed the first 10,000 users of their site who had contacted the site with comments and questions about the photos they uploaded.

Finally, there has to be remaining resource and capability to make suggested changes rapidly. Although there is a risk that rapidly taking on board feedback from first users could lead to a less representative sample of users than making changes over time, these early changes could be important in capturing and harnessing some of the most engaged audience for the report. Of course, ideally further budget and capability would then remain to implement further amendments as more new users begin accessing the site and making further suggestions.

6.2.7 Advanced European Crime Portal Application: Allowing for Online Analysis of Microdata

Once the ECP is established, another option to consider is allowing researchers to analyse the data online instead of having them download datasets and then analyse it using a statistical package. Of course, for rigorous analyses it will be critical that the analysts download the full dataset. But in the cases when the analyst only needs to generate a summary statistic or would only like to download a subset of the data, it would be useful to allow for online analysis.

One successful model for this is the National Archive for Criminal Justice Data (NACJD) at the Inter-university Consortium for Political and Science Research (ICPSR) at the

University of Michigan (http://www.icpsr.umich.edu/NACJD/).⁶⁸ NACJD includes access to thousands of criminal justice datasets and for some there is an option for online analysis. This online analytic component is based on the Survey Documentation and Analysis (SDA) program created by the Computer-Assisted Survey Methods Program at the University of California, Berkeley (http://sda.berkeley.edu/document.htm). The SDA features used by NACJD allow users to:

- browse the codebook for a dataset
- perform certain statistical procedures, such as:
 - o list values of individual cases
 - o frequencies
 - o cross-tabulations
 - o comparisons of means
 - correlation matrixes
 - o ordinary least squares regression
- manipulate variables
- recode variables
- compute new variables
- list newly created variables
- create customised subsets of selected variables and cases
- download the entire collection or a customised subset, including:
 - o ASCII data file with optional delimiters
 - SAS, SPSS or Stata setup files
 - o codebook customised for the selected subset.

⁶⁸ For information about other approaches, see Rothenberg and Hoorens (2010).

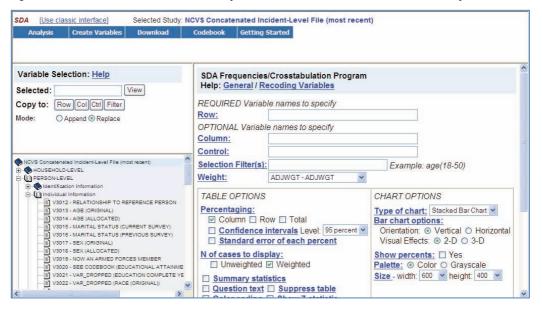


Figure 6.2: Screenshot of SDA Online Analysis Tool for US Criminal Victimisation Survey

6.3 Developing a European Crime Report

The ECR may facilitate insightful analysis by explicitly making it easier for users to understand which data are appropriate to compare across space and time. Our discussions with policy experts suggested a desire for a formal publication that would be printed and could also be downloaded from the Internet. As noted in Chapter 2 there are a number of existing data sources containing information that are useful for understanding crime and the context in which crime occurs in Member States. Aggregating this information in a way that provides new insights that can improve criminal justice practice is paramount.

The EC will make a number of decisions which will influence the ultimate form of the published ECR. Besides resources, important decisions include:

- intended audience for the ECR
- content
- language
- responsibility for publishing and validating
- process for peer review and soliciting feedback
- creating an interactive ECR (*i*ECR).

We conclude the section with a sample table of contents for a report focused on violent crime.

6.3.1 Intended Audience

Identifying the target audience for the ECR is an important prerequisite for developing the content and making decisions about how to market this publication. Since one of the goals of this project is to reduce the intentional and unintentional misuse of crime statistics, it will be important to make sure the document will be easy to navigate and useful to journalists and non-expert policymakers.

Indeed, if the audience is also to include non-policy experts, it may be useful to consider how to make it interesting to encourage people to read it. While journalists and politicians may find crime rankings to be of special interest, the ECR will try to prevent readers from doing just that. One simple (if crude) suggestion is to include an introductory chapter titled "Ten interesting trends/figures related to CCJ in the EU" to generate interest. Of course, determining what should feature in this and other chapters is a sensitive matter, and it will be necessary to decide who should have decision-making power over content and publication.

6.3.2 Content

The EC will have to make a decision about which crimes or crime types should be included in the ECR, and many other decisions will need to be made about the content. From a resource perspective, the more information is included, the more expensive it will be to produce the document. These costs must be weighed against the contribution it is expected the document will make to improving knowledge, and ultimately improving safety and justice.

Some of the researchers we spoke to suggested that the ECR should not necessarily be limited to quantitative data and analysis. For example, with new crime types the report could be more qualitative in nature, helping to identify what types of data are collected, where there are gaps, and how these gaps could be filled. This should also be taken into consideration when making a decision about the content of the ECR.

Possible components of an ECR include:

- Types of crime. The ECR could focus on a number of crimes or just a few. The
 ECR could also be used to call attention to new or previously understudied
 crimes. Regardless of the crime(s) considered, it is critical that the ECR highlight
 the differences in how crimes are defined and recorded.
- Criminal justice response. As with crime definitions, it will be critical that the
 report highlights similarities and differences in the structure and nature of
 criminal justice systems. Arrest and conviction data are readily available for major

crimes (see Chapter 2), and this information is usefully contextualised by information about incarceration rates (for example), which would be vital if the data were to be used to estimate the social and economic costs of crime or to investigate the effectiveness of deterrence (e.g. calculating expected incarceration years per conviction).

- Contextual factors. Chapters 4 and 5 of this report highlight a number of factors that can help us interpret crime data across space and time (e.g. urbanisation, per capita police officers, levels of poverty and inequality, socio-demographic differences).
- Analysis and smart aggregation. Noting converging and diverging crime trends
 as a function of different factors (e.g. region, income, legal system) will hopefully
 create new insights and help motivate additional research. More importantly,
 combining the crime and CCJ data together and separately with the contextual
 factors can develop a more complete, smarter picture.
- Innovative and/or best practices. The ECR could also include information about how jurisdictions are addressing certain crimes, and whether certain practices or programmes are believed to be most effective. At one extreme, the EC could ask for a formal meta-analysis that would include an exhaustive search of the literature and advanced statistical techniques that account for the quality of each study (e.g. Maryland Scale of Scientific Methods, Campbell Collaboration). At the other extreme, the authors could simply include a few text boxes which highlight innovative programmes or even summarise existing meta-analyses.

One could imagine a report that includes each of these components, or some combination. Box 6.3 lists a potential table of contents for an ECR if there was a decision to focus on violent crime. Although it is specific to violent crime, one could use the same structure for other crimes included in victimisation surveys.

Box 6.3: Potential Table of Contents for an ECR Focused on Violent Crime

Executive Summary. This should be targeted to non-academics.

Chapter 1. Definitions of Violent Crime. This chapter will lay out which crimes will be covered in the report and how they are defined in each Member State. This kind of information is typically relegated to footnotes and appendixes, but should be featured prominently in the ECR. The ultimate goal of this chapter will be to group Member States with similar definitions (place them in definition bins) in order to facilitate more meaningful comparisons.

Chapter 2. Violent Crimes Reported to Police. There are a number of existing reports which collect this information for Member States (e.g. Sourcebook, HEUNI Report Series) and it will be useful to assess whether the existing sources tell the same story. Comparing countries in the same definition bin and exploring trends will likely yield important insights.

Chapter 3. Violent Crimes Reported in Victimisation Surveys. Comparing victimisation information with data about crime reported to the police can yield interesting insights about perceived effectiveness of the police (and larger criminal justice system) as well as possible cultural differences in the propensity to report violent crime. International victimisation surveys that use similar survey instruments across countries help overcome definitional differences that make comparisons difficult, and sometimes impossible.

Chapter 4. Definitions about Criminal Justice Actions. Several researchers have highlighted how different countries define arrests, convictions and incarceration differently. Bringing this information together in one chapter and making it clear which countries have similar definitions and approaches is imperative to promoting useful comparisons.

Chapter 5. Arrests, Convictions and Sentencing for Violent Crimes. Once again, displaying these data for Member States with similar definitions will be most informative.

Chapter 6. Smart Aggregation of Violent Crime Data. Although it will be a contribution to bring together much of the existing data about violent crime in the EU in one report, the real value added of this publication will come from presenting and combining these data in ways that yield new insights. For example, showing how countries with similar arrest definitions differ in robbery arrests per robbery (based on victimisation data) can yield important insights about the expected sanction for committing a robbery in different Member States. Similarly, calculating the expected prison years per robbery conviction can provide information about the expected sanction as well as an important component of the social cost associated with a robbery.

Chapter 7. Implications for Improving Public Safety. This chapter pulls out the key insights from the report and makes recommendations for future research in this area that can improve public safety.

This sample blueprint does not include a chapter that reviews the evidence-based practices for reducing violent crime. One could easily imagine an ECR with this or even a formal meta analysis, but these extra sections require resources (especially in the case of the latter).

6.3.3 Language

The EMCDDA's Annual Report is typically 100 pages long and is published in 22 languages. ⁶⁹ Since the ECR may exceed 200 or 300 pages – depending on what is covered – it may be prohibitively expensive to translate it into 22 languages. If this is the case, then it may be best to publish the full document in English and another language (e.g. French), and translate the executive summary into the other 20 languages

6.3.4 Responsibility to Create and Validate

In addition to choosing the content, another important decision for DG HOME is deciding who will create and publish these reports. The first decision is whether DG HOME wants to do this internally or externally. Since this report was funded under the auspices that it would be used to shape a forthcoming tender for actually creating the ECR, our understanding is that the preference is that it should be produced externally.

Responsibility involves more than just producing the report, it also involves validating the information that is obtained. Since the report will be initially based on data that are collected by others, one could argue that this will not be a major concern. However, we are not comfortable with this assumption. While some EU and international agencies work hard to understand whether outliers are mistakes or represent true phenomena, this is not a universal policy. It will be critical for those who produce this report to spend time and resources in verifying anomalous figures. Indeed, this should be considered a goal of the ECR.

Given the international nature of this publication, it makes sense to award the tender to an international group with strong knowledge about the CCJ data collection processes throughout the EU. For the sake of efficiency and consistency, one option would be to offer the tender for a minimum of two years with biannual evaluation and renewal if appropriate, but with a maximum of six years, after which it has to be publicly tendered again. In Box 6.4 there is a discussion of how a European monitoring centre on crime might operate.

⁶⁹ The EMCDDA annual report was 98 pages in 2008, 99 pages in 2009, and 108 pages in 2010.

Box 6.2: A European Monitoring Centre on Crime?

Although we were only tasked with thinking about the development of an ECR, we did engage in discussions about the creation of a European monitoring centre on crime (based on the EMCDDA-model), or possibly tasking the EMCDDA with collecting CCJ data. The EMCDDA has done a tremendous job collecting and harmonising drug-related data and should be been seen as a model organisation in this regard. Given its strong connections with law enforcement officials in all Member States and experiences in dealing with differences in legal practices and policies, it has a strong foundation for collecting these types of data.

Besides the costs involved of creating a new centre or tasking the EMCDDA with collecting CCJ data, there would be important administrative concerns about reporting. Although the long-term goal would be to streamline all the reporting requirements, there would likely be important administrative burdens on Member States in the short term. There may also be political concerns as it is not clear whether all Member States would want to have such a centralised source collecting crime information.

Given all of the data collection that is currently occurring in the EU, it makes sense to start small and publish an ECR which draws on these existing sources and creates new insights for policymakers and researchers. Whether or not there should be a European monitoring centre on crime is a long-term question that will require detailed conversations that would likely start in the EU Expert Group on Policy Needs for Data on Crime and Criminal Justice.

6.3.5 Peer Review and Soliciting Feedback

Regardless of the path chosen, we strongly encourage the EC to provide funding for independent, rigorous and quick peer review. While it may seem as though the latter two qualities are at odds, it is possible to get both if the compensation is appropriate and plans are made in advance to reserve the reviewers' time. To make sure the review is truly independent, the EC should choose the reviewers and verify that the feedback is incorporated into the draft.

To solicit feedback, it is likely there would be strong support for and utility from building a series of working groups for the ECR. For example, a working group of world leading experts (not just national focal points) should be assembled to mine data and allow ongoing developments, as well as potentially a few quick wins, which are good for building

early interest and support. This may also allow the ECR to be an instrument for analytical developments. Academic and policy analyst interviewees indicated this was a helpful way to improve the quality of their datasets and policy analysis. These working groups should meet separately and together to optimise learning from the ECR; and to foster trust, strong working relationships, open and constructive communication, potential cross-national research collaborations, operational interventions, and so on. These would all play a role in helping to ensure interest in, support for, learning from and thus utility and sustainability of the ECR.

6.3.6 Developing an Interactive European Crime Report

While it would be virtually costless to post a PDF version of the ECR on the Internet, more could be done with these data to facilitate comparisons and make it easier for users to access key statistics. One option would be to follow the EMCDDA model and include separate links to each of the tables that present data by country and year. Another option would be to create drop-down menus on the ECP that would allow users to choose which countries, years and crimes to be displayed (as tables, charts or downloadable spreadsheet files). A critical component for these more interactive approaches is making sure that users know that the statistics they are analysing are comparable across time and space. In many reports, the idiosyncrasies of the definitions are relegated to footnotes or posted on a different web page. If the EC allows users to come up with their own customised figures and printouts, it will also have to make clear whether or not the numbers being compared are indeed comparable (are we comparing apples with apples?). Presumably this information would already be included in the ECR, so the decision would be to determine how to display it (e.g. using pop-up windows, side bars or footnotes on printed tables). It would also not be difficult to make it technically impossible to print data that are noncomparable on the same graph. Of course, that would not stop someone from creating two different reports and then combining the information, but it would create an additional layer of protection against faulty comparisons.

Another advantage of making the experience more interactive is that it would make it easier to facilitate smart aggregation (Chapter 5). For example, those examining homicide rates may want to compare countries with similar rates of alcohol consumption (as proxied by sales; Rossow, 2001). One could also imagine wanting to compare those countries that have similar levels of per capita income. The number of selection variables can be large and the code to add them to a web page is not complicated; the limiting factor will be the time and resources devoted to collecting and verifying the information used to create these variables. In many cases the information required for smart aggregation will already be

included in the ECR.

Incorporating the iECR into the ECP will require more sophisticated programming, which includes analytic tools and mapping technologies. One promising approach is to develop the iECR using the same technology used for the dynamic and visually stunning OECD eXplorer, which was developed in collaboration with the National Centre for Visual Analytics (NCVA) at Linköping University, Sweden. (For an example of this being used for OECD child welfare statistics, see http://stats.oecd.org/childwellbeing/; Figure 6.3.) NCVA has developed a free platform for research and education purposes, which would allow the *i*ECR produce similar graphics and reports (http://ncva.itn.liu.se/explorer/openexp?l=en).

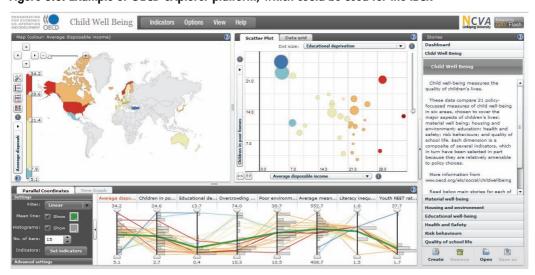


Figure 6.3: Example of OECD eXplorer platform, which could be used for the IECR

In going forward with implementation of an ECR, ECP and *i*ECR, it will be important to consult database experts; their technical insights and expertise will be important when making decisions about the architecture, hosting a website, and so on.

6.4 Insight About Costs

The earlier sections of this chapter made it clear that the EC has a number of options to consider when making a decision about the ECR, *i*ECR and ECP.

6.4.1 Printed Edition of the European Crime Report

The main costs of producing the print edition will come down to which crimes are considered and the amount of information included in the report. Focusing a report on a crime or set of crimes that are new or understudied can make an important contribution, but it will likely also require significant resources. Whether it is a qualitative assessment of

existing data gaps for new crimes or a new data collection effort, these tasks can be time-consuming.⁷⁰ Another option highlighted in Box 6.3 is to build a report based on data that have already been collected and published. Since it would be cheaper to collect these data, it would leave more funds available for comparison, trend analysis and smart aggregation (as discussed in Chapter 5).

As discussed in Section 6.3.3, the length of the document will also determine whether the full document or just the executive summary is translated into 22 languages.

6.4.2 Internet

To create a European crime portal that is essentially a clearinghouse full of links and documents would require minimal sophistication, but the costs associated with consulting a data archiving expert could be significant. The search function will be important and Google Site Search costs approximately $\[\\epsilon \\equiv \\equiv$

An important cost associated with the ECP will come from the start-up and ongoing labour costs associated with deciding what will be on the site and what the categories will be. Chapters 2–4 and the Appendices provide a list of many of the online sources that should be included, but time will have to be devoted to sketching out the general structure of the website (the web developer can handle the specifics). Once developed, either someone at the EC, a contractor or a volunteer will need to make decisions about what else to post on the site.

6.5 Timeline for a Possible Course of Action

The introduction of various elements need not be immediate; in fact, as expressed by interviewees, it is preferable that it is not. There are some challenging elements that will

 $^{^{70}}$ A number of researchers suggested that the ECR should not be limited to quantitative data and analysis. For example, with new crime types the report could be more qualitative in nature, helping to identify what types of data are collected, where there are gaps, and how these gaps could be filled.

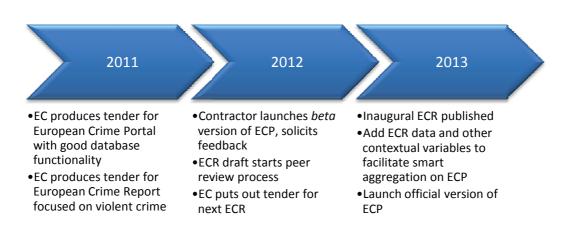
⁷¹ Using an exchange rate of €1=\$1.328 from the European Central Bank on December 7, 2010.

⁷² Flex programmers around London appear to make about €400–500/day. See http://www.itjobswatch.co.uk/contracts/uk/adobe%20flex.do (accessed December 31, 2010).

take time and effort to develop well.

We therefore provide a timeline that would allow for learning and yet ensure progress continues to take place. Figure 6.4 assumes initiation of events in 2011 with the introduction of various elements through to 2013. As can be seen, the initial elements would be the tendering process for the ECP and ECR. After launching the *beta* version of the ECP in the next year (similar to piloting where users can identify broken links, difficult areas to navigate, and so on), the ECP could then potentially be complete by 2013. Similarly for the ECR, only after completing the peer review process of the initial ECR and lessons are learned would the final report be published in 2013.

Figure 6.4: Potential Timeline of Events to Implement Options



Contract Reference N° JLS/2009/ISEC/PR/001

CHAPTER 7 Conclusions

7.1 Introduction

A careful review of existing data collection systems across the EU, and interviews with experts, leads us to conclude that there is a considerable amount of existing data which an ECR could draw on and collate. The main limitation of current data (and the challenge an ECR must address) is the difficulty of making robust comparisons within and between countries, over time, because of differences in offence definitions and criminal justice system structures.

Improving current CCJ information is a process. By starting simple and gradually expanding the scope of analysis, the ECR will have a strong foundation and thus a reputation for quality. By taking the very real issue of CCJ comparability seriously, the EC will increase the credibility, utility and sustainability of the ECR.

A focus on smart aggregation (and smarter indicators) and a user friendly framework could help achieve the aim of providing higher quality data and information for a variety of users. Although starting simple is the short-term strategy, it will be important when possible to wrap the social and economic context around the data to facilitate informed readings of CCJ information and reduce the possibility of misleading interpretations. With this strategy, the design and implementation of the ECR will be essential to achieving the informative and accessible information provision.

The rest of this chapter summarises the key findings of this report, the potential design and implementation options of the ECR and ECP, and the limitations of this research.

7.2 Key Findings

Crime significantly affects citizens' lives and countries' resources. This report identifies a number of key ideas that should inform the development of an ECR:

• To best inform policy and practice, it is important that the widest existing CCJ

- data and reporting are used carefully (perhaps more so than in some other fields) to write the ECR.
- There are few sources where the (fairly extensive) range of data currently collected
 and reporting the EU is collated in an informative and/or useful way. Those
 collecting data already have serious recording and reporting burdens.
- There appears to be a wide variety of data sources and reporting within the EU, yet these are not necessarily readily available, which is not surprising considering the challenges to using CCJ data.
- The key analytic challenge for an ECR is achieving a reasonable degree of comparability across countries with very different legal systems, data and reporting systems and practices, and varied social and economic contexts. This blueprint for an ECR suggests a framework, building on that articulated by Von Hofer (2000) and European Sourcebook, for addressing discrepancies in legal and definitional issues, statistical and reporting issues, and substantive and contextual issues.
- We have termed our overall approach to building useful comparisons and highlighting challenges to comparative analysis smart aggregation. This framework includes visual representations of comparability where possible, and starts by grouping countries based on whether their legal systems and definitions of the particular CCJ issue under consideration are similar enough for useful comparison. An ECR would then move on to highlight relevant data and reporting issues, such as whether existing data for different countries are drawn from similar timeframes. Finally, the wider social and economic context recurrently found in the criminological literature to influence crime trends and phenomena would be included.
- In addition to wrapping context around numbers and breaking out component parts of national figures, smart aggregation in an ECR would also include the creation of whole new, smarter indicators, which draw out meaningful comparative information from existing reporting. For example one such indicator could be specific offence divided by the number of reported victimisations for that offence (changing the denominator from offences known to the police to offences reported in victimisation surveys).
- The key decisions to be made for the creation of an ECR are funding, model of
 implementation, and dissemination and communication strategy. This report
 suggests likely components of costs for the various options; formats for
 implementation including a biennial "hard copy" report with each report
 following a particular thematic focus; a European crime portal where

policymakers, practitioners and researchers can go to get CCJ reports; statistics and microdata for multiple Member States; and an *i*ECR that would allow for online bespoke generation of reports on a range of CCJ phenomena.

7.3 Dissemination and Implementation Options

Using a range of evidence, this study examines the need for and challenges to develop an ECR. This information allowed us to develop a series of four options for the dissemination and implementation of an ECR using several different media. The options developed are not necessarily mutually exclusive, and many of the initiatives complement one another and could be considered a package. The trade-offs become one of technical capacity and resources.

Full implementation of an ECR is a process that may take up to three years. A potential timeline is developed with the possible activities in the short run (year 1), medium run (year 2) and long run (year 3). By year 3 (or 2013 in this case), the following could be achieved:

- publishing the inaugural ECR
- adding ECR data and other contextual variables to facilitate smart aggregation on ECP
- launching the official version of ECP.

The key aspect of the proposed timeline is that it allows for learning and cross-checking of challenges in order to ensure progress continues to take place and the ECR and ECP are built on a solid foundation.

As in any research endeavour, there are limitations to the breadth and/or depth of findings. These are summarised below.

7.4 Limitations

This study presents the first attempt to assess the points of view of a variety of stakeholders and audiences for an ECR. The study is limited in scale, however, and therefore provides only an indication of the way in which stakeholders would like to see an ECR carried out.

In collecting data for this study, through interviews and meetings, we believe we have included a wide range of views – including those of students, early career researchers, policy analysts, statistical officers, ministry officials and university academics. We also

believe we have taken into account a variety of perspectives – younger to older, new to experienced, specialist to generalist, and quantitative to qualitative researchers. However, we do not assume to know all the constituents of the potential target audience for an ECR, and thus we may not have captured a technically representative sample.

REFERENCES

Reference List

- Aebi, M., M. Killias, and C. Tavares, "Comparing Crime Rates: The International Crime (Victim) Survey, the European Sourcebook of Crime and Criminal Justice Statistics, and Interpol Statistics," *International Journal of Comparative Criminology*, Vol. 2, 2002, pp.22–37.
- Aebi, M., "Measuring the Influence of Statistical Counting Rules on Cross-National Differences in Recorded Crime," in K. Aromma and M. Heiskanen, eds., *Crime and Criminal Justice Systems in Europe and North America* 1995–2004, Helsinki: HEUNI, 2008, pp. 200–218.
- Aebi, M., B. Aubusson de Cavarlay, G. Barclay, B. Gruszczyńska, S. Harrendorf, M. Heiskanen, V. Hysi, J.-M.. Jehle, M. Killias, O. Shostko, P. Smit, R. Pórisdóttir, R. Jaquier, *European Sourcebook of Crime and Criminal Justice Statistics*, 4th ed., The Hague: WODC, 2010.
- Andresen, M., "Crime in Lithuania: The Impact of Accession to the European Union," European Journal of Criminology, Vol. 6, No. 4, 2009, pp.337–360.
- Andrew, C., and M. Goldsmith, "From Local Government to Local Governance and Beyond?" *International Political Science Review*, Vol. 19, 1998, pp. 101–117.
- Antonopoulos, G. A., "The Greek Connection(S): The Social Organization of the Cigarette-Smuggling Business in Greece," *European Journal of Criminology*, Vol. 5, No. 3, 2008, pp.263–288.
- Aromaa, K., and M. Heiskanen, Crime and Criminal Justice Systems in Europe and North America 1995–2004, Helsinki: HEUNI, 2008.
- Barclay, G. C., "The Comparability of Data on Convictions and Sanctions: Are International Comparisons Possible?," *European Journal on Criminal Policy and Research*, Vol. 8, 2000, pp.13–26.
- Barclay, G., and C. Tavares, "International Comparisons of Criminal Justice Statistics 2001", London: Home Office, Research Development Statistics, 2003. As of December 30, 2010:

- http://www.observatorioseguranca.org/pdf/01%20%2823%29.pdf
- Bennett, R. R., and J. P. Lynch, "Does a Difference Make a Difference? Comparing Cross-National Crime Indicators," *Criminology*, Vol. 28, 1990, pp. 153–182.
- Bennett, T., K. Holloway, and D. Farrington, "The Statistical Association between Drug Misuse and Crime: A Meta-Analysis," *Aggression and Violent Behavior*, Vol. 13, No. 2, 2008, pp.107–118.
- Bogner, A., "Science Crime: The Korean Cloning Scandal and the Role of Ethics," *Science & Public Policy*, Vol. 33, No. 8, 2006, pp. 585.
- Bowers, K. J., and S. D. Johnson, "Domestic Burglary Repeats and Space-Time Clusters: The Dimensions of Risk," *European Journal of Criminology*, Vol. 2, No. 1, 2005, pp.67–92.
- Bowling, B., "The Rise and Fall of New York Murder: Zero Tolerance or Crack's Decline?," *British Journal of Criminology*, Vol. 39, 1999, pp.531–554.
- Braithwaite, J., Inequality, Crime and Public Policy, London: Routledge, 1979.
- Brookman, F., Understanding Homicide, London: Sage, 2005.
- Brookman, F., and M. Maguire, "Reducing Homicide: A Review of the Possibilities," *Crime, Law and Social Change*, Vol. 42, 2005, pp.325–403.
- Budd, T., C. Sharp and P. Mayhew, "Offending in England and Wales: First results from the 2003 Crime and Justice Survey," Home Office Research Study 275, London: Home Office.
- Buonanno, P., "Crime and Labor Market Opportunities in Italy (1993–2002)," *Labour*, Vol. 20, No. 4, 2006, pp.601–624.
- Burrows, J., R. Tarling, A. Mackie, R. Lewis and G. Taylor, "Review of police forces' crime recording practices," Home Office Research Study 204, London: Home Office, 2000.
- Calafato, R. and P. Knepper, "Criminology and Criminal Justice in Malta," European *Journal of Criminology*, Vol. 6, No. 1, 2009, pp. 89-108,
- Calvó-Armengol, A., and Y. Zenou, "Social Networks and Crime Decisions: The Role of Social Structure in Facilitating Delinquent Behavior, *International Economic Review*, Vol. 45, No. 3, 2004, pp. 939–958.
- Carrington, P. J., "Population Aging and Crime in Canada, 2000–2041," *Canadian Journal of Criminology Revue Canadienne De Criminologie*, Vol. 43, No. 3, 2001, pp.331–356.
- Ceccato, V., R. Haining, and P. Signoretta, "Exploring Offence Statistics in Stockholm City Using Spatial Analysis Tools," *Annals of the Association of American*

- Geographers, Vol. 92, No. 1, 2002, pp. 29–51.
- Cid, J., "Is Imprisonment Criminogenic?: A Comparative Study of Recidivism Rates between Prison and Suspended Prison Sanctions," *European Journal of Criminology*, Vol. 6, No. 6, 2009, pp.459–480.
- Clarke, R., "Technology, Criminology and Crime Science," *European Journal on Criminal Policy and Research*, Vol. 10, No. 1, 2004, pp. 55–63.
- Coombes, M., C. Wong, M. Charlton, and D. Atkins, "Crime Risk in Urban and Rural Neighbourhoods: An Experimental Analysis of Insurance Data," *Environment and Planning B: Planning and Design*, Vol. 21, No. 4, 1994, pp. 489–504.
- Council, "The Stockholm Programme- An Open and Secure Europe Serving and Protecting Citizens," Document No 2010/C 115/01, Brussels: European Council, 2010.
- Curran, J., I. Salovaara-Moring, S. Coen, and S. Iyengar, "Crime, Foreigners and Hard News: A Cross-national Comparison of Reporting and Public Perception," *Journalism*, Vol. 11, No. 1, 2010, pp. 3–19.
- de Waard, J. "The Private Security Industry in International Perspective," *European Journal on Criminal Policy and Research*, Vol. 7, No. 2, 1999, pp. 143–174.
- DeFronzo, J. and L. Hannon, "Welfare Assistance Levels and Homicide Rates," Homicide Studies, Vol. 2, No. 1, 1998, pp. 31-45.
- Disley, E., L. Rabinovich, and J. Rubin, *Local Authority Commissioning: Understanding the Use of Information and Evidence by Commissioners of Services*, RAND Europe report for the National Endowment for Science, Technology and the Arts, Cambridge, UK: RAND Europe, 2009.
- Disley, E., and J. Rubin, *Criminal Justice System Transformation: A Report of Reducing Prison Populations and Reoffending in Four Countries*, RAND Europe report for the UK Ministry of Justice, Report#TR-753-NESTA, Cambridge, UK: RAND Europe, forthcoming.
- Doob, A. N., and C. M. Webster, "Countering Punitiveness: Understanding Stability in Canada's Imprisonment Rate," *Law & Society Review*, Vol. 40, 2006, pp. 325–368.
- Durante, R., and B. Knight. "Partisan Control, Media Bias, and Viewer Responses: Evidence from Berlusconi's Italy," NBER Working Paper Series 14762, National Bureau of Economic Research, 2009.
- EC, "Commission Legislative and Work Programme 2009: Acting now for a better Europe," European Commission Communication 712 final, Vol. 1., Brussels, 2008.

 As of December 30, 2010: http://ec.europa.eu/atwork/programmes/docs/clwp2009_en.pdf

- EC, "Data and Information on Women's Health in the European Union," 2009a. As of December 30, 2010: http://ec.europa.eu/health/population_groups/docs/women_report_en.pdf
- EC, "Deliverables document: Sub-group on crime and criminal justice," DG JLS 3rd Expert Group Meeting, February 5–6,, 2009b.
- EC, "Delivering an area of freedom, security and justice for Europe's citizens: Action Plan Implementing the Stockholm Programme," European Commission Communication 171 final, Brussels, 2010a. As of December 30, 2010: http://ec.europa.eu/commission_2010-
 - 2014/malmstrom/archive/COM%202010%20171%20EN.pdf
- EC, "Directive of the European Parliament and of the Council on Attacks Against Information Systems and Repealing Council Framework Decision 2005/222/JHA," COM (2010) 517 final, Brussels, September 30, 2010, 2010b.
- EC, *Lisbon Treaty at a Glance*, 2010c. As of December 30, 2010: http://europa.eu/lisbon_treaty/glance/index_en.htm
- EC, Proposal for a Directive on attacks against information systems, repealing Framework Decision 2005/222/JHA, European Commission Memo/10/463, 2010d.
- Edmark, K., "Unemployment and Crime: Is There a Connection?," *Scandinavian Journal of Economics*, Vol. 107, No. 2, pp.353–373, 2005.
- Eisner, M. and P.O. Wikström, "Violent Crime in the Urban Community: A Comparison of Stockholm and Basel," *European Journal on Criminal Policy and Research*, Vol. 7, No. 4, 1999, pp. 427-442.
- Eisner, M., "Modernization, Self-Control and Lethal Violence: The Long-term Dynamics of European Homicide Rates in Theoretical Perspective," *British Journal of Criminology*, Vol. 41, 2001, pp. 618-638.
- Eades, C., "Young People and Knife Carrying: What to do?", Centre for Crime and Justice Studies, 2006.
- Enzmann, D., I. H. Marshall, M. Killias, J. Junger-Tas, M. Steketee, and B. Gruszczynska, "Self-Reported Youth Delinquency in Europe and Beyond: First Results of the Second International Self-Report Delinquency Study in the Context of Police and Victimization Data," *European Journal of Criminology*, Vol. 7, No. 2, 2010, pp.159– 183.
- EP, Committee on Civil Liberties, Justice and Home Affairs of the European Parliament,

 The Impact of the Lisbon Treaty for the Freedom, Security and Liberties EU Related

 Policies. As of December 30, 2010:

 http://www.europarl.europa.eu/document/activities/cont/200801/20080110ATT18

- 008/20080110ATT18008EN.pdf.
- Esping-Andersen, G., *The Three Worlds of Welfare Capitalism*, Princeton: , Princeton University Press, 1990.
- Estrada, F., and A. Nilsson, "Segregation and Victimization: Neighbourhood Resources, Individual Risk Factors and Exposure to Property Crime," *European Journal of Criminology*, Vol. 5, No. 2, 2008, pp.193–216.
- Estrada, F., "The Transformation of the Politics of Crime in High Crime Societies," European Journal of Criminology, Vol. 1, No. 4, 2004, pp. 419-443.
- Eurobarometer, "Eurobarometer 73: Public Opinion in the European Union, First Results," 2010. As of December 30, 2010: http://ec.europa.eu/public_opinion/archives/eb/eb73/eb73_first_en.pdf
- EUROPA, "More Justice, Freedom and Security", no date. As of December 30, 2010: http://europa.eu/lisbon_treaty/glance/justice/index_en.htm
- EUROPA, The Commission communication "towards a general policy on the fight against cyber crime," MEMO/07/199, Brussels, May 22, 2007.
- Eurostat, 2010. As of December 30, 2010: http://epp.eurostat.ec.europa.eu/portal/page/portal/crime/introduction.
- Fajnzylber, P., D. Lederman, and N. Loayza, "Inequality and Violent Crime," *Journal of Law and Economics*, Vol. 45, No. 1, 2002a, pp.1–40.
- Fajnzylber, P., D. Lederman, and N. Loayza, "What Causes Violent Crime?," *European Economic Review*, Vol. 46, No. 7, 2002b, pp.1323–1357.
- Farrell, G., S. Cheney, and K. Pease, *Consolidating Police Crackdowns: Findings from an Anti-Burglary Project*, Police Research Series Paper 113, London: Home Office, 1998.
- Farrington, D. P., P. A. Langan, and M. Tonry, *Cross-National Studies in Crime and Justice*, Washington: Bureau of Justice Statistics, U.S. Department of Justice, 2004.
- Fijnaut, C. and L. Paoli, Organised Crime in Europe: Concepts, Patterns and Control Policies in the European Union and Beyond, Dordrecht: Springer, 2004.
- Fondation Robert Schuman *The Lisbon Treaty 10 Easy-to-read Fact Sheets*, December 2007. As of December 30, 2010: http://www.robert-schuman.eu
- Forsaith, J., E. Nanopoulos and B. Irving, "Study for an impact assessment on a proposal for a new legal framework on the confiscation and recovery of criminal assets," Cambridge: RAND Europe, forthcoming.
- Fougère, D., F. Kramarz and J. Pouget, "Youth Unemployment and Crime in France," Journal of the European Economic Association, Vol. 7, No. 5, 2009, pp. 909-938.

- Garicano, L., and P. Heaton, "Information Technology, Organization, and Productivity in the Public Sector: Evidence from Police Departments," *Journal of Labor Economics*, Vol. 28, No. 1, 2010, pp.167–201.
- Gaviria, A., "Increasing returns and the Economic Evolution of Violent Crime: The case of Colombia," Journal of Development Economics, Vol. 61, 2000, pp. 1-25.
- Giannelli, P., "Forensic Science," *Journal of Law, Medicine and Ethics*, Vol. 34, No. 2, 2006, pp. 310–319.
- Giannelli, P., "Wrongful Convictions and Forensic Science: The Need to Regulate Crime Labs," North Carolina Law Review, Case Legal Studies Research Paper 0–102, forthcoming.
- Gilligan, J., Violence: Our Deadly Epidemic and Its Causes, New York: Grosset/Putnam Books, 1996.
- Goudriaan, H., J. P. Lynch, and P. Nieuwbeerta, "Reporting to the Police in Western Nations: A Theoretical Analysis of the Effects of Social Context," *Justice Quarterly*, Vol. 21, No. 4, 2004.
- Gould, D., D. Mustard, and B. Weinberg, "Crime Rates and Local Labor Market Opportunities in the United States: 1979–1997," *Review Economic Statistics*, Vol. 84, No. 1, 2002, pp.45–61.
- Greene, J. "Zero Tolerance: A Case Study of Policies and Practices in New York City," Crime Delinquency, Vol. 45, No. 2, 1998, pp. 171-187.
- Greenhalgh T., "How to read a paper: searching the literature,"London: BMJ Publishing Group, 1997, pp. 13-33.
- Greer, K., "The Changing Nature of Interpersonal Relationships in a Women's Prison," The Prison Journal, Vol. 80, No. 4, 2000, pp.442–468.Hallin, D., and P. Mancini, Comparing Media Systems: Three Models of Media and Politics, Cambridge: Cambridge University Press, 2004.
- Halliday, J. "Making Punishments Work: Report of a Review of the Sentencing Framework for England and Wales," London: Home Office, 2001.
- Halpern, D., Social Capital, Cambridge: Polity, 2005.
- Harrendorf, S., M. Heiskanen, and S. Malby, *International Statistics on Crime and Criminal Justice*, Helsinki: HEUNI, 2010. As of December 30, 2010: http://www.heuni.fi/Etusivu/Publications/1266333832841 HEUNI/UNODC
- Harries, R., "Modelling and Predicting Recorded Property Crime Trends in England and Wales: A Retrospective," *International Journal of Forecasting*, Vol. 19, No. 4, 2003, pp.557–566.
- Hartney, C., "US Rates of Incarcertation: A Global Perspective," National Council on

- Crime and Delinquency, November 2006.
- Hason, A., "Recent Developments in Patent Rights for Pharmaceuticals in China and India," *Pace International Law Review*, Vol. 18, No. 1, 2006, pp. 12.
- Healy, J., *The Benefits of an Aging Population*, Australian National University. Discussion Paper 63, Manuka: The Australia Institute, 2004.
- Heaton, P., "Hidden in Plain Sight: What Cost-of-Crime Research Can Tell Us About Investing in Police," RAND OP-279-ISEC, Santa Monica, Calif.: RAND Corporation, 2010.
- Hosking, G., and I. Walsh, *Violence and What to Do About It: The Wave Report*, Croydon: WAVE Trust, 2005.
- Hsieh, C., and M. Pugh, "Poverty, Income Inequality, and Violent Crime: A Meta-Analysis of Recent Aggregate Data Studies," *Criminal Justice Review*, Vol. 18, No. 2, 1993, pp.182.
- Hughes, G., *Understanding Crime Prevention: Social Control, Risk and Late Modernity*, Philadelphia: Open University Press, 1998.
- Johnson, S. D., and K. J. Bowers, "The Burglary as Clue to the Future: The Beginnings of Prospective Hot-Spotting," *European Journal of Criminology*, Vol. 1, No. 2, 2004, pp.237–255.
- Kelly, M., "Inequality and Crime," *Review of Economics and Statistics*, Vol. 82, No. 4, 2000, pp. 530–539.
- Kerley, G., "Drug Law and Enforcement in Australia and the Netherlands: A Case Study of Comparative Criminal Law," paper submitted to Australian National University, 2004.
- B. Kilmer. "Do cannabis possession laws influence cannabis use?" In I. Spruit (Ed.), Cannabis 2002 report: Technical report of the International Scientific Conference (pp. 119-141). Brussels: Ministry of Public Health of Belgium, 2002.
- Krajewski, K., "Crime and Criminal Justice in Poland," *European Journal of Criminology*, Vol. 1, No. 3, 2004, pp.377–407.
- Kruttschnitt, C., and J. Savolainen, "Ages of Chivalry, Places of Paternalism: Gender and Criminal Sentencing in Finland," *European Journal of Criminology*, Vol. 6, No. 3, 2009, pp.225–247.
- Lappi-Seppälä, T., *Crime Prevention and Community Sanctions in Scandinavia*, Tokyo: UN Asia and Far East Institute for the Prevention of Crime and the Treatment of Offenders, 2009.
- Lappi-Seppälä, T., "Reducing the prison population: long-term experiences from Finland," In: Crime Policy in Europe, Council of Europe, Strasbourg: Council of Europe

- Publishing, 2006, pp. 139-155.
- Levitt, S. D., "Understanding Why Crime Fell in the 1990s: Four Factors That Explain the Decline and Six That Do Not," *Journal of Economic Perspectives*, Vol. 18, No. 1, 2004, pp.163–190.
- Machin, S., and C. Meghir, "Crime and Economic Incentives," *Journal of Human Resources*, Vol. 39, No. 4, 2004, pp.958–979.
- MacKenzie, D. L., and A. Picquero, "The Impact of Shock Incarceration Programs on Prison Crowding," *Crime Delinquency*, Vol. 40, No. 2, 1994, pp. 222–249.
- Messner, S., and R. Rosenfeld, "Political Restraint of the Market and Levels of Criminal Homicide: A Cross-National Implication of Institutional-Anomie Theory," *Social Forces*, Vol. 75, No. 4, 1997, pp.1393–1416.
- Murray, J., C. G. Janson, and D. P. Farrington, "Crime in Adult Offspring of Prisoners a Cross-National Comparison of Two Longitudinal Samples," *Criminal Justice and Behavior*, Vol. 34, No. 1, 2007, pp.133–149.
- Neumayer, E., "Inequality and Violent Crime: Evidence from Data on Robbery and Violent Theft," *Journal of Peace Research*, Vol. 42, No. 1, 2005, pp.101–112.
- Noam, E., *Media Ownership and Concentration in America*, Oxford: Oxford University Press, 2009.
- O'Donnell, I., "Crime and Justice in the Republic of Ireland," *European Journal of Criminology*, Vol. 2, No. 1, 2005, pp.99–131.
- OpenSigle, "GreyNet, Community Home Page," 2010. As of December 30, 2010: http://opensigle.inist.fr/handle/10068/697753
- Oster, A., and J. Agell, "Crime and Unemployment in Turbulent Times," *Journal of the European Economic Association*, Vol. 5, No. 4, 2007, pp.752–775.
- Parker, K., J. MacDonald, G. Alpert, M. Smith, and A. Piquero, "A Contextual Study of Racial Profiling: Assessing the Theoretical Rationale for the Study of Racial Profiling at the Local Level," American Behavioral Scientist, Vol. 47, No. 7, 2004, pp. 943-962.
- Pickett, K., J. Mookherjee, and R. Wilkinson, "Adolescent Birth Rates, Total Homicides, and Income Inequality In Rich Countries," American Journal of Public Health, Vol 95, No. 7, 2005, pp. 1181-1183.
- Prideman, W., "Vodka and Violence: Alcohol Consumption and Homicide Rates in Russia," *American Journal of Public Health*, Vol. 92, No. 12, 2002, pp.1921–31.
- Rasinger, S. "Lithuanian Migrants Send Crime Rocketing': Representation of 'New' Migrants in Regional Print Media," *Media Culture Society*, Vol. 32, No. 6, 2010, pp. 1021–1030.

- Reiner, R., *Political Economy, Crime and Criminal Justice*, Oxford: Oxford University Press, 2007.
- Reisinger, D., *Crime and Media in Contemporary France*, West Lafayette: Purdue University Press, 2007.
- Rennison, C. M., "A Different Approach to the Gender Gap in Offending," Women & Criminal justice, Vol. 19, No. 3, 2009.
- Reuter, P., Marijuana Legalization: What Can Be Learned from Other Countries?, Santa Monica, Calif.: RAND Corporation, 2010.
- Robinson, N., C. V. Oranje-Nassau, and M. Botterman, *Building a Digital Europe: Lessons* for the Delivery of Secure Pan-European E-government, prepared for DG INFSO, European Commission, 2009.
- Room, R., B. Fischer, W. Hall, S. Lenton, and P. Reuter, *Cannabis Policy: Moving Beyond Stalemate*, Oxford: Oxford University Press, 2010.
- Rossow I., "Alcohol and Homicide: A Cross-cultural Comparison of the Relationship in 14 European Countries," *Addiction*, Vol. 96, No. 1, 2001, pp. S77–92.
- Rothenberg, J. and S. Hoorens, "Enabling long-term access to scientific, technical and medical data collections," RAND Report TR-567-BL, Santa Monica: RAND Corporation, 2010.
- Rubin, J., and E. Disley, A Cross-national Study of Reducing Prison Populations and Reducing Reoffending, commissioned by the Ministry of Justice, UK, forthcoming.
- Saar, J., "Crime, Crime Control and Criminology in Post-Communist Estonia," *European Journal of Criminology*, Vol. 1, No. 4, 2004, pp.505–531.
- Salmi, V., and J. Kivivuori, "The Association between Social Capital and Juvenile Crime: The Role of Individual and Structural Factors," *European Journal of Criminology*, Vol. 3, No. 2, 2006, pp.123–148.
- Sampson, R., and W. Groves, "Community Structure and Crime: Testing Social-Disorganization Theory," *American Journal of Sociology*, Vol. 94, No. 4, 1989, pp.774–802.
- Sampson, R., S. Raudenbush, and F. Earls, "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy," *Science*, Vol. 277, No. 5328, 1997, pp.918.
- Sampson, R. J., and J. Cohen, "Deterrent Effects of the Police on Crime: A Replication and Theoretical Extension," *Law & Society Review*, Vol. 22, No. 1, 1988, pp.163–189.
- Schneider, F., and U. Windischbauer, "Money Laundering: Some Facts," *European Journal of Law and Economics*, Vol. 26, No. 3, 2008, pp.387–404.
- Schuman, H. and V. Gaidys, Collective Memory in Lithuania, 1989, Ann Arbor, MI: Inter-

- university Consortium for Political and Social Research, 1993. Sattar, G., and M. Killias, "The Death of Offenders in Switzerland," *European Journal of Criminology*, Vol. 2, No. 3, 2005, pp.317–340.
- Savage, J., R. Bennett, and M. Danner, "Economic Assistance and Crime a Cross-National Investigation," *European Journal of Criminology*, Vol. 5, No. 2, 2008, pp.217–238.
- Schuman, H., and V. Gaidys, *Collective Memory in Lithuania*, 1989, Ann Arbor: Interuniversity Consortium for Political and Social Research, 2009.
- Schwartz, J., D. J. Steffensmeier, and B. Feldmeyer, "Assessing Trends in Women's Violence Via Data Triangulation: Arrests, Convictions, Incarcerations, and Victim Reports," *Social Problems*, Vol. 56, No. 3, 2009, pp.494–525.
- Shaw, M., J. van Dijk, and W. Rhomberg, "Determining Trends in Global Crime and Justice: An Overview of Results From the United Nations Surveys of Crime Trends and Operations of Criminal Justice Systems," *Forum on Crime and Society*, Vol. 3, No. 1, 2003, pp.35–64.
- Shepherd, J, and I. Brennan, "Tackling Knife Violence," *British Medical Journal*, Vol. 337, 2008, p. a849.
- Sherman, L. W., "Police Crackdowns: Initial and Residual Deterrence," *Crime and Justice a Review of Research*, Vol. 12, 1990, pp.1–48.
- Smith, D. J., "Editorial: Criminology and the Wider Europe," *European Journal of Criminology*, Vol. 1, No. 1, 2004, pp.5–15.
- Soares, R., "Crime Reporting as a Measure of Institutional Development," *Economic Development and Cultural Change*, Vol. 52, No. 4, 2004, pp.851–871.
- Sourcebook, European Sourcebook of Crime and Criminal Justice Statistics, 2nd ed., The Hague: WODC, 2003.
- Statistics Norway, 2010. As of December 30, 2010: http://www.ssb.no/english/subjects/03/05/a_krim_tab_en/.
- Stevens, A., "Drug-Crime Connections," *Contemporary Sociology A Journal of Reviews*, Vol. 37, No. 6, 2008, pp.590–591.
- Sutherland, E., Principles of Criminology, 4th ed., Chicago: J. B. Lippincott, 1947.
- Tavares, C., G. Thomas and M. Roudaut, "Money Laundering in Europe: Report of work carried out by DG HOME and Eurostat," Luxembourg: Publications Office of the European Union, 2010.
- Tham, H., and H. von Hofer, "Individual Prediction and Crime Trends," *European Journal of Criminology*, Vol. 6, No. 4, 2009, pp.313–335.
- Thümmler, K, A. Britton and W. Kirch, "Data and Information on Women's Health in the European Union," European Commission Directorate-Generale for Health &

- Consumers, Brussels: European Communities, 2009.
- Tilly, C., and L. Lees, *Analysis of Arrests in Paris, June 1848*, Ann Arbor: Inter-university Consortium for Political and Social Research 1998. As of December 30, 2010: http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/49/detail;jsessionid=232F2FA DB0E2F86E7779241CE15450C6
- Tseloni, A., and C. Zarafonitou, "Fear of Crime and Victimization: A Multivariate Multilevel Analysis of Competing Measurements," *European Journal of Criminology*, Vol. 5, No. 4, 2008, pp.387–409.
- UNODC, Development of Monitoring Instruments for Judicial and Law Enforcement Institutions in the Western Balkans: Background Research on Systems and Context, Vienna: UN Office on Drugs and Crime, 2010a.
- UNODC, 2010b. As of December 30, 2010: http://www.unodc.org/unodc/en/data-and-analysis/Crime-Monitoring-Surveys.html?ref=menuside.
- Van Dijk, J., The World of Crime: Breaking the Silence on Problems of Security, Justice and Development Across the World, Sage Publications Inc., 2007.
- Van Dijk, J., J. Kesteren, and P. Smit, Criminal Victimisation in International Perspective: Key Findings From the 2004–2005 ICVS and EU ICS, The Hague: Boom Juridische Uitgevers, 2008.
- Van Dijk, J., P. Mayhew, and M. Killias, Experiences of Crime across the World: Key Findings from the 1989 International Crime Survey, Deventer: Kluwer Law and Taxation, 1990.
- Van Swaaningen, R., "Criminology in the Netherlands," *European Journal of Criminology*, Vol. 3, No. 4, 2006, pp.463–501.
- Viuhko, M., "Human Trafficking for Sexual Exploitation and Organized Procuring in Finland," *European Journal of Criminology*, Vol. 7, No. 1, 2010, pp.61–75.
- Von Hofer, H., "Crime and punishment in Sweden 1750-2000," *Journal of Scandinavian Studies in Criminology and Crime Prevention*, Vol. 4, 2003, pp. 162-179.
- Von Hofer, H., "Crime Statistics as Constructs: The Case of Swedish Rape Statistics," European Journal on Criminal Policy and Research, Vol. 8, 2000, pp. 77–89.
- Wall, D., Cybercrime: The Transformation of Crime in the Information Age, Cambridge: Polity Press, 2007.
- Weerman, F. M., and C. Bijleveld, "Birds of Different Feathers: School Networks of Serious Delinquent, Minor Delinquent and Non-Delinquent Boys and Girls," *European Journal of Criminology*, Vol. 4, No. 4, 2007, pp.357–383.
- White, A. "Rule of Law and the Limits of Sovereignty: Private Prison in Jurisprudential perspective," *American Criminology and Law Review*, Vol. 38, 2001, pp. 111–146.

- Yablon, M., "Modeling Prison Populations," *European Journal of Operational Research*, Vol. 52, No. 3, 1991, pp. 259–266.
- Yamamura, E., "Formal and Informal Deterrents of Crime in Japan: Roles of Police and Social Capital Revisited," *Journal of Socio-Economics*, Vol. 38, No. 4, 2009, pp.611–621.
- Zhang, J., "The Effect of Welfare Programs on Criminal Behavior: A Theoretical and Empirical Analysis," *Economic Inquiry*, Vol. 35, No. 1, 1997, pp.120–137.
- Zhang, S., T. Benson, and X. Deng, "A Test-Retest Reliability Assessment of the International Self-Report Delinquency Instrument," *Journal of Criminal Justice*, Vol. 28, No. 4, 2000, pp.283–295.
- Zimring, F. E. "The Necessity and Value of Transnational Comparative Study: Some Preaching from a Recent Convert," *Criminology & Public Policy*, Vol. 5, No. 4, 2006, pp. 615–622.

APPENDICES

Appendix A: Process for Data Reporting and Potential Reporting Gaps

We develop a process map of the data reporting process and provide an example of a best case scenario for the amount of data that can be missing from Member States that are generally thought of as active in crime and criminal justice (CCJ) statistics provision.

Process Map

Figure A.1 illustrates the overall process by which different actors are involved in data provision. The initial and terminal activities of the whole process are represented by ovals; decisions are represented by diamonds; and activities in which an entity has to do something are represented by boxes.

To start, the process begins with the database's (Eurostat's) need to publish data. The database requests data from a Member State and if the data are already collected, the national correspondent submits the data to the database. If the data are not ready, national correspondents need to prepare them, which may include collating data they have received from recording bodies, or contacting the recording bodies to submit the data. National correspondents may also publish data, in addition to sending information on to the database for publication.

There may be several recording bodies that prepare data for the national correspondent. For example, in France, aggregate crime data are collected annually at the département level (by the local police and gendarmerie authorities)⁷³ and then the Ministry of Interior collects the data in each zone for each département and publishes the total number of offences at département level (Fougère et al., 2009).

⁷³ "There are 95 départements in France. For historical reasons, the body in charge of ensuring security differs between urban areas, which are 'police zones', and rural areas, which are 'gendarmerie zones'. Policemen' status is civilian but gendarmerie is a military corps. Both gendarmes and policemen have to record the number of reported crimes in their respective zones," (Fougère et al., 2009, p. 913).

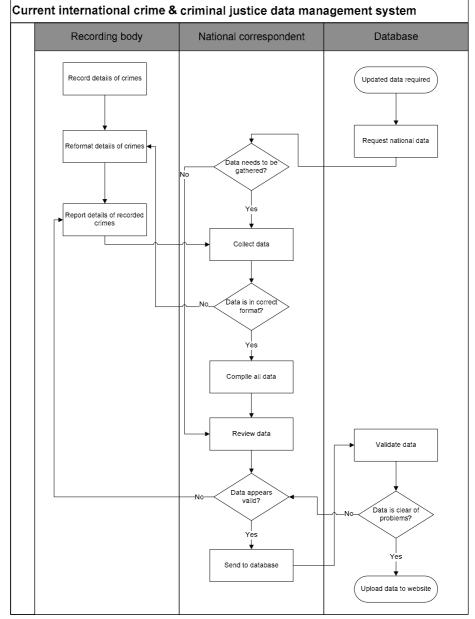


Figure A.1: Process Map of how Crime and Criminal Justice Data Flow to End Users

Generally databases such as the Council of Europe Scheme for Evaluating Justice Systems (CEPEJ) and Sourcebook ask national correspondents to fill in a survey type document. Therefore the national correspondent may have all the information from their recording bodies and need to identify the appropriate value in order to fill out the database's survey document. The national correspondent then inputs the values into the survey document and provides information about the nature or definition changes that may have occurred for particular variables.

In a final step, there are validation processes that vary by dataset.

This is not necessarily the optimal process as we have identified three areas that require considerable improvement in efficiency:

- formatting
- reporting
- validating.

The process shows there can be burdens in the system where databases have to come back to National Correspondents and request a different format.

This whole process is for one database. If another database asks for different types of data (for example if a new variable is introduced such as money laundering), every entity has to go through this whole process. In fact, interviews with national correspondents indicate this appears to be the case (for more on interview findings see Appendix C). There is duplication of effort and a burden on Member States as the recording bodies state they have to report similar information to multiple sources in multiple formats.

Gaps in Data Provision

As an example of the degree to which Member States may not respond to requests for data, CEPEJ sends questionnaires to its European members to provide information on their CCJ system. In an effort to understand whether non-response may be a problem and thus potentially undermine the delivery of a European Crime Report (ECR), we examine where two countries known for relatively strong provision of CCJ data – Netherlands and Sweden – have non-responses. As seen in Table A.1, for the most part the two countries supplied completed surveys in 2008. This provides some confidence that the ECR will have relatively complete information for at least some countries.

Table A.1: Whether Responses to the 2008 CEPEJ Scheme for Evaluating Justice Systems Were Complete, by Subject Area, Netherlands and Sweden

Subject area of questionnaire		Complete for Sweden?	Complete for Netherlands?
1.	Demographic and economic data		
	1. 1. General information		
	1. 1. 1. Inhabitants and economic information	Y	Υ
	1. 2. Budgetary data concerning judicial system		
	1.2.2. Budget (courts, public prosecution, legal aid, fees)	most	Y
2.	Access to justice and all courts		
	2. 1. Legal aid		
	2.1.1. Principles (qualification, frequency, amounts)	Y	Y
	2. 2. Users of the courts and victims		

Subject area of questionnaire	Complete for Sweden?	Complete for Netherlands?
2. 2. 1. Rights of the users and victims	Y	Υ
2. 2. 2. Confidence of citizens in their justice system	Y	Υ
3. Organisation of the court system		
3. 1. Functioning		
3. 1. 1. Courts (number, type)	Y	Υ
3. 1. 2 Judges, court staff (numbers)	few	most
3. 1. 3 Prosecutors (numbers)	Y	Υ
3. 1. 4 Budget and new technologies (computer systems)	Y	Υ
3. 2. Monitoring and evaluation		
3. 2. 1. Monitoring and evaluation (systems/indicators in place)	Y	Υ
4. Fair trial		
4. 1. Principles		
4. 1. 1. General principles (numbers, procedures)	Υ	Υ
4. 2. Timeframes of proceedings		
4. 2. 1. General information (procedures in place)	Y	Υ
4. 2. 2. Penal, civil and administrative law cases (numbers by type)	Y	most
5. Career of judges and prosecutors		
5. 1. Appointment and training		
5. 1. 1 Recruitment, nomination and promotion (procedures)	Y	Υ
5. 1. 2. Training (nature and frequency)	Y	Υ
5. 2. Practice of the profession		
5. 2. 1. Salaries (average salaries, other benefits)	Y	Υ
5. 2. 2. Disciplinary procedures (types, number)	Y	most
6. Lawyers		
6. 1. Statute of the profession		
6. 1. 1 Profession (numbers, organisation)	most	most
6. 1. 2. Training	Y	Υ
6. 1. 3. Fees (transparency, regulation)	Y	Υ
6. 2. Evaluation		
6. 2. 1 Complaints and sanctions (standards, numbers)	most	Y
7. Alternative Dispute Resolution		
7. 1. Mediation and other forms of ADR		
7. 1. 1. Mediation (organisation, number of procedures)	few (no numbers of cases)	most
7. 1. 2. Other forms of alternative dispute resolution (free text)	Y	N
8. Enforcement of court decisions		
8. 1. Execution of decisions in civil matters		
8. 1. 1. Functioning (number, organisation)	Y	Υ
8. 1. 2. Supervision (regulation)	Υ	Υ

s	ubject area of questionnaire	Complete for Sweden?	Complete for Netherlands?
	8. 1. 3. Complaints and sanctions (nature, number, timeframe)	Y	few
	8. 2. Execution of decisions in criminal matters		
	8. 2. 1. Functioning	Υ	Y
9.	. Notaries		
	9. 1. Statute		
	9. 1. 1. Functioning (status, number)	n/a	Y
	9. 1. 2. Supervision (regulation)	n/a	Y
10	0. Functioning of justice		
	10. 1. Foreseen reforms		
	10. 1. 1. Reforms (free text on current debate)	Y	Y

SOURCE: The European Commission for the Efficiency of Justice 74

 $^{^{74}\} See\ http://www.coe.int/T/dghl/cooperation/cepej/default_en.asp\ (accessed\ December\ 31,\ 2010).$

Appendix B: Descriptions of Report Structures

We do not present the following report structures in order that the European Crime Report (ECR) duplicates other reports. Rather, we present other reports to learn from previous examples and build a platform for discussing what the ECR may contain.

As the ECR is likely to include both qualitative and quantitative information, we review a variety of reports that include both types of information. We review those reports that use data for one Member State only and those using data for several countries. As the Netherlands and the United Kingdom are reviewed frequently, we turn attention to specific efforts in Germany, France and Hungary. Another element we consider are the topics of the reports, so we review those that are not at all focused on crime and criminal justice (CCJ) (e.g. reports on science and technology), those that have an overall focus on CCJ and those focused on one particular offence (e.g. drug offences). Lastly, we also review the structure of a report with a more journalistic style and reports of a more policy-orientated style.

The review of reports' content and structure is not exhaustive as the intention is to provide an indication of the efforts being made. We consider only those reports published by government bodies or private institutions; we do not consider academic journals, for example.

OECD Outlook Reports

The Organisation for Economic Co-operation and Development (OECD) produces a variety of publications, including country surveys, statistics and "outlooks". Of particular interest are the "outlook" reports as these provide country-level information, present statistics and perform original analysis. Each directorate of the OECD produces a hardcopy "outlook" report.

OECD "outlooks" generally have an editorial, a main report and an annex (of tables, sources and methods). The editorial is effectively a communication from the director of the Directorate and does not contain statistics. Quantitative information is used to note, for

example, where growth rates of factors such as employment are not explained by particular policies.

The main reports currently contain analyses of trends (statistical and policy), topical issues⁷⁵ and country notes.

The chapters on topical issues contain presentations of descriptive statistics (as figures and tables) and analyses of data. The data used for analysis generally come from the OECD through its national contact points.⁷⁶

Each country note is approximately two pages long, one discussing the statistics and relevant policies to the topic, and the other presenting raw data for the country. In addition to data on the topic (e.g. migration flows for *International Migration Outlook*), there are contextual data such as gross domestic product (GDP) and employment rates.

OSAC Crime and Safety Reports

The US Overseas Security Advisory Council (OSAC) produces annual crime and safety reports for countries outside the United States. They are written by regional security officers and contain information about the current crime and safety environment. The information included in these reports is relatively anecdotal as they are accounts by security officers; therefore the reports do not contain any statistical data or analysis and are generally risk assessments of travelling to these countries. Specifically, the headings for all country annual reports are:

- The Overall Crime and Safety Situation (in addition to general descriptions, there are headings such as "Crime Threats", "Crime", "Safety" and "Road Safety")
- Political Violence
- Post-specific Concerns (e.g. Organised Crime, Hate Crime)
- Police Response
- Medical Emergencies
- Travel Precautions.

The OSAC has a website providing these annual reports, along with other topical reports (such as *Cyber Awareness Bulletin*) and links to further information.⁷⁷ The website is a US

⁷⁵ Examples of topical issues are the role of the crisis, public opinions and migration, and the impact of naturalisation on the labour market outcomes of immigrants (contained in the 2010 International Migration Outlook).

⁷⁶ Interview with a co-author of an OECD Science, Technology and Industry Outlook.

⁷⁷ See https://www.osac.gov/Pages/Home.aspx, (accessed December 31, 2010).

Government inter-agency website managed by the Bureau of Diplomatic Security, US Department of State. In addition to these headings, they provide up-to-date alerts for each country, which are generally related to security and travel warnings, such as kidnap threats.⁷⁸

Europol's Organised Crime Threat Assessment

Europol produces two key crime and security reports annually: the EU Organised Crime Threat Assessment (OCTA) and the EU Terrorism Situation and Trend report (TE-SAT).

The OCTA is a qualitative assessment of the threat from organised crime, whereas the TE-SAT focuses on national defence and security issues. Since 2006, Europol has produced OCTA reports that have generally taken on the following thematic structure:

- assessment of organised crime groups
- criminal markets
- the organised crime landscape (regions and hubs).

The information in these reports "is based upon existing knowledge and expertise" and provided in the form of a narrative; the OCTA does not present statistics in any form so has no tables or figures. In addition to Europol personnel, contributions are provided by Member States, European Central Bank, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), Eurojust, FRONTEX, the European Anti-Fraud Office, law enforcement partners outside the EU (Canada, Colombia, Norway, Russia, Switzerland and the United States), international policing organisations (the International Criminal Police Organization or INTERPOL and Southeast European Cooperative Initiative centre), the private sector and academia.

Organized Crime and Corruption Reporting Project's CCWatch Briefs

Organized Crime and Corruption Reporting Project (OCCRP)⁷⁹ is a journalistic-style report supported by grants from the UN Democracy Fund (UNDEF) and the U.S. Agency for International Development (USAID). It is a joint programme of the Center for Investigative Reporting in Sarajevo, the Romanian Center for Investigative Journalism, the Bulgarian Investigative Journalism Center, Media Focus, the Caucasus Media Investigation Center, Novaya Gazeta and a network of investigative journalists in Montenegro, Albania, Moldova, Ukraine, Macedonia and Georgia.

⁷⁸ For example, Mali. As of August 20, 2010: https://www.osac.gov/Pages/ContentReports.aspx?cid=2.

⁷⁹ See http://reportingproject.net/new/index.php (accessed December 31, 2010).

The OCCRP produces CCWatch Briefs, which provide information on criminal activities identified by journalists. There are relatively few statistics and instead qualitative insights on the state of CCJ in particular countries.

Selection of Member State Annual Crime Reports

France's Annual Bulletin

In France, the National Institute of Advanced Studies in Security and Justice has a department called the National Observatory of Crime and Criminal Reponses (ONDRP). The ONDRP's task is to gather statistical data on crime (related to individuals or property) from all departments and agencies, public or private. From January 1, 2010, the ONDRP has also been responsible for centralising data on sentencing, enforcement and implementation of measures, and criminal penalties. Importantly, the ONDRP is responsible for organising the communication of results of its studies to all citizens through regular publications and putting them online on a website.⁸⁰

A particular publication is the *Annual Bulletin*, which discusses criminality and delinquency as recorded each year by the police and gendarmerie. The beginning of the report is structured around a discussion to understand what the statistics mean for policing and the strategies employed by local and national police; figures are presented and statistics are included in context. This is followed by raw data tables and figures. Lastly, there is discussion and statistical tables on specific areas that do not appear in recorded crime statistics, specifically, incident reports that do not have enough evidence to be pursued as crimes (*la main courante*) and tickets issued by the gendarmerie.

The report is currently structured along the following themes:

- annual review of recorded crimes and misdemeanours by the police and gendarmerie
- key lessons
- activities of the police and gendarmerie
- annual review of recorded crimes by the police and gendarmerie; tables and figures on the indicators of the ONDRP
- État 4001 (statistical tables from a data collection instrument called "The State 4001")⁸¹
- incident reports by the national police

⁸⁰ See http://www.inhesj.fr/articles/accueil/ondrp-h20.html (accessed December 31, 2010).

For more information on this data collection, see http://www.cartocrime.net/webigeoagsdb/lexique.jsf#etat4001 (accessed December 31, 2010).

tickets issued by the gendarmerie.

Germany's "Criminal Justice in Germany"

The Federal Ministry of Justice publishes a report on the criminal justice system in Germany (authored by Jörg-Martin Jehle). The report describes all levels of the criminal justice system in Germany, "ranging from police, prosecutorial and court activities to sentencing, imprisonment and probation". It is published at irregular intervals; the fourth edition was published in 2005. The objective of the report is to inform the general public; thus in addition to statistical tables and figures, there is policy-relevant information and explanations of what statistics can (and cannot) tell us. The report is divided into information on police, prosecution, sentencing and penal sanctions, probation, penal institutions and reconvictions.

Hungary's "Crime Situation" Report

The National Crime Prevention Committee⁸² under the statutory obligation of the Hungarian Parliament publishes a "Report on the previous years' crime situation and the implemented policies". The first issue was released in 2009. The future of this (potentially) biannual publication is uncertain since the new government entered office in 2010.

The report consists of a thorough analysis of crime in Hungary, largely relying on national and regional statistics, and a description of the crime prevention measures taken according to each priority of the national crime prevention strategy. The analysis of the crime situation focuses on longitudinal descriptive statistics on:

- crime types
- detection rates
- characteristics of the perpetrator
- characteristics of the victim
- countries.

The description of crime prevention measures concentrates on public spending and policies, rather than outcomes and impacts.

PricewaterhouseCoopers Global economic survey

PricewaterhouseCoopers (PwC) surveys businesses each year to analyse the degree to which

⁸² The Committee was created in 2003 by the government and is a semi-governmental body representing a partnership between ministries, governmental bodies, NGOs and civil society actors. Its remit is to support the implementation of the crime prevention strategy of the government. For more information see http://www.bunmegelozes.hu/index.html?lang=en (accessed December 31, 2010).

businesses are facing economic crimes such as fraud.⁸³ Responses from the surveys are presented in a report made available on the PwC website. The reports contain a narrative on the findings, which are supported in part by tables and figures; the raw data are not available. There is relatively little analysis of the data as the aim of the survey is to identify the degree to which respondents experience particular crimes.

European Sourcebook

The European Sourcebook is a survey of European countries comparing statistical information available on CCJ statistics. Authors standardise variables as much as possible in order to form comparisons. Authors of the Sourcebook have produced a "flyer" explaining the information that was collected and defined and presenting some empirical findings. The flyer is approximately two pages long and includes a figure for a particular criminal justice variable (e.g. prison population) over time and a figure for crime types (e.g. assault) over time.

UNODC's Forum on Crime and Society

The Forum on Crime and Society is a UN sales publication on criminological and sociolegal issues. It is issued by the UN Office on Drugs and Crime (UNODC) twice yearly in the six official languages of the UN: Arabic, Chinese, English, French, Russian and Spanish. The articles published in the Forum are written by scholars and experts from around the world. The methodologies are quantitative and qualitative and contain data from a variety of sources.

UNODC's World Drug Report

The UNODC annually publishes a document providing information and statistics on the supply of and demand for illicit drugs around the world. "In 1998, the General Assembly gave UNODC the mandate to publish 'comprehensive and balanced information about the world drug problem' in recognition of the importance of factual and objective information in international drug control."

Similar to the OECD "outlook" reports, the UNODC's *World Drug Report* contains a section of analysis on the general situation, a section on statistical trends and descriptions, a topical section and a statistical annex. The report is prepared with raw data and estimates

⁸³ For example, see http://www.pwc.com/en_GX/gx/economic-crime-survey/pdf/global-economic-crime-survey-2009.pdf (accessed December 31, 2010).

⁸⁴ For example, see http://www.unece.org/stats/documents/2004/11/crime/wp.10.e.pdf (accessed December 31, 2010).

⁸⁵ See http://www.unodc.org/unodc/en/data-and-analysis/WDR.html (accessed December 31, 2010).

from government bodies, research institutions and the UNODC itself.

Eurostat's Statistics in Focus: Crime and Criminal Justice

Eurostat produces a series of reports called Statistics in Focus in which data in subthemes (crime and criminal justice is a subtheme of population and social conditions) are presented in a document. One page is devoted to presenting some statistical findings, generally with a figure to illustrate the overall picture of CCJ. This is followed by raw data tables on each variable for which data are collected.

European Institute for Crime Prevention and Control, Report Series

A recent publication of the Report Series is *International Statistics in Crime and Justice* (Report Series 64), which is a joint publication of the European Institute for Crime Prevention and Control (HEUNI), a UN affiliate organisation, and the UNODC. The publication uses responses of the UN-CTS to analyse the crime and justice situation across the globe. The publication includes quantitative analysis, also displaying statistics in the form of figures and tables, and qualitative analysis. The most recent report has the following table of contents:

- Homicide
- Trends in Police Recorded Crime
- Drug Crime
- Complex Crimes (e.g. human trafficking)
- Responses of the Criminal Justice System
- Attributes of Criminal Justice Systems Resources, Performance and Punitivity
- Trends in World Prison Population
- Crime and Criminal Justice Statistics Challenges.

For the most part, each of the chapters is written by different authors. Throughout Report Series 64, there are explanations of definitional issues and caveats for different recording practices. There is a rigorous examination of datasets in which Eurostat, European Sourcebook and other UN datasets is investigated.

Appendix C: Findings of Interviews, Surveys and Conference Session

In this appendix we synthesise findings from interview and survey responses.

Interviews

Interviewees are generally positive about the prospect of a European Crime Report (ECR). Interviewees tend to agree about the challenges involved, especially the pressure to compare the incomparable over time and across countries, and ensuring data quality.

There are some similar features of an ECR that interviewees would like to see, including:

- data, reports and research
- information on "core" crimes and unconventional or fad crimes (interviewees understood the problems over definition and data for unconventional crimes and would like to see the issues discussed, rather than statistics)
- reports on best (and bad) practice.

Surveys

The main goal of the survey was to learn more from policy experts. We received responses from:

- Cyprus, Denmark, Hungary, Italy, Poland, Switzerland
- the European Forum for Urban Security
- the European Sourcebook.

These are some of the comments made by respondents:

Also other different comparables should be shared with, such as number of households, number of housing estates, number of apartments, number of personal vehicles, number of commercial vehicles, etc.

Data provided through official channels are often grossly inaccurate or misleading and need a lot of cleaning.

Introduce innovation. Leave to national agencies to do the routine work and go ahead with organized crime, economic crime, cost of crime and other issues that are relevant for comparisons among EU Member States.

Respondents made the following comments on redundancy:

As there is a multiple stakeholder reporting system in place, it often occurs that the separate reporters do report different statistics on the very same items.

It would also be of great help for all if there would be a common questionnaire for UNODC, EUROSTAT and ES. It's just de-legitimising all of us when there are three times different datasets for similar realities.

Conference Session

Participants in the discussion in the session in Liège were open and robust, and showed no apparent hesitation in providing possible criticisms, concerns and suggestions; they challenged each other as well as the research team. We considered this positive as, with a few exceptions, it meant we were able to hear and learn from the interests and concerns of experienced and expert criminologists who have been dealing with many of the relevant areas for decades.

These are the issues that generated most interest, discussion and debate at the session in Liège:

- Many were keen to understand the likely financing of the ECR and the EC's aims about authorship.
- There appeared to be a consensus among participants that information and reporting for the ECR needs to come from variety of sources, and that this could be achieved in several ways, for example through commissioning a range of research projects to populate and feed in to the ECR, and/or through drawing on expert panelists who would have oversight of the different areas covered by the ECR.
- There was wide interest in understanding what the EC's role would be in delivering this report.
- There was also interest in understanding and discussing the likely audience for the ECR. Most of those present at the Liège session believed the key aim of an ECR was to provide synthesised reporting of European CCJ information, in an accessible and already interpreted form, to policymakers who need digestible pieces of information about the state of EU crime and justice, key comparisons and trends.

- There was also agreement that if the key audience was policymakers, there should
 not be much provision or discussion of data as this would be too academic and
 detailed for those with few resources (of time, money or analytical capability) to
 make sense of it.
- There was a concern that the ECR should not seek to duplicate existing efforts in the production and reporting of data. The word "report" in the title of the project, "European Crime Report", led to concern about whether the ECR would duplicate existing reporting. The research team reassured participants that the aim was not to duplicate effort or push out existing systems and mechanisms, but on the contrary to draw on them and leverage them to make them more widely used and accessible for informing and understanding EU crime and justice.
- Although some participants emphasised what would be extremely difficult about developing a European crime report, and argued that RAND's report should primarily highlight for the EC what could not be done rather than what could, a few participants advocated that it could and should be accomplished. With this encouragement there was an argument in favour of starting small and improving the ECR through successive iterations as it proceeds (and perhaps limiting expectations for early reports).
- There was interest in understanding how the ECR would relate to the Crime Observatory.
- Some participants emphasised that the ECR should be about communications, and bring together information to be accessible for policymakers.
- One participant noted that a data-driven report would not address the need to deliver an action plan.
- Participants discussed whether the ECR could be a way to release and learn from survey findings. One person suggested that the ECR should separate source from analysis, and focus on presenting some of the findings.

Appendix D: Data Matrices

Table D.1: Private Crime and Criminal Justice Databases, Data Collection by Survey

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
Economist Intelligence Unit	Country Risk Service and Country Forecast 2009	2009	~160 countries	The misuse of public office for private (or political party) gain	Expert staff assessment	
KMPG	KMPG Fraud	2003, 2009	UK	Fraudulent behaviour	Executives of public and private companies	Volunteer
PricewaterhouseCoopers	PWC Global Economic Crime Survey	2003, 2005, 2007, 2009	Depends on year; in 2009, 54 countries (~3000 respondents)	Economic crime and fraud, asset misappropriation (incl. embezzlement or deception by employees), accounting fraud, corruption and bribery (incl. racketeering and extortion), money laundering, intellectual property infringement (including trademarks, patents, counterfeit products and services), illegal insider trading, espionage, financial performance, fraud risk assessment	Relatively senior workers (e.g. heads of departments, CEOs)	
Bertelsmann Foundation	Bertelsmann Transformation Index	2003, 2006, 2008, 2010	~130 less developed and transition countries	The government's capacity to punish and contain corruption	Network of local correspondents and experts inside and outside the organisation	

Table D.2: Public Crime and Criminal Justice Databases, Data Collection by Survey or Compiling Existing Data, Single Country Only

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
Center za raziskovanje javnega mnenja in množičnih komunikacij	Attitudes Towards Corruption	2002–	Slovenia	Problem of corruption, its causes and acceptance		Probability sample of telephone numbers from the list of household telephone lines, provided by the Telekom Slovenia. Last birthday method used for selection among members of household
Centro de Investigaciones Sobre la Realidad Social	Center for Research on Social Reality Survey	1990–1996	Spain	Opinions on crimes and civil liberties	Adults	Random stratified sampling design

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
Commission for the Prevention of Corruption (Komisija za preprečevanje korupcije)	Survey of Economic and Business Environment, Business Ethics and Unofficial Payments in Slovenia	2002	Slovenia			
Commission for the Prevention of Corruption (Komisija za preprečevanje korupcije)	Public opinion on corruption between Slovenian journalists	2008	Slovenia	The actual condition of corruption between Slovenian journalists	The adult residents of Slovenia, older than 18 years, living at a permanent address. People living in household without telephone and institutionalised people.	Two-stage random sample based on list of Slovene telephone subscribers. Telephone numbers selected considering variability in Slovene telephone region. Respondents in households were selected by "last birthday" method.
Criminal justice departments and agencies and Central Community Relations Unit	Community Attitudes Survey	1992–2003	Northern Ireland	Level of crime; Public perceptions and views on crime, law and order, and policing issues	Adults aged 16 and over, living in private households	Random stratified sampling design
Ipsos MORI; Social Disadvantage Research Centre, Oxford University	Household Survey Data	2002, 2004, 2006, 2008	England	Experience of crime	Adults living in New Deal for Communities Partnership Areas	Multi-stage stratified random sample
Ministry of Interior. Police Department	Police Barometer	1999, 2001, 2003, 2005, 2007	Finland	Public opinion on the role and services of the police; citizens' feelings about safety and security; fear of crime; experiences of crime; trust in the police, the Border Guard, rescue services, etc.	People resident in Finland aged 15 or over (excluding the Åland Islands)	Quota sampling based on the age, gender, region and municipality type distributions of target population
National Research Institute of Legal Policy	Finnish Self-Report Delinquency Study/Juvenile Deliquency in Finland	1995, 1996, 1998, 2001, 2004	Finland	Graffiti writing or painting; destruction of property at school; destruction of property outside school; shoplifting; stealing at school; stealing at home; buying stolen goods; auto theft; taking part in a fight; beating somebody up; use of soft drugs, misuse of legal medicine, use of other than soft drugs, and drunken driving	9th graders	Random cluster sample, with geographical area and community residential density as stratification criteria
National Research Institute of Legal Policy	Finnish Teacher Victimisation	1997	Finland	Anti-social behaviour and violence against teachers and teacher attitudes towards young people's criminal behaviour	Teachers in upper secondary schools in Finnish-speaking municipalities	Stratified random sampling
Netherlands Institute for the Study of Crime and Law Enforcement	School study	n/a	Netherlands	Adolescent delinquency; peer involvement in delinquency	Started with students in first or third year of secondary education	Longitudinal quantitative and qualitative data
Public Opinion and Mass Communication Research	Attitudes of Slovene public toward policing	2002–2006	Slovenia	Relationship of general public toward institutions like the police	The adult residents of Slovenia, older than 18 years, living on	Probability sample of telephone numbers from the list of household

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
Centre (Center za raziskovanje javnega mnenja in množičnih komunikacij)					permanent address; people living in a household without telephone and institutionalised people	telephone lines, provided by Telekom Slovenia; last birthday method used for selection among members of household
Scandinavian Research Council for Criminology (Nordiska Samarbetsrådet för Kriminologi)	Young Male Crime Survey	1962, 2006	Finland	Self-reported crime	Finnish young men who had reached call-up age of 19 years; Finland has conscription army and draftee age was 19 in 1962	Cluster sampling; questionnaire was given to all young men who attended the year 1962 call-ups in Helsinki and Rovaniemi.
Statistics Sweden	Surveys of living conditions	1978–	Sweden	Perceptions of safety and victimisation	16-84 year olds	n/a
TNS-BMRB Scotland. Scottish Government	Scottish Crime Survey	1993–	Scotland	Crime victimisation; perceptions of local area; varying modules over time (including violence, antisocial behaviour, personal safety, perceptions of the Scottish Criminal Justice System and prisons)	Adults aged 16+ within randomly chosen private households	Multi-stage stratified random sample
University of Jyväskylä	Jyväskylä Longitudinal Study of Personality and Social Development, self- ratings of 36 year olds	1995	Finland			
University of Jyväskylä	Jyväskylä Longitudinal Study of Personality and Social Development, life history calendars of 42 year olds 2001	2001	Finland	Delinquency	8-year-old second grade pupils (mostly born in 1959)	Random probability sampling
Wetenschappelijk Onderzoek- en Documentatiecentrum (WODC)	WODC Youth Delinquency Survey	2005	Netherlands		10-17-year-olds	Stratified random sampling
WODC	Police Monitor	1993, 1995, 1997, 1999, 2001, 2003	Netherlands	Aspects of public safety and the functioning of the police		
WODC, TNS NIPO	Monitor Crime in the Business Sector, formerly Trade and Industry Crime Monitor	2004–2008	Netherlands	Burglary, theft, vandalism, violence; preventive measured used	Five sectors of industry: construction, retail, catering, transport and business services	Volunteer sample

Table D.3: Public Crime and Criminal Justice Databases, Data Collection by Survey or Compiling Existing Data, Multiple Countries Only

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
Communities and Local Government. NatCen	Citizenship survey	2001, 2003, 2005, 2007/08, 2008/09	England and Wales	Fear of types of victimisation; involvement in tackling crime groups	Adults aged 16 years and over	Multi-stage stratified random sample
EC	European Crime and Safety Survey	Time series available from 1950 for some countries	EU-15 plus Estonia, Poland, Hungary, United States, Bulgaria, Croatia and Turkey	Victimisation and perceptions of crime		
Economic and Social Data Service	Arrestee Survey	2003–2006	England, Wales	A range of areas within the drugs and crime nexus	Arrest events and persons arrested	Multi-stage stratified random sample
Economic and Social Data Service	National Child Development Study	1965, 1969, 1974, 1981, 1991, 1999– 2000, 2004, 2008–2009	Great Britain		Adults in Great Britain born in one particular week in 1958	No sampling (total universe)
Economic and Social Data Service	1970 British Cohort Study	1970, 1975, 1980, 1986, 1996, 2000, 2004, 2008	Great Britain	Age-specific questions on drug use and experience of petty crime; contact with the police and crime; experience of crime	Everyone born in a specific week in 1970	No sampling (total universe)
Eurofound	European Social Survey	2002–	25 European countries	Trust in police, experiences of corruption, crime victimisation and sense of safety	Aged 15 and above	Random sampling among population
EC	Euro-barometer	1970-	EU-27	Policies national or EU level; EU action in certain areas key priority; main actions undertaken by EU; fears about building of EU; importance of criteria in deciding whether a country should join the EU; Opinion on key topical issues; Fears regarding the building of EU – likely to happen	Aged 15 years and over	Multi-stage, random probability sample

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
EC	European System of Social Indicators	1999–2001	EU-27, Norway, Switzerland, Japan, US	Crime load, resources and efficiency in fight against crime; subjective perception and evaluation of public safety; inequalities; social exclusion; trust in institutions; Europe specific concerns; crime prevention; environmental crime; crime structure; values & attitudes to public safety, sanctioning, & cause of crime	n/a	n/a
Freedom House	Nations in Transit	2003–	30 countries	Extent of corruption as practised in governments, as perceived by public and as reported in the media, and implementation of anti-corruption initiatives	Assessment by experts originating or resident in the respective country	
Home Office. Research and Planning Unit	British Crime Survey	1982–	England, Wales (and in early years, Scotland)	Levels of crime, public attitudes to crime and other related issues	Adults aged over 16 years	Multi-stage stratified random sample
Home Office. Research and Statistics Directorate	Young People and Crime Survey	1992–1993	England and Wales	Criminal offences crime and lifestyle factors; use of controlled drugs; young offenders	Young people aged 14–25 in England and Wales	Random sample selected in clusters using the Postal Address File
Home Office Research, Development and Statistics Directorate	Offending, Crime and Justice Survey	2003–	England and Wales	Measures of self-reported offending; indicators of repeat offending; trends in prevalence of offending, drug and alcohol use; information on nature of offences committed	Persons aged 10–29 years, resident in private households	Multi-stage stratified random sample
Human Rights First	Hate Crime Survey	2007, 2008	56 OSCE countries	Six facets of violent hate crime		
Ministry of Justice (Netherlands)	International Self- Report Delinquency	1992, 2005	26 countries	Carrying weapons; threatening someone; engaging in riots or group fights in public; beating up a family member; beating up a non-family person; hurting someone with a weapon	14–21-year-olds	
Office for National Statistics	General Household Survey; called General Lifestyle Survey since 2008	1971–	Great Britain	Experience of crime, violence or vandalism in the area	Private households in Great Britain	Random stratified sampling design

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
Office for National Statistics	Omnibus Survey	1990–	Great Britain	Attitudes to domestic violence; attitudes to the police; anti-social behaviour	Adults aged 16 or over living in private households	Multi-stage stratified random sample
Social and Community Planning Research	British Social Attitudes Survey	1983–1991	Great Britain	Crime rates compared with other areas; Fear of crime; care taken to prevent property crime; crime and civil rights; opinion of particular crimes; opinion on police powers and civil rights; use of death penalty; use of discipline to prevent crime; television and crime; religion prevention of crime	Adults (18 and over) living in private households	Multi-stage stratified random sample
Southern Europe Legal Development Initiative	Regional corruption monitoring indexes	2001, 2002	Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Yugoslavia (~1000 each country)	Attitudes towards corruption, corrupt practices, assessment of the spread of corruption, corruption-related expectations	18+-year-olds	
Transparency International	Global Corruption Barometer	2003–	69 countries and territories (73,132 individuals)	Government's actions to fight corruption; extent of corruption; interaction in the past 12 months; payment of a bribe; amount of bribes paid; proportion of bribe to household income; made a formal complaint; Reason for no formal complaint; Certainty bribe will deliver; Willingness to pay more for corruption-free good; Frequency of private sector to bribe public sector; Seriousness of bribery to obtain decisions; Acceptability of certain behaviours		Quota sampling, using sex, age, socio- economic condition, regional and urban balances as variables; in some countries used random sampling

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
Transparency International	Bribe Payers Index	1999, 2002, 2006, 2008	Belgium, Canada, Netherlands, Switzerland, Germany, United Kingdom, Japan, Australia, France, Singapore, United States, Spain, Hong Kong, South Africa, South Korea, Taiwan, Italy, Brazil, India, Mexico, China and Russia	Likelihood of firms in 19 specific sectors to engage in bribery		
Transparency International	Corruption Perceptions Index	2001–2009	180 countries and territories	Extent of corruption and likelihood of corrupt government		
UNESCO	Data from UNESCO Trafficking Statistics Project		Multiple countries			
UN Interregional Crime and Justice Research Institute (UNICRI), funded by Dutch and Hungarian ministries of justice; survey by Gallup	International Crime Business Survey (formerly International Commercial Crime Survey)	1994, 2000 (revised)	9 Central– Eastern European capital cities	Victimisation; perceptions; attitudes towards daily business; corruption, fraud and extortion		

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
UNODC	UN surveys on crime trends and the operations of criminal justice systems	1970–2006 (10 surveys completed)	86 countries	Court; police; prisons; prosecution		
UNODC	International Homicide Statistics	2004	198 countries	Single homicide rate, homicide range		Cross-national crime statistics sources, international public health data, and national law enforcement and criminal justice data sources
UNODC, UNICRI, UK Home Office	International Crime Victims Survey	1989, 1992, 1996, 2000, 2004, 2009	75 countries		n/a	n/a
World Bank	Country policy and institutional assessments for International Development Association (IDA) countries	2006–2008	~75 countries (eligible for IDA funding)	Corruption, conflicts of interest, diversion of funds, anti-corruption efforts and achievements	Country teams, experts inside and outside the bank	
World Economic Forum	Global Competitiveness Report	2008, 2009	~130 countries	Undocumented extra payments or bribes connected with exports and imports, public utilities, tax collection, public contracts and judicial decisions are common or never occur	Senior business leaders; domestic and international companies	n/a

Table D.4: Public Crime and Criminal Justice Databases, Data Collection by Compiling Recorded Data

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
Central Eastern European / Commonwealth of Independent States	TransMONEE		Central and Eastern Europe and Commonwealth of Independent States	Total crime rates; crimes against and committed by juveniles		National statistical offices in the countries of CEE/CIS
CoE	Annual Penal Statistics of CoE (SPACE I)	1999–2007	46 CoE Member States	State of prison populations		
CoE	Annual Penal Statistics of CoE (SPACE II)	1999, 2001	46 CoE Member States			
CoE	CEPEJ	2004, 2006; the next evaluation report on judicial systems will be published mid–2010 (& cover 2008 statistics).	46 CoE Member States	Access to justice; justice budgets; organisation of court system; principles and timeframes of justice; career of judges, prosecutors, lawyers; alternative dispute resolutions; enforcement; notaries; function of justice; Economy and demography		National contact points (usually in Ministry of Justice with national statistics)
EC	EUROSTAT internet portal	1950-	EU, candidates, potential candidates, EFTA and EEA, outside Europe	Crimes recorded by the police, prison population; expenditures of police, judicial and prison systems and fire and rescue services in relation to country's GDP; Police officers		Data come from official sources in the countries such as the National Statistics Office, the national prison administration, Ministries of Interior or Justice and police.
Home Office. Research, Development and Statistics Directorate	Offenders Index cohort data	1953–1997	England and Wales	Crimes convicted; Provides resource for investigating patterns of convictions for known offenders and modelling their interaction with the criminal justice system	Cohorts of offenders born in sample weeks in 1953, 1958, 1963, 1968, 1973 and 1978	No sampling (total universe)

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
Institut National des Hautes Etudes de la Sécurité et de la Justice Observatoire Nationale de la Deliquence	cartocrime.net	1996–	France	Violent crime; non-violent crime; sexual violence; threat of violence		
INTERPOL	INTERPOL Database on International Intellectual Property Crime	2008(?)	186 countries	Transnational and organised intellectual property crimes	Private industry	
Statistics Norway	STRASAK database	1960–; annual statistics; biannual statistics produced until 2003, quarterly statistics produced until 1998	Norway	Offences reported to the police; offences investigated; sanctions; imprisonments; criminal prosecutions; victims of offences reported to the police; police and prosecution; disputes dealt with by the conciliation boards; survey of level of living; victims and crime; the correctional service		
Uni Lausanne, WODC	European Sourcebook	1996–	Europe	Police; prosecution; conviction; corrections		
U.S. Department of Health and Human Services; National Institutes of Health; National Institute of Mental Health; Guggenheim Foundation; German Marshall Fund of the United States	Violence and Crime in Cross-National Perspectives	1900–1972	110 nations	Murder; rape; robbery; assault; theft; and population		

Table D.5: Public Crime and Criminal Justice Databases, Studies with Data Collected by Survey

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
A research consortium	International Dating Violence Study		36 universities and 19 countries	Domestic violence	University students	Students in psychology, sociology, criminology and family studies
A. Crawford; Center for Criminology, Middlesex University; ESRC	Second Islington Crime Survey	1989	England	Crime victimisation; public perceptions of crime and the police	n/a	n/a
Bennett (1988)	Correlates of crime	1960– 1984	52 countries; owing to missing data, approximately 25 countries useful	Offence, offender and national social, political and economic data		Non random; the nation had to be a member of INTERPOL between 1960 and 1984; the nation had to report crime data to the Secretariat of INTERPOL between 1960 and 1984; and the nation could skip no more than three of INTERPOL's two-year crime data reporting periods
Catherine Donovan and Marianne Hester; Economic and Social Research Council	Comparing Love and Domestic Violence in Heterosexual and Same Sex Relationships	2005/06	UK	Domestic violence	Quantitative survey: women and men aged 16–65 who had experienced a same sex relationship; qualitative interview transcripts: women and men aged 18–65 who had experienced same sex and/or heterosexual relationships	Volunteer sample; convenience sample
D. Gadd; Department of Criminology, Keele University	Context and Motive in the Perpetuation of Racial Harassment and Violence in North Staffordshire	2004	England	Motivation for racial crimes	Perpetrators of racial harassment and other members of local communities	No sampling (total universe)
D.J. Smith; School of Law, University of Edinburgh; ESRC	Edinburgh Study of Youth Transitions and Crime	1997– 2001	Scotland	Offending rates and anti-social behaviour	Young people aged between 11.5 and 12.5 years in 1997, resident in Edinburgh	No sampling (total universe)

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
David P. Farrington; Home Office	Cambridge Study in Delinquent Development (Great Britain)	1961– 1981	Cambridge, England	Arrests; crime; juvenile delinquency	Population of young male children	All boys aged 8–9 who were on the registers of six state primary schools within a one-mile radius of a research office
Howard Schuman and Vladas Gaidys; U.S. Dept of Health and Human Services	Collective Memory in Lithuania	1989	Lithuania	Opinions on crime	Adults aged 16 years and over	Multi-stage stratified random sample
I. Loader; Department of Criminology, Keele University; ESRC	Policing, Cultural Change and "Structures of Feeling" in Post-War England	1945– 1999	England	Public and professional understandings of policing	Adults (focus group members) and police officers (serving and retired) in the Manchester area; police spokespersons, politicians and civil servants in England	Purposive selection and case studies
J. Phoenix; Department of Social and Policy Sciences, University of Bath; ESRC	Doing Youth Justice: Analysing Risk and Need Assessments in Youth Justice Practice	2004/05	England	Understanding of young offenders and the criminal justice process	All those involved in the adjudication of youth justice in a small local authority	Volunteer sample
K. Edgar; Centre for Criminological Research; University of Oxford	Conflicts and Violence in Prison	1998– 2000	England	Crime and law enforcement; Legislation and legal systems	Prisoners and staff	Purposive selection and case studies
L. Zedner; Centre for Criminological Research; University of Oxford	Crime, Social Order and the Appeal to Community	1994– 1996	England, Germany	Strength of appeals to the idea of community	People involved in community crime projects	Purposive selection and case studies
L. Tornstam; National Swedish Institute of Statistics; Danish National Institute of Statistics	Abuse of Elderly	1987	Sweden, Denmark		18–74-year-olds (Sweden); 16 year olds+ (Denmark)	n/a

Agency	Source	Years covered	Countries	CCJ variables included	Target population	Sampling method
R. Atkinson; Department of Urban Studies, University of Glasgow; ESRC	Neighbourhood Boundaries, Social Disorganisation and Social Exclusion	2001–2002	Scotland	Neighbourhood governance of crime and disorder	Residents of one affluent neighbourhood and one deprived neighbourhood in each of two Scottish cities (Edinburgh and Glasgow)	The four neighbourhoods were chosen on the basis of social profile. Quantitative postal survey survey based on a sample of households randomly generated from the Postcode Address File by CACI for each of the four defined neighbourhoods; qualitative interviews were carried out with five key actors in each neighbourhood. One focus group interview was conducted in each of the four neighbourhoods, and two additional ones with residents drawn unwittingly from across each pair of neighbourhoods.
W. Hollway; Department of Social Sciences, University of Bradford; T. Jefferson; Centre for Criminological and Socio-Legal Studies, University of Sheffield; ESRC	Gender Difference, Anxiety and the Fear of Crime	1995	England		16–76-year-olds living on low and high crime estates in the north of England	Purposive selection and case studies
Ribeaud & Eisner (06)	Swiss youth sample	1999	Switzerland	Delinquent involvement; victimisation; substance abuse	9th grade students of the Swiss canton of Zurich	Stratified random sample
S. Rex; Institute of Criminology, University of Cambridge; ESRC	Penal communication	2001– 2002	England	Meaning of punishment; purpose of sentencing and punishment; probation; community service and combination orders; prison sentences; youth justice; public perceptions of sentencing; attitudes to criminal behaviour; reparation and restorative justice	Magistrates, probation officers, offenders and victims of crime in Bedfordshire, Cambridgeshire, Greater London, Gloucestershire and Hertfordshire	Volunteer sample
Zarafonitou (2004)	Insecurity, Fear of Crime and Attitudes towards the Criminal Phenomenon	2004	Greece	Perceptions of safety and victimisation	Athens	Basis of residence via stratified sampling

Table D.6: Public Crime and Criminal Justice Databases, Studies with Data Collected by Compiling Recorded Data

Agency	Source	Type of data	Years covered	Countries	Crimes	Target population	Sampling method
Cid (2009)	Criminal courts of Barcelona	Judicial documents			Offences for which the maximum penalty is no more than three years' imprisonment		
Interuniversity Consortium for Political and Social Research	Analysis of arrests in Paris, June 1848	Judicial documents	1848	France	Insurrection	11,616 people arrested during the 1848 insurrection in Paris, France	No sampling (total universe)
L. Kelly; Child and Women Abuse Studies Unit, London Metropolitan University; ESRC	Rape in the 21st Century: Old Patterns, New Behaviours and Emerging Trends	Compilation of existing material	2000–2002	England	Demographics of victim and assailant; circumstances around attack; circumstances around reporting of attack	Rape cases reported to a sexual assault resource centre and/or the police in the research sites	Purposive selection or case studies

Appendix E: Methodology

Our approach was to apply a mix of methodologies in order to provide independent, robust evidence that took into account a variety of perspectives and reduced any biases. For our purposes of exploring a range of views and experiences, an approach such as a systematic literature review would have unnecessarily reduced the literature to a set of exclusion criteria that could not be known in advance. We wanted to capture the most relevant information, including that which was not obvious but had lessons from which we could draw. For example, we reviewed reports in science and technology and spoke to engineers, all of which would have been unlikely to survive an exclusion criterion for reviewing crime and criminal justice (CCJ) literature.

Our proposed methods involves going beyond the established best practice in systematic literature reviews (Greenhalgh, 1997) and uses a triangulated, multi-method approach, which complements the various strengths and weaknesses of the different approaches involved.

Interviews

During this project we conducted ten semi-structured interviews with academics and early career researchers or PhD students. The purpose of the interviews was to get more in-depth information than the surveys, and perhaps a view that cannot be expressed in an open forum such as that of the conference session.

We identified academics through contacts with the advisory panel, the researchers of this project and the project officer of the EC.

We identified students and early career researchers through the European Society of Criminology Postgraduate and Early Stage Researchers Working Group. It provides a forum for students to discuss, develop and collaborate on new and innovative criminal justice research with other early stage researchers and lead or senior academics on a European level. We conducted interviews with those connected through this group. In particular, we wanted to ensure that students were in a forum that did not include

professors and felt free to express their views.

Interview Protocol

1. Challenges, Advantages

In this first section, we are asking questions about opinions on how to get the ECR off the ground.

- Regarding advantages:
 - With respect to an ECR, what would be helpful as a <student, academic, policy analysts> to see in an ECR?
 - Do you see undergrads through to PhD students using it?
 - o In terms of frequency, how often would you envisage ECR disseminated?
 - In terms of languages, do you think students will be fine with a report in English?
 - O What would make an ECR attractive to PhD students to read?
 - Are there any other advantages we have not discussed that may come from an ECR?
- Regarding disadvantages or challenges?
 - O Do you have some ideas on what may be some challenges of providing an ECR?
 - O Do you face any challenges to getting information from contact points?

2. Specific topics

In this second section, we are asking questions about content and ideas of what to include in an ECR.

- If you got to prioritise the topics in an ECR, what would you start with?
- What crime areas do you think should be considered in each year?

3. Structural issues

In this last section, we are asking questions about the format of the ECR and the institutional structure.

- Are there any existing models that would be good to look at?
- To operationalise this, it may be that there needs to be a crime centre like the EMCDDA. Do you have an opinion on whether that should be done?
- Imagine these two models one in which there is a more live interaction between user & data that prints a report and then one in which an annual report is printed – which do you prefer and what issues do you see with each?

Survey

Through discussions with the EC project officer, the project's advisory panel and the

researchers, we designed a survey instrument, which we launched on April 30, 2010. The main aim of the survey was to receive an overview of information from statistical officers or data experts in various locations throughout Europe.

We chose respondents from a contact list of the EC and gave them weeks to respond.

Survey Instrument

This is the survey instrument we emailed to data experts:

Dear Data Expert,

Thank you for taking the time to respond to this brief survey about crime and criminal justice (CCJ) data. The European Commission Directorate-General for Justice, Liberty, and Security has asked RAND Europe to help develop a blueprint for a new European Crime Report. Your responses to this survey will be critical for helping RAND Europe and the EC create a Report that will maximize value added while minimising the amount of time and resources Member States devote to collecting and reporting CCJ data.

We expect it will take you between 20 and 45 minutes to complete this short survey. Your responses will remain anonymous and will not be attributed to you, your agency, or your country. Please submit your responses to Dr. Jennifer Rubin via email at jkrubin@rand.org. We would appreciate it if you could submit your responses to us before Friday, June 11.

- 1 Your name:
- 2 Institution:
- 3 Email address:
- 4 Phone (In case we need to follow-up about a particular answer):
- 5 Who in your country reports CCJ data to EUROSTAT?

(If multiple individuals/departments report this information, please list them all.)

6 Who in your country reports CCJ data to UNODC?

(If multiple individuals/departments report this information, please list them all.)

7 Who in your country reports CCJ data to CEPEJ?
(If multiple individuals/departments report this information, please list them all.)
8 Who in your country reports CCJ data to the European Sourcebook of Crime and
Criminal Justice Statistics?
(If multiple individuals/departments report this information, please list them all.)
9 Do you think there are ways to make the data collection and/or reporting process more
efficient in your country?
Yes
No
If yes, how?
10 Have you encountered challenges when collecting CCJ data or reporting it to
European and international institutions? (For example, resource constraints, data availability, data reliability, sensitivity of findings, etc.)
Yes
No
If yes, please describe.
11 Do you know of others in your country who have encountered challenges when collecting or reporting CCJ information to European and international institutions
Yes
No
If yes, please describe.
10.0
12 Does your country produce a national crime report?
Yes

No
If yes, how often is it published?
Is it published for public use?
Yes
No
Is it published on the web?
Yes
If yes, what is the URL
If there is a publicly available report and it is not available on the Internet, would it be acceptable if we scanned a copy and put it on the Internet?
Yes
No
13 What types of crime data are collected in your country from non-criminal justice sources? (e.g. organised crime data from private companies; hospitals collecting admissions information on violent incidents, insurance companies collecting information on thefts and damage)
14 Do you frequently use CCJ information from other countries (e.g. for crime comparisons, understanding outcomes of policies and measures they are implementing, etc.)
Yes
No
If yes, which countries?
15 When you are looking for CCJ information for other countries, what sources do you find most useful for obtaining these data? Please rank all that apply (1=Most important; 2= Second most important, etc.):
That country's Ministry of Justice (or its equivalent)

Personal contacts in selected countries
Google Scholar or other specialised academic search
Google, or another Internet search engine
European Commission
Council of Europe
European Sourcebook of Crime and Criminal Justice Statistics
EUROSTAT
Supreme Audit bodies
United Nations
Other:
16 How useful has the European Sourcebook of Crime and Criminal Justice Statistics been to you and your colleagues?
Very useful
Useful
Barely useful
Not at all
Do not know
17 If the European Sourcebook of Crime and Criminal Justice Statistics has been useful, can you please specify how?
18 Would you and your colleagues find it useful if there was one central website where
you could go for pan-European data and links about crime and criminal justice in Europe?
Yes
No
19 Putting resources aside, do you think it would be useful to follow an EMCDDA-type

model and create a pan-European centre devoted to collecting crime data and analysing trends?

Yes

No

If no, are there other models that you think would be more useful? If so, why?

20 If you were tasked with improving CCJ reporting in Europe, what would your priorities be?

Thank you very much for taking the time to help us learn more about CCJ data in your country and in Europe.

Conference

The research team presented progress to date in the development of a blueprint for an ECR and invited session participants to discuss ideas for the ECR. Approximately 30 European criminologists were present at a working session at the European Society of Criminology 10th annual conference in Liège, Belgium, on September 10, 2010. We recruited through word of mouth, targeted selection by other participants and fliers left at the information desk with other session notifications.

The aim of the initial briefing was to provide some background and context to the need for an ECR, and to discuss and obtain input from those present on what an ECR could be and should seek to achieve.

The briefing set out parameters for the discussion, provided some detail of the content and characteristics to consider in an ECR, and elicited feedback from scholars in this field. This has required some careful stepping, as it has become clear many sought to conduct this project and were disappointed they were not selected. Some have made this clear and refused to participate, although most have been helpful and constructive in contributing thoughts and ideas to the project.

Literature Reviews

The review followed a structured multi-stage process of triangulation from three sources.

The first step involved an electronic bibliometric search to identify our sample. We used an electronic search of the Web of Science and RePEc⁸⁶ databases and searched the references of relevant articles to identify further, relevant sources (in identifying a sample for a survey, this is called snowballing). To address any missing data problems (many studies are in books or unpublished PhD theses, etc.), we complemented the search with Google, Google Scholar and targeted searches of four key crime and criminology journals (*European Journal of Crime, Criminal Law and Criminal Justice; Journal of Scandinavian Studies in Criminology and Crime Prevention; British Journal of Criminology*; and *Journal of Quantitative Criminology*). Lastly, we triangulated the bibliometric and open source searches with an "expert opinion" based review. This included discussion with other researchers and analysts to send us any relevant material. In particular, we asked statistical officers for insights on further data sources of which we might not have been aware or clarification on what appeared to be duplicate sources.

We were not attempting a methodology audit. We were examining the issues brought about in the literature on the quantitative and qualitative analysis of international CCJ information.

In summary, our literature review process was performed with three key aims:

- to identify data collections that are or have been collected
- to discuss the statistical, legal and substantive factors affecting international CCJ statistics
- to develop ideas for smarter aggregation of CCJ data.

⁸⁶ An economic and finance index housing over 850,000 items around the world. See http://ideas.repec.org/ (accessed December 31, 2010).