

**BETTER DECISION MAKING WITH TECHNOLOGY -  
THE JUDICIAL INFORMATION RESEARCH SYSTEM**

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***1. Introduction***

A major function of the Judicial Commission of New South Wales under the *Judicial Officers Act* is assisting courts to achieve consistency in approach in the sentencing of offenders. The Commission's objectives in this area are to reduce unjustified disparities in sentences imposed by the courts, to improve sentencing efficiency generally, and to reduce the number of appeals against sentences, thereby releasing valuable resources which can be redeployed to reduce court delays..

To address its statutory mandate, in 1989 the Commission commenced development of the Sentencing Information System, a computerised judicial support system designed to provide judicial officers with easy access to sentencing information. Development of the system continued and in 1996, when the SIS was in the process of being re-engineered to take advantage of new technologies, a decision was taken to expand the database to include legal and other information relevant to all New South Wales courts. The system was renamed the Judicial Information Research System (JIRS) in recognition of its new content and its evolution from the previous function of merely providing sentencing information.

## 2. *The Judicial Information Research System - JIRS*

The JIRS is a computerised database containing legally and statistically relevant information on sentencing and other legal information to assist judicial officers to make better decisions. It has been developed by the Judicial Commission of New South Wales under the guidance of experienced judicial officers. Most judges and magistrates have access to the JIRS on the Commission's host computer through laptop computers.

The JIRS is the first of its kind in Australia and is acknowledged as a world leader in the field of computerised sentencing databases and knowledge management systems. It is an extensive, interrelated and hypertext linked resource that provides discrete modules of reference material. The object of the sentencing component in JIRS is not to limit the sentencing discretion of each judicial officer. Its purpose is to provide judicial officers with rapid and easy access to the collective wisdom of the courts in order to assist them with their sentencing decisions.

The JIRS provides judicial officers with the full range of "point and click" and "cut and paste" facilities associated with an internet browser environment. An enhanced search facility allows the user to find the information easily by keywords, topic, date ranges and other filters.

The system provides primary research sources, such as judgments and legislation, linked to the Commission's array of secondary research material, including summaries of judgments, commentary on sentencing principles, and sentencing

statistics. The hypertext links in the JIRS enables related information within the system to be accessed easily and effectively.

### **3. *Databases in JIRS***

JIRS includes:

#### *Sentencing Statistics*

This component provides statistical information in the form of graphs and tables on the range and frequency of penalties imposed in recent cases of a similar nature. The judicial officer may enter specific details of the offence and the offender (age, prior record, bail status, plea, etc.) and select various displays of penalties, including fines and prison terms. Within seconds the judicial officer is able to read from the screen information on the "going rate" or "tariff" for the offence.

The statistical information is derived from data generated by the courts. The raw data is checked and processed by the Commission before being entered into the statistical database for use by judicial officers.

#### *Judgments*

This database contains full text sentencing decisions from the New South Wales Court of Criminal Appeal and also criminal cases decided by the High Court of Australia. More recently the Commission has included civil cases decided by the

High Court of Australia and Supreme Court of New South Wales, together with judgment from the Land and Environment Court, District Court and the Industrial Relations Commission. Information from this module may be retrieved either by selecting from a judgment-year alphabetic list of case names or by undertaking a word search. The information can be copied, downloaded or printed as required by the user.

### *Case Summaries*

This component contains brief facts, both objective and subjective, and sentencing outcomes of decisions of the Court of Criminal Appeal. This module makes it possible to quickly locate all cases relating to a particular offence and, from the summary, move to the full text of the judgment. When there are important sentencing principles enunciated, these are noted in the form of a key word at the head of the summary, and a hypertext link is made to the Sentencing Principles and Practice database (mentioned below).

### *Sentencing Principles and Practice*

The Sentencing Principles and Practice component contains concise, specially prepared, commentary on sentencing principles, and key passages from judgments that distil the essence of the judge's sentencing rationale. It is a convenient way of discovering the leading cases on sentencing and then calling up the full text of the judgment from the Court of Criminal Appeal or High Court databases. It also provides a description of the sentencing options available to the courts, as well as

the form of orders which may be used in respect of these options. This database is linked to other components of the JIRS.

### *Services Directory*

The Services Directory component contains essential information on drug and alcohol counselling, periodic detention, juvenile and community service options; all cross referenced by geographic location and type. Dedicated directories for adult and juvenile facilities, as well as other features, make this a useful resource for locating key rehabilitation facilities that may be of particular relevance to an offender facing sentencing.

### *Advance Notes*

These are summaries of cases decided by the Court of Criminal Appeal and the High Court of Australia. Each "note" contains the main submissions of counsel and a precis of the legal principles or rulings arising from the decision. The advance notes are prepared by the Office of the Director of Public Prosecutions and provided to the Commission for inclusion in the JIRS.

### *Sentencing Date Calculator*

The sentencing date calculator has been a feature of JIRS for a number of years. It provides a quick and easy method for determining critical eligibility release and termination dates, once the court has decided when a sentence of imprisonment is

to commence, whether a non-parole term is to be specified, and the duration of the various components of the sentence. The sentencing date calculator has been designed to reflect the approach for determining sentences as specified in s 44 of the *Crimes (Sentencing Procedure) Act 1999* (NSW).

### *Electronic Bench Books*

This component contains on-line versions of all Judicial Commission bench books. Bench books are practical reference works that contain information about managing and conducting trials. They include relevant legislation, case law, sentencing principles, procedural guidelines, suggested jury directions and sample orders. Bench books help improve consistency of approach by judicial officers and reduce the risk of appellable error. The bench books in JIRS include:

- The Sentencing Bench Book
- The Criminal Trial Courts Bench Book
- The Local Court Bench Book
- The Civil Trial Courts Bench Book
- The Equality Before the Law Bench Book.

These works are hypertext linked to the case law and legislation contained in the JIRS.

### *Legislation*

Electronic versions of all New South Wales and Commonwealth of Australia Acts and Regulations are held in this database. Each section of legislation relevant to



sentencing is hyperlinked to the related caselaw and statistics of the offence. For selected legislation (e.g. the *Crimes Act 1900*) the database contains historical versions dating from 1991.

### *Recent Law*

A major challenge for judicial officers is to keep abreast of the latest legal developments and particularly in criminal law. Recognising this need, JIRS builds on its previous work and now offers the new “Recent Law” component to provide concise notification of legal news as it happens. “Recent Law” covers all aspects of criminal law, including sentencing, directions to juries and new legislation. The simplified search menu for “Recent Law” enables users to quickly access relevant items that have been posted without having to wade through a large amount of material

### *Offence Packages*

Offence Packages is a menu item designed to provide JIRS users with ready access to information for the most common offences in the criminal calendar. In short, the page for each offence package consolidates information found in the various menu options on JIRS. It directs the user to all the key parts of JIRS with information about the offence such as:

- Recent Law items
- Legislation
- Criminal Trial Courts Bench Book

- Sentencing Bench Book
- Sentencing statistics
- NSW Court of Criminal Appeal summaries
- Table of NSWCCA sentencing appeals where the standard non parole period provisions applied
- Publications

A uniform approach to organising the material is taken, although the range of relevant material varies for each offence. At the time of writing, offence packages have been created for the following offences: murder; manslaughter; assault and wounding; dangerous driving; sexual assault including child sexual assault; armed robbery; break and enter; various supply offences, and commonly prosecuted Commonwealth offences. More offences will be added over time.

#### *Conference papers*

Papers from Judicial Commission educational conferences and seminars from 2007 onwards are now accessible to all judicial officers on JIRS. The Conference papers can be accessed through a search screen or by browsing for papers by conference, author surname, key word, topic or date. Papers are added shortly after each conference and seminar and are reproduced as they are delivered.

#### *Publications*

This database contains an on-line version of all Judicial Commission publications including:

- The Judicial Officers Bulletin
- The Judicial Review Journal
- Sentencing Trends and Issues Papers
- Research Monographs
- Education Monographs

A brief outline of the Commission's activities in maintaining the various components of JIRS is attached at Appendix "A".

#### **4. *The Technology***

The JIRS is built on Open Source Software, It uses World Wide Web (WWW) technology with standard HTML pages on a web browser such as Microsoft Internet Explorer or Mozilla Firefox as the user interface. The major technical subsystems include Linux operating system, Apache web server, Postgre SQL database with tsearch2 search engine and XMLMind editing software.

Since the system is modular in design and uses open systems technology, it is adaptable to future changes in processes. It can be easily interfaced to any system that can generate ASCII or any standard word processing output and reconfigured as required.

All usual security control mechanisms such as users, user groups, user roles, user authorization, and audit trails are available. Security is implemented both at the

operating system level and Web server level. PHP, Java Script and Perl programming languages are also used in JIRS.

## **5. Use of JIRS**

Judicial officers and legal practitioners in New South Wales use the system extensively in their day to day work. Usage currently is approximately 90,000 page hits per month by approximately 1,000 potential users.

Current use of JIRS is split between:

- Judicial officers: 32%
- The Office of the Director of Public Prosecutions: 32%
- Subscribing legal practitioners: 16%
- State and federal government agencies, Aboriginal Legal Services, Legal Aid Commission, Office of the Public Defender and university research centres: 18%.

## **6. Conclusion**

In May 2009 the Judicial Commission conducted a user satisfaction survey. The survey was designed to gain an understanding of the usefulness of the different components of JIRS and to gather any suggestions for improvements. 768 responses were received. 97% of respondents expressed satisfaction with JIRS and

81% indicated they accessed information from the database at least once a week and 97% use it at least once a month. All suggestions for improvement to the system have been implemented. JIRS is in a state of continuing evolution and the Commission constantly re-assesses the utility of the various aspects of the system and how they can be improved further.

The JIRS has become an essential tool for New South Wales courts, both at first instance and appellate level, and for legal practitioners.

## APPENDIX "A"

## JIRS: a complete judicial decision support system

Description	What the Judicial Commission does	JIRS Component
Early notice of important legal developments	<ul style="list-style-type: none"> <li>– identify significant decisions and legislative changes</li> <li>– extract core of case law and legislation and post online</li> <li>– print and distribute monthly Recent Law flyer</li> </ul>	Announcements and Recent Law
Statistics on the range and frequency of penalties imposed in similar cases	<ul style="list-style-type: none"> <li>– receive data from NSW Bureau of Crime Statistics and Research, Department of Juvenile Justice and the courts</li> <li>– audit data</li> <li>– process and load data on JIRS within 2–4 months of receipt</li> </ul>	Sentencing statistics
Full text of judgments and case summaries for selected cases	<ul style="list-style-type: none"> <li>– receive cases from High Court, Court of Criminal Appeal (CCA), Court of Appeal, Supreme Court, Land and Environment Court, Industrial Relations Commission, District Court and Local Court</li> <li>– advance notes supplied by Office of the Director of Public Prosecutions</li> <li>– load full text judgments within 1 working day of receipt</li> <li>– prepare Recent Law items within 14 days of receipt for important decisions</li> <li>– prepare important CCA case summaries within 2 weeks of receipt</li> <li>– link cases and summaries to sentencing principles and practice component and the <i>Criminal Trial Courts</i> and <i>Civil Trials Bench Books</i></li> </ul>	Case law
Concise commentary on sentencing principles	<ul style="list-style-type: none"> <li>– take sentencing principles from new cases and legislation and post as Recent Law items</li> <li>– link principles in bench book to case law and legislation</li> </ul>	Sentencing principles and practice ( <i>Sentencing Bench Book</i> )
Practice and procedure manuals for the various courts containing current statements of relevant legal principles, sample orders and suggested jury directions	<ul style="list-style-type: none"> <li>– identify significant decisions and legislative changes which impact on the content of the bench book</li> <li>– Bench book committees consider content and draft amendments and special bulletins</li> <li>– publish updates on JIRS and in hard copy</li> </ul>	Bench books
All NSW and Commonwealth Acts and Regulations	<ul style="list-style-type: none"> <li>– receive legislation from NSW Parliamentary Counsel's Office and Commonwealth Attorney General's Department</li> <li>– process and load legislative changes within 24 hours of receipt</li> <li>– alert users to commencement date of criminal legislation via Recent Law items</li> <li>– link legislation to relevant case law and sentencing statistics</li> <li>– verify currency of legislation weekly</li> </ul>	Legislation
Monographs, <i>Sentencing Trends &amp; Issues</i> , <i>Judicial Officers' Bulletin</i> , <i>The Judicial Review</i>	<ul style="list-style-type: none"> <li>– identify relevant topic or research area</li> <li>– commission author</li> <li>– edit and typeset manuscript</li> <li>– publish in hard copy and online</li> </ul>	Publications
Essential information on treatment options and rehabilitation facilities	<ul style="list-style-type: none"> <li>– identify relevant service providers</li> <li>– maintain currency of information</li> </ul>	Services directory