

Audit Report No. 25, 2003-2004

Intellectual Property Policies and Practices in Commonwealth Agencies

Introduction

Background

- 2.1 Intellectual property (IP) refers to the rights granted by law in relation to the fruits of human intellectual activity. It includes all copyright, all rights in relation to inventions (including patent rights), plant varieties, registered and unregistered trade marks (including service marks), registered designs, circuit layouts, confidential information and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields. Each IP type is recognised and protected under Australian law.¹
- 2.2 In both the public and private sectors, IP is being recognised as an increasingly important resource, contributing to and enhancing both the operations of an organisation and its value. The Commonwealth government in particular, due to the breadth and diversity of its activities, is a significant generator, acquirer and user of IP.

¹ Australian National Audit Office (ANAO), Audit Report No. 25, 2003-2004, *Intellectual Property Policies and Practices in Commonwealth Agencies*, Commonwealth of Australia, p. 17.

- 2.3 The fact that IP assets are less tangible than physical assets makes managing, valuing and accounting for IP more difficult and complex.
- 2.4 However, there is a set of common principles that should underpin the management of IP in any organisation. During the audit, the Australian National Audit Office (ANAO) developed a framework for IP management, which comprises a number of integrated management activities. The framework was developed with specific reference to the public sector environment. It consists of a number of management elements that work together to comprise IP management.

The audit

- 2.5 In 2003 the ANAO conducted an audit of the IP policies and practices in Commonwealth agencies. The aim of the audit was to:
- form an opinion on whether Commonwealth agencies have systems in place to manage their IP assets in an efficient, effective and ethical fashion; and
 - identify areas for better practice in IP management by those agencies.
- 2.6 Case studies were conducted in seven agencies:
- Australian Bureau of Statistics (ABS);
 - Airservices Australia;
 - Department of Defence, including Defence Science and Technology Organisation;
 - Australian Nuclear Science and Technology Organisation;
 - Department of Employment and Workplace Relations;
 - Commonwealth Scientific and Industrial Research Organisation (CSIRO); and
 - Grains Research and Development Corporation.
- 2.7 The ANAO presented its report to the Parliament in February 2004.

Audit findings

- 2.8 The ANAO audit found that only 30 percent of agencies had developed specific policies or procedures for managing IP. The agencies involved in the case studies had varying systems in place to manage their IP.
- 2.9 At the time of the audit, the Commonwealth did not have a whole-of-government policy approach to managing IP. As a result, agencies were

responsible for devising their own approaches to the management of the IP they generated and/or acquired.

- 2.10 The ANAO noted that, although the Department of Communications, Information Technology and the Arts (DCITA) document *The Commonwealth IT IP Guidelines (2000)* provided useful guidance to agencies on the management of IT-IP (including consideration of ownership options for IP managed by an agency), there remained a need for broader guidance and support for agencies on IP management more generally.² The ANAO considered that the scheduled review of the *Commonwealth IT IP Guidelines* by DCITA could provide an opportunity for more detailed assessment of the need for further guidance and support for Commonwealth agencies on the management of IP in general, with input from other interested agencies.
- 2.11 The ANAO considered that the development of a whole-of-government policy on the management of IP by Commonwealth agencies could assist agencies to understand the importance of IP management and the issues involved.
- 2.12 A whole-of-government policy could also nominate an agency, or agencies, responsible for monitoring and reporting on the implementation of the policy and provision of appropriate support to agencies. The ANAO made two recommendations; the second of which aimed at developing a whole-of-government approach to address these areas.
- 2.13 The other ANAO recommendation aimed to improve the efficient, effective and ethical administration of agency IP.³ The ANAO also identified areas for improvement and better practice in agency management of IP.

ANAO recommendations

- 2.14 The ANAO made the following recommendations:

Table 2.1 ANAO recommendations, Audit report no. 25, 2003-04

1.	The ANAO recommends that, in order to ensure the effective and efficient management of intellectual property, agencies develop an intellectual property policy appropriate for agency circumstances and functions, and implement the required systems and procedures to support such a policy. <i>All agencies agreed or agreed in principle.</i>
2.	In order to ensure that the Commonwealth's interests are protected, the ANAO recommends that the Attorney-General's Department, the Department of Communications, Information

2 ANAO Audit Report no. 25, 2003-04, p. 22.

3 ANAO Audit Report no. 25, 2003-04, p. 24.

Technology and the Arts, and IP Australia (along with other relevant agencies), work together to develop a whole-of-government approach and guidance for the management of the Commonwealth's intellectual property, taking into account the different functions, circumstances and requirements of agencies across the Commonwealth, and the need for agency guidance and advice on intellectual property management.

All agencies agreed or agreed in principle.

The Committee's review

2.15 The Committee held a public hearing on 9 August 2004 to review the progress made against the audit's recommendations. Witnesses from the following agencies attended the public hearing:

- the ANAO;
- the ABS;
- Attorney-General's Department (AGD);
- CSIRO;
- DCITA;
- Department of Finance and Administration (Finance); and
- IP Australia.⁴

2.16 The Committee took evidence on the following issues:

- whole-of-Government approach;
- recognition and benefits for contributors; and
- classifying and valuing Intellectual Property.

2.17 The Committee notes that the ANAO's report was tabled over 18 months ago, in February 2004. The Committee acknowledges that given the lapse of time since the tabling of the ANAO's report, there may be some changes in the way Government agencies now manage their IP. The Committee has endeavoured to seek updates on the status of agencies' response to the recommendations. This information is reported where relevant throughout this chapter.

4 A full list of witnesses appearing at the hearing is at Appendix D.

Whole-of-Government approach

- 2.18 At the time of the ANAO's audit, the Commonwealth did not have a whole-of-government policy approach to managing IP. Agencies were responsible for devising their own approaches to the management of their IP.⁵
- 2.19 The audit noted the need for broad guidance and support for agencies on IP management. It recommended that the AGD, DCITA, and IP Australia, along with other relevant agencies, work together to develop a whole-of-government approach and guidance for the management of the Commonwealth's IP. This approach would take into account the different functions, circumstances and requirements of agencies across the Commonwealth, and the need for agency guidance and advice on IP management. All audited agencies agreed outright or in principle to the ANAO recommendation.⁶
- 2.20 The Committee asked all agencies at the public hearing for their views on the recommended whole-of-government approach to IP management. All agreed that it was a step in the right direction.⁷ Agencies explained that such an approach would:
- guide agencies to improve their management of their IP;
 - encourage government Chief Executive Officers to focus appropriate attention on IP management issues;
 - overcome agencies' lack of understanding of IP; and
 - acknowledge that IP management is an issue that needs to be addressed.⁸
- 2.21 The AGD told the Committee that the Commonwealth already has a whole-of-government approach to copyrighting. Copyright is a type of IP right that covers the expression of original ideas in material form. Copyright protection is provided by the *Copyright Act 1968* (Copyright Act). The AGD oversees provisions in the Copyright Act for government use of copyright material. Those provisions effectively set out a whole-of-government approach. The AGD feels that a whole-of-government

5 ANAO Audit Report No. 25, 2003-2004, p. 22.

6 ANAO, Audit Report No. 25, 2003-2004, pp. 22, 59.

7 *Transcript of Evidence*, 9 August 2004, pp. 2, 16.

8 ANAO, *Transcript of Evidence*, 9 August 2004, p. 3; Department of Communications, Information Technology and the Arts (DCITA), *Transcript of Evidence*, 9 August 2004, p. 15; IP Australia, *Transcript of Evidence*, 9 August 2004, p. 15.

approach to IP would complement the work that it is already doing on copyright.⁹

- 2.22 The ABS told the Committee that it has a substantial amount of IP in the form of internally-generated software, which it generally manages internally. The ABS also has external IP issues with its on-selling of data and statistical collections. It uses copyright to ensure that published data is only used for its intended purpose. The ABS told the Committee that it had given little thought to a whole-of-government approach.¹⁰
- 2.23 The CSIRO advised the Committee that it possessed significant experience of the creation, management and exploitation of intellectual property.¹¹
- 2.24 DCITA told the Committee that it had already begun working with IP Australia and AGD towards a whole-of-government approach to IP management. Its goal was to create a statement of principles that expressed good IP management practice. At the hearing in August 2004, DCITA advised the Committee that it expected the development of the IP principles to be completed by October 2004.¹²
- 2.25 The three responsible agencies would then develop an IP better practice manual to provide guidance and advice on how to implement these principles.¹³
- 2.26 In February 2005 the Committee sought an update on progress on the development of a whole-of-government approach to IP. DCITA advised that due to changes in portfolio responsibilities following the October 2004 Federal Election, IP matters are now handled by the AGD. The Committee was also advised that due to these portfolio changes, and reallocation of resources dedicated to the implementation of the Australia-United States Free Trade Agreement, work on progressing the development of IP principles had been delayed. In May 2005 AGD advised the Committee that 'options for progressing the response to the ANAO report are currently being considered'.¹⁴

9 Attorney-General's Department (AGD), *Transcript of Evidence*, 9 August 2004, p. 4; ANAO, Audit Report No. 25, 2003-2004, p. 31.

10 Australian Bureau of Statistics (ABS), *Transcript of Evidence*, 9 August 2004, pp. 2, 14.

11 Commonwealth Scientific and Industrial Research Organisation (CSIRO), *Transcript of Evidence*, 9 August 2004, p. 3.

12 DCITA, *Transcript of Evidence*, 9 August 2004, pp. 5, 10.

13 DCITA, *Transcript of Evidence*, 9 August 2004, pp. 5, 9, 10.

14 DCITA and Attorney-General's Department, Email correspondence to Committee secretariat, dated 9 February 2005, 6 May 2005, and 10 May 2005.

- 2.27 The ANAO recommendation did not specify the involvement of other agencies in developing a whole-of-government approach to IP management. The ANAO told the Committee that the recommendation was not intended to focus on any particular line agency. However, it felt that AGD, DCITA and IP Australia should consult with line agencies like CSIRO and ABS while drafting the whole-of-government approach. This would give the development process the benefit of other agencies' experience of IP.¹⁵
- 2.28 The ABS and CSIRO are both major generators of IP. The ABS reported intangible assets, including IP, to a value of \$76.8 million in its 2002-03 Financial Statement, while CSIRO reported annual revenue from intellectual property of \$17.6 million in 2001-02. Both agencies told the Committee that they would be happy to contribute to the development a whole-of-government approach to IP management.¹⁶
- 2.29 A number of agencies told the Committee that a whole-of-government approach to IP management cannot adopt a uniform approach across all agencies. Agencies that are commercially oriented require IP management that cultivates the market for their IP, while agencies that are not commercially oriented do not. A whole-of-government approach should set a framework for IP management, but leave each agency free to optimise its role within the framework.¹⁷

Committee comment

- 2.30 The Committee is disappointed to note that more than 18 months after the ANAO's audit report was tabled, there is little progress towards developing a whole-of-government approach to IP management. DCITA and other agencies outlined plans to develop an IP strategy at the Committee's public hearing in August 2004, however it appears little has been done since that date.
- 2.31 The Committee believes that CSIRO and ABS should be involved in developing a whole-of-government approach to IP management, given that they are both major generators of IP.
- 2.32 The Committee feels that it is vital that line agencies that are major generators of IP contribute to developing the whole-of-government

15 ANAO, *Transcript of Evidence*, 9 August 2004, p. 8.

16 ANAO Audit Report No. 25, 2003-2004, pp. 21, 95; ABS, *Transcript of Evidence*, 9 August 2004, p. 2; CSIRO, *Transcript of Evidence*, 9 August 2004, p. 3.

17 CSIRO, *Transcript of Evidence*, 9 August 2004, p. 3; ANAO, *Transcript of Evidence*, 9 August 2004, pp. 3-4.

approach to IP management. Accordingly, the Committee makes the following recommendation:

Recommendation 1

2.33 **The Committee recommends that the Attorney-General's Department commence development of a whole-of-government approach and guidance for the management of the Commonwealth's intellectual property, for completion by May 2006. The Attorney-General's Department should consult widely with Commonwealth agencies, particularly those which are major generators of intellectual property.**

2.34 The Committee agrees that the whole-of-government approach to IP management needs to accommodate the different circumstances of each agency. Accordingly, it makes the following recommendation:

Recommendation 2

2.35 **The Committee recommends that the whole-of-government approach to the management of the Commonwealth's intellectual property within a framework for IP management should leave each Commonwealth agency free to optimise its role within the framework.**

Recognition and benefits for contributors

2.36 The Committee was interested in how IP management distributes benefits from any commercialisation of IP. Distributing benefits to the individuals involved in creating IP would reward creativity and innovation. This may, in some circumstances, encourage further innovation and help agencies to retain valuable employees.

2.37 The Committee understands that the traditional approach to distributing the benefits of IP commercialisation does not recognise the contribution of individuals. This approach recognises Commonwealth agencies as inventing, developing and commercialising IP, and all benefits are distributed to the agency. The individual is not regarded as important to the IP process.

- 2.38 AGD advised the Committee that the Copyright Act includes moral rights amendments that enable individuals to be acknowledged in copyright material that they produce for the Commonwealth as part of their employment. More generally, however, any IP produced by a Commonwealth employee is effectively owned by the Commonwealth.¹⁸
- 2.39 DCITA and IP Australia agreed with the Committee that agencies should recognise the contribution of individuals in IP development. The ANAO told the Committee that agencies should consider the issue while developing IP management policy.¹⁹
- 2.40 Agencies generally felt, however, that commercialising IP and recognising individual contributions were not primary goals of Commonwealth IP management. DCITA felt that IP management should facilitate public access to IP. CSIRO told the Committee that IP should be managed to maximise the benefit for Australia.²⁰
- 2.41 The Committee had heard of IP policies that distributed one-third of benefits to the inventing team, one-third to their division and one-third to the corporate organisation. Such policies produce uniform and outstanding results because they reward individuals for creating the IP, the division for making this possible and the organisation for commercialising the IP.²¹
- 2.42 The Committee asked CSIRO whether it had considered this sort of benefit distribution policy. CSIRO told the Committee that it was piloting a program that would make available to inventors a portion of the future income of their inventions. It had come up with this benefit distribution policy in order to recruit and retain talented employees. This is an issue because CSIRO must compete for employees with universities and the private sector, and would be disadvantaged if it could not offer incentives to top people.²²
- 2.43 CSIRO's benefit distribution system, however, is quite complicated to implement. Each inventor may have contributed a different amount of effort to the invention, and many other people are involved in making the

18 AGD, *Transcript of Evidence*, 9 August 2004, p. 8.

19 DCITA, *Transcript of Evidence*, 9 August 2004, p. 7; IP Australia, *Transcript of Evidence*, 9 August 2004, p. 9; ANAO, *Transcript of Evidence*, 9 August 2004, p. 7.

20 DCITA, *Transcript of Evidence*, 9 August 2004, p. 7; CSIRO, *Transcript of Evidence*, 9 August 2004, p. 5.

21 Joint Committee of Public Accounts and Audit (JCPAA), *Transcript of Evidence*, 9 August 2004, p. 6.

22 CSIRO, *Transcript of Evidence*, 9 August 2004, p. 6, 16.

- invention a reality. The contributions and appropriate rewards must be worked out for each of these people.²³
- 2.44 CSIRO told the Committee that it would probably not be possible to come up with a precise formula for recognising everyone's contribution. Instead, this would probably be worked out by management or by the members of the inventing group. Both of these solutions raise problems of their own.²⁴
- 2.45 CSIRO told the Committee that benefit distribution did not fit well with its present philosophy of rewarding employees. CSIRO employees are paid to be creative, and are currently rewarded through the promotion system. CSIRO employees generally earn less than their university colleagues, but CSIRO reports that their staff are generally happy with their situation.²⁵
- 2.46 Another difficulty with benefit distribution is that much of an invention's income is not realised immediately. CSIRO told the Committee that it usually takes between five and ten years for a patent to start earning money. Inventors would have to wait several years to receive the benefits of their invention.²⁶
- 2.47 The benefit distribution scheme also risks channelling talented people away from work that benefits Australia but does not generate an income. People will choose to work on projects that will make money rather than ones that will benefit Australia. CSIRO is currently determining how to operate its scheme to retain top people while avoiding this situation.²⁷
- 2.48 IP Australia told the Committee that Commonwealth IP management policy should not prescribe a distribution of benefits. Agencies should promote innovation amongst their employees, but it would be better to let each agency choose its own way of doing this. Different agencies conduct business differently, and the distribution of benefits will not be an appropriate or effective incentive in all of them.²⁸

Committee comment

- 2.49 The Committee believes that IP management is an important way to retain talented employees and promote an environment of innovation in

23 CSIRO, *Transcript of Evidence*, 9 August 2004, pp. 6, 11.

24 CSIRO, *Transcript of Evidence*, 9 August 2004, p. 11.

25 CSIRO, *Transcript of Evidence*, 9 August 2004, p. 10.

26 CSIRO, *Transcript of Evidence*, 9 August 2004, p. 10.

27 CSIRO, *Transcript of Evidence*, 9 August 2004, p. 16.

28 IP Australia, *Transcript of Evidence*, 9 August 2004, p. 9.

Commonwealth agencies. All agencies should consider a benefit distribution scheme when developing their IP management policies.

- 2.50 The Committee recognises that setting up a fair and practical benefit distribution scheme would be very difficult. Indeed, setting up such a scheme across all Commonwealth agencies would be almost impossible. Therefore, the Committee agrees with IP Australia that agencies should be free to choose their own way of promoting innovation and retaining talented employees.

Classifying and valuing Intellectual Property

- 2.51 The ANAO audit stated that agencies' IP policy will need to define the types of intellectual property that the agency will need to manage. Not all types of intellectual property generated or held by an agency will require active management. The report suggests that agencies' IP policy should outline how to classify IP, the types of IP that should be identified and further managed, how they are to be managed, and by whom.²⁹
- 2.52 The Committee asked agencies how they were planning to classify their IP.
- 2.53 DCITA told the Committee that it has made a complete stock-take of its IP production. This stock-take divided DCITA's IP into categories of low, medium and high importance, based on:
- operational significance;
 - strategic significance;
 - commercial potential; and
 - public significance.³⁰
- 2.54 The Committee was interested in how DCITA classifies its corporate email, which may have a high operational significance but generally has a low IP value. DCITA told the Committee that it classifies emails according to the importance of the work that they relate to.

An email that is contributing to work on a key decision may be operationally important, and that would be rated as 'high', but if it were just general work product thinking, prior to leading into

29 ANAO Audit Report No. 25, 2003-2004, pp. 49-50.

30 DCITA, *Transcript of Evidence*, 9 August 2004, p. 12.

further development of an idea, then they might rate that as 'low'.³¹

- 2.55 DCITA advised that it is focussing its management efforts on the 'high' category. However, the production of commercial or beneficial IP is not a significant part of DCITA's role. Most of its IP is in the 'low' category, in the form of papers, letters and email. This IP is protected by copyright, and requires little further management.³²
- 2.56 DCITA told the Committee that the stock-take was the first in the process of classifying its IP and locating its most important IP. So far, the stock-take had succeeded in raising staff awareness of IP classification, and staff were now thinking about how to classify the IP that they were producing.³³
- 2.57 CSIRO told the Committee that it understands that there are different types of intellectual property, and it has a different approach to each type. For example, publications are protected by copyright and the IP rights belong to the authors. Patents, on the other hand, are a fundamental part of CSIRO's mission of technology transfer, and IP rights are not assigned to individuals.³⁴
- 2.58 Finance told the Committee that categorising IP is very difficult because of complexities in evaluating the commercial potential of IP. The current rules for valuing research and development state that benefits must be able to be obtained beyond reasonable doubt. This sets a very high standard that is difficult to achieve. IP valuation requires a reliable measure, and IP that cannot be separated from an agency's core business cannot be valued. These accounting requirements are very difficult to meet.³⁵
- 2.59 ABS told the Committee that it had a method of classifying IP assets since 1997, and had been developing it with ANAO ever since. ABS is trying to develop a robust valuation process, but this is complicated by the fact that IP does not realise its full value immediately. Some ABS IP continues to generate returns for 10 to 15 years. Therefore, ABS is developing an IP

31 DCITA, *Transcript of Evidence*, 9 August 2004, p. 12.

32 DCITA, *Transcript of Evidence*, 9 August 2004, p. 12.

33 DCITA, *Transcript of Evidence*, 9 August 2004, p. 12.

34 CSIRO, *Transcript of Evidence*, 9 August 2004, p. 15.

35 Department of Finance and Administration (Finance), *Transcript of Evidence*, 9 August 2004, pp. 12-13.

valuation process that is sustainable over time and unaffected by large fluctuations in IP activity.³⁶

Committee comment

- 2.60 The Committee is pleased with the work to date in developing a system for classifying IP. All agencies should consider using the criteria developed by DCITA for classifying their own IP.
- 2.61 The Committee recognises that it is very difficult to assess the value of IP accurately. Agencies would be assisted in classifying their IP if they had access to guidelines on developing IP valuation systems. These guidelines would also improve the standard of reporting on IP in agencies' annual reports. The Committee makes the following recommendation:

Recommendation 3

- 2.62 **The Committee recommends that the Department of Finance and Administration, in consultation with the Attorney-General's Department, develop guidelines to assist agencies in developing valuation systems for their intellectual property.**
- 2.63 The Committee notes that the ANAO plans to undertake a performance audit of management of intellectual property in selected Commonwealth agencies during 2005-06. The Committee looks forward to reviewing this ANAO audit in due course and hopes that the audit reveals a comprehensive whole-of-government approach to intellectual property management, with agencies following agreed policies and procedures.

36 ABS, *Transcript of Evidence*, 9 August 2004, p. 13.

