

COMPUTER SOFTWARE

162. The Committee received a number of submissions in relation to computer software. Submissions from the Australian Information Industry Association (A.I.I.A.) and **I.B.M. Australia Limited** (I.B.M.) opposed the repeal or any relaxation of the sections. Submissions from The Professional Computer Users' Group, the Association of Librarians of Colleges of Advanced Education, and a Western Australian company, D-Tech Pty Limited, sought the repeal or the relaxation of the sections. Except for I.B.M., these organisations were represented at the public hearings, in some cases their submissions being taken over the telephone.
163. Before summarizing the issues raised in these submissions it is proposed to describe the short history of the protection of computer software. Computer software forms part of what may be called the information industry. This industry consists, in part, of computers (hardware), stored information (data bases), and programs. The term software is used in this Report to cover both data bases and programs. Programs can be in "source code" which a machine cannot execute directly, or "object" or machine code. Programs are also usually described as "operating systems", which "run" the computer, or "applications", which perform "human" tasks, such as accounting. It also covers what is sometimes described as firmware, that is, systems programs fixed in micro chips which form an integral part of the
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computer itself. The uncertainty which surrounded the issue of copyright protection for computer software which is illustrated by the decisions of the Federal Court in Apple Computer Inc. v. Computer Edge Pty Limited (1984) 1 F.C.R. 549; (1984) 53 A.L.R. 225 and the High Court on appeal from the Federal Court (1986) 161 C.L.R. 171 was resolved in part by the 1984 amendments to the copyright Act. These amendments included a new definition of "literary work" which now includes:-

- "(a) a table, or compilation, expressed in words, figures **or** symbols (whether or not in a **visible** form); and
- (b) a computer program or compilation of computer programs".

Also included in the amendments were definitions of "computer program" and "material form" and an amended definition of "adaptation". The effect of these definitions is to make it clear that copyright will subsist in a program notwithstanding that it is stored in a form which is only machine readable. The amended definition of "adaptation" includes a translation from one computer language to another and the definition of "material form", in relation to a work or an adaptation of a work, includes any form (whether visible or not) of storage from which the work or adaptation can be reproduced. As the Explanatory Memorandum to the legislation indicates? for a program to be protected it need not necessarily be capable of execution in its existing form but may need first to be

translated into another language or converted into machine readable form. The material form which is required includes such methods of fixation as storage or reproduction on magnetic tape, read only (ROM) or random access (RAM) computer memory, magnetic or laser discs, bubble memories, and other forms of storage which will doubtless be developed.

164. It is relevant at this stage to note similar developments in other parts of the world. The United Kingdom enacted legislation for the protection of computer software in July 1985 - Copyright (Computer Software) Amendment Act 1985 (U.K.). Although thought to be similar in effect, the United Kingdom amendments are different in form from the Australian provisions. The definition of "writing" in s. 48 of the United Kingdom Act never contained the limitation that it be in a visible form; therefore the definition of "literary work" in the same section did not require amendment. Further, the amending Act states that the copyright Act 1956 (U.K.) shall apply in relation to a computer program as it applies in relation to a literary work. Section 2 of the amending Act provides that references to reduction of a work to a material form shall include references to the storage of that work in a computer. In the United States it would seem that the statutory definition of literary works in the Copyright Act of 1976 is broad enough to include computer data bases and programs (Nimmer on copyright, pp. 2-43 and following). Section 117 of the Act (as amended by the Computer Software
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copyright Act of 1980) makes it clear that reproduction and adaptation of computer programs constitute infringing acts unless within the scope of that section's exemption. The amending Act also inserted a definition of "computer program" in section 101 of the Copyright Act. It has been held that not only is a computer program a work of authorship subject to copyright but that this includes programs in machine-readable language (object code) - see Apple Computer Inc. v. Franklin Computer Corporation 714 F.2d 1240 3d Cir. 1983.

165. The Committee recognizes that protection of computer software remains a vexed issue despite the legislative provisions described above. The Australian legislation does not, for example, answer the question of who is the author of a work created by the use of a computer such as a computer aided design. The status of "semiconductor chips" is an issue which has particular relevance to the importation question. A semiconductor chip is an "integrated circuit" which is a circuit in which active elements, some or all of the interconnections and passive elements are integrally formed in and/or on a piece of material and which is intended to perform an electronic function. It may be protected, under Australian law, because the design from which the chip is constructed is protected as an artistic work under the Copyright Act as an article embodying a three dimensional reproduction of an artistic work. If a chip is not such an article, a memory chip would at least be affected by the operation of the Act
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in its application to a computer program stored in such a chip. The World Intellectual Property Organisation (W.I.P.O.) is presently considering a draft treaty on the Protection of Intellectual Property in Respect of Integrated Circuits. In the current draft (April 1987) "microchips" (manufactured integrated circuits) which have been put on the market by or with the consent of the proprietor, shall not be prevented from being imported. The Committee notes that, in the event that Australia accedes to this Treaty, the Copyright Act prohibition against parallel importation of programs unless amended would be used to defeat the intended free importation of legitimate memory chips.

166. A brief outline of the software industry in Australia was provided by the A.I.I.A. in its submissions where it is said:-

"The Australian software industry is based very much on' the marketing and support of overseas produced computer software. In most cases, software companies or distributors in Australia enter into exclusive marketing, agreements with overseas principals.

There also exists a large and innovative local software industry in Australia, developing and supplying software which is competitive in price and quality in the overseas market.

The market for software in Australia is highly competitive and there are many participants; as a consequence, normal pricing pressures and the usual market forces ensure that all participants remain competitive."

More specific information on the structure of the industry

was provided by the Department of Industry, Technology and Commerce. It appears that the industry is characterized by two distinct types of undertakings, namely:-

1. Relatively large enterprises (often with significant overseas ownership) employing over 100 people and engaged in importing software and providing software support services (including customer services, education, literature and software development). These firms are small in number but have a high market share.

2. Small, mainly Australian owned enterprises employing as few as four persons. These firms are large in number and collectively employ a significant number of software programmers. Generally they engage in specialised software production or modify imported software packages to meet Australian market requirements.

The Department estimates that in 1985 the Australian software industry comprised over 900 independent software houses employing between 12,000 and 15,000 persons and enjoying total annual sales of approximately \$700,000,000. In a survey published by the Department in 1987, it estimated that in 1986 the industry comprised 1,150 small locally owned companies producing specialised software or modifying non-Australian software, and about 50 large enterprises mainly importing software. In 1986 Australian

domestic market sales were estimated at \$1.2 billion, of which 50.3% was packaged software.

167. A.I.I.A. was established in 1978 and at the date of its submission - May 1986 - comprised 97 members consisting of more than 85 percent of the information industry in Australia. The Committee received representations from A.I.I.A. in support of the retention of sections 37 and 38 in relation to computer software. A request was also made to extend section 135 procedures to cover all copyright works, including software, and to delete the requirement that the works be "printed copies". As in the case of books and records, it was claimed that the Australian software industry is based very much on the marketing and support of overseas produced computer software. Furthermore, competition exists in the software industry because software houses compete with each other, at least insofar as applications programs are concerned, by marketing programs which represent alternative choices for the consumer. Australia needs access to the best overseas software, and it is claimed by A.I.I.A. that this might be endangered if copyright protection is withdrawn. It was further claimed that protection against pirated software would be considerably reduced without the protection of territorial copyright. The submission said:-

"The development of software is a labour intensive activity representing the creative efforts of highly qualified and skilled authors. More importantly, it is extremely costly to create and compile. However, once obtained it is cheap to

produce. Unless some adequate form of protection exists against illicit reproduction, developers will be understandably reluctant to invest the millions of dollars required for the development of software."

It was also argued by the Association that parallel imports could be sold more cheaply than programs supplied through the licensee because other importers did not have to carry the costs of marketing and servicing, which together represented high investment costs for the Australian licensee. Also important, the submission continued, is the question of support services such as education, training and product enhancement. It was said that these types of support services are indispensable to the continued efficient performance of the products supplied, and thus to continued customer satisfaction. In order to provide such services the copyright owner or exclusive licensee of software must be assured of some measure of protection as an incentive to establish and develop distribution networks and support services in a particular territory. The submission said:-

"The efficiency, indeed, the existence, of such a network will, be eroded if others can enter the software market without providing such services."

It would appear to be the case that "packaged" software is at times sold "off the shelf" without any prospect of associated support or up-date services.

168. In similar vein to the case put by the publishers of printed works and the manufacturers of sound recordings, it was asserted by the A.I.I.A. that prevention of parallel imports of software ensures a secure and relatively stable marketing environment in which the considerably high investment costs associated with marketing and supporting software products can confidently be undertaken by a distributor or licensee. The submission said:-

"This ensures that a distributor or licensee will achieve projected returns 'on initial investment, and will thus continue to develop and expand that particular market, to the end-user's obvious benefit. If the software product is obtainable within that market or territory from alternative sources, the commercial advantages from initial high investments will not be obtainable, and a distributor or licensee will make no effort to create or expand a market for products."

169. The basis of A.I.I.A.'s submission in relation to s. 135 of the Act was that the section, which by its own terms restricts its operation to any "printed copy" of a work, does not cover programs contained in, for example, magnetic discs. The Association urged that the Act be amended to make clear the applicability of s. 135 to all works and subject matter protected by copyright. The Association further submitted that s. 135 should be amended so as to allow exclusive licensees to take action under the section. Under the section as it is presently worded, only the owner of the copyright may avail him or herself of the procedure provided by the section. This is because s. 119, which

covers the rights of exclusive licensees, only gives such licensees rights in relation to actions for infringement. It was claimed that s. 135 could be a practical and effective tool with which exclusive licensees of software could safeguard their investment.

170. The Deputy President of the Australian Software Houses Association, Mr. Bernard Green, spoke for the Association at the public hearings. He said the Association was founded in 1982 in order to provide an independent voice for Australian companies who were in the business of developing software. It now includes amongst its members (143 in number at the time of the hearings) companies who import software. In general terms, Mr. Green said his Association supported the submission of A.I.I.A. In addition, he referred to the electronic delivery of software by, for example, satellite transmission, and the enormous potential this has to facilitate piracy. On the other hand, Mr. Green also recognized the potential that exists for exclusive licensees of foreign produced software to act unreasonably.

171. The PC Users Group Inc is an association incorporated in the Australian Capital Territory. It has a current membership of approximately 450 professional computer users, including a number of government departments and other corporate members. It was the submission of the PC Users Group that the parallel importation of legitimate copies of computer software should be allowed. The Group

stated that it did not support software piracy in any form. In support of its submission the Group made a number of claims. These are summarized as follows:-

1. The provisions of the Act allow enforceable monopoly arrangements to be set up where none would otherwise exist. This results in high prices. The facts of one case can be cited where a computer retailer imported a software package and sold it for \$850 (with a 35% profit) compared to the \$2000 price at which the licensed importer was selling it at the same time.

2. Furthermore, the argument that the exclusive licensees can provide adequate support to the end consumer does not cater for the many intelligent customers who do not need support, yet under the present arrangements must pay for it regardless.

3. The provisions also prevent importation completely where the exclusive agent does not want to market the product in Australia. This happens where an overseas company releases a new product, but decides, for reasons of corporate strategy, to use the old stocks by selling them in the "colonies".

4. Where the exclusive agent refuses to sell in Australia, this can significantly affect the ability of Australian industry to develop add-on products for

both the Australian markets and for export.

In concluding its submission, the Group made the following recommendations:-

- "1. The monopoly provisions of the Copyright Act be repealed and in their place provisions be inserted to ensure that importation of software products with Copyright in a Berne or Ucc (Universal Copyright Convention) country be an infringement if they are imported from non-Berne or Ucc countries.
2. If recommendation 1 is not accepted, that, where an exclusive agent for a Copyright owner refuses to sell a product in Australia, importation of that work for sale etc will not constitute an infringement.
3. If recommendation 1 is not accepted, that all provisions of the Copyright Act relating to the enforcement of monopolies be moved to the Trade Practices Act."

172." The Association of Librarians of Colleges of Advanced Education is, as its name implies, concerned with libraries in Colleges of Advanced Education, which, it was said in the submission, acquire software for a number of purposes, including the training of students in the use of software, the making of software available to students and staff for particular computations, and, in some circumstances, as a substitute for text books. In its submission this Association referred to "a tradition among British and United States publishers" to make agreements concerning works published in both countries, which give the British

publisher exclusive rights to distribute the work in Australia. The submission continued:-

"Reinforced by these Sections of the Act, these agreements have had a deleterious effect on the provision of works in Australian libraries. It is not unknown for a work readily available in the United States to be unavailable to an Australian library, because a British publisher with 'rights' to the Australian market has in fact not published the work, or allowed it to go out of print.

It is very undesirable for college libraries and students that a similar situation be allowed to develop with computer software. Because traditional book publishers are entering the software market there is a risk that the traditional 'rights' to geographically limited markets will also be introduced to the software market."

The Association also referred to data bases which many libraries use and to which access is provided by data base vendors in America, Europe and elsewhere. The concerns expressed in relation to computer programs, it was said, apply equally to data bases. In short, the Association was primarily concerned with the question of availability of computer programs and data bases and considered it highly undesirable that the geographically restrictive "rights" that reduce the availability of books should apply to computer software.

173. D-Tech Pty Limited sent a large volume of papers to the Committee documenting the history, to date, of two actions in which the Company had been involved. In its submission
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D-Tech referred to problems of over-pricing which, it claimed, were caused by the market protection afforded by the importation sections. At the hearings, it also referred to its inability to supply computer equipment because it did not have a licence to import the operating system software embodied in the equipment. The Company suggested the following changes:-

- "1. Repeal sections 37 and 38 of the Act.
2. Replace repealed sections with sections designed to protect Australian holders of copyright i.e. original holders of copyright. Assignment of copyright from foreign to Australian companies where the goods are actually manufactured in Australia. The burden of proof of manufactured content should be on the copyright holder.
3. Foreign companies should not be able to enforce copyright action against persons selling their original equipment in Australia where the competition is only from 'local' agents selling exactly the same item."

174. The issues in this area are, as in other areas, pricing and availability. The software users claimed that the current importation provisions restrict competition in the market allowing the licensed distributors to affix unrealistically high premiums to the price of software. The licensed importers claimed that high premiums are necessary in order to cover the cost of support services. The software users argued that there are many sophisticated end-users who do not require support services and are disadvantaged by the relatively high prices. The software users also claimed

that in certain instances licensees have chosen not to market certain software products because the perceived market is not sufficient to generate adequate returns. In answer to this, the licensed importers claimed that large scale parallel importation would greatly reduce their ability to establish and develop distribution networks, that market penetration would decrease and that this would result in an overall decline in the availability of software. The licensed importers also said that diminished protection of the copyright owner's intellectual property would result in a large increase in the distribution of pirate software. The software users all claimed that they have no desire to see piracy increase. It should be noted that the Committee has not received any information which would establish either that exclusive software distributors have set exceptionally high margins on imported products or that access to foreign software products has been hindered by supplier inefficiencies. However, the Committee does acknowledge that the potential exists for price and supply problems to exist under the current import provisions and it does not dispute that these problems may have occurred.

175. Although similar submissions in relation to other copyright works have led the Committee to recommend that there should be no repeal of the importation provisions, the Committee did consider that there were a number of other factors, unique to the protection of computer programs, which suggested that computer programs should be treated differently. The first such factor is the state of flux in
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which the whole issue of the protection of computer programs and related articles presently seems to be. Computer programs in object code have only been protected in Australia since 1984. Technological developments have superseded the legislation. For example, the question of ownership of computer created works is not catered for. The fact that semi-conductor chips and their protection are being considered internationally as a matter apart from computer programs or other copyright works and, more importantly for this reference, the fact that the traditional territorial division of copyright protection is presumed to have no part in the protection of semi-conductor chips, raises the possibility that some form of exhaustion of rights would also be appropriate for computer programs. The second factor is related to the first. It is that computer programs have only been protected for four years. They are still not protected in many other countries. Unlike other works which are protected by copyright, the owners or licensees of computer programs cannot claim that their business structures and practices have evolved over many years on the basis of territorial divisions. Accordingly, a recommendation to allow parallel importation of programs ought not to represent as fundamental a change to software industry marketing practices as it might to the practices of other copyright industries. The final factor which the Committee considered is the ease and utility of incorporating computer programs not only into computers, but also into all sorts of other articles which would not otherwise be

protected. Many automatic household appliances, which require programming, provide examples. The Committee sees some similarity between this situation and that of liquor importers who are prevented from importing particular lines because the copyright in the label is vested in an Australian licensee. Elsewhere in this Report the Committee has recommended that such a use of the Copyright Act in relation to labels should not be permitted. Although the operating software is a much more significant component of a computer operated system than is the label on a liquor bottle, the potential for abuse where programs are incorporated into otherwise unprotected articles, is evident. In this regard, the Committee notes that the draft treaty on the protection of integrated circuits previously referred to does not extend protection to layout designs of integrated circuits the creation of which is exclusively dictated by the functions of the integrated circuit to which they apply. As the notes attached to the draft treaty indicate, this prevents protection extending to the technical function of the integrated circuit. This, it seems to the Committee, is partly aimed at preventing the problem outlined above.

176. On balance, however, the Committee is not persuaded that computer software should be treated any differently from other works which are protected by copyright. Computer programs are now included in the Copyright Act as if they were literary works. To exclude them from one aspect of the protection afforded by the Act - namely, protection

from parallel importation - would create much confusion and would, despite the concerns outlined above, be difficult to justify. Further, the Committee's recommendations that importation be allowed where there is either a specific order or where the article sought to be imported is unavailable in Australia, as outlined at the beginning of this Report, do offer solutions to the major problems raised by the software users. The range and quantity of imported software products available to the Australian consumer will increase. On the other hand, the support and marketing activities of the licensed importers will not be substantially affected because the demand for imported software products that need to be altered to meet Australian conditions will remain unaffected, and in the area which will be affected - packaged software - the number of unsophisticated users who do require support will be unaffected by such changes.

177. The Committee considers that there is a case, in the interests of consistency, for an amendment of s. 135 so as to include computer software. Section 135 will be referred to in more detail a little later. Its operation has been minimal, but there seems no reason in principle why its provisions should not be amended to include all areas of copyright. At the moment, its operation is restricted to printed copies of works. Infringements of the importation provisions of the Act in relation to computer software will not very often involve the importation of printed copies. More usually the offending articles will be micro chips,

discs or tapes in which programs are fixed.