

MODEL  
PROVISIONS  
ON THE  
PROTECTION  
OF  
COMPUTER  
SOFTWARE

PREPARED BY THE  
INTERNATIONAL BUREAU  
OF THE WORLD INTELLECTUAL  
PROPERTY ORGANIZATION



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# Model Provisions on the Protection of Computer Software

## INTRODUCTION

### History of the Model Provisions

1. The Model Provisions on the Protection of Computer Software contained hereunder (referred to as "the model provisions") are the result of six years' work carried out by the International Bureau of WIPO with the assistance of experts.

2. In 1971, an Advisory Group of Governmental Experts on the Protection of Computer Programs met to advise the International Bureau on the steps to be taken in order to prepare a study, requested by the United Nations,<sup>1</sup> on the appropriate form of legal protection for computer programs and on the possibilities in the field of international arrangements, with a view to facilitating the access of developing countries to information on computer software. This study was continued by the International Bureau with the help of an Advisory Group of Non-Governmental Experts on the Protection of Computer Programs, which met in 1974, 1975, 1976 and 1977.

3. Before and during the elaboration of the model provisions, the following questions were also discussed by the Advisory Group:

- (a) the *need for special legal protection* for computer programs and their related documentation (such programs and documentation are covered by the term "computer software"); and
- (b) the desirability that any system of legal protection should incorporate a system for the *registration or deposit of computer software* or for the compliance with other formalities.

The results of the discussions on these two questions are outlined below (see paragraphs 5 to 8 and 9 to 21, respectively).

4. Moreover, the Advisory Group considered, in its 1976 session, the question of an international treaty for the protection of computer software. Such a treaty could provide for a minimum level of protection for computer software and a system of recognition of the effects of an international registration or deposit of computer software by the Contracting States. Whereas the latter aspect of a possible treaty would

depend on the establishment of registration or deposit systems on the national level (see hereinafter paragraphs 9 to 21), an obligation to provide for minimum protection presupposes that legal decisions on the protection to be granted on the national level have stabilized to some extent, an effect which could be achieved through the adoption of the present model provisions.

### Need for Special Legal Protection

5. Before adopting or amending its legislation so as to provide special protection for proprietors and users of computer software, each country will almost certainly consider two basic questions: Is computer software in need of legal protection? Are the various forms of protection that are already available under its law insufficient?

6. Legal protection of computer software is desirable for the following reasons:

(a) *Investment and time required.* The investment in computer software is large: under a recent estimate, based on the number of computers currently in use, and the past and expected increase in that number, together with estimates of the staff employed on programming activities and the cost of software, it is possible that a sum of the order of 13 billion US dollars is spent annually on the creation and maintenance of software systems.<sup>2</sup> Although this must vary considerably, the time required for the planning and preparation of computer programs is long, often amounting to many man-months of total effort. The need for legal protection of computer programs should be seen not only in terms of the large-scale investment in computer software but also from the viewpoint of the small software enterprise or individual creator of software. The existence of strong legal protection would encourage the dissemination of their creations and enable such creators to avoid duplication of work. Without such dissemination, numerous programmers may spend considerable time and effort in order to accomplish, in parallel work, the same objective; although the programs created by them may be different, any one of those programs would probably fully accomplish the said objective.

<sup>1</sup> See the Report of the United Nations Secretary-General on the Application of Computer Technology for Development (UN document E/4800 of May 20, 1970), paragraph 202 in particular.

<sup>2</sup> Estimate quoted in the (United Kingdom) Report of the Whitford Committee on Copyright and Designs Law (1977—London, Her Majesty's Stationery Office, Cmnd 6732), paragraph 477.

In any case, legal protection will encourage exploitation of software for purposes other than internal use.

(b) *Likely future developments.* Already, software is estimated to account for by far the greater part of the total cost of computer systems. The proportions of 70% and 30% representing the expenditure on software and hardware, respectively, would seem to be a reasonable estimate. In any case it can be expected that the software elements will, in the future, account for a substantial, if not a predominant, proportion of the expenditure and that the total expenditure on computer software will constantly increase. At present, the largest amount of expenditure on computer software seems to be devoted to the creation and maintenance of specific purpose user programs, not of general applicability; since such programs are not of direct interest to third parties, their misappropriation is relatively unlikely in view of the adaptation required. However, there is a trend towards the creation of computer programs that are of interest to more than one user or even of general and widespread utility and thus can help to save expenditures; such a trend towards standardized user software is likely to increase as computers become more accessible to the public and easier to operate and as the proportion of the cost of the hardware components in computer operations decreases. In the context of the increasing accessibility of computer software, reference should be made to two important developments: the creation of computer networks among nations aided by sophisticated telecommunications systems (a trend which highlights the need for *international* protection), and the move towards new programming techniques facilitating the use of computers by persons other than trained programmers.

(c) *Protection as an incentive to disclosure.* The importance of ensuring the ready accessibility of the important form of modern technology represented by computer software has been referred to on many occasions, particularly in the context of the needs of developing countries (see, for example, the Report of the UN Secretary-General mentioned in footnote 1, above). Although some computer programs would not be made publicly available in any event (for example, programs revealing a trade secret of an enterprise or those designed to complement computer hardware and transferred only with the corresponding computer), it is reasonable to suppose that many proprietors of the rights in other programs would at present rely primarily on secrecy either in order to exclude all others from using the software or to permit only selected persons to use it under a confidential disclosure contract. Where effective legal protection is available, the proprietors of rights could instead rely on that protection and disclose the software.

(d) *Protection as a basis for trade.* The lack of legal protection may be particularly harmful in the context

of trade. Both the seller and the buyer of computer software are interested in legal protection because it increases the legal security of their relationship. A system of protection would also be of advantage to developing countries; such a system would encourage dissemination of software to those countries, not only because the publication of the software would not defeat protection but also the protection would eliminate the uncertainty of enforcing a confidential disclosure contract. Also, legal protection would enable dissemination on favorable terms in some cases; for example, the proprietor of the rights in computer software might be encouraged to license it in a developing country at an especially low royalty if he could be sure of being able to take action against users in other countries if his software were accidentally disclosed by the licensee in the developing country. Moreover, the greater disclosure in the advertisement of software which, it is hoped, will result from legal protection may help such countries to evaluate the alternatives on the international market.

(e) *Vulnerability of computer software.* Consideration should also be given to the vulnerability of some forms of computer software; for instance, a "computer software package," consisting of a computer program and related descriptive and explanatory documentation, is expensive to prepare and easy to copy as soon as the prototype is available.

7. It may be that computer software can, in a few countries, be adequately protected without any change in existing laws. But, due to the newness of computer technology and the consequent scarcity of judicial decisions, and to disagreement among legal experts, there is a considerable state of uncertainty in this field. Two forms of legal protection may be specifically directed to the results of the intellectual creativity in computer software: they are *patent protection* and *copyright protection*. In addition, there are *other branches of law* which can provide means for protecting computer software, especially where it constitutes a trade secret.

(a) *Patent protection.* The patent would seem to be an appropriate form of legal protection of computer software since it covers new and inventive technical solutions. It can thus apply to programs embodying the same concept as a patented program, but in a completely different form; it can also be relied on to prevent others using the same program in a computer. However, in many countries computer programs and other items of computer software, in particular algorithms, cannot be regarded as patentable inventions; the European Patent Convention, for example, contains an express provision to that effect (Article 52(2)(c)). In some countries, a computer program would seem to be at least *indirectly* protectable by, for example, a patent granted for a computer programmed in a new way or for a process

relating to the use of a program as a means of operating a computer in a new manner or as a means of control in the manufacture of articles. In most countries the question of patentability cannot be answered with any degree of certainty. Moreover, even if patent protection were generally available, it would probably cover only a minute proportion of computer programs since it is considered that only in very few cases (perhaps 1%) would a program have sufficient inventiveness to satisfy the requirements of patent law, although a large amount of time, effort and resources may have been devoted to its creation. There are also serious practical difficulties to be taken into account: difficulties in conducting the examination relating to the novelty and inventiveness of a computer program, in establishing the documentation on the prior art and in finding qualified examiners. One further difficulty is that, under patent procedures, any person has access to a full disclosure of the invention enabling a person skilled in the art to make the patented product or use the patented process; in view of the relative difficulty of detecting misappropriations of a computer program, it could be argued that such an unrestricted disclosure to the public is not desirable; and yet, to make an exception in the case of computer programs might prejudice a fundamental principle of patent law: disclosure to the public.

(b) *Copyright protection.* Whereas patent law protects the technical idea underlying an invention, copyright law focusses on protecting the form in which ideas are expressed, although protection is not limited to that form. Thus, copyright protection would seem to be particularly appropriate for computer software as a whole (and not merely computer programs) since a large amount of computer software consists of descriptive or explanatory matter; even a computer program (consisting, for example, of magnetic tape) is a form of expression—of the ideas contained in the software leading up to the program. In most cases the intellectual creativity in computer software resides in the skill and effort used to make those ideas “understandable” to a computer, as economically and as effectively as possible. However, although some kinds of computer software (especially those in verbal form) are clearly protectable under copyright laws, experts disagree on whether other kinds (particularly a computer program, on magnetic tape for example) can be considered a literary, artistic or scientific work, which are the traditional subjects of copyright protection. Moreover, such protection may be of very limited value since it essentially covers only copying (or related acts such as translation or adaptation); thus, in itself, the use of a program to operate a computer cannot be prevented by copyright law (just as the making of a cake cannot be an infringement of the copyright in the recipe). It is essential that use in a computer should be covered by the rights in computer

software; it is, in fact, possible that copyright law can provide a remedy in this case since it is probable that the use of a program always involves its copying in the computer memory, but the courts may not regard such internal reproduction as sufficient for the purposes of copyright law. The model provisions essentially adopt a copyright law approach which takes account of their subject matter's affinity with copyright protection and overcomes the possible limitations indicated above.

(c) *Other forms of protection.* The laws of certain countries provide a number of means of preventing the unauthorized disclosure or use of secret information. There are a number of laws which directly penalize or provide civil law remedies against the misappropriation of a trade secret or of information obtained in breach of confidence. A common means of protecting information concerning computer software, which is provided by all laws, is by contract. Even in the absence of an express term in a contract, persons in a fiduciary relationship with a computer enterprise, such as its employees, can be prevented from disclosing secret information. Secret information can also be indirectly protected by certain provisions in criminal law, by general provisions in civil codes or by certain actions in the law of torts. Even in the absence of secrecy, the misappropriation of computer programs may, in certain circumstances, be actionable in the context of unfair competition law. However, even in countries where trade secrets can be protected directly, there is uncertainty or differences as to the scope of protection and as to the conditions (for example, whether disclosure to a licensee or to a restricted number of other third parties would prejudice the secrecy of the know-how protected). The disadvantage of protection under contract law is that in most cases it will be difficult to prevent persons outside the contractual relationship from disclosing or using a program. Moreover, one of the advantages of the establishment of clear and adequate legal protection for computer software is to encourage greater disclosure of information on computer software which would otherwise be vulnerable to misappropriation. The aim of such protection is therefore precisely to avoid any necessity to rely on secrecy and on laws and legal measures safeguarding secrecy.

8. *In conclusion,* it can be said that computers are becoming more and more important in the fields of science, technology and commerce and other spheres of human activity; computer software accounts for the greater part of investment in computer technology and its creation requires a high degree of intellectual effort. It would therefore seem to need and deserve a guarantee of legal protection, which should encourage investment and trade in computer software and promote its wider accessibility. However, there is at present a state of uncertainty as to the protection of computer software under various legal systems. The

purpose of the model provisions is to eliminate that uncertainty.

### Deposit of Computer Software

9. The model provisions do not make the protection of computer software dependent upon its deposit or registration with a national authority or upon compliance with other formalities, such as the marking of the computer software. Countries interested in the model provisions might like to consider the desirability of including in their laws a mandatory provision of the kind indicated or of at least providing for an optional system for the deposit or registration of computer software. The arguments for and against such a mandatory system are outlined below, followed by those for and against an optional system.

10. The basic argument in favor of a *mandatory system of deposit* is that, in return for the special protection accorded, the proprietor of the rights in computer software should be obliged to deposit the software. Such a requirement would ensure the eventual disclosure of the software to the public with the consequent advancement of the art. It would also enable third parties to direct their efforts to creating computer software in new fields. Moreover, the deposit would promote the dissemination of computer software, facilitate its sale or licensing and increase certainty concerning the object of protection in each case, which would otherwise be difficult to define. These arguments apply to some extent also to the less strict requirement for the *registration of computer software*, under which the proprietor would simply have to provide particulars of the computer software, together with an abstract of it, which would be disclosed to the public.

11. A further argument in favor of a mandatory system of *deposit or registration* is that the proprietor should give notice to the public that a certain item of software is protected as well as an indication of when the term of protection expires, a date that is not easily ascertainable due to the fact that computer software is not normally published. In this connection, a number of experts feel that computer software, including additions updating a computer program, should at least be *marked* with an indication of the name of the proprietor of the rights and the date of their expiration.

12. The requirement of adequate disclosure to the public in return for the rights granted by the State is a fundamental obligation under patent law. Supporters of the basic argument, outlined in the first sentence of paragraph 10, above, are thus adopting a *patent law approach*. If such an approach is adopted, it is reasonable that it should apply to the system of legal

protection of computer software as a whole, in particular to the rights granted under the law. However, for the reasons indicated in paragraph 7(a) and (b), above, the model provisions are essentially based on a *copyright law approach*; the rights granted are consequently less extensive than those of a patentee: they do not protect the concepts underlying computer software and cannot prevent a person from independently creating the same computer software and using it. The primary purpose of the protection granted is not to allow proprietors to profit from a period of exclusive rights as a reward for the creation and disclosure of computer software, but simply to encourage creation and dissemination of computer software and to prevent the misappropriation of the results of another's valuable work, thus introducing legal security which should both facilitate trade in computer software and encourage proprietors to make it more generally available.

13. The advantages of a mandatory deposit system have also been questioned. Countries adopting it would have the difficult task of devising and administering a system for the classification and indexing of computer software; otherwise, in view of the vast amount of computer software created each year, the advantages of disclosure and notice to the public would be nugatory. Such a system would be facilitated if it were established at the international level. Furthermore, in order to fully achieve its purposes, a deposit system would have to provide for a time limit after which the depositor could no longer prevent disclosure of the software to the public. The fixing of such a time limit may, however, give rise to problems: if, taking into account the vulnerability of the proprietor's position in the case of complete disclosure, the time limit is fixed in a way that allows for a period of substantial secrecy, the advantages of disclosure for the public would be reduced or even eliminated.

14. With regard to a requirement for compliance with formalities in general, a number of disadvantages have been referred to. It has been stated that compulsory formalities would not be in the interest of the small software enterprises or individual users, who might be unaware of the need to comply with them; they might also render the system of protection unattractive since some people would seem to be in favor of such a system but opposed to deposit. A mandatory deposit might even have a discouraging effect on creators if they have to make a full disclosure of their creations. In view of the copyright law approach that has been adopted, it is above all logical that the protection provided by the model provisions should not be made dependent in any way (as far as either the existence or its enforcement before the courts is concerned) upon compliance with formalities, since there is no such requirement under the copyright laws of the

majority of countries. On the other hand, if the copyright law of a country adopting the model provisions does contain a requirement for the deposit and/or marking of protected works, such a country would presumably include the same requirement in any law based on the model provisions. Moreover, any formalities would create problems in view of the fact that computer programs—and even commercialized standard software—are frequently updated.

15. *In conclusion*, it is suggested that countries considering the question discussed above should first decide the basic approach to the system of protection to be established. If a patent law approach were adopted, it would be logical for a requirement for compliance with formalities to be included in legislation based on the model provisions, which, as a whole, would have to be examined in the light of such an approach. If the principle of the model provisions (copyright law approach) were adopted: countries whose copyright law contains no requirement for compliance with formalities would have to consider, on the balance of convenience, whether and to what extent such a requirement should be introduced for forms of computer software that are not protected by copyright; other countries would presumably adopt the same solution as that contained in their copyright law.

16. Some of the arguments outlined above also apply to the question whether a system of *optional deposit of computer software* should be adopted. Under one possible system that has been discussed, the proprietor of the rights in computer software would be able to deposit with a national authority a computer program and/or any or all the documentation constituting software and relating to the program. Within that optional deposit system there would be a registration system which would be mandatory in the sense that, if a deposit were made, a certain amount of information would have to be furnished for the purpose of publication; one of the most important requirements in this connection would be the furnishing of an abstract of the computer program which had been deposited or, if it had not been deposited, to which the deposited software related. To the extent that they had not been subjected to secrecy by the depositor, the contents of deposits would be accessible to the public. The deposit would not confer any legal rights but merely certain presumptions as to the time of the creation of the software.

17. An optional deposit system of the kind referred to would have three main purposes:

- (1) to enable the public to have direct access to non-secret computer software;
- (2) to provide the depositor with evidence of the prior existence of this computer software;

(3) through publication of an abstract of the computer software, to enable the public to know the kind of software available.

18. Doubts have been expressed, however, as to whether the first-mentioned purpose could be achieved through a deposit system of the kind indicated. It might be impracticable to require the deposit of computer programs in machine-readable form, and would be impossible for a depositary authority to provide copies of such programs unless it had a wide range of machinery for doing so, and it might not, in any event, be desirable that the public should be given copies of programs in machine-readable form (even if they are not secret) owing to the danger of infringement of the rights in the program; the deposit would be of limited value if only hard copies of the program or its related software were available to the public. Moreover, the public could never be sure that a computer program had not been updated since its deposit; thus, potential users would in any event have an interest in directly establishing contact with the depositor. Doubts have also been expressed concerning the second purpose mentioned in the preceding paragraph; the same evidential advantages could perhaps be achieved through the deposit of the computer software elsewhere, with a notary public for instance. If all that remains is the third purpose mentioned, this could be achieved through the simpler registration system (see paragraph 20, below).

19. It has been suggested that a full deposit system could be more meaningful if it were made more attractive to potential depositors by the enhancement of advantages to them, for example by the grant of a longer term of protection to deposited software. In addition, the question could be considered of providing for an international priority right to be based on deposit. However, it should be borne in mind that too great incentives for deposit would have the same effect as making deposit compulsory, a question that has been discussed above.

20. Some of the advantages mentioned above could be obtained through an *optional registration system* without any legal effects; the information registered could include an abstract of the computer program, the machines on which it could be used and the languages, possibly the price and other terms for the use of the software and possibly also the date of expiration of the protection.

21. The usefulness of an optional deposit or registration system would have to be examined in the context of the needs of software producers and users, and of the services already existing in that field. Any such system having no legal effects would probably have to be considered outside the framework of a system of legal protection of computer software.



### Purpose and Structure of the Model Provisions

22. The purpose of the model provisions is to assist countries in complementing, or introducing certainty into, their laws applicable to the protection of computer software. They endeavor to regulate their subject matter in as complete a way as possible so that they could form the basis of a special law on the protection of computer software; they would of course have to be adapted to the legal system of the country adopting them and supplemented with the usual provisions in its legislation (transitional provisions and entry into force, for example).

23. At the same time, the model provisions should not be understood as necessarily requiring adoption in a separate law on the protection of computer software. In many countries, the principles contained in the model provisions may simply amount to clarifications or extensions of existing legal rules and could be incorporated—in so far as they are not already included—in existing laws, for example partly in the copyright law and partly in the law on trade secrets or unfair competition. Even in such a case, the complete presentation in the model provisions has the advantage that it draws attention to the various problems which may exist under particular national systems and indicates possible solutions to those problems.

24. The structure of the model provisions is as follows:

*Section 1* defines the protected subject matter ("computer program," "program description," "supporting material" and "computer software," the latter consisting of one or more of the first-mentioned items) and the term "proprietor."

*Section 2* deals with the question to whom the rights in respect of computer software belong, in particular in the case where computer software has been created by an employee; moreover, *Section 2* regulates the transfer and devolution of rights in respect of computer software.

*Section 3* defines the requirement of originality of computer software.

*Section 4* makes clear that concepts (as opposed to the form in which they are expressed) are outside the protection of the Law.

*Section 5* lists the acts covered by the rights of the proprietor; the list can be divided into two parts: items (i) and (ii) deal with the unauthorized disclosure of, and the unauthorized access to, computer software, while items (iii) to (viii) relate to acts of unauthorized copying, use, sale, etc., of computer software.

*Section 6* defines infringement and specifies two cases that are not to be considered infringement (the independent creation of computer software and the particular situation of foreign vessels, aircraft, spacecraft or land vehicles entering the territory of the country).

*Section 7* regulates the duration of the rights under the Law.

*Section 8* establishes the relief available in the case of infringement.

*Section 9* makes clear that protection on the basis of other provisions is not excluded.

25. The establishment of effective protection for computer software in as many countries as possible is desirable, not only from the point of view of each country but also from the point of view of the international community. The use of computer software frequently concerns more than one country; in particular, in view of the fact that modern technology enables the operation of a machine having information-processing capabilities to be controlled by signals transmitted from a distant place, it may well happen that the user of software is in one country while the machine which performs certain functions under control of the software is in another country. If, under such circumstances, effective protection of computer software existed only in one of those countries, it might happen that no protection whatsoever is granted since, in the country with the effective protection, it may not be possible to prove that the unauthorized act was committed on its territory and not in the other country. To fill those gaps and to achieve international harmonization of national laws is another important purpose of the model provisions for the protection of computer software.

## MODEL PROVISIONS

## COMMENTS

## Section 1

*Comments on Section 1*

## Definitions

For the purposes of this Law:

(i) "computer program" means a set of instructions capable, when incorporated in a machine-readable medium, of causing a machine having information-processing capabilities to indicate, perform or achieve a particular function, task or result;

(ii) "program description" means a complete procedural presentation in verbal, schematic or other form, in sufficient detail to determine a set of instructions constituting a corresponding computer program;

(iii) "supporting material" means any material, other than a computer program or a program description, created for aiding the understanding or application of a computer program, for example problem descriptions and user instructions;

(iv) "computer software" means any or several of the items referred to in (i) to (iii);

(v) "proprietor" means the person, including a legal entity, to whom the rights under this Law belong according to Section 2(1), or his successor in title according to Section 2(2).

a. Section 1 (items (i) to (iv)) explains what the Law means by the term "computer software" and places the various kinds of computer software into three different categories (items (i) to (iii)), which, under Section 5, benefit from different levels of protection. Item (v) provides for a single word to denote the beneficiary of the rights under the Law.

b. The term "computer software" covers both a program for making a computer carry out a particular task and the related documentation. A large amount of documentation may be prepared before a computer program takes its final form—consisting (in the case of a digital computer) of particles in successive groups on, for example, magnetic tape. In the present normal practice of a computer working with binary data elements, each performs one of two different functions and is usually expressed by a "1" or a "0" in the system of binary numbers.

c. When designing a particular computer program, first the problem to be solved by the computer has to be analyzed. Then a general method for solving the problem must be adopted or devised in order to give an idea of the main stages in the running of the program. Each of these stages must then be broken down into more and more detail, until finally the instructions are developed which will enable a computer for which the program is designed to perform all the operations necessary for the execution of the program. These instructions will normally first be expressed in one or more "programming languages," which are understandable both to the computer and to the user of the program. They are then translated (possibly in several steps and usually by means of a program already in the computer) into the lowest level of expression, which causes the computer to perform its tasks. In the process outlined above, one may first prepare a problem description and then, progressively, descriptions—or schemes in the form of flow charts, for example—of the method adopted, of the main stages of the program and of the steps to be taken in the implementation of those stages. Each item of such documentation, in addition to the set of instructions developed from it, is covered by the term "computer software" in the Law.

d. *Item (i)* defines a "computer program," which (under Section 5) is eligible for protection covering not only unauthorized disclosure and copying but also certain forms of use of the program.

e. A computer program must, under item (i), be a set of instructions which is capable of causing a "machine having information-processing capabilities" to operate in a specified way. The term

## COMMENTS

*Section 1 (continued)*

“machine” has been preferred to “computer.” The former has a more precise and wider meaning in the computer art and would be understood by persons skilled in that art as covering, in addition to “computers,” any other special purpose machine, such as an automatic telephone exchange or an “intelligent” terminal or component thereof having information-processing capabilities. In this connection, the expression “machine having information-processing capabilities” would seem to be a little wider than the more normal “information-processing machine” and has thus been preferred to the latter expression. It would be more usual to speak of “data-processing” capabilities, but such an expression might not cover a machine for automatically processing text in, for instance, the production of a newspaper.

f. A further requirement under item (i) is that the “set of instructions” constituting a computer program must be capable of causing a computer to perform a particular task. The program must therefore contain *all* the instructions necessary to enable the computer to perform each of the successive operations leading to the desired result. This does not mean that the program has to be error-free before it can be considered as such; most programs have to be tested and corrected before they become operational or are commercialized. Item (i), moreover, implies that, in order to be recognized as such, the computer program must be ready for incorporation in a “machine-readable medium.” This condition is obviously fulfilled if the program is already on magnetic or punched tape for inputting in the computer; it is, however, also fulfilled if the set of instructions is in a humanly readable language capable, when directly copied by suitable means (for example, by means of the keyboard on the computer terminal), of being accepted by the computer; the instructions must thus at least be expressed in one of the many programming languages referred to in point c, above. It should be noted that programming languages are becoming increasingly higher in level, so that it is not inconceivable that a computer might one day accept instructions written in a human language, and such instructions would thus constitute a “computer program” within the meaning of the Law.

g. Finally, under item (i), a computer program must cause a computer “to indicate, perform or achieve a particular function, task or result.” The latter expression could perhaps be replaced simply by “to perform a particular task”; the three verbs and nouns in the expression are, however, descriptive of the various purposes for which a computer program may be used. “Result” gives the idea of the output of

## COMMENTS

*Section 1 (continued)*

the computer; a "task," the problem that it has to solve; a "function," an action performed by part of the program in the execution of its task; the word "function" covers switching operations of hardware components according to a particular program and would also seem appropriate to describe the action of programs which translate other programs expressed in a programming language into their final form, as well as the many other kinds of programs complementing the hardware in a computer so as to facilitate the execution of new programs. The verb "to indicate" is normally associated with the "result" displayed after the task has been completed, but during the running of the program, a particular function may be indicated. Moreover, a result is not always *indicated* by the computer; it may be *achieved*, in the case, for example, of a computer which directly controls the flight of an aircraft.

h. As stated in the preceding point, a *part* of a computer program, such as a subroutine or modular unit, may cause a computer to carry out an ~~intermediate function~~ in the performance of the overall task. Such a part may thus itself constitute a computer program as defined in item (i).

i. *Item (ii)* defines a form of computer software which is not strictly speaking a "computer program" but from which a computer program can be developed in a relatively straightforward manner. This form of software is called a "program description," a term to which the Law gives a much narrower meaning than that normally understood. Under Section 5, program descriptions are eligible for protection similar to that given to computer programs defined in Section 1(i).

j. For the purposes of item (ii), a program description must first of all be a "complete procedural presentation"; in other words, it must describe the whole procedure—namely, *all* the steps to be taken in the execution of a computer program. Moreover, a general description is not sufficient; the description must be "in sufficient detail to determine a set of instructions constituting a corresponding computer program." This requirement is clearly fulfilled if the program description sets out all the instructions to be followed by the computer, so that the only thing that remains to be done is to convert them into a form that is acceptable to a computer. However, for the purpose of the definition, the set of instructions need not be set out but merely "determined"; a program description might thus be constituted by a flow chart (a procedural presentation "in schematic form") which is in such detail that each block contained in it could be easily transformed into a corresponding set

## COMMENTS

*Section 1 (continued)*

of machine-readable instructions. It should furthermore be noted that a program description does not have to be capable of transformation into only a single set of instructions; a number of different but similar sets of instructions could in most cases be directly developed from the same program description however detailed, especially if those sets of instructions are being designed in a manner which is independent of a particular kind of computer. Provided that each set of instructions referred to would constitute a "corresponding computer program"—in other words, provided that there would always be a recognizable link between the possible sets of instructions and the steps indicated in the program description—the requirement of item (ii) is fulfilled.

k. *Item (iii)* defines the third category of computer software: "supporting material." This term covers software which is typically supplied to users, in addition to the computer program and program description, in a "software package" and facilitates the use and possible adaptation of the program. "Supporting material" covers the problem description and other descriptive documentation relating to a computer program (see point c, above), other than the documentation which is at such an advanced stage that it constitutes a program description under item (ii). It also covers explanatory documentation, such as user instructions, which are often indispensable and which, *inter alia*, explain how the program is to be used and how the data is to be prepared and indicate the kinds of computers in which it can be used.

l. The extent of protection given to supporting material is very limited—merely trade secret protection (Section 5(i) and (ii)) and copyright protection (Section 5(iii), (vii) and (viii)). Although such protection is already available in many countries, it has been provided for in the present model provisions since not all countries have laws protecting trade secrets or recognize all kinds of supporting material (especially software that is not in verbal form) as "literary" or "scientific works" for the purposes of copyright protection.

m. *Item (iv)*: In order to lighten the text of the provisions, the term "computer software" has been used in provisions which are applicable to each of the three categories defined in items (i) to (iii).

n. *Item (v)*: The words "including a legal entity" may already be understood in the word person."

o. The word "proprietor" is intended to cover joint proprietors, where computer software is created jointly or where the rights in it are owned jointly by more than one successor in title.

## MODEL PROVISIONS

## COMMENTS

**Section 2****Proprietorship; Transfer and Devolution of Rights in Respect of Computer Software**

**(1) The rights under this Law in respect of computer software shall belong to the person who created such software; however, where the software was created by an employee in the course of performing his duties as employee, the said rights shall, unless otherwise agreed, belong to the employer.**

**(2) The rights under this Law in respect of computer software may be transferred, in whole or in part, by contract. Upon the death of the proprietor, the said rights shall devolve according to the law of testamentary or intestate succession, as the case may be.**

*Comments on Section 2*

a. This Section determines who is entitled to the rights provided for by the Law (referred to as "the proprietor"—see Section 1(v)) and permits the transfer and devolution of those rights. Section 2 is concerned only with the rights under the Law and does not affect any other rights in computer software.

b. *Subsection (1)*: In principle, the rights under the Law belong to the creator of the computer software. There may, of course, be several creators since it is quite common for different parts of a computer program to be written by different persons. Such persons will not necessarily be considered joint creators of the complete software; where, for instance, the different parts of the program themselves constitute computer programs (see the comments on Section 1, point h), each creator would, in principle, have the sole rights in the part of the computer program, and in the related software, created by him. Normally, however, such teamwork will be performed in the context of an employment relationship so that, unless agreed otherwise, all the rights in the software will belong to the employer in accordance with the second sentence of subsection (1). In other cases, the different creators would normally have established their rights beforehand by contract.

c. A question that might be asked is whether the creator of a computer program which generates another computer program can be considered the creator of that other program. What typically happens in this kind of situation is that the creator devises a "parent" program designed to have a wide range of applications and making provision for a variety of different functions. A generating program selects appropriate parts of the parent program, adjusts them to the needs of the new program, links those parts together and produces the new program, all of whose parts are thus contained in the parent program. This is a question that would have to be decided case by case. In the situation outlined above, the creator of the parent program would probably be considered also to have created the new program; but even if he were not, his rights would extend to any new program which is substantially similar to the parent program from which it was produced (see Section 5, subsections (vi) to (viii), in conjunction with (iv)). The question of generated programs is also referred to below in the context of originality (see the comments on Section 3, point d).

d. Concerning software created by employees, subsection (1) adopts the kind of regulation to be found in many laws with respect to inventions or literary and

## MODEL PROVISIONS

## COMMENTS

*Section 2 (continued)*

artistic works created by employees. Normally, the rights belong to the employer. The parties may, however, agree on a different solution. Moreover, the rights belong to the employee if the software was created otherwise than in the course of performing his duties as employee. For example, a person employed solely as a keyboard operator who creates software useful to his employer would probably be considered its proprietor; such a solution would appear just since such an employee's salary would be lower than that of a programmer, whose salary would normally take account of the creativity expected of him.

e. Subsection (1) does not provide any solution in the case where software is created pursuant to a commission. There are in fact a large number of specialized "software houses" producing "tailor-made" programs for clients. Such work is also performed by manufacturers of computer hardware for their clients. The reason for this omission in the Law is that, in practice, contracts relating to such commissioned work always contain provisions governing the ownership of the rights in the software. Moreover, there would seem to be no uniform practice concerning the ownership of rights in software created under a commission.

f. *Subsection (2)*: This provision relates only to the transfer and devolution of the rights in computer software; it does not refer to the licensing of such rights. Such a reference would seem unnecessary in view of Section 6(1) which makes clear that the proprietor may authorize—or, to use different terminology, license—others to make use of computer software in which he holds the rights under the Law.

g. It should be noted that subsection (2) concerns the transfer of the *rights* in respect of computer software. A person who merely transfers the software by, for example, programming the transferee's computer does not thereby transfer the rights in the software.

**Section 3****Originality**

**This Law applies only to computer software which is original in the sense that it is the result of its creator's own intellectual effort.**

*Comments on Section 3*

a. This Section lays down the basic requirement which must be fulfilled by computer software in order to benefit from the protection of the Law. It adopts the idea of "originality," contained in the copyright laws of most countries.

b. The requirement of originality would seem to be the most appropriate since, as explained earlier (paragraph 7(b) of the Introduction), the model

## COMMENTS

*Section 3 (continued)*

provisions have essentially adopted a copyright approach; like copyright law, they essentially protect the form in which ideas are expressed and cannot be invoked against anyone who has independently created computer software which is the same as the protected software (see Sections 4 and 6(2)); both the model provisions and copyright law can thus be contrasted with patent law, which protects the idea underlying an invention and may be enforced even against persons who subsequently devise the same invention independently of the owner of the patent.

c. The requirement of originality under copyright law is, however, given different meanings in different countries. In some countries, a protectable work must simply *originate* with the person claiming copyright in it; in others, it must in addition be of a certain *qualitative* standard. In order to promote a desirable uniformity of protection in the various countries that may adopt the model provisions, Section 3 does not simply provide that protectable computer software must be original, or that it must be original within the meaning of the copyright law of the country concerned; it explains—in very general terms, allowing each country freedom of interpretation—what is meant by originality in the context of computer software: the software must be “the result of its creator’s own intellectual effort.”

d. In the phrase just quoted, the word “own” emphasizes the idea that the computer software must originate with its creator; the words “intellectual effort” could, for example, be understood as excluding trivial computer programs consisting of few instructions. Other programs with few instructions may involve a high degree of intellectual effort where, for example, a programmer devises a shortcut to the solution of a problem that had hitherto required many instructions taking up expensive computer time. The word “effort” would seem particularly appropriate since computer programs may take many man-months to prepare and it would be unjust if the result of such work could be appropriated by another person. The question also arises as to whether a person who generates a computer program from its parent program (see the comments on Section 2, point c) is exercising his “own” intellectual effort; the answer would probably be in the affirmative but might vary from case to case. It should be noted that “own” does not mean “independent” in the sense that the creator did not make use of other computer software in devising his own program. The mere fact that a person creates software on the basis of another person’s software, or even generates a computer program from another’s parent program, does not in itself mean that



## MODEL PROVISIONS

## COMMENTS

**Section 4****Concepts**

**The rights under this Law shall not extend to the concepts on which the computer software is based.**

the new software is not original; originality must be examined in each case. It should also be borne in mind that computer software may be only partly original; in such a case, the rights under the Law would extend only to the aspects of the software that are original.

*Comments on Section 4*

a. This Section reflects the fundamental purpose of the model provisions, which is to protect the form in which the concepts, or methods used, in the creation of computer software are expressed, and not the concepts themselves.

b. As far as the Law is concerned, therefore, no person can be prevented from using the concepts underlying another person's software, provided that, if reference is made to that other person's software, he develops a different form of expression and provided also that the new form of expression is not substantially similar to that contained in the other software (see Section 5(iv) and (v)). The words "form of expression" in the preceding sentence should be understood in a wide sense: a person who uses a different form of expression with respect to each concept individually, but slavishly copies the structure of another person's software may well be held to have infringed that person's rights; in such a case, the Law would not be protecting the concepts themselves but merely the arrangement of those concepts.

c. It should be stressed that Section 4 only relates to the rights under the Law. In countries which allow computer programs (or certain computer programs) to be directly or indirectly protected by patents, a computer program embodying a new and inventive concept may be patentable, and the concept thus protected.

**Section 5****Rights of the Proprietor**

**The proprietor shall have the right to prevent any person from:**

**(i) disclosing the computer software or facilitating its disclosure to any person before it is made accessible to the public with the consent of the proprietor;**

**(ii) allowing or facilitating access by any person to any object storing or reproducing**

*Comments on Section 5*

a. This Section defines the "rights under this Law,"<sup>22</sup> referred to in other provisions. The effect of those rights is to allow the proprietor to prevent certain acts committed in direct or indirect relation to the computer software actually owned by him. This is what is meant by "the computer software." The rights do not extend to computer software, however similar, having no connection with the proprietor's. The three categories of computer software defined in Section 1 are not accorded the same degree of protection: computer programs (Section 1(i)) are protected by

## MODEL PROVISIONS

*Section 5 (continued)*

**the computer software, before the computer software is made accessible to the public with the consent of the proprietor;**

**(iii) copying by any means or in any form the computer software;**

**(iv) using the computer program to produce the same or a substantially similar computer program or a program description of the computer program or of a substantially similar computer program;**

**(v) using the program description to produce the same or a substantially similar program description or to produce a corresponding computer program;**

**(vi) using the computer program or a computer program produced as described in (iii), (iv) or (v) to control the operation of a machine having information-processing capabilities, or storing it in such a machine;**

**(vii) offering or stocking for the purpose of sale, hire or license, selling, importing, exporting, leasing or licensing the computer software or computer software produced as described in (iii), (iv) or (v);**

**(viii) doing any of the acts described in (vii) in respect of objects storing or reproducing the computer software or computer software produced as described in (iii), (iv) or (v).**

## COMMENTS

*Section 5 (continued)*

Section 5(i) to (iv) and (vi) to (viii); program descriptions (Section 1(ii)) by Section 5(i) to (iii) and (v) to (viii); supporting material (Section 1(iii)) by Section 5(i) to (iii) and (vii) and (viii).

b. Although this is not expressly stated in Section 5, it is intended that the rights under the Law should cover not only the commission of the acts listed in items (i) to (viii), but also the causing or procurement of their commission; if this does not follow from the general principles of law of a country adopting the model provisions, it could be expressly stated in an additional provision.

c. *Items (i) and (ii)* relate to all three categories of computer software. They prevent the unauthorized disclosure or making available of computer software before it has been made accessible to the public with the consent of the proprietor. They overlap to some extent; for example, a person who hands over software documentation to an unauthorized person would be infringing both items (i) and (ii). However, an employee, for instance, who orally discloses computer software owned by his employer would only be infringing item (i), and a person who hands over magnetic tape embodying a computer program might only be covered by item (ii).

d. Items (i) and (ii) are designed to protect undisclosed computer software; the protection they provide may already be available in a country adopting the model provisions, under its law on trade secrets, breach of confidence or data trespass. Provisions of this kind would be useful for countries whose laws do not provide sufficient protection against the acts covered; computer software is in particular need of such protection because of its vulnerability and the difficulty of detecting its use after misappropriation.

e. *Item (iii)* also relates to all three categories of computer software. In view of the descriptive and explanatory nature of many forms of computer software, the protection against copying that is provided by this provision may already be available under copyright law. The inclusion of item (iii) is, however, necessary since many countries would not consider software that is not in verbal form as "literary" or "scientific works" for the purposes of copyright law.

f. The word "copying" is reinforced by the phrase "by any means or in any form." It should thus be given a wide interpretation covering, for example, reproduction on magnetic tape, or altering the form of data and then reinstating it in its original form.

## COMMENTS

*Section 5 (continued)*

g. Whether the unauthorized copying of only part of computer software infringes item (iii) will have to be decided on the facts of each case, presumably on the same principles as those applied under the copyright law in the case of partial copying of protected works. It should be noted that no protection extends to parts of computer software that are not original (see comments on Section 3, point d) and that a part of a computer program may itself be protected as a complete computer program (see the comments on Section 1, point h).

h. *Item (iv)* covers a variety of acts in relation to a computer program only: in particular, its translation into another programming language; its adaptation in some other way, so as to correspond to the needs of the infringer, for example; its alteration not amounting to copying but resulting in a substantially similar computer program; and its transformation back into a program description or into a program, for the purposes of sale, for example. As stated earlier (in the comments on Section 2, point c), the generation of a new computer program may be an infringement of the rights in the parent program.

i. *Item (v)*, relating solely to program descriptions, also covers a variety of acts. Its main purpose is to prevent a person from developing another person's program description into a corresponding computer program or developing a computer program corresponding to a substantially similar program description. It seems only fair that the rights in a program description should extend to a computer program which can be developed from it in a relatively straightforward manner (see the comments on Section 1, points i and j). The Law, however, is very cautious in according special protection to anything other than the end product of computer software, namely the computer program as defined in Section 1(i); an item of computer software may, for example, have played a decisive role in the creation of a computer program by another person, but if that software was not in sufficient detail to determine the set of instructions constituting the computer program, it cannot be protected as a program description within the meaning of Section 1(ii).

j. *Item (vi)* directly covers the use of a computer program in a computer; it thus grants an essential form of protection of computer programs, which is not, as such, provided by copyright law (although indirect protection under copyright law may be available in some countries since it would seem that, during the running of a computer program in the computer, each instruction will at some moment necessarily be copied). The rights under item (vi)

## MODEL PROVISIONS

## COMMENTS

*Section 5 (continued)*

extend not only to the proprietor's computer program, but also to computer programs produced by copying or use referred to in the three preceding items. A program description can thus be indirectly protected under item (vi).

k. *Item (vii)* covers commercial and similar acts performed in relation to any of the three categories of computer software. Under this provision, a proprietor who transfers computer software by, for example, programming the transferee's computer, still retains the right to prevent him from licensing others to use the software (see the comments on Section 2, point g). It should be noted that the acts include the exporting of computer software; this is important in the context of the establishment of computer networks covering different countries: for example, a computer program might be transmitted from a terminal in country A, which grants protection against use, and processed by a computer in country B, which grants no such protection. It is possible that the courts of country A might refuse protection under Section 5(vi), holding the use of the program to have taken place abroad; because of the word "exporting," protection would be available in country A under item (vii). Consideration could be given to including the "transmitting" of computer software among the acts in item (vii), but such inclusion might lead to unforeseen results; for instance, the telecommunications enterprises would have to be exempted from any liability. In this context, it is to be noted that patent and copyright protection normally do not cover the transportation or transmission of the protected matter.

l. *Item (viii)* is complementary to item (vii); it is included in order to make clear that the rights under the Law extend to acts committed in relation to items of computer hardware with software stored in them.

**Section 6****Infringements**

**(1) Any act referred to in Section 5(i) to (viii) shall, unless authorized by the proprietor, be an infringement of the proprietor's rights.**

**(2) The independent creation by any person of computer software which is the same as, or substantially similar to, the computer software of another person, or the doing of any act referred to in Section 5(i) to (viii) in respect of such independently**

*Comments on Section 6*

a. This Section explains what is meant by infringement (referred to in Section 8) and specifies two situations which are not to be considered to involve infringement.

b. *Subsection (1)*: Any act referred to in Section 5(i) to (viii) constitutes infringement unless it has been "authorized by the proprietor" of the computer software. Such authorization need not be given expressly. It will probably be implied, for example, that a person who receives computer software confidentially for the purposes of trial is authorized to disclose it to certain of his employees (but not to other employees) or that a person who purchases magnetic

## MODEL PROVISIONS

*Section 6 (continued)*

created computer software, shall not be an infringement of the rights of the latter under this Law.

(3) Any presence of the computer software on foreign vessels, aircraft, spacecraft or land vehicles, temporarily or accidentally entering the waters, airspace or land of this country, and any use of computer software during such entry, shall not be considered an infringement of the rights under this Law.

## Section 7

## Duration of Rights

(1) The rights under this Law shall begin at the time when the computer software was created.

(2)(a) Subject to paragraph (b), the rights under this Law shall expire at the end of a period of 20 years calculated from the earlier of the following dates;

(i) the date when the computer program is, for purposes other than study, trial or research, first used in any country in controlling the operation of a machine having information-processing capabilities, by or with the consent of the proprietor;

(ii) the date when the computer software is first sold, leased or licensed in any country or offered for those purposes.

(b) The rights under this Law shall in no case extend beyond 25 years from the time when the computer software was created.

## COMMENTS

*Section 6 (continued)*

tape containing computer software is entitled to use it (but not to sell it). The extent of such implied authorization will depend upon the facts of each case and upon the practices in the trade.

c. *Subsection (2)*: This provision has been included as a safeguard against any possible interpretation of the Law incompatible with the fundamental principle that the proprietor's rights do not extend to computer software created independently.

d. *Subsection (3)*: This provision is based on the principles laid down in Article 5ter of the Paris Convention for the Protection of Industrial Property. The full application of the Law with respect to foreign aircraft, etc., temporarily or accidentally entering the country's territory might be harmful to international relations. The provision refers only to the presence and use of computer software; it does not prevent the proprietor from taking action against the unauthorized disclosure or sale, etc., of the computer software concerned.

*Comments on Section 7*

a. This Section on duration seeks to encourage proprietors of the rights in computer software to make the software accessible to the public by giving them a reasonable period during which they can rely on the protection of the Law. Once the rights have expired, everyone will be free to copy or use the computer software, subject to any continuing rights under other laws.

b. A problem that this Section seeks to overcome is how to find a point in time from which the period of duration can be calculated. The obvious reference point is the date when the rights begin, namely the date of the creation of the computer software (subsection (1)). But such a date is sometimes imprecise and often difficult to prove by third parties wishing to have some degree of certainty as to when the rights will expire.

c. The model provisions specify (subsection (2)(a)) two dates, the earlier of the two being used as the normal reference point for the purpose of calculation—namely, the date of the first use in a computer of an operational computer program and the date of first commercialization (which is easier to establish). With regard to the latter date, the relevant provision (subsection (2)(a)(ii)) refers to the first sale, lease or license or first offer for those purposes; by this is meant the first sale, etc., of computer software that is already in existence; it can happen, for instance, that computer software is licensed before it is actually

## MODEL PROVISIONS

## COMMENTS

*Section 7 (continued)*

created; it is not intended that such a license should be taken into account in the calculation of the duration.

d. With regard to the length of the period, the model provisions propose a period which is a little longer than the term normally accorded to patents (which give more extensive protection, enforceable even against independently made inventions) but which is much shorter than the normal copyright period (in view of the essentially industrial nature of computer software). Consideration must also be given to the fact that computer software can have a very long life; computer programs which had formerly become obsolete as soon as a new generation of computer hardware was developed can now, by means of another program, be adapted for use in subsequent computers. Furthermore, it can take several years for computer software to become ready for commercialization, especially in foreign countries. The model provisions thus propose that the rights under the Law should begin at the time of creation of the computer software and end 20 years after the earlier of the dates specified in items (i) and (ii) of subsection (2)(a). However, in order that the expiration of the rights should not be unduly delayed (they would indeed be of indefinite duration if neither of the events referred to in subsection (2)(a) occurred), there is an absolute limit of 25 years (subsection (2)(b)).

e. Account has also been taken of the desirability that the rights in a particular item of computer software should expire at the same time in all the countries that may adopt the model provisions. The period of duration is thus counted from the first industrial or commercial use "in any country" (subsection (2)(a)(i) and (ii)) or from the date of creation (subsection (2)(b)).

**Section 8****Relief**

**(1) Where any of the proprietor's rights have been, or are likely to be, infringed, he shall be entitled to an injunction, unless the grant of an injunction would be unreasonable having regard to the circumstances of the case.**

**(2) Where any of the proprietor's rights have been infringed, he shall be entitled to damages or such compensation as may be appropriate having regard to the circumstances of the case.**

*Comments on Section 8*

a. This Section on relief in the case of infringement has been worded in very general terms in view of the very different rules in the various countries that may adopt the model provisions. It will therefore probably be more useful as a guideline than as a model provision.

b. *Subsection (1)*: One important situation where the grant of an injunction might be "unreasonable having regard to the circumstances of the case" is where a person in good faith purchases computer software from a person pretending to be the proprietor. The purchaser may have spent a large amount of money in adapting his enterprise to take account of the software. It might be desirable in such a case that

## MODEL PROVISIONS

## COMMENTS

*Section 8 (continued)*

the court should have power to grant a compulsory license to the purchaser if the proprietor were unwilling to grant a license himself. The situation of the innocent infringer is particularly difficult in the case of computer software, since there may be no means of checking ownership. Even a requirement that all software should be marked (see paragraph 11 of the Introduction) would be of little use since the false proprietor would be likely to have replaced the marking before the sale.

c. *Subsection (2)*: The expression "such compensation as may be appropriate having regard to the circumstances of the case" could cover delivery-up of the profits made by the infringer if these were greater than the amount of damage sustained by the proprietor. It would also allow the court to take account of the innocence of infringement referred to above by, for example, merely ordering, if it is just for some payment to be made, that a reasonable royalty be paid for the use of the computer software.

**Section 9****Application of Other Laws**

**This Law shall not preclude, in respect of the protection of computer software, the application of the general principles of law or the application of any other law, such as the Patent Law, the Copyright Law or the Law on Unfair Competition.**

*Comments on Section 9*

a. This Section is primarily designed as a reminder that the purpose of the model provisions, even if they are adopted in the form of a separate law, is to *complement* existing law on computer software. For example, a proprietor whose rights under the Law have expired under Section 7 may nevertheless, at least in respect of certain forms of computer software, be able to take action in reliance upon the copyright law of the country concerned unless computer software has been removed in its entirety from the copyright law when introducing the model provisions; similarly, a patentee of an invention involving computer software is not prevented by Section 6(2) from bringing an action under the country's patent law with respect to computer software created independently.

b. It should however be pointed out that, in some countries, in spite of Section 9, the proprietor might be required to elect one of the remedies available as the basis of legal proceedings. If Section 9 is adopted in its present form, care will have to be taken to ensure that the rights under the model provisions do in fact complement—and not conflict with—rights provided for under other laws; for instance, if the solution proposed in Section 2(1) were adopted and a different solution relating to works created by employees were provided for in the country's copyright law, an employer and his employee might each have the right to prevent the other from dealing with the same item of computer software.

**MODEL PROVISIONS**  
on the  
**PROTECTION OF**  
**COMPUTER SOFTWARE**

**Section 1**

**Definitions**

For the purposes of this Law:

(i) "computer program" means a set of instructions capable, when incorporated in a machine-readable medium of causing a machine having information-processing capabilities to indicate, perform or achieve a particular function, task or result;

(ii) "program description" means a complete procedural presentation in verbal, schematic or other form, in sufficient detail to determine a set of instructions constituting a corresponding computer program;

(iii) "supporting material" means any material, other than a computer program or a program description, created for aiding the understanding or application of a computer program, for example problem descriptions and user instructions;

(iv) "computer software" means any or several of the items referred to in (i) to (iii);

(v) "proprietor" means the person, including a legal entity, to whom the rights under this Law belong according to Section 2(1), or his successor in title according to Section 2(2).

**Section 2**

**Proprietorship; Transfer and Devolution of Rights in Respect of Computer Software**

(1) The rights under this Law in respect of computer software shall belong to the person who created such software; however, where the software was created by an employee in the course of performing his duties as employee, the said rights shall, unless otherwise agreed, belong to the employer.

(2) The rights under this Law in respect of computer software may be transferred, in whole or in part, by contract. Upon the death of the proprietor, the said rights shall devolve

according to the law of testamentary or intestate succession, as the case may be.

**Section 3**

**Originality**

This Law applies only to computer software which is original in the sense that it is the result of its creator's own intellectual effort.

**Section 4**

**Concepts**

The rights under this Law shall not extend to the concepts on which the computer software is based.

**Section 5**

**Rights of the Proprietor**

The proprietor shall have the right to prevent any person from:

(i) disclosing the computer software or facilitating its disclosure to any person before it is made accessible to the public with the consent of the proprietor;

(ii) allowing or facilitating access by any person to any object storing or reproducing the computer software, before the computer software is made accessible to the public with the consent of the proprietor;

(iii) copying by any means or in any form the computer software;

(iv) using the computer program to produce the same or a substantially similar computer program or a program description of the computer program or of a substantially similar computer program;

(v) using the program description to produce the same or a substantially similar program description or to produce a corresponding computer program;



(vi) using the computer program or a computer program produced as described in (iii), (iv) or (v) to control the operation of a machine having information-processing capabilities, or storing it in such a machine;

(vii) offering or stocking for the purpose of sale, hire or license, selling, importing, exporting, leasing or licensing the computer software or computer software produced as described in (iii), (iv) or (v);

(viii) doing any of the acts described in (vii) in respect of objects storing or reproducing the computer software or computer software produced as described in (iii), (iv) or (v).

## Section 6

### Infringements

(1) Any act referred to in Section 5(i) to (viii) shall, unless authorized by the proprietor, be an infringement of the proprietor's rights.

(2) The independent creation by any person of computer software which is the same as, or substantially similar to, the computer software of another person, or the doing of any act referred to in Section 5(i) to (viii) in respect of such independently created computer software, shall not be an infringement of the rights of the latter under this Law.

(3) Any presence of the computer software on foreign vessels, aircraft, spacecraft or land vehicles, temporarily or accidentally entering the waters, airspace or land of this country, and any use of computer software during such entry, shall not be considered an infringement of the rights under this Law.

## Section 7

### Duration of Rights

(1) The rights under this Law shall begin at the time when the computer software was created.

(2)(a) Subject to paragraph (b), the rights under this Law shall expire at the end of a period of 20 years calculated from the earlier of the following dates:

(i) the date when the computer program is, for purposes other than study, trial or research, first used in any country in controlling the operation of a machine having information-processing capabilities, by or with the consent of the proprietor;

(ii) the date when the computer software is first sold, leased or licensed in any country or offered for those purposes.

(b) The rights under this Law shall in no case extend beyond 25 years from the time when the computer software was created.

## Section 8

### Relief

(1) Where any of the proprietor's rights have been, or are likely to be, infringed, he shall be entitled to an injunction, unless the grant of an injunction would be unreasonable having regard to the circumstances of the case.

(2) Where any of the proprietor's rights have been infringed, he shall be entitled to damages or such compensation as may be appropriate having regard to the circumstances of the case.

## Section 9

### Application of Other Laws

This Law shall not preclude, in respect of the protection of computer software, the application of the general principles of law or the application of any other law, such as the Patent Law, the Copyright Law or the Law on Unfair Competition.

LIST OF PARTICIPANTS  
OF THE MEETINGS OF THE ADVISORY GROUP  
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PROTECTION OF COMPUTER PROGRAMS\*

First Session: June 17 to 20, 1974  
Second Session: June 23 to 27, 1975  
Third Session: May 17 to 21, 1976  
Fourth Session: June 1 to 3, 1977

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