EUROPEAN COMMUNITIES
THE COUNCIL

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SUMMARY OF PROCEEDINGS

of: the Working Party on Intellectual Property (Copyright)
on: 28 and 29 January 1993

No. prev. doc.: 6857/93 PI 43 CULTURE 57
No. Cion prop.: 6919/92 PI 64 CULTURE 61


1. At its meeting held on 28 and 29 January 1993, the Working Party on Intellectual Property (Copyright) began a first reading of the above proposal.

A. General discussion

a) Appropriateness of the proposal

2. The United Kingdom delegation, supported by the Italian delegation, raised the question whether it would not have been more appropriate to have discussed the principles underlying the Commission's proposal in a forum open to non-governmental experts before being presented with a formal Commission proposal.
In this context, the German delegation, supported by the Belgian and Spanish delegations expressed strong doubts whether there was any need for Community harmonization of the legal protection of databases at this stage.

The Commission representative replied that discussions of this subject at Community level had begun in 1986; a chapter had been devoted to this subject in the Commission's green paper on copyright and the challenge of technology\(^{(1)}\) in 1988; a hearing had been held in 1990 which had endorsed the principle of harmonizing the legal protection of databases on the basis of copyright; and discussions on this subject were under way in the World Intellectual Property Organization (WIPO) and in the GATT Uruguay Round. The Commission could therefore not accept that its proposal was premature.

b) **Limitation of the proposal to electronic databases**

3. The Belgian and Danish delegations considered that the Directive should not be limited to electronic databases (Article 1(1)), but should apply to databases in all forms. The German delegation was not convinced of the need to limit the Directive to electronic databases. The Italian delegation pointed out that there was no precedent for making copyright protection dependent upon the means of presentation of a work. The French delegation considered that the protection given to electronic databases would inevitably have repercussions on the protection of databases in

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paper form, and drew attention to the need to consider the implications in cases where an electronic database was created from an existing database in paper form. The United Kingdom delegation indicated that opinion in the United Kingdom was divided on the question whether or not the Directive should be limited to electronic databases, but pointed out that such limitation could complicate infringement proceedings where a database was available in both electronic and non-electronic forms. The Belgian, Spanish and Netherlands delegations pointed out that the wording of the 15th recital (".... means which include electronic ...") suggested that other forms of databases could be included in the scope of the Directive.

The Commission representative stated that the main risk of piracy was in relation to electronic databases, and that therefore the Commission had considered it appropriate to give the greatest priority to harmonization of the protection of such databases.

4. The Danish and United Kingdom delegations also considered that if the Directive were to be limited to electronic databases, careful consideration would have to be given to defining what was meant by "electronic databases". The French and Netherlands delegations questioned whether it would always be possible to make a clear distinction between "the electronic materials necessary for the operation of the database" and "any computer program used in the making or operation of the database" (Article 1(1)).
The Commission representative drew attention to the definition contained in the 13th recital and offered to provide glossary definitions of a number of terms used in the proposal.

5. The Danish delegation expressed doubts with regard to the application of the Directive to databases which contained collections of both facts and works. The French delegation was not convinced that databases containing collections of literary works could be dealt with in the same way as databases containing collections of audiovisual works or sound recordings.

c) Combination of copyright protection and sui generis protection

6. The French delegation welcomed the distinction made in the Commission's proposal between copyright protection and sui generis protection. The Belgian, Danish, and United Kingdom delegations expressed doubts with regard to the relationship and the interface between these two types of protection. The Italian delegation considered that the combination of the two types of protection increased the complexity of the proposal and expressed misgivings at the fact that this combination would result in the possibility of compulsory licences being granted in respect of databases which were the subject of copyright protection.

The Commission representative explained that copyright protection could not be used to protect facts contained in a database, and that it was therefore necessary to make provision for some
other form of protection in addition to copyright protection.

7. With regard to copyright protection, the German delegation considered that the obligation to protect databases by copyright already existed under the Berne Convention for the Protection of Literary and Artistic Works. Together with the Danish delegation, it questioned whether the reference in Article 2(1) of the proposal to Article 2(5) of the Berne Convention should not be accompanied by a reference to Article 2(1) of that Convention.

The United Kingdom delegation doubted whether the copyright protection of databases should be based on the criteria of selection and arrangement, pointing out that this would result in less protection for some databases than that resulting from present law in the United Kingdom.

8. The German delegation considered that copyright protection should be combined not with sui generis protection, but with either a right related to copyright or protection under unfair competition law as part of a general harmonization of unfair competition law within the Community.

9. The Belgian, Netherlands and United Kingdom delegations considered that the term of sui generis protection should be longer than the 10 years proposed by the Commission.

The Commission representative considered that 10 years represented a fair balance between the interests of rightholders and the interests of the
general public in having competing products on the market.

10. **The Danish and Spanish delegations** expressed doubts with regard to the compulsory licence provisions proposed as a counterpart to the sui generis protection.

    **The Irish delegation** expressed a favourable reaction to these provisions in this context.

    **The Belgian, German and French delegations** indicated that they were still examining whether these provisions constituted an acceptable counterpart to the sui generis protection.

d) **Structure of the Directive**

11. **Almost all delegations** considered that the present structure of the Directive was not conducive to its comprehension, and **several delegations** invited the Commission to separate the provisions—relating to copyright protection from those relating to sui generis protection. **The Commission representative** agreed to reconsider the structure while not changing the substance of the proposal.

e) **Authorship**

12. **The German and Italian delegations** expressed doubts on the need to harmonize the authorship of databases.

13. **The Irish delegation** considered the provisions on authorship (Article 3) unsatisfactory, as it

14. **The Danish delegation** expressed doubts with regard to the provision concerning the relationship between an employee and his employer (Article 3(4)).

15. **The Belgian, Spanish, French, Italian, Netherlands and United Kingdom delegations** considered that the provision concerning the authorship of collective works (Article 3(2)) would have to be examined in the light of the ongoing discussions in this respect in the content of the amended proposal for a Directive harmonizing the term of protection of copyright and certain related rights\(^{(3)}\).

The **German and Irish delegations** questioned whether this provision was compatible with the Berne Convention.

f) **Originality**

16. **The United Kingdom delegation** expressed doubts with regard to the proposal that originality be assessed in relation to the selection or arrangement of the works or materials contained in a database (Article 2(3)).

The **French delegation** suggested that it would be sufficient to apply the criteria for originality normally applied by the Member States.

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The Spanish delegation considered that it was useful to have the criteria for originality set out in the Directive.

The Commission representative considered that it was not possible to define originality without reference to choice in the selection or arrangement of the works or materials concerned, as all copyright protection concerned choice in the selection or arrangement of otherwise unprotected elements.

g) Article 4 of the proposal

17. The Belgian, Danish, German, Irish, Netherlands and United Kingdom delegations expressed doubts as to the need for the inclusion of Article 4(1) in the Directive.

The Belgian, German, Netherlands and United Kingdom delegations considered that if this provision were to be included, it would have to be considered whether its wording was consistent with the Berne Convention.

The Danish, German and French delegations expressed particular concern with regard to the references to abstracts and summaries in this provision.

The Commission representative explained that the intention of this provision was to avoid the need for a creator of a database, who wished to make an abstract or a summary of a work for inclusion in his database, to seek the authorization of the author of the original work;
it was not intended to allow the creator of a database to take an existing abstract or summary without authorization; the Commission services would reconsider the wording of this provision in the light of the observations made.

18. The Netherlands delegation suggested that Article 4(2) might be transferred to the transitional provisions of the Directive.

h) Other general observations

19. The Netherlands delegation expressed difficulties in understanding a number of concepts used in the proposal.

20. The Danish delegation considered that it should be examined to what extent updating a database would affect the protection resulting from the Directive.

21. The German delegation questioned whether Article 5 was necessary and whether it was compatible with the Berne Convention.

The Commission representative considered that it was compatible with the Berne Convention, and pointed out that Directive 91/250/EEC contained a corresponding article.

22. The German delegation criticized the quality of the German translation of the proposal. The Netherlands delegation also drew attention to shortcomings in the Dutch version, in particular in Article 3.
B. Examination of the provisions

23. It was agreed that:
   - the definitions in Article 1 would be examined in relation to the provisions in which the terms defined occurred;
   - the Working Party would examine first the provisions relating to copyright protection, then those relating to sui generis protection.

Article 2(1)

24. The Commission representative pointed out that the term used to translate the English word "collections" throughout the proposal for a Directive should be the word used in Article 2(5) of the Berne Convention.

The Irish and United Kingdom delegations considered that "compilations" might be an acceptable alternative term in English.

25. The German delegation questioned the need for Article 2(1).

The Commission representative explained that the purpose of Article 2(1) was to require that the form of protection to be given to databases was that of copyright, and that they should be protected as collections within the meaning of Article 2(5) of the Berne Convention. Its structure was based on that of Article 1(1) of Directive 91/250/EEC.
26. The Belgian, Danish, German, Irish, Portuguese and United Kingdom delegations questioned whether the reference to Article 2(5) of the Berne Convention was not too restrictive; since that provision mentioned only collections of literary or artistic works, these delegations feared that this reference would exclude databases which were collections of facts. Some of these delegations suggested that this reference be supplemented by a reference to Article 2(1) of the Berne Convention.

The Commission representative pointed out that recent work in the GATT and in WIPO showed a trend to consider Article 2(5) of the Berne Convention as covering not only collections of works, but also collections of facts. If a database were to be protected as a literary or artistic work within the meaning of Article 2(1) of the Berne Convention, rather than as a collection within the meaning of Article 2(5) of that Convention, there would be a greater onus on the author to demonstrate the originality of his work than was required by the criteria of selection and arrangement contained in the latter provision.

Article 2(2) and Article 1(1)

27. With regard to the limitation of the proposal to electronic databases, see points 3 and 4 above.

28. A number of delegations questioned whether it was

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(4) This provision reads:
"Collections of literary or artistic works such as encyclopaedias and anthologies which, by reason of the selection and arrangement of their contents, constitute intellectual creations shall be protected as such, without prejudice to the copyright in each of the works forming part of such collections."
intended that the criteria "arranged, stored and accessed by electronic means" in the definition of "database" in Article 1(1), which is referred to in Article 2(2), should be cumulative. The Commission representative confirmed that this was the intention.

29. The Netherlands and United Kingdom delegations asked whether a database on a CD-ROM would come within the definition in Article 1(1). The Commission representative considered that it would.

30. The Irish and United Kingdom delegations considered that it was not clear from this definition, particularly when it was read in conjunction with the 13th recital, that a database on a CD-ROM would come within the scope of the Directive but a database in paper form which was read by optical character recognition (OCR) technology would not. The Commission representative was invited to reconsider the wording in this respect.

31. The French, Netherlands and United Kingdom delegations asked for clarification of the terms "electronic materials necessary for the operation of the database" in Article 1(1).

The Commission representative explained that an electronic database war composed of the data which it contained, the software used in its making or operation, and the electronic materials (or tools) necessary for its operation; these tools were the thesaurus, the index and the system for obtaining or presenting information. The thesaurus and index could in some cases qualify for copyright protection in their own right. The system for obtaining or presenting information was not the software used for retrieving data, but the means chosen by the author of the database for ensuring that the information
contained in the database could be presented to the user in a user-friendly way.

32. The French delegation questioned why Article 1(1) would have the effect that a thesaurus or an index which was not sufficiently original to qualify for copyright protection in its own right would be given copyright protection as a result of its inclusion in an electronic database.

The Commission representative explained that it was unclear whether a thesaurus or an index, whether in electronic or paper form, would at present qualify for copyright protection in the Member States. In order to bring about a minimum level of harmonization in this respect, the Commission had proposed that these tools be eligible for copyright protection when included in an electronic database.

33. The Irish and Netherlands delegations asked for clarification as to the relationship between copyright protection for the thesaurus, the index and the system for obtaining or presenting information and the compulsory licensing provisions in Article 8.

The Commission representative explained that these compulsory licensing provisions were not applicable to:

- works protected by copyright which were included in an electronic database;

- the right in the selection or arrangement of works or materials contained in an electronic database;

- the thesaurus, index or system for presenting or obtaining information.
Compulsory licences were available under Article 8 for the commercial use of the contents of a database in the independent creation of a new database.

The United Kingdom delegation considered that it was not clear from the wording of Article 8 that these compulsory licences were available only in respect of the independent creation of a new database.

The Commission representative drew attention to the 31st recital in this context.

34. The Irish, Netherlands and United Kingdom delegations expressed doubts with regard to the inclusion of the "system for obtaining or presenting information" in the definition in Article 1(1). They considered that a system was something conceptual, and pointed out, with specific reference to Article 1(2) of Directive 91/250/EEC, that it was generally accepted that copyright protection applied to expression, not to ideas and principles.

The Commission representative considered that these systems would consist not only of ideas, but also of expression.

35. The Belgian, Danish, German, Irish and United Kingdom delegations questioned the reference in Article 2(2) to non-electronic databases remaining "protected to the extent provided for by Article 2(5) of the Berne Convention". They considered that a Community Directive should not prescribe what was to be protected under an international convention, and pointed out that since the scope of this Directive was limited to electronic databases, it should not stipulate how non-electronic databases were to be protected. Several of
these delegations suggested that it would be preferable to say that this Directive was without prejudice to the rules of national law and international law on the protection of collections of works or materials arranged, stored or accessed by non-electronic means. The United Kingdom delegation also pointed out that, since the Berne Convention gave minimum protection, Member States were free to provide protection for non-electronic databases which went beyond that provided for by Article 2(5) of the Berne Convention.

**Article 2(3)**

36. The French delegation questioned whether the criterion of selection alone or the criterion of arrangement alone would ensure a sufficient degree of originality; it suggested replacing the words "by reason of their selection or their arrangement" with the words "by reason of their selection and their arrangement".

The Commission representative considered that selection alone and arrangement alone would be sufficient, and pointed out that this alternative corresponded to the wording of Article 2(5) of the Berne Convention in the French-language version, which, in accordance with Article 37(1)(c) of that Convention, should prevail in case of differences of opinion on the interpretation of the various texts.

37. The Irish and United Kingdom delegations, while recognizing the relevance of the criteria of selection and arrangement in respect of copyright protection of collections of literary or artistic works, questioned the need for these criteria to be applied to collections of data in electronic databases. They considered that making copyright protection dependent upon selection of the
materials to be included in a database was dangerously close to protecting ideas by copyright. Application of this criterion would imply that the more comprehensive a database was, the less likely it would be to attract copyright protection, in spite of the greater investment and labour involved. They also questioned how the arrangement of material in an electronic database and the originality of such arrangement were to be assessed.

The German delegation also questioned the need for the words "by reason of their selection or their arrangement" in this provision, considering that the criterion "original in the sense that it is a collection of works or materials which constitutes the author's own intellectual creation" was sufficient without this qualification. It also questioned the need for the second sentence of Article 2(3).

The Commission representative and the French delegation considered that selection and arrangement were appropriate criteria for determining copyright protection, but that the investment and labour involved were not. The German delegation agreed with them on the latter point.

38. In this connection, the Irish and United Kingdom delegations questioned whether it was necessary for the Directive to prescribe the régime of protection to be applied to electronic databases. They asked whether it would be sufficient for the Directive to describe the protection to be given, leaving the Member States free to decide what form this protection should take.

The Commission representative considered that such an approach would not provide sufficiently harmonized protection for the database industry in the Community.
39. The United Kingdom delegation asked that a recital or a minutes statement be added to the effect that the terms of Article 2(3) were without prejudice to the freedom of Member States to decide whether or not to give copyright protection to computer-generated databases.

Article 2(4)

40. The German delegation suggested that in addition to the works or materials contained in a database, other parts of the database, such as the thesaurus or the index, could have copyright protection in their own right outside the protection given by the Directive.

The Commission representative explained that the thesaurus and the index would be covered by the copyright protection given by the Directive.

41. In reply to a question from the Netherlands delegation, the Commission representative explained that the purpose of the last part of Article 2(4) was to make it clear that the protection of a database resulting from the Directive in no way affected any rights, whatever the nature of those rights, subsisting in the works or materials contained in the database.

Article 3

42. This Article had been commented on in the general discussion (see points 12 to 15 above).

43. A number of delegations continued to question the need for this Article, pointing out that it would achieve relatively little harmonization.
44. If this Article were to be considered necessary, a number of delegations questioned whether it was essential that it should be so closely aligned on Article 2 of Directive 91/250/EEC.

The Commission representative pointed out that problems were likely to arise if the rules (resulting from this Directive) applicable to authorship of a database were to be different from the rules (resulting from Directive 91/250/EEC) applicable to authorship of a computer program incorporated in that database.

45. The Danish and United Kingdom delegations in particular reserved their positions on this Article until similar questions had been resolved in the framework of the amended proposal for a Directive on term of protection(5).

46. Several delegations also expressed reservations with regard to Article 3(4).

The Commission representative considered that this provision was necessary, since databases were often created by a number of persons under contracts of employment.

Article 4

47. A number of comments had been made on this Article in the course of the general discussion (see points 17 and 18 above).

48. The United Kingdom delegation considered that this provision should refer not only to the incorporation of

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works or materials into a database, but also to the downloading of such works or materials from a database.

49. The United Kingdom delegation considered that it would be useful to include a definition of the term "bibliographical material".

The Commission representative explained that this term would cover the title of a work, the name of its author and its reference number. In the Commission's view, it was necessary to state clearly that this material was not covered by copyright protection, since this was not clear at present in all Member States.

50. Several delegations considered that Article 4(1) should be reformulated to make a clear distinction between abstracts and summaries made by the author of the original work, the incorporation of which into a database would require the authorization of the rightholder in the original work, and abstracts and summaries made by the creator of the database, the incorporation of which into a database would not require the authorization of the rightholder in the original work.

The Netherlands delegation expressed doubts whether the creator of a database could make an abstract or summary of a work protected by copyright without the authorization of the rightholder in that work.

The United Kingdom delegation suggested that consideration be given to the possibility of providing for a compulsory licence where the creator of a database wished to incorporate into his database an abstract or summary made by the author of the original work.

51. The Belgian, Irish and Italian delegations
considered that the term "summaries which do not substitute for the original works themselves" was unclear.

52. In reply to a question from the Belgian delegation, the Commission representative explained that "brief" was intended to qualify "abstracts", "quotations" and "summaries".

53. Several delegations considered that quotations should be dealt with separately from abstracts and summaries in this provision. They also considered that the reference to quotations should be expanded to include the safeguards contained in Article 10(1) and (3) of the Berne Convention.

54. The Chairman suggested that consideration be given to the possibility of Article 4 taking the form of a recommendation, and drew attention in this respect to the Recommendations for Settlement of Copyright Problems Arising from the Use of Computer Systems for Access to or the Creation of Works, adopted in Paris on 11 June 1982 by the joint UNESCO and WIPO Second Committee of Governmental Experts on Copyright Problems Arising from the Use of Computers for Access to or the Creation of Works\(^{(6)}\).

C. Other business

55. The Working Party reviewed the implementation of Directive 91/250/EEC. It noted that Denmark, Italy and the United Kingdom had already implemented this Directive, and that procedures were under way in the other Member States.

\(^{(6)}\) See Annex.
The Commission representative reminded delegations that the Commission had written to Member States in Autumn 1992 asking for a table indicating the provisions of national law which implemented each of the provisions of the Directive.
Annex I. Recommendations for Settlement of Copyright Problems Arising from the Use of Computer Systems for Access to or the Creation of Works

Noting that States and international organizations are now giving high priority to information policy,
Recognizing that creation of systems for the organization and co-ordination of information and documentation has become a main element for the performance of the various functions of the society, in particular in scientific, economic, technical, political, cultural, educational and social fields,
Noting also that the rapid development of information technology and the importance of information products and services in international trade have led to the creation of computerized information systems, networks, and data bases, on both national and international levels, to enable information-seeking users to have direct access to such systems,
Taking into account that, at present, more and more works protected by copyright are used for storage in and retrieval from computer systems and this practice is likely to grow,
Considering that, at present, technological developments in the computer area have led to changes in methods of producing various categories of creative works which may respond to the general requirements for international and national copyright protection,
Recognizing the important role of copyright as a stimulus for creativity and the development of society,
Considering also that the use of the new technologies for access to or the creation of works should be facilitated consistently with the appropriate protection of works,
Taking note of the provisions of the international conventions on copyright actually in force,
Bearing in mind that the use of computer systems for access to or the creation of works has given rise to certain problems in the field of copyright,
Considering that the development towards international computerized information systems and the increasing transborder flow of data make it highly desirable to harmonize international views on the settlement of these copyright problems and
to achieve co-operation among States on common and practical solutions in this connection.

The Committee is of the opinion that:

(a) the use of computer systems for access to or the creation of protected works should be governed by the general principles of copyright protection as laid down in particular in the international copyright conventions and such use does not at present require amendments to these principles;

(b) the copyright problems raised by such use are complex and while settling them national legislation should take into account the legitimate interests of both the copyright owners and the users of the protected works in order to stimulate creativity of authors and not hamper the dissemination of works by means of computer technology;

(c) States, while seeking legal solutions on the basis of the existing principles or enacting specific legal provisions governing the problems arising from the use of computer systems for access to or the creation of works, should be guided by the following recommendations:

USE OF COMPUTER SYSTEMS FOR ACCESS TO PROTECTED WORKS

Subject-matter to which the recommendations apply

1. These recommendations apply to material which either constitutes intellectual creation and therefore is to be considered as enjoying protection under copyright legislation or otherwise enjoys protection under such legislation (hereinafter referred to as 'protected works'). Bibliographic data as such of a particular protected work (name of the author, title, publisher, year of publication, etc.) are not included in this definition.

2. Subject to the provisions of paragraph 1 above, protected works may embrace in particular the following categories:

(a) full texts, or substantial parts thereof and other complete representations of protected works;

(b) abbreviated representations of protected works either in the form of adaptations or derivative works or in the forms of independent works;

(c) collections and compilations of information, whether or not resulting from data processing, independently of the kind of information contained in them and of their material support (including collections and compilations of bibliographic data of several works);

(d) thesauri and similar works intended for the exploitation of computerized data bases.

Rights concerned

3. Storage in and retrieval from computer systems (input and output) of protected works may, as the case may be, involve at least the following rights of authors provided for in either international conventions or national legislation on copyright or both:

(a) the right to make or authorize making of translations, adaptations or other derivative works;

(b) the right to reproduce any work involved;

(c) the right to make the work available to the public by direct communication;

(d) the moral rights.
Acts concerned

4. Input. The act of input of protected works into a computer system includes reproducing the works on a machine-readable material support and fixation of the works in the memory of a computer system. These acts (such as reproduction) should be considered as acts governed by the international conventions (Article 9(1) of the Berne Convention and Article IVbis (1) of the Universal Copyright Convention as revised in 1971) and national legislation on copyright and therefore subjected to the author's exclusive rights and the requirement of prior authorization by the copyright owner.

For the purposes of this paragraph a work should be considered as reproduced when it is fixed in a form sufficiently stable to permit its communication to an individual.

5. Output. States should consider granting protection under copyright legislation in respect of output of protected subject-matter from computer systems whether this constitutes:
(a) a reproduction or a corresponding act (e.g. production of a hard copy print-out or fixation of texts, of drawings, of machine-readable forms, of sounds, of audiovisual works, etc., on analogous physical medium or a transmission of the contents of a database into the memory of another computer system with or without an intermediary fixation); or
(b) an act whereby such subject-matter is made available to the public (e.g. as visual images or other perceivable form of a presentation of a work).
Provisions of national legislation concerning reproduction and direct communication to the public must normally apply to such acts.

6. However, in order to harmonize the approach of States in settling the problems relating to input and output and to provide the authors with the real possibility of exercising control when their works are put into computer systems, States should consider the desirability of express recognition under their national laws of the exclusive right of the author to make his work available to the public by means of computer systems from which a perceivable version of the work may be obtained. Such a right may apply to the acts of input or output or to the act of input only, the latter being, in this case, the starting-point of control exercised by the author over the destination of his work.

Moral rights

7. General provisions in national and international law on moral rights are also applicable to the use of computers for access to protected works. States should consequently ensure that the obligations in this respect following from the relevant instruments are duly taken into account.

limitations on copyright

8. States should give special consideration to the application of the limitations of copyright protection permitted under international conventions (Article 9(2), 10 and 10bis of the Berne Convention and Article IVbis, paragraph 2, of the Universal Copyright Convention) and provided for in national laws, with regard to the use of protected materials in computerized systems, taking into account the developments in the field of computerized systems and the impact which these sophisticated techniques may have on the application of such limitations.

9. States may consider the possibility of allowing in their domestic laws, as
an exception to the exclusive rights, certain uses of protected materials in computer systems but such use must be within the limits established by the international conventions on copyright and in no way reduce the level of protection provided for under the conventions.

10. To the extent to which the right of translation and reproduction is concerned, in relation to storage in and retrieval from computer systems of protected works, the developing countries may avail themselves under national legislation of the relevant special provisions contained in the Paris Act of the Berne Convention and the Universal Copyright Convention as revised in 1971.

Administration and exercise of rights and legislative measures

11. Storage in together with retrieval from computer systems of protected works should be based upon contractual agreements or other freely negotiated licences arranged either individually or collectively. Taking into account that both authors and society at large are mutually interested in rapid and easy dissemination of works, States should consider undertaking appropriate measures to facilitate effective systems for the proper exercise and administration of rights in respect of works used in computer systems and practical possibilities for the exercise of moral rights.

12. The introduction of non-voluntary licences in respect of use of protected works in computer systems is permissible only when freely negotiated licences as mentioned in the preceding paragraph are not practicable and only to the extent to which such licences are compatible with the relevant provisions of the international conventions on copyright. Although such use of protected works in computer systems can have a transformer character, the effect of non-voluntary licences would be applicable only in the State where such licences have been prescribed.

Use of computer systems for creation of protected works

13. These recommendations do not deal with or affect the protection of computer software or programs as such which may enjoy protection under national laws (e.g. copyright, patent, unfair competition or trade secrets).

14. Where computer systems are used for the creation of works, States should basically consider them as a technical means used in the process of creation for achieving the results desired by human beings.

15. In order to be eligible for copyright protection the work produced with the help of computer systems must satisfy the general requirements for such protection established by the international conventions and national laws on copyright.

16. In the case of works produced with the use of computer systems, the copyright owner in such works can basically only be the person or persons who produced the creative element without which the resulting work would not be entitled to copyright protection. Consequently, the programmer (the person who created the programs) could be recognized as co-author only if he or she contributed to the work by such a creative effort.

17. When a computer system is used in the case of commissioned works or in the case of works by a person or persons under an employment contract the matter of attribution of copyright ownership should be left to national legislation.

18. Paragraphs 13 to 17 deal mainly with problems in connection with the creation of works by means of computer systems. It should, however, be borne in mind that these problems have, to some extent, aspects in common with those dealt with in the preceding paragraphs, e.g. as regards compilations, adaptations or translations produced by means of a computer system.