EU scope of copyright protection for computer programs

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Legislative timeline:

14 May 1991, after years of heated debate, Council Directive 91/250/EEC on the legal protection of computer programs ("Software Directive") is adopted. Key features include:

- Protection by copyright, as literary works within the meaning of the Berne Convention for the Protection of Literary and Artistic Works (Art 1)
- No comprehensive definition of "computer program" but express statement that the term 'computer programs' shall include their preparatory design material (Art 1) and a recital confirming that the term includes programs in any form, including those incorporated into hardware (recital 7)
- Protection shall apply to the expression in any form of a computer program. Ideas and principles which underlie any element of a computer program, including those which underlie its interfaces, are not protected by copyright under this Directive (Art 1)
- A computer program shall be protected if it is original in the sense that it is the author's own intellectual creation. No other test to be applied (Art 1)
- Confirmation that temporary and transient copying may implicate the reproduction right (Art 4)
- Permitted exceptions include:
    - necessary for the use of the computer program by the lawful acquirer in accordance with its intended purpose, including for error correction (Art 5.1)
    - making of a back-up copy by a person having a right to use the computer program insofar as it is necessary for that use (Art 5.2)
    - right of a person having a right to use a copy of a computer program, without the authorization of the rightholder, to observe, study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the program which he is entitled to do (Art 5.3)
    - Carefully balanced exception for decompilation to obtain information necessary to achieve interoperability of an independently created computer program with other programs (Art 6)
    - Additional special measures of protection e.g. against circumvention of copy protection (Art 7).

29 October 1993, Directive 93/98/EEC amends the Software Directive by deleting the term of life plus 50 so that the harmonised term of life plus 70 for literary works applies.

22 May 2001, Directive 2001/29/EEC on the harmonisation of copyright and related rights in the information society ("Information Society Directive") specifically provides that its provisions about legal protection of technological measures shall not affect the specific provisions in the Software Directive, and that the exceptions to the exclusive rights in relation to programs are governed exclusively by Arts. 5 and 6 of the Software Directive.

23 April 2009, Software Directive replaced by codified version 2009/24/EC.

The references to the Court of Justice of the European Union ("CJEU")

22 December 2010, nearly 20 years after the adoption of the Software Directive, the CJEU issued its first substantive decision in a reference from a national court about the Software Directive in case C-393/09.

Parties: *BSA Czech v. Czech Ministry of Culture*

Question referred: whether the graphic user interface of a computer program is a form of expression of the program within the meaning of Art 1(2)

Held:

- a graphic user interface is "an interaction interface which enables communication between the computer program and the user" but does not constitute "a form of expression of a computer program within the meaning of Art. 1(2)". Accordingly it cannot be protected specifically by copyright in computer programs
- a graphic user interface may however be protected by (non-program) copyright if it is original in the sense that it is its author's "own intellectual creation". This would exclude components dictated only by their technical function.

The Court then considered a second question as to whether the television broadcasting of a graphic user interface could constitute "communication to the public" of a work under Article 3(1) of the Information Society Directive. It held that, since interaction with the user is "an essential element characterising the interface", mere passive reception of the user interface via a TV broadcast does not amount to "communication to the public". It remains to be seen whether this purposive interpretation of "communication to the public" is adopted for other types of work.

28 July 2010, the High Court of Justice of England and Wales referred a series of questions to the CJEU, in litigation between *SAS Institute v. World Programming Limited*.

Questions referred relating to the Software Directive include (high level summary):

- how far can you go in copying functionality?
- are programming languages protected?
- are data file formats protected?
- scope of the Art. 5(3) exception?

The CJEU is also asked to answer questions arising under the Information Society Directive as regards use of technical information provided in manuals about the programs and programming language to create competing programs (and related manuals).

The questions in full:

A **On the interpretation of the Software Directive:**

1. Where a computer program ("the First Program") is protected by copyright as a literary work, is Article 1(2) to be interpreted as meaning that it is not an infringement of the copyright in the First Program for a competitor of the rightholder without access to the source code of the First Program, either directly or via a process such as decompilation of the object code, to create another program ("the Second Program") which replicates the functions of the First Program?

2. Is the answer to question 1 affected by any of the following factors:

   (a) the nature and/or extent of the functionality of the First Program;

   (b) the nature and/or extent of the skill, judgment and labour which has been expended by the author of the First Program in devising the functionality of the First Program;

   (c) the level of detail to which the functionality of the First Program has been reproduced in the Second Program;

   (d) if the source code for the Second Program reproduces aspects of the source code of the First Program to an extent which goes beyond that which was strictly necessary in order to produce the same functionality as the First Program?

3. Where the First Program interprets and executes application programs written by users of the First Program in a programming language devised by the author of the First Program which comprises keywords devised or selected by the author of the First Program and a syntax devised by the author of the First Program, is Article 1(2) to be interpreted as meaning that it is not an infringement of the copyright in the First Program for the Second Program to be written so as to interpret and execute such application programs using the same keywords and the same syntax?

4. Where the First Program reads from and writes to data files in a particular format devised by the author of the First Program, is Article 1(2) to be interpreted as meaning that it is not an infringement of the copyright in the First Program for the Second Program to be written so as to read from and write to data files in the same format?

5. Does it make any difference to the answer to questions 1, 3 and 4 if the author of the Second Program created the Second Program by:

   (a) observing, studying and testing the functioning of the First Program; or

   (b) reading a manual created and published by the author of the First Program which describes the functions of the First Program ("the Manual"); or

   (c) both (a) and (b)?

6. Where a person has the right to use a copy of the First Program under a licence, is Article 5(3) to be interpreting as meaning that the licensee is entitled, without the authorisation of the rightholder, to perform acts of loading, running and storing the program in order to observe, test or study the functioning of the First Program so as to determine the ideas and principles which underlie any element of the program, if the licence permits the licensee to perform acts of loading, running and storing the First Program when using it for the particular purpose permitted by the licence, but the acts done in order to observe, study or test the First Program extend outside the scope of the purpose permitted by the licence?

7. Is Article 5(3) to be interpreted as meaning that acts of observing, testing or studying of the functioning of the First Program are to be regarded as being done in order to determine the ideas or principles which underlie any element of the First Program where they are done:

   (a) to ascertain the way in which the First Program functions, in particular details which are not described in the Manual, for the purpose of writing the Second Program in the manner referred to in question 1 above;

   (b) to ascertain how the First Program interprets and executes statements written in the programming language which it interprets and executes (see question 3 above);

(c) to ascertain the formats of data files which are written to or read by the First Program (see question 4 above);

(d) to compare the performance of the Second Program with the First Program for the purpose of investigating reasons why their performances differ and to improve the performance of the Second Program;

(e) to conduct parallel tests of the First Program and the Second Program in order to compare their outputs in the course of developing the Second Program, in particular by running the same test scripts through both the First Program and the Second Program;

(f) to ascertain the output of the log file generated by the First Program in order to produce a log file which is identical or similar in appearance;

(g) to cause the First Program to output data (in fact, data correlating zip codes to States of the USA) for the purpose of ascertaining whether or not it corresponds with official databases of such data, and if it does not so correspond, to program the Second Program so that it will respond in the same way as the First Program to the same input data.

B **On the interpretation of the Information Society Directive:**

8. Where the Manual is protected by copyright as a literary work, is Article 2(a) [*reproduction right*] to be interpreted as meaning that it is an infringement of the copyright in the Manual for the author of the Second Program to reproduce or substantially reproduce in the Second Program any of the following matters described in the Manual:

(a) the selection of statistical operations which have been implemented in the First Program;.

(b) the mathematical formulae used in the Manual to describe those operations;

(c) the particular commands or combinations of commands by which those operations may be invoked;

(d) the options which the author of the First Program has provide in respect of various commands;

(e) the keywords and syntax recognised by the First Program;.

(f) the defaults which the author of the First Program has chosen to implement in the event that a particular command or option is not specified by the user;

(g) the number of iterations which the First Program will perform in certain circumstances?

9. Is Article 2(a) to be interpreted as meaning that it is an infringement of the copyright in the Manual for the author of the Second Program to reproduce or substantially reproduce in a manual describing the Second Program the keywords and syntax recognised by the First Program?