

Kluwer Copyright Blog

How much protection for computer programs? The opinion of AG Szpunar in C-159/23 Sony Computer Entertainment Europe

Bohdan Wid?a (Jagiellonian University in Kraków) · Monday, July 8th, 2024

How did we get here?

Case [C-159/23 Sony Computer Entertainment Europe](#) revolves around the scope of protection of computer programs under the 2009 [Software Directive](#). The Court of Justice of the EU (CJEU) will respond to two preliminary questions posed by the German Supreme Court. The detailed background of the case was discussed in a [previous post](#). To summarize, the central issue is whether changes made only to the content of variables stored in a computer's working memory are alterations of the program covered by the exclusive right from Article 4(1)(b) of the Software Directive. Variables are essentially locations in computer memory which can store different types of data accessed and processed by a computer program. When such data is modified in the working, volatile memory, it may influence the behaviour of the program without changing either its source code or object code. The issue is slightly more complicated by the fact that the work in question is a videogame, which means that at least some of its aspects, such as graphic and sound elements, can enjoy protection under the InfoSoc Directive ([C-355/12, Nintendo](#)). On 25 April 2024, AG Szpunar issued his [opinion](#) in the case. Although it does not suggest any revolutionary views in connection with the main object of the case, it is worth a closer look due to additional issues that emerged during the proceedings before the CJEU.

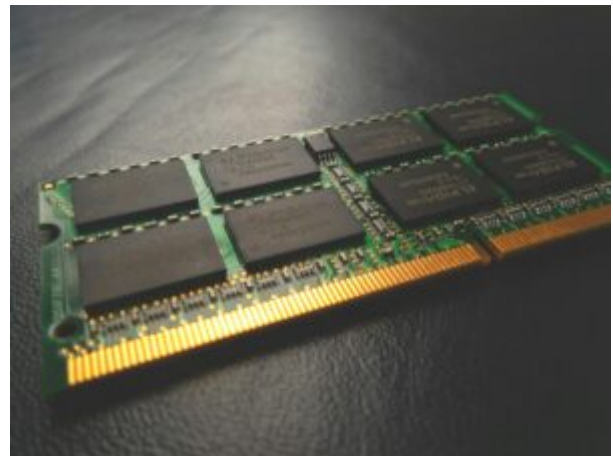


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No protection of the content of variables stored in the volatile memory

Both questions referred in C-159/23 specifically concern only the aspects of videogames protected under the Software Directive, which requires the EU member states to protect all forms of expression of computer programs. Referring to Article 10(1) of the TRIPS Agreement, the CJEU confirmed earlier that protection covers both the [source code and object code](#) (C-393/09, *BSA*). AG Szpunar contrasted code with variables that are ‘merely data (...) which the computer produces and reuses when running the program’. They could refer, for example, to the number of speed boosts available to a player in a racing game. AG Szpunar compared variables to the content of his opinion, which is external to the software used to draft it (para 48). He added that since they are the results of users’ actions, as opposed to the program’s author, they do not enjoy copyright protection (para 49). Additionally, he argued that such variables do not satisfy the requirement of sufficient identifiability established by the CJEU in C-310/17 *Levola Hengelo* (para 50). Both in the national proceedings and before the CJEU, Sony argued that one should appreciate the influence of the variables on ‘the game experience created by the programmer’. In other words, according to Sony a game should be taken as a whole, and what values the variables have in a given moment is a reflection of the original plan of the author. Therefore, changes to the variables are essentially changes to the work itself. AG Szpunar dismissed these arguments, stating that they would amount to protecting ideas and principles underlying the program (para 54). If the CJEU follows AG Szpunar’s suggestions, changing the content of the variables in the volatile memory will not amount to infringement of copyright in a computer program, provided that the code of the program remains unchanged. This conclusion appears to be in line with the [expectations of the referring court](#).

Limited scope of non-literal protection?

While describing the object of protection under the Software Directive, AG Szpunar repeatedly stressed that it is focused on the source code and object code (preparatory design materials mentioned in Article 1(1) of the Software Directive were irrelevant for the case). It is difficult to read this part of his opinion as anything but a deliberate argument for limiting the copyright protection of computer programs to their literal elements. AG Szpunar’s reasoning appears to draw a demarcation line between literal elements (code) and unprotected ideas and principles. He specifically mentions the ‘intentional restriction of that protection to the «literal» expression’ (para 40). If followed consequently, this interpretation would brush away any protection of non-literal elements of computer programs.

The term ‘non-literal elements’ is usually associated with ‘non-literal copying’: an umbrella term that refers to using parts of a given computer program without directly copying its code. Different authors use it in the context of various activities, such as imitating functionality, copying the program’s structure, imitating its look-and-feel or re-writing the program in another programming language (e.g., [Moon 2015](#); [Arnold 2020](#)). Compared to the USA (see [Whelan v. Jaslow](#), [Computer Associates v. Altai](#) and [Lotus v. Borland](#)), the jurisprudence in the EU remains scarce, with the exception of C-406/10 *SAS*, which dealt with the protection of functionality, and to a certain degree programming languages and data formats. However, it did not deal with such aspects as the internal structure of a program.

There are compelling arguments against limiting the scope of protection of computer programs in

the EU to literal elements. None of the provisions of the Software Directive specifically mention source code and object code. Instead, under Article 1(2) of the Software Directive, ‘any form’ of expression enjoys copyright protection. Article 4(1)(b) of the Software Directive grants the exclusive right to all kinds of alterations of the program and reproductions of such alterations. When a computer program is translated from one computer language to another, the purely literal elements of the original form are lost. Compilation (source code to object code), decompilation (object code to quasi-source code), or transpilation (source code in language A to source code in language B) are all such alterations that preserve only, or primarily, the non-literal elements of the original form. Each results in just another form of expression of the same work. And this is by no means an exclusive list. In his opinion, presented in [C-393/09 BSA](#), AG Bot compared preparatory design materials, another form of expression covered by the Software Directive, with a film scenario on which a program written in the form of code is further based. This analogy relies on the assumption that if the same computer program can be expressed either as preparatory materials or as code, the common protected element must be the non-literal elements. Although the CJEU did not repeat it in the *BSA* judgment, the phrase used by the court (“expression in **any form** of a computer program which **permits** reproduction in different computer languages, **such as** the source code and the object code”, para 35) is open-ended enough to include non-literal elements. The exact scope of their protection is indeed contentious, and too strong protection of such elements could significantly impair competition. However, it is difficult to deny at least some degree of such protection under the Software Directive.

The looming shade of communication to the public

The last and perhaps most intriguing part of AG Szpunar’s opinion deals with two issues that only materialized during the hearing and in the written submissions.

As easy as it is to lose track of the numerous cases dealing with communication to the public under Article 3 of the [InfoSoc Directive](#), arguments raised in [C-159/23 Sony](#) could take the issue to another level. The defendant (Datel) is not the person who allegedly alters the computer program but a manufacturer of a tool that allows users to do it. To justify Datel’s liability, Sony and the Commission suggested that the CJEU should apply its case law on communication to the public by analogy. If accepted, this reasoning would essentially equalize direct and indirect infringement for all exclusive rights. The waters of EU copyright law would also become far murkier, with the (in)famous test involving a number of complementary, not autonomous and interdependent criteria (see e.g., [C-392/19, VG Bild-Kunst](#)) becoming a cornerstone of analysis. AG Szpunar did not hide his scepticism, stressing that there is no simple analogy and that the Software Directive and the InfoSoc Directive have slightly different scopes and objectives.

Furthermore, the Commission suggested analysing the case from the point of view of the InfoSoc Directive due to the complex character of video games, confirmed by the CJEU in [C-355/12, Nintendo](#). AG Szpunar considered this issue purely hypothetical, as infringement of rights to non-software elements was not claimed in the main proceedings. He also dismissed the argument that changes to the game’s ‘narrative structure’ would infringe any exclusive rights mentioned in the InfoSoc Directive.

The fact that a significant part of the opinion is dedicated to issues raised late in the proceedings, and not discussed by the referring court, is in itself quite unusual. What is particularly striking is

the far-reaching arguments concerning the scope of liability were raised not only by the applicant, but also by the European Commission. Not long ago, a similar problem concerning online platforms caused enough uncertainty to warrant a legislative intervention – which led us to the hotly contested Article 17 of the [CDSM Directive](#) (see recital 61 of the CDSM Directive, acknowledging the uncertainty, and [C-401/19, Poland v. EP and the Council](#)). It is challenging to justify why the Commission, instead of proposing legislative changes, attempted to steer the CJEU into broadening the application of the communication to the public right. If anything, the attempt to use a fairly obscure case to achieve a far-reaching policy result proves that ideas developed in the CJEU’s jurisprudence have consequences, extending into areas likely not anticipated when the original idea was formulated. After all, one can very seriously doubt whether the CJEU even thought about computer programs when it developed its concept of communication to the public. This underscores the need to exercise extreme caution in applying it in other circumstances.

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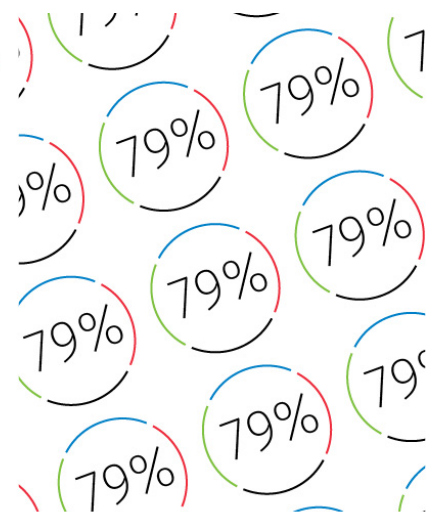
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