Case C-688/21

Summary of the request for a preliminary ruling pursuant to Article 98(1) of the Rules of Procedure of the Court of Justice

Date lodged:

17 November 2021

Referring court:

Conseil d'État (France)

Date of the decision to refer:

8 November 2021

Applicants:

Confédération paysanne and Others

Defendants:

Premier ministre

Ministre de l'Agriculture et de l'Alimentation

Intervener:

Fédération française des producteurs d'oléagineux et de protéagineux

1. Subject matter and facts of the main proceedings:

1 The proceedings concern the rules on genetically modified organisms (also 'GMOs') and in particular the rules on GMOs obtained by mutagenesis. The legislation, and first and foremost Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms, exclude such GMOs from their scope.

2 A genetically modified organism is a living organism the genetic heritage of which has been modified by human intervention. Transgenesis, which is a genetic engineering technique referred to in Part 1 of Annex I A to the Directive of 12 March 2001 and is subject to the obligations laid down in that directive,

consists in inserting into the genome one or more new genes from close or separate species. Conventional or random mutagenesis, which is referred to in Annex I B to the Directive of 12 March 2001 and is not required to fulfil the obligations laid down in that directive, consists, on the other hand, in causing random mutations in a DNA sequence by the action of chemical or physical mutageneous agents (ionising radiation). This technique was applied *in vivo* to whole plants or parts of plants, which were then subjected to selection and crossing procedures in order to select the mutations of interest from an agronomic viewpoint. Following the adoption of the Directive of 12 March 2001, new genetic modification methods were developed. These methods first of all consisted in applying random mutagenesis procedures *in vitro*, by subjecting plant cells to chemical or physical mutageneous agents. New techniques, known as targeted or genome editing mutagenesis, now consist, thanks to genetic engineering, in causing a precise mutation in a target gene without introducing a foreign gene. Thus, in particular, oligonucleotide-directed mutagenesis (ODM), which consists in introducing into cells a short DNA sequence which will cause a mutation in the cell identical to the cell carrying the oligonucleotide, is distinguished from directed nuclease mutagenesis (SDN1), which uses different types of proteins (zinc finger nucleases, TALEN, CRISPR-Case9) capable of cutting or editing the DNA. Cells thus modified are then subjected to *in vitro* cultivation techniques in order to regenerate entire plants.

3 By application of 12 March 2015, the applicants in the main proceedings, a French agricultural union and eight associations concerned with the protection of the environment and the dissemination of information on the dangers of GMOs, asked the referring court to annul the implied decision of the Prime Minister refusing their request that, inter alia, he revoke Article D. 531-2 of the *code de l'environnement* (Environmental Code), transposing Directive 2001/18, which excludes mutagenesis from the definition of techniques giving rise to genetic modification within the meaning of Article L. 531-1 of the code, and ban the cultivation and marketing of herbicide-tolerant rape varieties obtained by mutagenesis, and to order the Prime Minister, subject to a periodic penalty, to take all steps to introduce a moratorium on herbicide-tolerant plant varieties obtained by mutagenesis.

4 The applicants in the main proceedings submitted before the referring court, inter alia, that mutagenesis techniques have evolved and now make it possible to produce, as with transgenesis techniques, herbicide-resistant varieties. However, they submit, the obligations laid down in Directive 2001/18 do not apply to those varieties, even though they present risks for the environment or health arising in particular from the release of genetic material of those varieties leading to the appearance of weeds which have acquired the herbicide-resistant gene, from the ensuing need to increase the quantities and vary the types of herbicides used and the resulting pollution of the environment, or from unintentional effects, such as undesired or off-target mutations on other parts of the genome and the accumulation of carcinogenic molecules or endocrine disruptors in cultivated plants intended for human or animal consumption.

5 By judgment of 25 July 2018, *Confédération paysanne and Others* (C-528/16, EU:C:2018:583), the Court of Justice clarified the scope of the exemption concerning mutagenesis, stating, in the light of recital 17 of Directive 2001/18, that Directive 2001/18 excludes from its scope only 'organisms obtained by means of techniques/methods of mutagenesis which have conventionally been used in a number of applications and have a long safety record'. In addition, the Court of Justice stated in paragraph 51 of its judgment that 'Article 3(1) of Directive 2001/18, read in conjunction with point 1 of Annex I B to that directive, cannot be interpreted as excluding, from the scope of the directive, organisms obtained by means of new techniques/methods of mutagenesis which have appeared or have been mostly developed since Directive 2001/18 was adopted'.

6 Following that judgment of 25 July 2018, *Confédération paysanne and Others* (C-528/16, EU:C:2018:583), the Conseil d'État (Council of State, France), by a new decision of 7 February 2020, ordered the Prime Minister to determine by decree the restrictive list of techniques or methods of mutagenesis which have conventionally been used in a number of applications and have a long safety record.

7 A draft decree was drawn up on that basis which treated 'random mutagenesis, with the exception of *in vitro* random mutagenesis consisting in subjecting plant cells cultivated *in vitro* to chemical or physical mutageneous agents' as a '[conventional use] without any noted drawbacks with regard to public health or the environment'.

8 In the meantime, that draft has been notified, pursuant to Directive 2015/1535 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services, to the Commission, which issued a detailed opinion on 28 May 2021.

9 In that opinion, the Commission states, in particular, that the distinction drawn between *in vivo* mutagenesis and *in vitro* mutagenesis is not supported by the judgment of the Court of Justice of 25 July 2018, by EU legislation or by the scientific advances in such techniques. In its view, there is no distinction between the two techniques, but rather a continuum in the genomic changes triggered by *in vivo* and *in vitro* random mutagenesis, as well as in the regeneration of the resulting plants. The European Commission relies, in that regard, on a preliminary report of 19 May 2020 by the European Food Safety Authority (EFSA), in which that authority concludes that the processes and the repair mechanisms that are triggered by the mutagen act at the cellular level, and that there is thus no difference in the way the mutagen affects the DNA, regardless of whether the mutagen is applied *in vivo* or *in vitro*, and that the type of mutations induced by a specific mutagen are expected to be the same regardless of whether that mutagen is applied *in vivo* or *in vitro*. In its view, random mutagenesis as a whole should be regarded as one and the same technique of genetic modification within the meaning of Article 3(1) of Directive 2001/18. It infers from the foregoing that the

draft decree infringes that directive because it includes *in vitro* random mutagenesis within the scope of the legislation on genetically modified organisms.

10 It is true that, in its opinion on the draft decree,[1] the Comité scientifique (Scientific Committee) of the Haut Conseil des biotechnologies (High Council for Biotechnology, 'the HCB') does state that the DNA repair mechanisms activated by alterations induced by a mutagen and/or the cultivation conditions are identical, whether the cells are cultivated *in vitro* or *in vivo*. However, the HCB also sets out the specific effects of *in vitro* cultivation, referred to as 'somaclonal variations', which are defined as genetic and epigenetic variations resulting from the impact of *in vitro* cultivation on plant material, the frequency of which is greater than that of spontaneous mutations. Thus, according to the HCB, *in vitro* cultivation is a source of metabolic changes and stress exerted on the cells and tissues, on account of the particular lighting, growth medium and humidity conditions of such cultivation, and a number of studies show how those conditions trigger a series of changes in how the functioning of the genome is regulated.

11 By pleadings lodged on 16 June and 17 September 2021, the Fédération française des producteurs d'oléagineux et de protéagineux (French Federation of Oilseed and Protein Crop Producers) asks the Conseil d'État, (i) to recognise that the [French] State implemented the decision of 7 February 2020 by notifying the Commission, as required by Directive 2015/1535, of a draft decree clarifying the list of techniques of mutagenesis exempted from the legislation on genetically modified organisms and that the adoption of that decree was prevented by the primacy of EU law, in the light of, in particular, the detailed opinions of the Commission and of five Member States, as well as by the Commission's study on new genomic techniques and the preliminary report of the European Food Safety Authority (EFSA), which constitute changes in factual and legal circumstances, and, (ii) to clarify the meaning and the scope of the decision of 7 February 2020, so that *in vitro* random mutagenesis continues to be exempted from the legislation on genetically modified organisms and that, at the very least, effect may be given to potential directions in a manner consistent with EU law. In the alternative, the French Federation of Oilseed and Protein Crop Producers asks the Conseil d'État to refer a question to the Court of Justice for a preliminary ruling.

2. Assessment by the Conseil d'État

12 There are two opposing approaches to determining the techniques of mutagenesis which have conventionally been used in a number of applications and have a long safety record within the meaning of the judgment of the Court of Justice of 25 July 2018.

[1] High Council for Biotechnology (2020). Opinion of the Scientific Committee in response to the referral of 2 July 2020 concerning the draft decree amending Article D.531-2 of the Environmental Code (ref. HCB-2020.07.07-1). (Paris, HCB), 44 p. Available at http://www.hautconseildesbiotechnologies.fr.

13 Under the first approach, which is the approach adopted by the European Commission and the EFSA, account is to be taken, to that end, only of the process by which the genetic material is modified, whereas, under the second approach, which is the approach used by the Conseil d'État in its decision of 7 February 2020, account should be taken of all the effects on the organism of the process used where they are capable of affecting human health or the environment, regardless of whether those effects stem from the mutageneous agent or from the method used, as the case may be, to reconstitute the plant.

14 In that connection, the Conseil d'État will refer the first question set out below.

15 If the Court of Justice answers that question to the effect that, in order to distinguish from amongst techniques/methods of mutagenesis those techniques which have conventionally been used in a number of applications and have a long safety record, account must be taken of all the variations in the organism induced by the process used, including somaclonal variations, which may affect human health and the environment, it will be necessary to determine which factors are to be taken into account with a view to establishing whether a technique/method of mutagenesis has a long safety record within the meaning of the judgment of the Court of Justice of 25 July 2018.

16 In that connection, whilst it is clear from the documents in the case file that considerable research has been conducted into *in vitro* random mutagenesis since the 1980s and that different varieties thus obtained were registered in the 1980s and 1990s, that is to say before the adoption of Directive 2001/18/EC of 12 March 2001, there is very little evidence of the use of those varieties in farming over that period, even though only open field use appears relevant to ensure the safe release into the environment of genetically modified organisms.

17 In that connection, the Conseil d'État will refer the second question set out below.

3. Request for the expedited procedure

18 In addition to the particular risks which are at stake for human health and the environment, the present case raises a major point of controversy involving the European Commission and a significant number of Member States and, furthermore, is of concern to all Member States. Although none of those factors, taken in isolation, would be decisive in and of itself to justify the Court of Justice agreeing to the use of the expedited procedure provided for in Article 105 of its Rules of Procedure, taken as a whole those factors appear to justify the use of that expedited procedure. In the alternative, in the event that the Court of Justice were to reject that request, a request would have to be made that it adjudicate on the present case as a matter of priority, in accordance with Article 53(3) of the Rules of Procedure.

4. Questions referred for a preliminary ruling

19 The Conseil d'État refers the following questions:

1. Is Article 3(1) of Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC, read in conjunction with point 1 of Annex I B to that directive and in the light of recital 17 of the Directive, to be interpreted as meaning that, in order to distinguish from amongst techniques/methods of mutagenesis those techniques/methods which have conventionally been used in a number of applications and have a long safety record, within the meaning of the judgment of the Court of Justice of 25 July 2018, consideration need be given only to the methods by which the mutageneous agent modifies the genetic material of the organism, or must account be taken of all the variations in the organism induced by the process used, including somaclonal variations, which may affect human health and the environment?

2. Is Article 3(1) of Directive 2001/18/EC of 12 March 2001, read in conjunction with point 1 of Annex I B to that directive and in the light of recital 17 of the Directive, to be interpreted as meaning that, in order to determine whether a technique/method of mutagenesis has conventionally been used in a number of applications and has a long safety record, within the meaning of the judgment of the Court of Justice of 25 July 2018, account need be taken only of open field cultivation of the organisms obtained using that method/technique, or may account also be taken of research work and publications that do not relate to such cultivation and, in relation to that work and those publications, is consideration to be given only to work and publications relating to risks for human health or the environment?