Report from the Commission to the European Parliament and the Council (183) of 19/07/2024

on the implementation of Directive 2010/63/EU on the protection of animals used for scientific purposes in the Member States of the European Union and in Norway in 2018-2022

Detailed analysis

The context

This report on the implementation of the 2010 Directive over the years 2018-2022 is the second of its kind; the first, covering the years 2013-2017, was published in 2020 (including the UK at the time). The authors of this report highlight first and foremost an improvement in the quality and consistency of the information provided by the Member States .[1]

It should be remembered that this is only declaratory information, not verified by the Commission. The authors also state that *"this report does not prejudge the Commission's position in any infringement proceedings concerning the compatibility of national implementing measures with EU law".*

Regulatory developments

Since the Directive was transposed, legislation and/or regulations have changed in 25 Member States, including France, generally as a result of compliance checks by the European Commission.
In Italy, moreover, the use of animals for xenotransplants and studies on addiction (under debate for several years, with some members of parliament wishing to ban it) has been extended until July 2025

[1] This is already contradicted by the first question on national coordination: some countries indicate that only one ministry is involved while indicating several ministries in the following question.

National coordination and the competent authorities

The competent authorities must carry out 5 tasks under the Directive:

- approval of establishments,
- inspection of establishments,
- project assessment,
- project authorisation,
- retrospective assessment.

In addition, national coordination must ensure :

- setting up the National Committee,
- statistics,
- training initiatives.

- **National coordination of the 8 missions**

- There is considerable diversity between Member States (MS), depending on the administrative organisation. In 11 MS, several ministries are involved (3 in France: Ministry of Higher Education and Research, Ministry of Agriculture, Ministry of Defence). In the other 17, a single ministry is responsible for all missions.
- When several ministries are involved, tasks are usually shared, as is the case in France between the ministry in charge of research and the ministry of agriculture. The same is true in Spain.
- Three ministries are involved in Belgium, one for each
- In countries where decentralisation is strong, the structures are complex, with national coordination and regional bodies responsible for implementation in each region: Germany, Spain, Austria.
- Sometimes, when several ministries share responsibilities, one ministry coordinates the whole, as in the Czech Republic.

- **How many competent authorities are there in each Member State?**

Competent authorities do not have to be public bodies, provided - in accordance with article 59 of the European Directive - that they have the necessary skills and infrastructure and that there are no conflicts of interest in the performance of their duties.

The table below summarises the information by country (there is one error for France: there are not 4 competent authorities at national level, as indicated in the table, but 3; it cannot be ruled out that there may be other errors for other countries):

Number of CAs																												
Type of authority	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	**Total**
National	1		1	1	8		1	2	1	93	2	4	2	1	1	1	1	2	3	1	2	1	3	1		2	1	1	**137**
Regional	9	3	28		14	23			87	19	2	89		19		20	2						314			27			**656**
Local - shared by more than one establishment		20				550										224					15		11		42			40	**902**
Local - within establishment		11																											**11**
Total	**10**	**34**	**29**	**1**	**22**	**573**	**1**	**2**	**88**	**112**	**4**	**93**	**2**	**20**	**1**	**245**	**3**	**2**	**3**	**1**	**17**	**1**	**328**	**1**	**42**	**29**	**1**	**41**	**1 706**

Number of CAs																												
Public or non-public	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	**Total**
Public	10	3	29	1	22	573	1	2	88	89	4	4	2	20	1	245	3	2	2	1	2	1	316	1	42	29	1	41	**1 535**
Non-public		31								23		89							1		15		12						**171**
Total	**10**	**34**	**29**	**1**	**22**	**573**	**1**	**2**	**88**	**112**	**4**	**93**	**2**	**20**	**1**	**245**	**3**	**2**	**3**	**1**	**17**	**1**	**328**	**1**	**42**	**29**	**1**	**41**	**1 706**

Number of CAs																												
Responsibility	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	**Total**
Authorisation of establishments	10	3	28	1	1	305	1	1	14	19	2	2	1	19	1	245	2	1	1	1	1	1	1	1	42	1	1	1	**707**
Inspections	10	3	28	1	14	245	1	1	88	19	2	2	1	19	1	225	2	1	1	1	1	1	315	1	42	21	1	41	**1 088**
Project authorisation	10	31	1	1	7	23	1	1	14	19	1	2	1	19	1	1	1	1	1	1	1	1	12	1	42	6	1	1	**202**
Project evaluation	10	31	1	1	7	23	1	1	14	93	1	89	1	1	1	1	1	2	3	1	16	1	12	1	42	6	1	1	**363**
Retrospective assessment	10	31	1	1	7	23	1	1	14	93	1	89	1	1	1	1	1	1	1	1	1	1	11	1	42	1	1	1	**339**

Since 2017, the figures have changed. In France, for example, the number of animal experimentation ethics committees responsible for assessing projects has fallen from 125 to 89 (competent authorities indicated as regional). They are not public.
According to this table, the Member States do not have the same understanding of the concept of competent authority, and some of them have a very large number of authorities responsible for approving and inspecting establishments. This is the case in Germany, Italy and Poland in particular. In France, the situation is clearer on this point: the Ministry of Agriculture and the Ministry of Defence are the only two competent authorities responsible for these two tasks

When it comes to project evaluation, the situation is just as heterogeneous: between 1 and 93 competent authorities according to the table produced in the report (above). Spain holds the record with 93 competent authorities responsible for evaluation for 1,668 projects evaluated in 2022. France comes second with 89 competent authorities for 2,901 projects. In contrast, Italy and Norway have just one competent authority to evaluate 843 and 438 projects respectively.
The report notes that there is no correlation between the number of projects to be evaluated and the number of committees responsible for evaluating them.

The issuing of authorisations is also organised in different ways. In France, apart from the Ministry of Defence, one competent authority (the Ministry of Research) authorises all projects for the 589 user establishments, whereas in Germany, 23 competent authorities authorise 2,516 projects for the 965 user establishments (regional organisation).

The report highlights the major structural differences in the organisation of the competent authorities in the Member States, and observes **that when there are multiple competent authorities for the same task, it becomes difficult to guarantee a coherent approach**, particularly when the number of projects to be assessed by a given committee is low; such a committee with low activity cannot acquire and maintain the necessary expertise.

As indicated above, in the case of non-public competent authorities, measures must be taken to ensure that they are competent and that the means are available for them to carry out their

tasks. Six MS are in this situation. France has indicated that it ensures these conditions through accreditation and annual audits .[2]

In addition, the absence of any conflict of interest must be guaranteed. France replied that all the committees are independent and impartial and guarantee the confidentiality of the documents submitted to them. These requirements would be met if the applicant for authorisation did not take part in discussions on the project.
In Belgium, the members of the structures responsible for evaluating projects are required to produce a declaration of interest, while in Poland, the committees include representatives of animal protection associations, "which broadens the debate and provides additional independent input".

The National Committee's recommendations

Under article 49 of the Directive, **a national committee for the protection of animals used for scientific purposes** "shall *advise the competent authorities and the bodies responsible for animal welfare on matters relating to the acquisition, breeding, accommodation, care and use of animals in procedures, and shall ensure that best practice is shared*".
In most Member States, the National Committee issues recommendations, particularly for training purposes, aimed at ethics committees or animal welfare structures. Several countries have drawn up advice and guides for assessing projects in order to harmonise approaches and achieve greater consistency in results. This is the case in Belgium and Austria, for example, with suggested tools for damage/benefit assessment. A number of national committees (including CNPAFIS in France) have given their position on ECVAM's opinion on antibody production.
In addition, some initiatives have been taken by national committees to get closer to committees in other countries in order to share good practice. Only 9 MS replied that they had worked in this spirit.

Training

All countries indicate that they guarantee the minimum training required for the various skills. On the other hand, no country can demonstrate that it ensures that staff skills are maintained. However, ongoing training courses, e-learning sessions and tutoring systems are in place.
Twenty-two countries (including France) systematically accept regulatory training carried out in other Member States. Six say that this is not automatic, including Germany, Belgium and the Netherlands.
According to the report, "*staff must be supervised until their skills have been assessed.* ***However, not all Member States have formal systems for supervision and competency assessment.*** *An open-access e-learning module on competency assessment is currently being developed by the Commission*".

Project assessment and authorisation

All the Member States indicated that they evaluate projects from all angles: justification of the project, justification of the use of animals, minimisation of suffering, consideration of environmental impact (except 2 countries on this last point: Denmark, Norway). All of them

[2] Which in practice have not been achieved

(except Malta) also indicate that they assess the expected scientific or educational benefits and objectives of the project.

An open-ended question gave respondents the opportunity to indicate how they assessed the possibilities of replacement when applying for authorisation for the project, and a number of avenues are given: quality of the bibliographical research carried out, databases consulted, use of systematic reviews, description of the non-animal methods used, reasons for rejecting the alternative methods envisaged, etc. The assessors can themselves carry out additional research into all these elements and check, for example, whether the project does not constitute a repetition of previous research. The evaluators can themselves carry out additional research on all these elements and check, for example, that the project is not a repetition of previous research. In addition, the application of the replacement may be verified if an OECD-validated method exists for regulatory testing.
France responded to this question with the following two examples: application of the ECVAM recommendation for the replacement of the animal model in context of monoclonal antibody production; verification of the use of video or inert media in applications for authorisation of projects involving training.

When applying the reduction, requests for justification may relate to the statistical methods used, the type of experts consulted, the quality of the experimental design, the measures taken to avoid unnecessary repetition of research, the sharing and re-use of tissues, etc.
There are also many examples of refinement.

Concerning the assessment of severity, all the Member States state that they have distributed the European guide to the competent authorities, and the European Commission seems to consider that this is sufficient to meet this requirement. France, like 9 other countries, assures that all committees use this guide.

21 MS (including France) indicate that they provide the committees with tools to assess the harm/benefit ratio without specifying what these tools are.
All the Member States argued that the committees should have all the skills required to ensure, in particular, that the 3Rs principle is applied, that animals are housed and cared for and that veterinary practice is carried out in scientific laboratories, and that they should be familiar with the various areas of scientific use and issues relating to experimental design. The authors of the report note, however, that "***it will be difficult, in Member States where there are a large number of competent authorities responsible for evaluating projects, to guarantee that the level of expertise available in these areas is sufficient***".
The question was also raised as to how to ensure that approaches and decisions are consistent when there are numerous competent authorities. Several Member States have indicated the means they are using to address this problem: training, recommendations, meetings between assessors, feedback and sharing of assessments between authorities, discussion of complex cases, etc. The report is surprised that the countries concerned have not responded to this question in order to guarantee harmonisation of approaches. France is one of the countries that did not respond to this question.

Around half of the respondents (including France) stated that committee members are trained in the skills needed to carry out project assessments: ethics, animal welfare, application of the 3Rs principle, design of procedures, assessment of seriousness.
Several MS mention the skills required of project assessors, but **only Ireland mentions expertise in the field of non-animal alternatives**. In addition, some countries (Ireland, Italy, Finland) have

developed methods for checking members' qualifications and improving them: working under supervision for a certain period, conferences, group work, comparing results between committees on specific cases, etc.

The report also stresses **the importance of guarantees of independence and impartiality for the competent authorities responsible for assessment.**
Most countries claim to incorporate independent advice into the assessment process, but this issue has sometimes been misunderstood. France, for example, took the view that the competent authorities responsible for the assessment provided these guarantees when the opinions of external experts were sometimes sought (when skills complementary to those of the committee members were required). However, the question concerned the independence and impartiality of the authorities themselves.
Eleven MS state that decisions taken by the competent authorities responsible for project assessment are taken by consensus. Eleven other MS - including France - state that decisions are taken following a majority vote (with no further details). Finally, for six other MS, the decision-making method varies from case to case.

The number of projects authorised in the EU+Norway was 13,222 in 2022, a significant drop from between 15,000 and 16,000 in previous years.
In France, the number of project applications was 3,358 in 2018, 4,515 in 2019, 3,889 in 2020, 3,575 in 2021 and 2,901 in 2022. The downward trend will therefore also be seen in France in 2022.
However, France leads the EU Member States in terms of the number of licence applications, ahead of Germany (2,538 in 2022).
However, the reduction in the number of projects in no way implies a reduction of the same order in the number of animals used. This is an indicator taken into account by the Commission when estimating the workload of project evaluation committees

The number of rejected projects was 480 in 2022, or 3.5% of the total number of projects. This percentage is decreasing, since it was 4.7% in 2018 and 6.7% in 2020.
France's rejection rates are of the same order: 5.6% in 2021; 4.9% in 2022 (according to CNREEA's annual report for 2022, out of 2,714 applications, 3.8% were rejected or cancelled).
Reasons for rejection are not provided.

Retrospective assessments

Projects involving severe procedures (the most painful) and/or the use of non-human primates must undergo retrospective assessment by a competent authority. However, the competent authorities may extend the scope of these assessments to other categories of project.
The Directive allows non-technical summaries to be updated with retrospective assessments (RAs), but there is no obligation to do so. 16 countries (including Belgium, the Netherlands, Norway and Sweden) are required to do this in ALURES, while 12 countries (including France, Germany, Spain and Italy) are not.

In 2022, in the EU+Norway, 4,062 projects were subject to retrospective assessment, i.e. around 30% of projects. In 2/3 of the cases, the RAs were linked to the requirements of the Directive (61% for the strictness of procedures, 5% for the use of NHPs, 0.8% for both reasons), and in the other third, this was the choice of the committee responsible for the evaluation. There are

many reasons for this choice: projects dedicated to higher education, uncertain anticipated severity, projects associated with derogations, projects using a large number of animals, etc.
For the year 2022, France reported 675 RAs requested, including 499 for severity, 124 for the use of NHPs, 21 for both reasons, and 31 for other reasons. Other reasons therefore account for 4.6% of applications, a rate well below the European rate, which has fallen drastically in 2022 since it was 23% in 2021.

Animal welfare bodies (AWB)

Some countries have laid down rules in addition to the Directive's requirements concerning the persons responsible for animal welfare: for example, in 10 countries, the designated veterinarian must be included in the AWB. Other types of expertise are mentioned: an ethologist if the establishment uses NHPs; a person with expertise in alternative methods, etc.
But 16 countries, including France, did not specify anything about the profile of AWB staff.
As regards the training of AWB members, 16 countries - including France - have no policy in this area.
The main way for countries to check that AWBs are carrying out the tasks set out in the Directive is through inspection.
In some countries, the AWB have important roles to play: advising on the reduction of supernumerary animals, advising on the sharing of tissues and organs, approving projects and reviewing the results of studies.
In 9 countries (including Spain, the Netherlands and Italy), it is formally compulsory to consult the AWB when applying for authorisation for a project, before submitting it to the competent authority. In the other 19 countries, including France, this is not the case.

Principles of replacement, reduction and refinement

According to the responses from the MS, when applying for authorisation for the project :

- All countries include a section in their application relating to each of the 3Rs
- All countries require justification of the animal species used
- 26 countries, including France, describe the conditions for accommodation and care, and 24 request justification for derogations
- **A review of the literature has been requested in 22 countries (including Germany, Belgium, Spain, Italy and the Netherlands), but not in France.**
- A refinement specialist is involved in 18 countries, including France (note: Transcience is surprised this response from France, as the requirement for such a specialist does not appear in any document published by the ministry responsible for research).
- **A statistical expert is involved in 16 countries** (including Germany, Belgium, Spain, the Netherlands, Italy and Norway), **but not in France**.
- **An expert in non-animal alternative methods is involved in 15 countries** (including Germany, Belgium, Spain, Italy, the Netherlands and Norway)**, but not in France**.
- **The AWB's opinion is mandatory in 13 countries** (including Spain, Italy, Norway and the Netherlands), **but not in France .**[3]

21 countries request information on supernumerary animals, and 16 of them, including France, are developing strategies to optimise their use.

[3] The fact that this number differs from that mentioned in the previous chapter merely reflects the approximate nature of the answers given by the MS in many of the survey headings.

10 countries (including Germany, the Netherlands and Sweden) have drafted additional recommendations on implementing the 3Rs, but France has not.

11 countries have set up a 3R centre, including France with the FC3R created in 2021.

All countries use one or more methods to avoid unnecessary repetition of experiments: research in the scientific literature, specific questions in the project authorisation application form, mutual acceptance of data, keyword searches for identical projects in the European ALURES database, etc.
But **setting up a database of projects and/or publishing negative results,** two powerful methods for avoiding duplication of experiments, **are only used by a minority of Member States**: the Netherlands, Norway, Poland, Italy, etc.
France was not part of this group in 2022, but the FC3R has since initiated a project along these lines. In the Netherlands and Germany, pre-registration platform projects have been launched.

Origin of non-human primates

The Directive stipulated that from November 2022, unless a derogation is granted, Member States "shall *ensure that non-human primates ... may be used in procedures only if they are derived from non-human primates bred in captivity or from self-sustaining colonies ... 'self-sustaining colony' means a colony in which the animals are bred solely within the colony or come from other colonies but are not taken from the wild, and where the animals are bred in a way that ensures that they are habituated to humans*". The aim is therefore to use only primates of the second generation (F2) or higher, or primates from autonomous colonies. Remember that the Commission's report covers the period 2018-2022, so the obligation did not yet apply, but the Member States had to prepare for it.
Only 12 MS declared establishments using, breeding or supplying non-human primates, including France. Four MS (including France) admitted to having continued to use first-generation (F1) non-human primates bred for commercial purposes between 2018 and 2022 (this is also the case for Germany, according to their annual statistics, although this country did not declare it in its responses to the questionnaire).
These MS provided information on their strategy to move to the use of second generation or higher animals (F2/F2+). France replied that this would take longer than expected (in addition, as an exception to this rule, France carried out a project on primates in the wild in Mayotte, during a species conservation project).

Approval for breeders, suppliers and users

The definition and terms of authorisation of animal users, suppliers and breeders vary significantly from one MS to another, making it impossible to draw meaningful comparisons. For example, in many countries, a university as a whole holds an authorisation, while in others, each department of the university holds an authorisation. Another example: an establishment that is both a breeder and a user must apply for two authorisations in Belgium, whereas in other countries a single authorisation is required. In France, suppliers and breeders are not distinguished, whereas in other countries they are.
Taking these inaccuracies into account, the report gives the following figures: 667 non-user supplier or breeder establishments in 2022, including 14 in France; 3,487 user

establishments, including 575 in France. These numbers are fairly stable over the last five years.
In addition, 108 establishments host NHPs, of which 80 are users. Of the 108, 41 are in Germany, 35 in France, 10 in Italy and 8 in Spain.

During the period covered by the survey (2018-2022), 61 withdrawals or suspensions of approval were decided, including 1 in France. Italy carried out the largest number of withdrawals or suspensions, with 44 cases, for reasons of "rationalisation" of activities and structures, at the initiative of the research organisations.

Inspections

The Directive recommends that inspections should cover at least one third of establishments each year. Breeders, suppliers and users of non-human primates must be inspected at least once a year. In addition, pursuant to article 34-§4 of the Directive, *"an appropriate proportion of inspections shall be carried out without prior warning"*.
The rate of one third of inspections is difficult to monitor, since the number of inspections includes repeated inspections in the same establishment and mixes different types of establishments. However, overall, all countries (except 3) are above the rate of 33% of establishments inspected each year (France reached 48% in 2022).
For the EU+Norway as a whole, the total number of inspections amounted to 3,431 in 2022, a fairly stable number over time; 35% of these inspections were unannounced (compared with 39% in 2018 and 2019).
In France, 277 inspections were carried out, including 92 unannounced inspections, representing a rate of 33% (compared with 16% in 2017, 25% in 2018, 28% in 2019 and 22% in 2021). In 2022, France will be close to the European average for the first time.
But the variability between countries is extreme, with the rate of unannounced inspections varying between 0 and 100%! The report suggests that the notion of an "appropriate proportion" of unannounced visits is not understood in the same way everywhere.

In 26 countries, establishments are systematically inspected before a licence is issued. This is not always the case in France and Norway. France justifies this situation by citing "a shortage of inspectors".

A "checklist" - or equivalent tool for structuring inspections and ensuring that all the required elements are inspected - is used in 23 Member States, including France. Germany does not yet use this type of method.
The main non-compliances mentioned in France's response concern the following points: "*accommodation, pharmacy, staff training, implementation of the 3Rs, care culture, lack of project authorisations, daily visits*".
The European Guide to Inspections is provided to inspectors by administrations in 22 countries, but not in France.

Cancellation of a project authorisation

In 9 countries, projects were cancelled during construction, including Germany, Belgium, Italy, the Netherlands and Sweden. In all, 57 projects were cancelled over 5 years, including 29 in Germany and 17 in the Netherlands.

The reasons given are: animal welfare problems, unauthorised changes to the project, lack of competence on the part of the project manager, project conditions not respected, etc.

Breaches of regulations, legal and administrative action, penalties

The European Commission's survey does not ask the Member States how many sanctions they issue each year, but it does gather information on the nature of regulatory breaches.
Eight Member States reported no breaches of the regulations during this 5-year period. The other 20 countries noted infringements: incomplete or missing records, housing that did not comply with legal requirements, shortcomings in hygiene, failure to demonstrate daily monitoring of animals, incomplete AWB records, malfunctioning alarm system, insufficient enrichment equipment in cages, number of animals exceeding the authorised number, project carried out without authorisation, inadequate pain relief measures, insufficient training, etc.
The administrative response to these breaches can take several forms: letters demanding improvements, follow-up and re-inspection, written warnings, verbal requests, requests for additional training, or termination of the project.

France responded to this question as follows: "*the authorities issued 180 warnings (reminders of the regulations), including 40 in 2019, 38 in 2020, 59 in 2021 and 43 in 2022, for minor or moderate non-compliance. 77 formal notices were also issued, including 16 in 2019, 11 in 2020, 23 in 2021 and 27 in 2022 for minor, moderate or major non-compliance. Finally, a decision to suspend operations in 2021 was made following a targeted inspection because experimental procedures on Zebrafish were being carried out without authorisation and the staff handling the animals did not have the appropriate qualifications.*"

In addition, the authorities can take legal action (in 12 countries including France): mainly fines but also legal proceedings. France did not take any legal action during the period under review.
For the 5 countries that answered the question, the maximum fines ranged from €150 (Italy) to €40,000 (Czech Republic), with Germany in the middle of the range at €25,000.

Areas for improvement in applying the Directive

Training is considered sufficient by 15 countries. However, 9 others, including France, consider that progress still needs to be made in this area, particularly for less frequently used animal species (dogs, NHPs, farm animals, fish, etc.).

Access to databases, such as those of ECVAM, is considered important.

Luxembourg also sums up the problem of finding alternatives: "*there are many easily accessible databases, websites and books, but it is not always easy to find the appropriate alternative methods to use for a particular scientific question. Some subjects are more represented in the field of alternatives than others, such as toxicology versus immuno-oncology".*

"***Luxembourg concluded that it is not easy to advise researchers on the best methods and also expressed the view that researchers may not be taking enough time to study all the different possibilities open to them***."

Other areas for improvement included:

- sharing information between countries and between 3R centres;
- Improvements to the non-technical summary query module on the ALURES platform (more detailed keyword searches, etc.);
- improving transparency on the use of animals for scientific purposes ;
- strengthening the powers of the AWB ;
- training of inspectors at european level ;
- better monitoring of actual severity ;
- harmonisation of project evaluation at European level ;
- developing a culture of care ;
- additional recommendations to justify the use of NHPs ;
- progress towards international acceptance of non-animal alternative methods...

While all of these recommendations are relevant, each would need to be translated into a number of concrete measures and actions.