INTRODUCTION

The Zoos Directive

Directive 1999/22/EC, relating to the keeping of wild animals in zoos (the ‘Zoos Directive’), was adopted on 29 March 1999 and came into force in 2002. The Directive aims to fulfil the obligations deriving from the 1992 Convention on Biological Diversity (CBD) to adopt measures for ex situ conservation. Its objectives are ‘to protect wild fauna and to conserve biodiversity by providing for the adoption of measures by Member States for the licensing and inspection of zoos in the EU. In order to achieve these objectives, the Directive focuses on the role of Member States’ authorities in putting in place a system for inspection and licensing of zoos to ensure that zoos implement the conservation measures listed in Article 3.

The REFIT Programme and the evaluation study

As part of its Smart Regulation policy, the Commission initiated the Regulatory Fitness and Performance Programme (REFIT); a rolling programme that keeps the entire body of EU legislation under review and aims at making EU law more simple and less costly. The Zoos Directive is covered under the REFIT programme, meaning that its implementation needs to be evaluated by the European Commission.

Milieu Ltd and VetEffecT were awarded a contract in June 2016 to carry out a study supporting the Commission in this evaluation. Based on the Commission REFIT Roadmap setting out the scope and terms of reference of the Zoos Directive evaluation, the purpose of this supporting study was to assess the relevance, effectiveness, efficiency, coherence and EU added value of the Directive (the study is articulated around these five ‘evaluation criteria’, further divided in 16 ‘evaluation questions’) and to provide an evidence-based judgement to support the REFIT evaluation carried out by the Commission to inform future decisions relating to EU biodiversity policy and ex-situ conservation in particular.

Methodology and sources of information

The study gathered all available evidence in order to answer the 16 evaluation questions of the REFIT Roadmap. To this end, it included a literature review, targeted surveys aimed at key stakeholder groups (i.e. Member States competent authorities (MSCAs), zoo operators, NGOs and zoo federations), in-depth interviews and a public consultation. The targeted surveys and interviews, and part of the documentary review, focused on 14 Member States (Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, France, Ireland, Italy, Germany, Lithuania, the Netherlands, Poland, Portugal, Spain) selected as representative case studies. This in-depth research in the 14 Member States was complemented by the public consultation and general literature review, in order to broaden the scope and geographical coverage of the evaluation study to all Member States.

The targeted surveys received answers from the competent authorities of the 14 selected Member States, 13 NGOs, 13 zoo federations, 70 zoos and one expert. In-depth interviews were carried out with 44 stakeholders (13 MSCAs, 8 zoo federations, 6 NGOs, 9 zoo operators and 8 EU and international stakeholders). The public consultation received 2297 answers (1944 answers from individuals, 148 from zoo operators, 21 from business or business representatives, 7 from public authorities, 38 from NGOs, 34 from other associations and 105 “other”). The results of all


This sample allowed the study to cover half of the EU Member States, and has been defined with the aim of satisfying the following main criteria: a mix of both smaller and larger (or densely populated) Member States, with a significant number of zoos; geographical coverage of the EU (balancing North/South, West/East) and of different administrative models (e.g. federal and centralised states, etc.); a combination of older and newer EU Member States, to assess different implementation periods; general availability of information, and different progress towards the implementation of the Zoos Directive, including Member States where issues related to the implementation of the EU legislation have been raised.

3 39 NGOs were contacted (response rate = 59%); 22 zoo federations contacted (response rate = 33%); 514 zoos contacted (response rate = 14%); 10 contacted experts, academia (response rate = 10%).
consultations are published on the dedicated consultation website\textsuperscript{4}.

**Purpose of the workshop**

The consortium presented its draft key findings to the European Commission in the first trimester of 2017. The purpose of the workshop is to share these findings of the supporting REFIT evaluation study with representatives of governments and stakeholders, including representatives from relevant economic sectors and non-governmental organisations at both EU and national level directly concerned with implementation of the Zoos Directive to ensure that:

- important findings are not overlooked in the conclusions;
- there is no misrepresentation of evidence in findings;
- adequate regard is given to the different inputs and the evidence that supports different views.

This Study will be a key contribution to the Zoos Directive evaluation, whose findings are intended to provide a solid and informed basis for any follow-up actions.

In order to enable constructive and informed discussions during the workshop, this Background Workshop Document presents the key findings of the Study per evaluation criteria. Each section contains an introduction on the scope of the criterion, an overview of the sources used, the methodological challenges that were faced and the key findings underlined by the analysis.

## 2 KEY FINDINGS

### 2.1 EFFECTIVENESS

This section analyses the extent to which the general and specific objectives of the Zoos Directive have been achieved, notably:

- Protect wild fauna and conserve biodiversity by strengthening the role of zoos in the conservation of biodiversity (general objective);
- Ensure that zoos implement Article 3 conservation measures (i.e. research and training on conservation, exchange of information, captive breeding, repopulation or reintroduction into the wild; promotion of public education and awareness; accommodation of animals satisfying the biological and conservation requirements and a high standard of animal husbandry; prevent of escapes in order to avoid threats to indigenous species and of intrusion of outside pest and vermin; keeping appropriate records of the zoo’s collection) and that closures of zoos are appropriately handled (specific objectives).

In order to achieve these objectives, the Zoos Directive places obligations on Member States authorities, which are required to set up inspection and licensing systems and, thus, ensure that all zoos implement Article 3 conservation measures as a condition for them to operate and be open to the public. The setting up of adequate licensing and inspection systems and the implementation of conservation measures by zoos are expected to result in a strengthened role for zoos in biodiversity conservation, increased knowledge and public awareness in relation to the conservation of biodiversity and, ultimately, in the protection of wild species and prevention of biodiversity loss.

The analysis is based on literature and documentary review, data and information collected through the targeted surveys and interviews, and the results of the public consultation.

The supporting study was constrained by the limited amount of information on the baseline situation (i.e. before the entry into force of the Zoos Directive) and the lack of data on the implementation of the Zoos Directive, as there is no reporting obligation for Member States under the Directive. Information was therefore mainly obtained through consultations with stakeholders. In spite of this,

\textsuperscript{4} \url{http://ec.europa.eu/environment/nature/legislation/refitzoosdirective/index_en.htm}
two main issues still limit the analysis: the lack of reliable data on the performance of the licensing and inspection system (including the lack of historical data), which has only been partly offset through the targeted consultation with MSCAs; and a high representation of zoos belonging to zoo federations (and particularly to EAZA) among the respondents to the targeted survey, which can lead to bias in the evidence collected on application of conservation measures by zoos.

Nevertheless, the combination and triangulation of sources has allowed us to draw general conclusions. The results of the analysis show that progress has been made towards the achievement of the general and specific objectives of the Zoos Directive, although open issues remain, especially in relation to its inconsistent application across the EU Member States and to the capacity of the Member States to implement and enforce a fully effective licensing and inspection system. The following paragraphs discuss in more detail the achievements and open issues, along with the contributing and impeding factors.

**Achievements and contributing factors**

Little information exists on the status of zoos in the EU and the activities promoted prior to the adoption of the Zoos Directive. However, a comprehensive and consistent approach to ex-situ conservation was generally missing in the EU. In 1993, only five out of the then twelve Member States had relevant legislation on the subject, although it was not focused on conservation objectives. Moreover, the European Survey of Zoological Collections, conducted five years earlier in 12 Member States, found that there was no widely used definition of ‘zoo’, limited information was available on the number of zoos in existence, and few zoos broadly met ‘the standards required by international guidelines of modern zoo practice in the areas of animal husbandry, species conservation and public education’, whilst a considerable number did not meet any acceptable standards. The survey also found that there was little significant consideration of the conservation activities or potential of zoos.

**Against this baseline, the Zoos Directive has represented an important step forward.**

There have been initial delays and issues in the transposition and implementation of the EU legislation. However, Member States have gradually overcome these issues and have established legislative and practical conditions to ensure the implementation and enforcement of the Directive, by identifying the entities subject to regulation, designating competent authorities and defining roles and procedures for the licensing and inspection of zoos (including periodical monitoring inspections).

In order to ensure that zoos implement conservation measures, most Member States have set up a structured process for inspection, by using inspection forms that contain the elements mentioned in Article 3 and, in some cases, go beyond the measures defined in Article 3, by establishing additional requirements for visitors’ safety, or standards for animal accommodation (both as binding minimum standards or not binding guidelines).

In addition, out of the 14 Member States selected for the evaluation study, eight (Belgium, Bulgaria, Czech Republic, Denmark, Ireland, the Netherlands, Poland and Portugal) make use of specialised external experts (mostly experts from zoo associations, or retired zoo experts that participate on a

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5 Belgium, Denmark, France, Spain, United-Kingdom.
8 Namely Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain and the United Kingdom.
9 In 2002, the European Commission launched an infringement procedure for non-communication of national transposition against eight Member States (Germany, Denmark, Spain, France, Ireland, Italy, the Netherlands and Portugal). Subsequently, other infringement procedures for non-conformity with the Zoos Directive or bad implementation were launched against three of the 14 Member States in the sample. Other infringements were launched by the European Commission for bad application of the Directive.
10 Binding: Bulgaria, Belgium, Italy, Lithuania, Poland; non-binding: Germany and Ireland.
11 In Germany and Spain, external expertise is activated, respectively, in exceptional circumstances or depending on the Region.
personal basis in zoo commissions) in inspections. In the absence of detailed criteria for assessing whether zoos respect their legal obligations, the recourse to external expertise can represent an important means to ensure that the assessment is adequate. Some Member States have also issued guidance documents (e.g. Ireland and the Netherlands) for inspections, or are active in the organisation of workshops and trainings addressed to inspectors, in order to improve the effective implementation of conservation measures across EU zoos (e.g. Bulgaria, Spain and Ireland).

Understanding to what extent the licensing and inspection systems set up by the Member States have been translated into an improved conservation role among EU zoos is challenging given the lack of consolidated data on the activities performed by EU zoos and thus, on their contribution to the conservation of biodiversity. However, our survey addressed to zoos provides some indications. Results show that many zoos implement several conservation measures and participate in research (52 out of 70), in training in conservation skills (35 out of 70), or conservation breeding programmes. Regarding the latter point, out of 70, 44 zoos are involved in two breeding programmes coordinated by EAZA; the European Endangered Species Programme (EEP) and European Stud Books (ESB), 12. Moreover, it is interesting to note that several of the zoos participating in these programmes are non-EAZA facilities 13.

Most of the zoos surveyed have also defined a written education strategy (51 out of 70) and have set up the conditions necessary to ensure the application of high standards of animal husbandry (through environmental enrichment measures, implemented by 39 zoos out of 70; in-house or external veterinarians available, respectively, in 58 and 45 zoos).

These achievements also concern small-medium entities operating in different Member States. Although data collected does not enable a solid comparision, participation in conservation measures does not appear to be limited to EAZA zoos or to zoos belonging to national or international federations, which are typically more involved in conservation activities 14.

Moreover, a majority of respondents to the public consultation consider that the different conservation measures defined in the Zoos Directive are sufficiently promoted across the EU, and improvements have been noticed in the past 15 years in relation to educational activities provided by zoos and in the size and design of spaces where animals are kept 15. Specifically, positive feedback was given in relation to the activities of zoos aimed at providing information and raising awareness of species, wild animals and their natural habitats 16. Moreover, 72% of the respondents to the public consultation indicated they received information on species and conservation during a visit, and 74% considered (fully or partly) the information of species and their habitats well presented.

Finally, the Zoos Directive represents an important instrument contributing to the overarching

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12 EEP and ESB are breeding programmes, coordinated by EAZA, which aim at “conserving healthy populations of animals in captivity while safeguarding the genetic health of the animals under the care” of their zoos (EAZA Conservation Programmes. http://www.eaza.net/conservation/programmes/).
13 According to the results of the survey, 10 non-EAZA zoos take part in EEP (out of the total 44 zoos participating in this programme) and 11 non-EAZA zoos take part in ESB (out of the total 45 zoos participating in this programme). In this regard, EAZA pointed out that participation of non-EAZA zoos in these programmes has increased in the last years with, in 2015, almost 50% of zoos participating in this programmes being non-EAZA facilities (interview carried out during the study).
14 Among the 70 zoos replying to the survey, only 6 zoos reported not to belong to any federation and 11 did not provide information about their membership to any federation. Although this small sample does not allow us to draw conclusions, it appears that also this group of zoos take part in several of the conservation measures defined by Article 3. For example: almost half of these zoos (8 out of 17) participate in research projects; most of them (13 out of 17) take part in information sharing activities; 11 out of 17 have a written education strategy; and 16 out of 17 have a record keeping system of the zoo’s collection.
15 69% of the respondents (or 1,588) observed improvements in the educational activities provided by zoos in the past 15 years; 66% of the respondents (or 1,533) observed improvements in the size and design of spaces where animals are kept.
16 Particularly positive feedback is provided in relation to the following conservation measures: providing information on exhibited species, wild animals and their natural habitats: 70% or 1,607 of positive answers; providing education on and raise awareness of species, wild animals and their natural habitats: 62% or 1,424 of positive answer. Less positive feedback is related to: Animal conditions and care (point 21g): 46% or 1,056 of negative answers; research in species conservation issues (point 21a): 43% or 987 of negative answers.
objectives set at European and global level for the protection of wild fauna and the conservation of biodiversity (in particular, in the EU Biodiversity Strategy, the Birds and Habitats Directives, the Convention on Biological Diversity - CBD\textsuperscript{17} and the CITES). For example, more than 80 LIFE Nature projects have included \textit{ex situ} measures; between 1995 and 2014, 17 zoos have been involved in LIFE projects and contributed to conservation actions supported by this programme\textsuperscript{18}. In addition, over 300 species included in the Annexes to the Birds and Habitats Directives, and which are among Europe’s most vulnerable species, have benefited from such projects\textsuperscript{19}.

Overall, we conclude that the Zoos Directive has been successful in introducing \textbf{rules on a subject which had previously been largely unregulated} and has \textbf{driven the establishment of licensing and inspection systems} aimed at ensuring that common minimum standards are in place in EU zoos. Moreover, although available evidence is scarce and not conclusive, the data collected through the public and targeted consultations suggests that \textbf{EU zoos are participating in different conservation measures}, including research and captive breeding programmes, offering better animal husbandry conditions, and to promoting education and awareness among visitors and the general public. Compared to the baseline situation, when the limited information available pointed to the lack of conservation focus and acceptable standards among EU zoos, progress has been achieved, with \textbf{improved standards} across EU zoos and participation in conservation of biodiversity.

Moreover, according to some stakeholders\textsuperscript{20}, substantial positive effects of the Zoos Directive can be observed in relation to the \textbf{accommodation and housing conditions of animals} (including environmental enrichment measures, consideration of species specific needs, etc.), directly leading to better conditions across the EU for animals in zoos. As mentioned above, several Member States have integrated minimum standards in their legislation for animal accommodation, or provided non-binding guidance on this matter.

These are all significant achievements prompted by the Zoos Directive, along with several contributing factors. The European Commission has partly compensated the lack of a monitoring and reporting system and the earlier lack of guidance on the implementation of the Zoos Directive through the launch of several infringements procedures\textsuperscript{21}, and the publication of the Good Practice Document in 2015. Moreover, funding opportunities are available to zoos through programmes such as LIFE and ERASMUS. In addition, several stakeholders have contributed to the effective implementation of the Zoos Directive:

- While the Zoos Directive has provided a framework of minimum requirements to apply across EU zoos, Member States have provided for \textbf{additional requirements} in the transposing legislation (e.g. more detailed definition of zoos, or more detailed description of Article 3 measures including animal accommodation standards). Moreover, as mentioned above, the preparation of guidance documents and the organisation of training and workshops has significantly contributed to the application of the zoo legislation and the achievement of the Directive’s objectives.
- \textbf{EU} and national zoo and aquaria \textbf{federations} (particularly EAZA) have also been very active in supporting the implementation of the Zoos Directive, through their membership requirements, standards, training, breeding programmes, workshop and conferences and public awareness raising activities. Similarly, international stakeholders (IUCN, WAZA) have adopted key documents assisting the implementation of the Directive (e.g. IUCN Technical Guidelines on the Management of \textit{Ex Situ} Populations for Conservation or the World Zoo and Aquarium Conservation Strategy).
- \textbf{NGOs} have played an important role in monitoring the implementation of the Directive’s requirements (a key area of work for NGOs active in this field such as Born Free, promoter of an

\textsuperscript{17} i.e. the Zoos Directive directly implements \textit{ex situ} conservation measures envisaged under Article 9 of the CBD.
\textsuperscript{18} Information provided by the European Commission, DG Environment.
\textsuperscript{20} In particular, 8 stakeholders (zoos, zoo federations and MSCAs) out of the 44 interviewed.
\textsuperscript{21} 27 infringement actions and five pilot procedures.
independent EU Zoo Inquiry), informing the public and raising awareness.

Finally, actions taken by individual zoos as part of their commitments and response to changing attitudes among visitors, have been a driver behind the changes observed and the increasing attention to conservation of biodiversity.

Open issues and related impeding factors

The assessment has identified several open issues related to the transposition, practical implementation and enforcement of the Zoos Directive.

A first point relates to the licensing and inspection systems set up in the Member States and the inconsistent application of the requirements across the EU. Member State’s enforcement authorities use inspection forms and inspections usually cover the proper implementation of the conservation measures listed in Article 3 of the Directive. However, enforcement authorities have rarely detailed or specified the requirements of Article 3 in terms of operational criteria and measurable parameters. When this has been done, detailed criteria mainly relate to minimum requirements for animal accommodation and other aspects, such as safety of visitors, which are not directly relevant to the conservation objectives pursued by the Zoos Directive. This approach can be explained by the wide differences among zoo collections (making it difficult to define and apply standard criteria). Nevertheless, it remains difficult to assess how, in practice, it is ensured that conservation measures are implemented by zoos, and there is the risk of inconsistent application of the requirements, both across Member States and within each Member State (when the inspection system is managed at local or regional level).

The inconsistent application is also explained by the lack of monitoring and of reporting requirements, and the absence of other instruments to coordinate actions between Member States, such as a forum for exchange among Member State Competent Authorities. The Commission's Good Practice Document on the Zoos Directive has been an important instrument in this regard. However, it has only been issued in 2015 and has been disseminated and used at a level that is not yet fully satisfactory (due to its limited visibility and absence of translation in national languages).

Secondly, closure of non-compliant zoos remains an exceptional measure, and Member States’ authorities have resorted to it in only a few cases. The accommodation of animals under adequate conditions in the case of closure of a zoo remains a significant challenge for authorities, even in Member States where solutions for the relocation of animals have been put in place (mainly based on the cooperation between the authorities, zoo owners and/or NGOs). In addition, the economic influence of zoos at local level might sometimes explain why authorities do not resort to the closure of non-compliant zoos.

Thirdly and more generally, concerns remain about the effectiveness of enforcement of the legislation on zoos. Some stakeholders (especially NGOs but, to some extent, also a limited number of zoos) point out that unlicensed zoos still operate in the EU. This would indicate that Member States do not only fail to close non-compliant zoos, but are also unable to identify all entities that should be subject to the legislation.

The possibility of verifying these claims is out of the scope of our evaluation. However, shortcomings affecting the proper implementation and enforcement of the Zoos Directive have been identified: stakeholders (including Member States, zoos, zoo federations, NGOs and experts reached through the targeted consultation) seem to agree on the fact that the full effectiveness of the current licensing and inspection systems is hindered by a lack of resources and capacity. In most Member States, inspectors in charge of zoos are usually also in charge of enforcing other legislations (animals used for scientific purposes, exotic animals, companion animals, farms, transport, slaughter, food safety, animal health, epidemics control, environmental and safety risks). Consequently, this means that human and financial resources allocated to the inspection of zoos are limited. It also means that inspectors do not necessarily have a sufficient knowledge and understanding of conservation activities undertaken by zoos, and of the specific requirements that apply to them.

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22 This is also in line with conclusions of the Born Free EU Zoo Inquiry 2016 (in course of publication).
Summary: achievement of the objectives of the Zoos Directive

Overall, the main achievements, against the general and specific objectives of the Zoos Directive, can be summarised as follows:

- In line with the activities promoted by the Zoos Directive and the expected outputs, Member States have set up operational licensing and inspection systems, in order to ensure that zoos implement conservation measures and that cases of non-compliance are handled. However, although progress has been achieved, the study supporting the evaluation has also highlighted that implementation and enforcement issues remain.

- The establishment of licensing and inspection systems is expected to translate into the actual implementation of conservation measures by all zoos (i.e. the expected result of the Zoos Directive). Although available evidence does not allow us to draw overall conclusions, the data collected during this study shows that zoos apply conservation measures (as defined in Article 3 of the Zoos Directive) at different degrees and in accordance with their capacity. The focus of zoos’ activities is mostly on information exchange, captive breeding, education activities for the general public and keeping of animals under appropriate conditions. Moreover, the feedback from the public consultation points to gradual improvements observed across EU zoos in the last 15 years, especially in relation to educational activities and the size and design of spaces where animals are kept. As mentioned above, and further discussed under “EU Added Value”, this progress has been prompted by the Zoos Directive, but other contributing factors have also played a role (e.g. the action of zoo federations, NGOs and zoo owners).

- Finally, the overall impact of the Directive on protection of wild fauna and conservation of biodiversity (as outlined in its Article 1) is hard to measure, as no studies and very limited scientific literature exist. According to available literature, the overall contribution of zoos to biodiversity conservation through research, training, captive breeding or reintroductions remains limited. However, this issue is debated within the scientific community and, therefore, existing evidence is not conclusive. In parallel, it is safe to say that the Zoos Directive represents an essential condition for the achievement of the general objectives set at European and global level (particularly with the CBD) in relation to the protection of wild fauna and conservation of biodiversity.

2.2 EFFICIENCY

Efficiency is a comparison between inputs used in a certain activity and the outputs and results produced. This section addresses the range of regulatory costs implied by the implementation of the Directive, and whether these costs are reasonable and proportionate compared to the benefits delivered. It also identifies the factors driving costs and whether unnecessary burdens result from the Directive’s implementation.

The analysis focuses on the costs accrued for both Member State authorities (in charge of setting up and implementing the licensing and inspection system), and zoos (required to implement a set of conservation measures and undergo inspection and licensing procedures), and the benefits that can be attributed to the Zoos Directive across different fields (i.e. in terms of biodiversity conservation, public education, increased visitor numbers and opportunities for the local economy).

The analysis is based on the investigation of the licensing and inspection system in the selected 14 Member States, and on the information collected through stakeholder consultations (targeted surveys and interviews, and public consultation). The possibility to quantify the costs and benefits remains limited due to the following factors:

- The lack of literature and any independent assessment on the topic, which would have provided a point of reference.

- The paucity and low quality of information provided by stakeholders and, importantly, the difficulty to attribute the costs and benefits to the Zoos Directive. Generally, both Member State
Costs and benefits of the Zoos Directive

By introducing a licensing and inspection system, the Zoos Directive has resulted in an increase in costs for both Member State competent authorities and zoos, respectively for the enforcement of the legislation and the application of the requirements related to conservation measures. However, despite the lack of reliable data, the extent of increased costs appears relatively limited.

On the one hand, for Member State authorities, new or additional costs (compared to the situation before the entry into force of the Zoos Directive) are borne in relation to the treatment of license applications, and for the preparation, execution and follow-up of inspections. The magnitude of these costs largely vary across Member States depending on the organisation of the licensing and inspection system (frequency of the inspections, number of inspectors involved in each on-site visit, existence of a pre-inspection phase). Where estimates have been provided, however, the resources fully dedicated to the enforcement of the Zoos Directive appear relatively limited (in some cases, less than one full time equivalent), or are difficult to quantify as zoo inspectors are usually also responsible for the enforcement of other legislative acts concerning biodiversity protection and animal welfare, as explained above. While there is agreement among MSCAs on the increase in costs directly related to the performance of the inspections, only half of the Member States that provided an answer reported an increase in training costs. This data is in line with the issues raised by stakeholders, including MSCAs, about the lack of appropriate knowledge of zoo inspectors, and the need for better promoting targeted training activities. Finally, no MSCA was able to quantify the costs occurred following the closure of a zoo and, according to Article 6 of the Zoos Directive, the relocation and accommodation of animals.

Regarding zoos, the information collected through the targeted consultation is extremely fragmented. A significant number of zoos in the sample (between 20 and 31 zoos of 70) report an increase in recurrent expenditures related to Article 3 conservation measures and investment across different fields: renovation of the enclosures, provision of information on exhibited animals, improved standard of animal husbandry and enclosures, systems to prevent escape and record keeping/animal identification systems. Where zoos have reported investing money, these costs are usually not seen as a direct consequence of the Directive. For example, out of the 31 zoos that reported investments for enclosure renovation, only 12 attributed part of these costs to the Zoos Directive. Similarly, for the other types of expenditures, the majority of responding zoos did not consider their expenditure a direct consequence of the Directive. The same pattern appears to hold for recurrent expenditures, where some zoos report a wide range of expenditures, but do not see these as attributable to the Directive. In general terms, it has been difficult for zoos involved in the targeted consultation, to disentangle the costs borne as a direct consequence of the Directive from expenses that would have occurred anyway, i.e. in absence of the Directive, and as part of the evolution of their role towards one of “modern zoos”.

Different considerations are valid in relation to the administrative burden, which has also been introduced along with the licensing and inspection system. In this case, efforts of zoos related to licensing and inspection procedures have increased (i.e. preparing an application for the license, preparatory work for the inspection, send documents to authorities, fill-in pre-inspection questionnaires, taking part in the visit of the MSCAs, providing answer to the inspection report). However, administrative costs appear to be strictly related to the requirements for obtaining the license, and in very few cases are considered by zoos as not proportionate to the overall benefits achieved or unnecessary.

Overall, costs have been considered as proportionate for competent authorities and zoos in the wide majority of cases, despite the uncertainty about the extent of costs and the benefits that can be attributed to the Directive.
According to all categories of stakeholders (consulted through the public and targeted consultation), the Zoos Directive has brought benefits across different areas, particularly by contributing to: public education and knowledge on biodiversity, improved accommodation of animals and standards for animal husbandry, efforts for *ex situ* conservation, and higher engagement of the public and stakeholders in biodiversity protection. Still, it remains difficult to establish to what extent these benefits can be attributed directly to the implementation of the Zoos Directive, and to what extent other factors (the evolution of zoos as institutions, and the change in expectations of the general public) have played a role. Moreover, benefits in terms of increased numbers of visitors and income for zoos as economic operators, and on the local economy, have generally been considered limited.

Despite this lack of clarity, as previously mentioned, costs were generally considered proportionate to the benefits by the large majority of zoos. Moreover, no significant difference emerged between zoos of different sizes, with no strong evidence that smaller zoos have faced higher difficulties in adapting to the legislation.

**Results of the analysis of unnecessary burden and of the factors contributing to efficiency**

No major issues have been raised in terms of unnecessary burdens by zoos or MSCAs. In parallel, it has not been possible to clearly identify how the different licensing and inspection systems, implemented in the 14 Member States, affect the level of costs and benefits achieved.

The information collected on the costs, the achievements and benefits associated with the Zoos Directive does not enable a systematic comparison between the Member States and the drawing of conclusions about casual links between the level of costs and achievements/benefits on the one hand, and the key features of the national implementation system on the other. However, the qualitative information gathered suggests that the issues hindering the proper and efficient functioning of the licensing and inspection system are mainly associated with the resources and capacity of national inspectorates, rather than with specific requirements of the national implementing legislation (such as the frequency of inspections).

In this view, possibilities for enhancing the efficiency of the Zoos Directive are mainly related to improved guidance and involvement of external experts in the inspection process (in order to provide specialised expertise during the inspections), and elimination of possible duplications due to controls carried out under different legislative acts (i.e. under Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein, and Directive 92/65/EEC on animal health requirements for trade in and imports into the EU).

**2.3 RELEVANCE**

The relevance analysis relies on a comparison of the current needs and objectives with those defined at the time of adoption of the Directive. The Zoos Directive was adopted in 1999, and has been in force since 2002 without further amendments. The purpose of the analysis was to identify any disparity between the objectives of the Directive and the current (legal, policy and scientific) situation.

The analysis is mainly based on relevant scientific literature and policy documents. Information was also drawn from the targeted surveys and public consultation. The evidence gathered in the context of the analysis of relevance is therefore based both on documented evidence and on the stakeholders’ perception.

Overall, the evidence indicates that the Directive is still relevant, as its objectives still correspond to the current needs and objectives and scientific knowledge. This observation is however to be nuanced on specific aspects, where relevance could be further enhanced.

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23 Stakeholders were asked about the relevance of the needs that justified the adoption of the Directive and whether the Directive was adapted to technical and scientific progress.

24 The consultation sought the opinion of the public on the importance of EU-wide rules on zoos for different aspects of biodiversity conservation and zoo management.
Current needs and objectives at EU and global level

Scientific evidence shows that the status of conservation (both in terms of species and habitats) has deteriorated over the last two decades. At the same time, our understanding of the importance of the protection of threatened species and of public awareness on biodiversity conservation issues has improved. These observations are backed up by scientific literature, and the overwhelming majority of stakeholders who participated to our targeted survey and public consultation (over 88% of stakeholders) agree on the current need to protect threatened species and make the public aware of conservation issues.

The need to protect biodiversity conservation is significantly greater now than at the time of the adoption of the Directive, and this evolution is reflected in the changes in policy objectives at EU and international level. In particular, global biodiversity policy has drastically changed since adoption of the Directive. The objectives set by the Parties to the CBD, which provided the initial international context of the Zoos Directive, have evolved markedly since the Directive came into force, with the adoption in 2010 of 20 targets (Aichi targets) with a specific focus on biodiversity conservation, and direct references to the protection of species and to education and awareness. Similarly, some of UN Sustainable Development Goals (SDG) adopted in 2015, set up targets for the protection of biodiversity by 2020. These international instruments provide a stronger legal framework surrounding the Directive than what was in place at the time of its adoption.

In light of these new objectives, the Directive’s objectives are still relevant. Its main general objective, the protection of biodiversity, and its specific objectives of ensuring the participation of zoos in conservation activities and the conservation promotion and awareness activities of zoos, are more needed than ever. This view is supported by all types of stakeholders (authorities, zoos and federations/NGOs) surveyed for the study, who consider the Directive as an appropriate way for ex situ management to meet the current needs (on average over 74% of respondents to the survey find the Directive still relevant).

The evolution of international instruments from general aspirations to focused targets has resulted in more specific objectives in relation to the conservation of biodiversity, to which ex situ management can contribute. These more specific objectives and indicators facilitate the implementation of the Zoos Directive's framework provisions. However, there is a general need to be more explicit about where ex situ management is most needed and could have the biggest impact in achieving conservation objectives. This criticism is supported by previous reports23 and stakeholders in our survey (zoo operators, federations) pointed to the need for a more targeted approach to ex situ conservation to meet the new, more specific objectives set at EU and international level.

Scientific and technical developments

There has been a wide range of scientific and technical developments in the field of biodiversity conservation since 1999, in particular in terms of:

- population management,
- identification of species in need of conservation action,
- identification of the actions needed for threatened species.

More specifically, in relation to scientific and technical developments in the field of ex situ management, a lot of progress has been made since the adoption of the Directive in relation to the interaction between in situ and ex situ conservation.

Due to its broad scope and formulation, the Directive does not contain any outdated requirements in relation to these developments. The results of stakeholders’ consultations support this conclusion. The majority of stakeholders responding to the targeted surveys (82%) consider that the Directive remains

appropriate in light of subsequent technical and scientific developments. There is a strong sense that it is in particular well adapted given scientific and technical progress in the field of biodiversity generally.

Stakeholders nevertheless also indicated that the interaction between in situ and ex situ conservation could be significantly enhanced.

2.4 COHERENCE

Evaluating the coherence of an EU act involves looking at the wider policy and legal framework in relation to a policy field. It evaluates how well the different interventions work together, by providing evidence of synergies and complementarities that could reinforce the achievement of common objectives, but also analyses inconsistencies and overlapping obligations that could lead to inefficiencies. The evaluation on coherence also seeks to examine the extent to which the Directive has supported the EU internal market and the creation of a level playing field for zoos across the EU.

The primary objective of the Directive is the conservation of biodiversity through establishing a conservation role of zoos. The Zoos Directive hence fits within a wide net of laws and policies at EU and national level aimed at the conservation of biodiversity, including in relation to conditions for accommodation of animals.

The coherence analysis is primarily based on the legal examination of the strategic objectives and specific provisions of relevant legal acts, with a view to assessing their consistency with the Zoos Directive. The results of the targeted consultations and public consultation were also taken into account.

The evaluation study reached the conclusion that there are no major inconsistencies and that, by the creation of a coherent legal framework, the Directive contributed to establishing a level-playing-field between all EU zoos. However, it also noted that this has not yet been achieved fully, and would be strengthened by better and more coordinated implementation.

A comprehensive and consistent framework for biodiversity conservation

The legal analysis has not revealed any inconsistencies between the Zoos Directive and the legislation examined. On the contrary, there are examples of positive interactions that strengthen the achievement of the objective of biodiversity conservation. Biodiversity conservation is not only the primary objective of the Zoos Directive, but also of the Birds and Habitats Directives, the EU Wildlife Regulation and the IAS Regulation. Taken together, these instruments establish a comprehensive system for biodiversity conservation in the EU, and contribute to the compliance of the Union with its obligations under the CBD.

At the same time, there is scope for further synergies in order to reinforce the effectiveness of the legal framework applicable to zoos and their contribution to biodiversity conservation. For instance, reintroduction programmes for native species are foreseen under both the Zoos Directive and the Habitats Directive, and zoos should be encouraged and provided with funding to participate and develop such programmes. Further synergies can also be enhanced with regard to the inspections carried out by the competent authorities in each Member State to check the compliance of zoos with their obligations, notably under the Zoos Directive, the EU Wildlife Regulation and Directive 92/65/EEC on animal health requirements. Instead of making zoos subject to several inspections, the organisation of joint inspection procedures to ensure compliance with the different pieces of legislation applicable to zoos was observed as a good practice to prevent inefficiencies and the

duplication of the work required from zoos and competent authorities to prepare and carry out the inspections.

Certain stakeholders and members of the wider public participating in the public consultation considered that there are some inconsistencies between the Zoos Directive and Regulation No. 1739/2005 on the movement of circus animals (‘Circus Regulation’), as well as with the IAS Regulation. However, the legal analysis concludes that there are no coherence issues. With regard to the Circus Regulation, it should be noted that given the clear exclusion of circuses from the scope of the Zoos Directive, there is no interaction between the two acts. Concerning the IAS Regulation, even though zoos are required to ban the keeping and breeding of IAS, this is fully in line with the biodiversity conservation objectives embodied in the Zoos Directive and the IAS Regulation, in view of the particularly negative impact that a spread of invasive alien species may have on local biodiversity. While it is acknowledged that zoos are not the main pathways for invasive alien species, there is evidence that they can still function as pathways, which justifies the strict approach taken.

**Creation of a level-playing-field**

The coherence analysis examined the extent to which the Zoos Directive has supported the EU internal market and the creation of a level-playing field for zoos across the EU. Prior to the adoption of the Directive, not all Member States had legislation in place to regulate the activities of zoos. Therefore, by making zoos in the EU subject to certain minimum requirements, such as the obligation to hold a license, to be subject to inspections and adopt the conservation measures provided in Article 3, the Zoos Directive constitutes an important step towards the establishment of a coherent legal framework for all EU zoos.

However, the establishment of a real level-playing field requires consistent and coordinated implementation of the Directive by the Member States. In practice, the analysis of the implementation of the Directive indicates that there are discrepancies in the legal obligations imposed on zoos in the different Member States, as well as in the level of control and enforcement mechanisms put in place presented under the analysis of effectiveness above. These discrepancies prevent the full achievement of a level-playing field.

This partial completion of the level-playing field is well reflected in the nuanced results of the targeted consultation, where 53% of stakeholders who expressed an opinion on this matter believe that the Directive has brought no benefits or minor benefits through establishing a level-playing field between zoos in different Member States.

**2.5 EU ADDED VALUE**

The criterion of EU Added Value aims at examining, from a qualitative perspective, to what extent the Zoos Directive has contributed to strengthening the role of zoos and to promote the adoption of conservation measures in a way that could not have been achieved by Member States on their own and/or by other stakeholders, and whether there is a need for continued EU action.

The analysis of the added value of the Directive was impaired by two critical limitations in the data available. Firstly, due to the absence of an impact assessment prior to the adoption of the Directive, only limited information was available to understand the situation in the Member States before the regulation of this issue at EU level. To overcome this lack of information, we defined the baseline by analysing the legislative frameworks applicable in countries member of the European Communities in 1992, by reviewing the 1988 European Survey of Zoological Collections and by interviewing experts in biodiversity conservation involved in the adoption of the Zoos Directive. The second data limitation

27 The framework wording of the Directive has given Member States a big margin of discretion in the transposition and implementation of the Directive’s requirements. This resulted in a situation where Member States have adopted legislation which varies significantly in terms of the obligations with which zoos must comply, e.g. different definitions of ‘zoo’, varied use of the exemption clause, use of cumulative instead of alternative wording in transposing Article 3, 1st indent, adoption of different standards, etc.
concerns the lack of monitoring and reporting requirements under the Directive. Such data would have helped us fully grasp the evolution in the implementation of the Directive across Member States. Information to understand this evolution was instead gathered through the targeted surveys, in-depth interviews and the public consultation.

The results of our analysis indicate that the Zoos Directive has, to some extent, achieved more than what would have been achieved by Member States on their own, and is perceived as a needed instrument for continued EU action in the field of *ex situ* conservation.

**EU wide results achieved by the Directive**

The Zoos Directive has played a crucial role in **setting a legal framework for the implementation of conservation measures by zoos**. It is the main achievement and added value of this EU legislative instrument: the Directive has set binding rules on all European zoos and, as such, prompted the adoption of conservation measures among them through the compulsory requirements of licensing. Without an EU Directive, **this overall result would probably not have been achieved under national legislation**, through participation in international agreements or the membership requirements of zoos federations. Before the adoption of the Zoos Directive, national legislation regulating the matter was absent in most Member States. Where national rules were in place - in five out of the twelve then Member States (i.e. Belgium, Denmark, France, Spain, and the United Kingdom) - (European Parliament, 1993) they included requirements for licensing and inspection, but mainly in relation to conditions for animal accommodation and animal welfare, while missing objectives on biodiversity conservation. Standards and guidelines were provided by zoo federations such as EAZA prior to the adoption of the Directive. These nevertheless had a limited impact due to their coverage (17% of licensed zoos are part of EAZA), scope (before the adoption of the Directive, EAZA standards covered exclusively accommodation and care of animals) and non-binding nature.

Regarding the implementation of conservation measures, the results of the targeted consultation, especially from zoo operators, highlighted that the Zoos Directive has partly contributed to the implementation of conservation measures and to a strengthened role of zoos. While EU action has certainly prompted the setting-up of a common framework, it is less obvious to what extent it has led to increased conservation activities among zoos. As outlined under the section on effectiveness, external factors also led zoos to implement conservation measures. The work done by zoo federations (i.e. definition of guidance and standards) as well as individual ambitions of zoo owners are important elements behind the increased efforts conservation activities of zoos. In that regard, it should be mentioned that 50% of the zoos belonging to a zoo federation that responded to our survey considered that the Zoos Directive did not contribute to implementing new conservation measures or improving the existing ones. These zoos expressed the view that, regardless of legal obligations, they would have implemented conservation measures as a consequence of broader changes at a global scale, the evolution of the role of zoos as conservation centres, and to meet visitors’ expectations on animal welfare, education and biodiversity conservation. It can be stated that the Zoos Directive and external factors exerted a mutually reinforcing effect on strengthening the role of all zoos in the conservation of biodiversity. According to a majority of MSCAs, NGOs and zoos, the Directive has caused a more efficient and faster implementation of conservation measures, especially in zoos that are not part of a zoo federation.

The results achieved with the implementation of the Zoos Directive were limited by several key factors, as discussed in the previous sections. Besides the external factors mentioned above, some factors are also related to the design and practical implementation of the Directive itself. According to both literature28 and stakeholders29, the alternative wording of Article 3, first indent, diminished the potential of the Directive to make all zoos evolve from entertainment to more conservation-oriented entities. On this note, it is important to bear in mind that the choice between several conservation options accommodates the wide differences in zoos’ capacities to implement these measures. The absence of requirements on the prioritization by zoos of *ex-situ* conservation of protected and

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29 In interviews with MSCAs and NGOs, see also Born Free Inquiry.
threatened species hinders the contribution of the Directive to wider conservation objectives, especially in the absence of complementary and targeted strategies on this aspect. Limitations on the implementation of the Directive also had a critical impact, with its lack of monitoring or reporting requirements, absence of coordinated action at EU level, and late issuance of the Guidance Document.

Need for continued EU intervention

Several elements suggest that there is still a need for EU intervention. Firstly, as explained under effectiveness, the objectives of the Directives have not yet been fully achieved. As a consequence, differences exist across Member States in terms of implementation and enforcement, which has led to discrepancies in the obligations applying to zoos. As explained above, this affects the level-playing field between zoos operators in the different Member States. This also impairs the proper protection of biodiversity sought by the Directive. These difficulties can only be overcome with full implementation of the Directive.

In parallel, existing international (i.e. Conventions such as CBD and CITES) and non-legislative instruments (standards and guidelines of zoo federations) enhance the role of zoos in conservation. However, these instruments do not enable the full achievement of the objectives of the Zoos Directive. Firstly, the Zoos Directive is instrumental to the practical implementation of the principles enshrined in international agreements such as the CBD and CITES, in order to fulfil the EU’s obligation as a party to the CBD. Secondly, as already mentioned, standards and guidelines defined by zoo federations can contribute only to a limited extent. These instruments, compared to the Zoos Directive, miss a key feature: a legally binding value that enables enforcement across all EU zoos. As such, the Directive remains important for ensuring the implementation of conservation measures by zoos.

The need for continued EU action in the field of ex situ management is recognised by all stakeholder groups surveyed for the evaluation study. EU-wide rules in relation to different aspects of ex situ conservation (e.g. keeping animals under appropriate conditions, promoting education, protecting threatened species), are deemed important by the large majority of all stakeholder groups responding to the public consultation (on average, by more than 80% of the respondents). Moreover, while zoos and public authorities tend to agree on the fact that most of the activities currently promoted by zoos would be continued also in absence of the Directive, other stakeholder categories, including individuals and NGOs, are less affirmative (on average, less than half of the respondents believe that all activities would be continued). Concerns were raised by NGOs regarding the political message of not having an EU legislation on zoos. One of the key concerns was that an absence of EU legislation on zoos would trigger repeals of national legislation or cuts in the budgets for enforcement.