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# INTRODUCTION

As part of its Better Regulation[[1]](#footnote-1) agenda the Commission launched a programme for Regulatory Fitness and Performance (REFIT). REFIT makes sure that EU laws deliver their intended benefits for citizens, businesses and society while removing red tape and lowering costs.

Environmental monitoring of EU environmental policy looks at compliance with legal obligations, and also helps us understand the causes and the extent of problems, and help us define the most cost-efficient responses. This evidence is usually transferred (reported) from the national or sub-national level to the EU level institutions, who use it for regulatory monitoring of whether legislation is working well or not. In this way, environmental monitoring, reporting and then regulatory monitoring play a fundamental role in providing information to citizens and policymakers on how well policy is delivering its environmental, economic and social objectives.

The May 2015 Better Regulation package[[2]](#footnote-2) made the following commitments:

*– Launch a broad review of reporting requirements to see how burdens can be alleviated. This review will have a particularly strong focus on areas where stakeholders have recently indicated their concerns, such as agriculture, energy, environment and financial services.*

*– Cooperate with Member States in examining the best ways to ensure compliance with EU law at national level, including those that have initiated a review of how well EU and Member State regulation combines to help protect the environment (as in the 'Make It Work' initiative). The objective is to identify solutions to enhance the efficient application of EU law at national and local level by reducing its complexity while maintaining its level of protection.*

Responding to this, in 2016 this Fitness Check was confirmed in the Commission's Work Programme 2016[[3]](#footnote-3) and a Roadmap[[4]](#footnote-4) set out the way forward. The 2017 Work Programme of the Commission[[5]](#footnote-5) included it in a package of measures for better enforcement in the environmental area where a "proposal to simplify environmental reporting" was announced as a follow up to this evaluation.

This Fitness Check is an evaluation that provides an evidence-based critical analysis of whether reporting obligations are proportionate and delivering as expected. Is the right information being made available, at the right time, in the right way and at as low a cost as possible?

## Purposes of the evaluation

Reporting is an essential element of the EU policy cycle. It provides the Commission with the data needed to assess the implementation of EU legislation and to inform the European Parliament, Council and the general public on the impacts on the ground. Reporting is also needed by the Member States to compare information in a cross-border context. However, the number of reporting obligations has grown over time (cf. section 2.1) in line with the increase in environmental legislation.

This work on reporting in the environmental field[[6]](#footnote-6) is to:

* Further develop more modern, effective and efficient reporting for EU environment policy as a necessary step towards delivering a better environment. This will reduce pressure on the public and private sector contributing to reporting, whilst also filling information gaps;
* Contribute to the Commission's priority to create a Union for Democratic Change, making environmental information more visible and accessible to citizens, and achieving higher standards of transparency and accountability.

Despite constant efforts to streamline reporting and reduce administrative burden (cf. section 2.2), there are perceptions that the current environmental reporting obligations are still causing unnecessary administrative burden whilst not providing the needed evidence base for EU and Member State policy making. In other words, a perception that some information that is not needed is collected: some information that is needed is not collected. Moreover, the existing obligations and their timing have developed without always considering overall coherence and relevance. Even where an obligation provides useful information, interactions with other obligations might not always have been taken into account, meaning there are potential synergies. There may also be some situations where the IT tools developed at national and EU level to report the information are not sufficiently efficient.

## Scope of the evaluation

Reflecting the fact this Fitness Check is one of the first to look at reporting across an area of the *acquis*, the scope could have been set in a number of ways. In practice, we wanted to be as ambitious as possible whilst, crucially, making it manageable and ensuring that we could deliver. This meant setting clear boundaries for the current work, whilst knowing that issues outside of scope may merit investigation at a later stage. These boundaries were set out in the Roadmap for the Fitness Check, and then were discussed with stakeholders.

The legislation covered

This Fitness Check covers the EU environment *acquis* under the remit of the Commission's Directorate General for Environment. Following an initial screening (see Annex 1), 58 pieces of legislation were included whilst six pieces have been excluded for example because they have no reporting obligations. As such, the exercise covers legislation in areas such as: waste, water, air quality, environmental governance, chemicals, industry, noise, chemicals and international agreements.

Naturally, most external stakeholders do not know which legislation is controlled by which Commission Directorate General. An example of legislation out of scope is the Waste Statistics Regulation which is part of Commission DG EUROSTAT's *acquis* (and some stakeholders indicated their wish to see it evaluated following the adoption of the Circular Economy package).

What is the reason for such a scope limitation? Essentially, going beyond these boundaries would have meant covering a much much longer list of legislation noticeably in the fields of climate, energy, agriculture, mritime policy, consumer health etc. Doing so would have been impractical in this exercise - you cannot do everything at once - diluting attention to the extent that analysis would all be superficial. In addition, this review is only one of many: for example, the Commission has already proposed a simplification of planning, reporting and monitoring obligations in the climate and energy areas[[7]](#footnote-7). Other areas will also carry out their own reviews learning from this first wave.

Environmentally relevant information under the control of other Directorate Generals is covered under the coherence evaluation questions (Section 7.3).

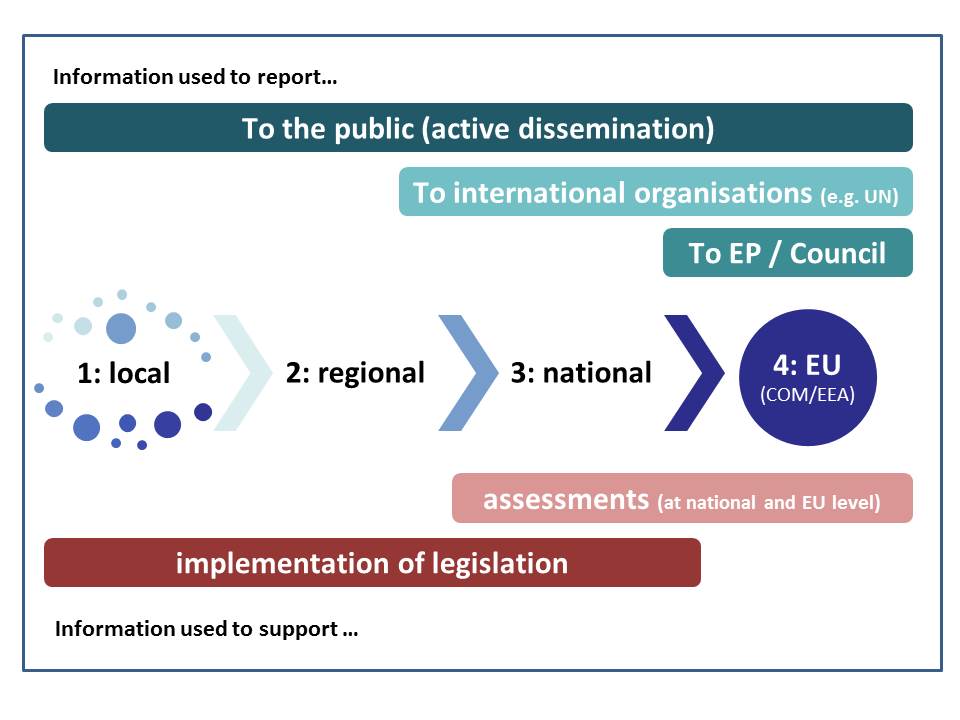
Which information flows are covered?

Information at the European level usually starts locally:

* *Environmental monitoring* involves seeing at the local level what is happening to the environment 'on the ground' in terms of air pollution, state of nature, water quality etc. This information is usually needed to manage implementation, regardless of whether it is reported or not[[8]](#footnote-8).
* This information then passes onwards through a range of bodies at the regional or national level and is *reported* to the EU level institutions and then actively reported on to the public.
* At the European level reported information is used for *regulatory monitoring*, in the sense of monitoring if the regulation is working well.

The Roadmap for this Fitness Check was clear that this Fitness Check excludes environmental monitoring in EU environmental legislation (such as measurements of pollutants in air, water, soil or waste)[[9]](#footnote-9). This cut-off was made to ensure that the scope was manageable: **only reporting is included in scope, including reporting for the purpose of regulatory monitoring** (the monitoring in the title of this Fitness Check is regulatory monitoring).

One potential confusion that came up in the stakeholder workshops was the difference between reporting and provision of information as the substantive requirement of the legislation. For example, REACH requires firms to prepare and submit registration dossiers – this is the substantive act of compliance. It is excluded from the scope of this Fitness Check as including such core acts of compliance would necessitate covering almost all the provisions in almost all the legislation, which would be unmanageable. However, in this example, note that such provisions are being considered as part of the REACH Review[[10]](#footnote-10).

**

*Figure 1: Information flows from local to EU level*

As well as covering reporting to the EU level, the Fitness Check also considers how this information is reported onwards. The Access to Information Directive (2003/4/EC) provides for the active dissemination by Member States to the public of environmental information such as legislation, plans, decisions, reports, environmental monitoring data and impact assessment studies. In practice, this is done online through Member State web portals. The INSPIRE Directive gives an impetus to such online environmental information by providing for discovery, view and download services.

What type of reporting obligations?

By 'reporting obligations' we mean the legal provisions requiring the submission of data, information or reports to the European Commission or the European Environment Agency, that are identified in a piece of legislation. This covers obligations on the European Commission to monitor the application of EU legislation and document them in reports to the European Parliament and the Council. Thus, the Fitness Check covers what is termed 'regulatory monitoring'[[11]](#footnote-11) by the European Commission on how Member States implement EU environmental legislation.

The Fitness Check covers the obligation on Member States and the Commission and their interaction and does not look explicitly at national obligations on different national administrations or businesses directly. Changes in reporting to the EU level can though lead to downstream changes for businesses and public authorities.

Another issue is that not all reporting obligations covered by this Fitness Check are written into the secondary legislation (Directives, Regulations etc.). Many are specified only through Delegated or Implementing Acts (comitology in the jargon) or through guidelines or agreements between the Member States and the Commission.

Conclusion on scope

Overall, the scope of the exercise is wide and challenging. The challenge has been to keep the right balance between: a strategic exercise that steps back and takes an overview to learn across reporting streams; and, an exercise that appreciates and learns from the detail of the different reporting streams and the operational challenges they pose.

# Background to the initiative

## History of environmental reporting

In 1991, the European Economic Community adopted the Standardised Reporting Directive (SRD-91/692/EEC)[[12]](#footnote-12), streamlined procedures and introduced a three-year reporting cycle for all covered legislation. The detailed content was then laid down in sector specific questionnaires. Consequently, a large number of implementing acts were adopted by the Commission over the years.

The next milestone was the establishment of the European Environment Agency (EEA) in 1994. The EEA is to provide the EU and the Member States with objective information and plays an important role including through Reportnet[[13]](#footnote-13) - an infrastructure for supporting and improving data and information flows.

Several sectoral initiatives, e.g. in the field of water or biodiversity policy, have also contributed significantly to the next stage of modernising reporting. The Water Information System for Europe (WISE) covers environmental monitoring and reporting of all water-related legislation, and streamlines reporting with the EEA's state-of-the-environment data flows. Similarly, the Biodiversity Information System for Europe (BISE) is a single entry point for data and information on biodiversity.

At the same time, the use of information technology (IT) has expanded and reporting has become increasingly electronic. Using electronic means for transmission and making reported data available online, e.g. through maps, triggered the need to define and harmonise electronic data standards. As a result, the INSPIRE Directive[[14]](#footnote-14) was adopted in 2007 to create a European Union spatial data infrastructure. The INSPIRE Directive sets technical standards for the interoperability of spatial data and for the online availability of data discovery and access services, therefore promoting comparability and data sharing.

This history (set out in more detail in Annex 3) shows the long-standing effort to streamline reporting and reduce the administrative burden to collectors, reporters and users.

## Ongoing streamlining exercises

Dedicated initiatives on streamlining have also taken place over the past years. This section lists a number of more recent developments which have not yet fully shown their effect or which are only at the start of their implementation. The Fitness Check has tried to anticipate and factor in the streamlining potential of these initiatives. The inventory (see section 5.1) suggested that streamlining exercises were completed for six pieces of legislation, eight were ongoing and four were planned. An initial overview was provided in SWD(2016) 188 and a more comprehensive overview is compiled in table 1.

*Table 1: Overview of recent or ongoing streamlining initiatives in relation to environmental legislation*

| ***Policy*** | ***Streamlining action*** | ***Expected timetable*** | ***Expected benefits*** |
| --- | --- | --- | --- |
| **Waste** | Revision of the waste legislation[[15]](#footnote-15) put forward a substantial simplification of reporting requirements (repeal of provisions obliging Member States to produce implementation reports every three years) | 2017-2020 | Significant reduction of administrative burden (i.e. 75 working days per country). |
| **Water/ SoE** | Streamlining of the Water Framework Directive reporting with the State of the Environment reporting on freshwater | 2015-2016 | All spatial data on River Basin Districts and sub-units, water bodies and environmental monitoring sites is now managed jointly, having to be reported only once when it is common to the two reporting flows. |
| **Water/ Marine** | Link between Water Framework Directive reporting and the Marine Strategy Framework Directive which meant that the programmes of measures which benefit fresh and seawater alike only need to be reported once | 2016 | Re-use of reporting under other water directives for the Marine Strategy Framework Directive. |
| **Water (urban waste water)** | Streamlining in urban waste water reporting and data dissemination through the establishment of an open source national urban waste water website[[16]](#footnote-16) | 2015-2017 | Better assessment of reporting information. Acceleration of publication of technical data for the 28 MS.  User friendly access to raw and aggregated urban waste water data. Implementation of the INSPIRE directive concerning INSPIRE services. |
| **Air quality** | Reporting and mutual exchange of information under the Ambient Air Quality Directives is organised via a dedicated internet interface, i.e. the so-called air quality portal | 2016 | This utilises a state-of-the-art electronic reporting approach by which air quality information is made available in a standardised, machine-readable and INSPIRE compliant form. The approach is explicitly geared towards streamlining the amount of information made available by Member States, to maximise the usefulness of such information and to reduce the administrative burden. |
| **Air emissions** | The new National Emission Ceilings Directive aligns the EU reporting requirements of emissions of air pollutants with the reporting process under the UNECE Convention on Long-Range Trans-boundary Air Pollution | 2016 | Reduced administrative reporting burden on MS: alignment of reporting dates and other requirements. |
| **Industrial emissions** | The Industrial Emissions Directive (IED) streamlined reporting for seven previous directives | 2012-2016 | The recast of seven previously existing directives and streamlined administrative aspects including cutting reporting requirements by around half. |
| **Industrial emissions** | Streamlining of reporting for IED, European Pollutants Release and Transfer Register (E-PRTR), Seveso (Major Hazardous Accidents), Large Combustion Plants (LCP) and the Extractive Waste Directive | 2017-2020 | Building on the reporting of the IED, state of the art web-based reporting technology will be used and approaches between several related directives will be streamlined which reduces the administrative burden while increasing the added value of reporting. |
| **Nature** | Reporting under the Birds and Habitats Directive has been streamlined since the last reporting round | 2013 | The joint reporting has streamlined content and timing and allows now for joint analysis of the status of habitats and species. |
| **Reporting** | Repeal of Council Directive 91/692/EEC of 23 December 1991 standardizing and rationalizing reports on the implementation of certain Directives relating to the environment | 2016-2017 | Streamlining reporting obligations and ensuring a clear legal framework while repealing obsolete provisions. |

## Intervention Logic

Reporting is an important information gathering process which provides the basic data on the state of the environment, implementation of measures and the effects of their environmental policies. This feeds the EU policy cycle of evaluation and Impact Assessment and revision as set out in the Better Regulation Guidelines (see figure 2).



*Figure 2: The EU Policy cycle (see page 6 of Better Regulation Guidelines)*[[17]](#footnote-17)

As the core of this Fitness Check are the provisions in the different legal acts of the EU environmental *acquis* that focus on reporting obligations. Hence, the intervention logic below only refers to these reporting obligations and not to the overall objectives of the legislation.

Broadly, reporting obligations have five main objectives:

* to allow for an assessment of whether EU legal obligations are being met
* to allow stakeholders to understand the state of the environment and actions taken to maintain and improve it
* to indicate how well the legislation is working (i.e. costs and benefits)
* to ensure access to environmental information for citizens
* to allow sharing of best practice between Member States regarding how best to implement EU environment law

Stakeholders responding to the public questionnaire found all five to be important given the overall high attribution of scores, but attached most importance to proving compliance with EU legal obligations (scoring 8.8 out of 10) and least importance to demonstrating performance including costs and benefits (scoring 7.3 out of 10).

Amongst the reporting obligations in the *acquis*, the most common purpose is to provide information on implementation and measures taken in Member States, which allows for an assessment of EU level compliance. There are also many reporting obligations that more indirectly facilitate this and allow for the European institutions and the public more widely understanding how the *acquis* is working in practice and what it is delivering.

A graphic representation of the general intervention logic for reporting obligations in the EU environment *acquis* is presented below.



*Figure 3: Intervention logic for reporting obligations in the EU environment acquis*

# Evaluation Questions

This Fitness Check assesses the fitness of the reporting obligations according to the five Better Regulation criteria of effectiveness, efficiency, relevance, coherence and EU-added value using specific evaluation questions that were set out in the mandate for the Fitness Check[[18]](#footnote-18).

A fifth effectiveness question was added during the process to look that the extent to which current environmental monitoring and reporting follows a certain consistent and corporate approach. In addition, the questions were slightly reworded to make clear the focus on reporting, including for regulatory monitoring and the exclusion of environmental monitoring.

Regarding **effectiveness**, the questions are:

* Are environmental reporting requirements met and with good quality, timely data?
* Does environmental reporting provide sufficient information on the state and the effectiveness of implementation of the environmental *acquis*?
* Does environmental reporting allow for the public to be properly informed about the state of the environment?
* Does environmental reporting allow for evidence based decision making including evaluations of regulatory fitness and impact assessments?
* Additional question: "Is environmental reporting following a consistent corporateapproach?"

Concerning **efficiency**, the evaluation questions are:

* To what extent are the costs involved justified and proportionate?
* What factors influenced the efficiency with which environmental reporting takes place?
* Are there examples of good practice in environmental reporting at the national or regional level that imply it could be undertaken more efficiently, and if so how?
* Could improvements be made to the process for environmental reporting to cut costs?
* Could the timing of reports be better synchronised or streamlined to cut costs?
* Could the promotion of active dissemination of data (in the context of Directives 2003/4/EC and 2007/2/EC) alleviate the environmental reporting burden whilst improving access for public authorities, businesses and citizens?

With regards to **relevance**, the questions are:

* Is the process of environmental reporting still relevant (as opposed to harvesting of data)?
* Are all environmental reporting requirements still relevant?
* Are environmental reporting requirements relevant for assessing progress with Key Performance Indicators (building on the indicators system introduced by the Better Regulation Guidelines)?
* Has the process of reporting taken advantage of technology: including advances in IT, increasing provision of data through Copernicus etc.?

As far as **coherence** is concerned, the questions are:

* Is some data reported multiple times, when it could be reported once and then used for multiple purposes?
* Is data reported (including to other parts of the Commission) but then full use not made of it?
* Is there coherence between reporting to the EU level and to other international levels?

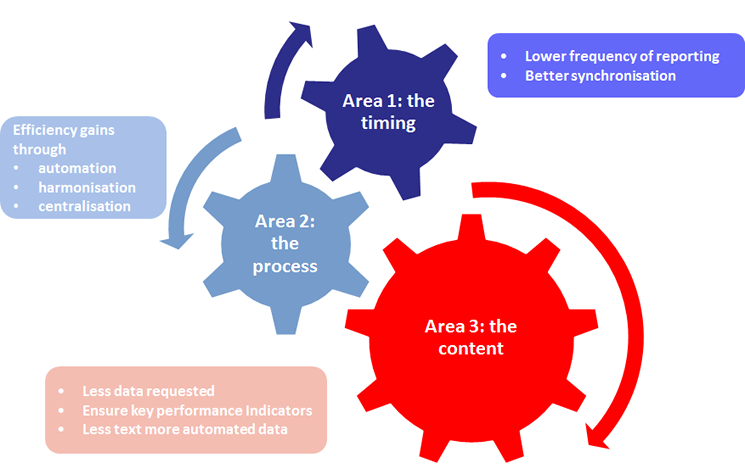
And with respect to **EU-added value**, the questions are:

* What is the additional value resulting from reporting to the EU intervention(s), compared to what could be achieved by Member States at national and/or regional levels?
* What would be the most likely consequences of stopping or repealing the existing EU reporting requirements and replacing them by increased transparency and active dissemination?

# Method

The Fitness Check has quantitatively and qualitatively assessed the impact, administrative burden and costs as well as the benefits resulting from the reporting obligations enshrined in the EU environment *acquis*. It looked at three areas in more detail, the timing, the content and the process of reporting.

The evaluation is underpinned by a comprehensive support study prepared by ICF, IEEP and Denkstatt (2017)[[19]](#footnote-19): "Support to the Fitness Check of monitoring and reporting obligations arising from EU environmental legislation". The study report documents the method, data and evidence in more detail.



*Figure 4: Overall approach to analyse environmental monitoring and reporting obligations looking at three different areas*

## Information and data gathering

For each reporting obligation, the inventory (see section 6.1) covers systematically data on the content, timing and process along with some information, e.g. on the usefulness of the reporting. The inventory was validated by the policy units in charge of the respective reporting obligations. Moreover, the European Environment Agency was consulted and information available there, such as the Reporting Obligation Database[[20]](#footnote-20), was used systematically. The existing obligations were also evaluated using the five Better Regulation evaluation criteria and the information gathered in the first two steps.

For the administrative burden assessment, a general review of relevant literature was followed by an assessment of the costs and benefits of reporting obligations.

The Commission launched a dedicated public consultation to underpin the Fitness Check and collected the views, evidence, ideas and expertise of the various stakeholders (MS, local and regional administrations, industry and business associations, individual companies and SMEs, research institutions, think tanks and non-governmental organisations (NGOs) as well as interested citizens). Moreover, four Stakeholder Workshops[[21]](#footnote-21) took place between November 2015 and December 2016 which collected evidence and views from experts of Member States, business associations and NGOs. The preliminary findings of the support study were also presented and reviewed by the Stakeholder Workshops allowing stakeholders the chance to provide additional input.

Either as part of the general stakeholder consultation, or in parallel, discussions took place with the Member States through the "Make it Work" initiative, which is a grouping of environment ministries. As outcome of their work, drafting principles for reporting were adopted[[22]](#footnote-22). Moreover, the Commission engaged in exchanges with the Committee of the Regions which, as a contribution to the Fitness Check, adopted an Outlook Opinion entitled "EU environment law: improving reporting and compliance"[[23]](#footnote-23).

And, finally, the Commission undertook in-house qualitative and quantitative research and interviews in order to validate the findings and gather additional information.

## Costs of reporting obligations – methodology and limitations

The costs of the reporting obligations were calculated using the methodology of the Standard Cost Model as described in tool 53 of the Better Regulation Toolbox[[24]](#footnote-24). This model involves estimating the time required per obligation and the frequency and then multiplying this by average earnings adjusted to include non-wage labour costs plus an additional 25% for overheads.

The information for the calculation of the man-days needed in order to fulfil each reporting obligation came from various sources but was mainly based on discussions with experts and practitioners backed up by desk research of relevant studies (such as Impact Assessments of the legislation). Estimates were validated with stakeholders as a further cross-check of the data, and in particular with the EEA given their involvement in the process.

In general, the analysis of costs of reporting seems sensible and proportionate to the benefits of undertaking the analysis[[25]](#footnote-25). Despite the uncertainties and lack of data that exist, the analysis is considered broadly right and more in-depth accurate analysis would not seem to be justified as it would be very challenging to undertake and would not change the conclusions of the Fitness Check. For example, one weakness is that the analysis does not include any allowance for differences in efficiency between and within Member States. In the stakeholder workshops comments were made about 'gold plating' or inefficiencies in the provision of data within Member States. Notably, federally orientated collection and reporting multiplies the number of actors involved, and is seen by many as increasing the complexity of reporting and hence also the costs.

A further issue is that costs vary over time. For example, the EEA has invested heavily in the IT infrastructure for collecting data on air quality. This leads to a short term increase in costs but savings in the longer run, whilst also delivering more up-to-date data to the public. These up-front costs, where known, are included in the analysis, but in practice excluding them would probably not change the banding of different legislation.

Finally, on costs, it is complicated to gather cost estimates from a range of experts who will understand and respond to questions in different ways. This issue was dealt with through cross-checking the draft analysis to provide as harmonised a view as possible. In the end, the legislation was put into bands that reflect the wish to avoid spurious accuracy in costings, but the need to show costs broadly.

## Benefits of reporting obligations – methodology and limitations

If the assessment of costs is a challenge, the assessment of benefits stemming directly from reporting in a quantified (monetised) manner is nigh on impossible. As mentioned earlier, reporting is an integral part of the implementation process and hence they contribute to the benefits resulting from the implementation of the legislation. However, these wider benefits have not been analysed, as in practice it would not tell us what need to change.

Instead, a more targeted and qualitative assessment was carried out focussing on the issues that need to be understood in practice to gauge the fitness-for-purpose of the reporting obligations. In particular, all reporting obligations went through a categorisation of their purpose, their benefits and a discussion of whether there was additional information that would be beneficial or if any information currently collected was of less benefit. This discussion involved all the different stakeholders and allowed for a picture to be built up of what is useful and what is not. However, it was not quantifiable and no other sources or references have been found where such a quantification of benefits resulting from reporting obligations has been carried out.

Another limitation was the representativeness of the stakeholder feedback. Despite the efforts to capture a wide input from experts and interested public through an online consultation, only 150 responded. Moreover, not all Member State responded and some did in a more consolidated way than others. During the stakeholder workshops, not all participants contributed in the same active way. Feedback and additional evidence was only received from very few experts and only four made an effort to coordinate their input in their Member State. Consequently, the feedback from these consultations does not provide necessarily the weight of evidence envisaged but is presented as useful indications which could be explored further.

Finally, in many cases the 'devil is in the detail' and needs thorough examination through the established mechanisms for specific piece of legislation, such as expert groups bringing together the Member States and the European institutions and other stakeholders.

# State of play and Main Results

In this section we present the main results of the inventory of reporting obligations. In addition, the costs and the benefits produced are assessed and their performance is evaluated. The detailed results are presented in the support study[[26]](#footnote-26). These general results illustrate the current *status quo* and, for example, changes proposed by the Commission but not yet adopted by the co-legislator (e.g. in the case of the waste legislation) have not been considered in the factual part of the inventory and the evaluation of administrative burden.

## Inventory

One of the initial tasks of this Fitness Check was to establish a basic inventory of environmental reporting obligations. As a first step, the EU environmental legislation which under the responsibility of the European Commission (DG Environment) was screened. Some pieces of legislation are excluded (see section 1.2) leaving 58 pieces of legislation (see Annex 1) retained.

As a second step, the legislation and other relevant information (such as the EEA’s Reporting Obligations Database[[27]](#footnote-27) and other legislation-specific literature) were reviewed. Then the inventory was validated through the experts in the Commission services responsible for the different pieces of legislation. Also other Commission services as well as the European Environment Agency (EEA) were consulted. Finally, the draft inventory was published on the EUROPA webpage[[28]](#footnote-28) and presented at the third Stakeholder Workshop (see Annex 2 and 4 for details) for a review for national and other experts.

The inventory was divided into sections, in particular:

A. Reference information

B. DPSIR Coverage (driving forces, pressures, state, impact and responses)

C. Type of content

D. Timing of reporting

E. Format and process requirement

F. Relevance to 3rd parties and the public

G. Use of information

H. Links to other reporting requirements

I. REFIT and other streamlining activities

### General statistics

The inventory identified a total of 181 reporting obligations (ROs) stemming from the 58 pieces of EU environmental legislation. 82 ROs of these 181 are regular reports whereas 99 are one-off or *ad hoc* ROs. Many of the legal instruments only have one reporting obligation but there are a small number of legal instruments which have multiple obligations. In most cases, there is one major obligation and the others are just one-off or small additional reporting requirements. For instance, there are six reporting obligations in each of five instruments, including the Noise Directive[[29]](#footnote-29) and the Packaging and Packaging Waste Directive[[30]](#footnote-30).

The greatest number of reporting obligations relate to waste. The second largest group is water related issues while reporting obligations covering broader governance issues came third. At the other end of the scale, only one soil related reporting obligation was identified in the Sewage Sludge Directive[[31]](#footnote-31) (see figure 5).

*Figure 5: Number of reporting obligations per environmental theme or media[[32]](#footnote-32)*

The ROs were assessed according to whether they are included in the European Environment Information and Observation Network’s (EOINET) Reporting Obligations database (ROD)[[33]](#footnote-33). Only 69 of the 181 reporting obligations were separately included in the EOINET ROD, reflecting in large part the identification of a range of ad hoc and one-off reporting obligations (where there is little value in including the information in the ROD), and also some sectoral coverage issues (for example, chemicals legislation is for the European Chemicals Agency).

### Content of reporting

The content of environmental reporting is diverse and dictated by the legislation in question. First, the ROs were categorised by the primary type of information transmitted, i.e. either numerical or geospatial data or textual information. A large majority of ROs result in text-based information being submitted by Member States (see figure 6). This can include, e.g. summary of measures, plans or programmes as well as other descriptions of administrative processes or the way exemptions and derogations have been applied.

*Figure 6: Number of reporting obligations with the primary type of information reported is either textual, geospatial or numeric data[[34]](#footnote-34)*

The second indicator uses the DPSIR (Driver, Pressure, State, Impact and Response)[[35]](#footnote-35) framework. Figure 7 shows that two-thirds of the identified ROs primarily address the ‘Response’ category (so, typically measures taken by public authorities to address environmental problems) while the remaining ROs are largely concerned with either the ‘State’ of the environment, or 'Pressures'. The socioeconomic and environmental ‘Impact’ category is marginal, and no reporting obligations primarily address 'Drivers' (although some do as a secondary issue). This in fact shows the trend in EU reporting, namely to identify and provide information on the nature of Member State reactions to environmental issues and their implementation of legal obligations.

*Figure 7: Number of reporting obligations with the primary type of a certain DPSIR35 category[[36]](#footnote-36)*

There are limitations to this categorisation, in that many ROs require a combination of types of information. However, this simple categorisation matches with the observation above in that over half of the reporting obligations concern “Response”, which will typically require a text description of action taken. One consequence of the findings from these two indicators is that the reports are less easy to automate, and require more effort to overview. The challenge of dealing with textual inputs across the full range of EU languages can also be considerable.

### Timing of reporting

82 ROs required the Member States to regularly report to the Commission while 99 ROs were either one-off or ad-hoc requirements. A one-off RO is, for instance, a requirement to transmit the list of competent authorities, or to notify the Commission on exemptions or penalties. Examples of ad-hoc RO include where the reporting is linked to a specific event: for instance, if a Member State decides to limit any incoming shipments of waste destined to incinerators that are classified as recovery under the Waste Framework Directive it needs to notify the Commission. These 99 ROs do not have significant costs associated to them and are not considered further in the assessment of timing.

Leaving aside the *ad hoc* or one-off ROs, there is significant diversity as regards the frequencies. Figure 8 shows the range from monthly reporting cycles up to six years. Out of the 82 regular ROs the largest category is annual reporting obligations, but more than half have reporting periods of more than two years, including a significant number (particularly in the water legislation) with a 6-year cycle. The periodicity of reporting varies with the nature of the environmental medium and issue covered by the legislation. In general, lower frequencies of reporting reduce the burden on Member States but may also lead to a lack of staff familiarity in Environment Ministries with the requirements of reporting.

*Figure 8: Frequency of reporting obligations[[37]](#footnote-37)*

80 ROs are linked to a Commission report, in other words the legislation requires the Commission to publish a report. It is noticeable that *some ad hoc* and one off obligations require the preparation of such a report whereas some repetitive reporting (for 13 ROs) is not associated with a Commission report. The inventory also recorded the time needed from the deadline of reporting to the presentation of these Commission reports. This analysis is presented and used in section 6.2.5.

### Format and process requirements

Generally, the process steps are similar for all reporting obligations (see figure 9). The Member State submits a report to the European Commission or its Agencies. Following a validation and quality assurance step where questions for clarification may be asked back to the Member State, the responsible EU body processes the data, analyses and evaluates it and publishes a report which is mostly addressed to the other EU Institutions and the public.

Questions for clarification

*Figure 9: Simplified process for centralised reporting*

Figure 10 shows that almost half of the identified ROs have no format requirements. When the *ad hoc* and one off categories are ignored, only 19 of the remaining regular ROs have no format requirements. The second largest group are those ROs where a reporting template, which needs to be used by the Member States, exists. In third place are those ROs which require a direct data input. Other format requirements include for instance questionnaires. It was also found that more than two-thirds (124) of the ROs are not electronically facilitated or done via an electronic platform.

*Figure 10: Number of reporting obligations with particular format requirements[[38]](#footnote-38)*

Another aspect is the arrangements for the process which are linked to the service provider for reporting. Overall, there are three main categories:

* The lead Commission services (in this case DG Environment) receives the reports and manages the entire reporting process;
* The European Environment Agency (EEA) is fully or partially conducting the process on behalf of the Commission;
* Other Commission services (in particular Eurostat) manage the reporting process on behalf of the lead service.

Figure 11 gives an overview on the use of each category.

*Figure 11: Overview of service provider for the process of reporting (EEA: European Environment Agency, Other: Usually DG Environment with or without the help of outsourcing)[[39]](#footnote-39)*

As set out above, there are 78 ROs where the Commission (or the EEA) produces a report on the basis of information reported to them. In more than half (38 ROs indicated as other), DG Environment handles these processes (receiving the information and then reporting onwards). In most cases, DG Environment has no in house capacity to handle substantial environmental reports (e.g. due to the lack of certain language capacities or specific technical knowledge) which leads to substantial outsourcing.

Except for six cases under the waste legislation where Eurostat handles the reporting, the other main environmental reporting processes rely on the support from the EEA to a larger or lesser extent. In 19 cases, the EEA manages the process from the beginning to the end publishing a technical report as well as other reporting products such as map viewers (e.g. on the Habitats and Birds Directives, the Bathing Water Directive or the National Emissions Ceiling Directive). In 11 cases (e.g. on the Urban Wastewater or the Nitrates Directive), the EEA makes the Reportnet infrastructure available and Member States can submit their files to the "Common Data Repository" (CDR). Thereafter, however, the quality assurance, analysis and evaluation of the data are then handled under the responsibility of DG Environment often through outsourcing (i.e. with the help of an external consultant).

## Costs and benefits

The analysis of costs and benefits was done through a screening analysis of all ROs with some in-depth evaluation for the most relevant obligations. The detailed assumptions and findings are documented in fiches[[40]](#footnote-40) for each of the 181 reporting obligations.

Table 2 below sets out the estimated costs in bands, in line with the proportionality of the analysis. As stated previously, the scope of the costings relates to the reporting obligations and captures only the additional costs over and above the costs incurred for compliance with the substantive requirements of the legislation.

Overall, the costs for Member States (including costs for competent authorities, businesses etc.) are roughly EUR 13 million per annum[[41]](#footnote-41). The most costly obligations tend to be those with direct reporting obligations for a large number of businesses or entities. For a large number of reporting obligations, costs are generated by the need to frequently compile extensive information, which may already exist in the Member States.

The results of this exercise need to be treated with caution given the lack of some data and the sensitivity of the methodology to the assumptions applied (see also section 4.2 and support study). However, they appear to be in the right order of magnitude since similar results have emerged from the Fitness Check evaluation carried out by the European Commission on the planning, reporting and monitoring obligations within the EU energy *acquis*[[42]](#footnote-42). This Fitness Check assessed a total of 91 obligations in 31 different legal acts of the energy *acquis* and estimated the costs related to planning and reporting obligations to be around EUR 20 million per year.

As well as costs for Member States of, the annual costs for the European Environment Agency are estimated at around EUR 4.5 million yearly[[43]](#footnote-43) and there are costs for the Commission (DG Environment) of approximately EUR 5 million per annum[[44]](#footnote-44) on average. **A reasonable estimate for the costs of reporting obligations is therefore roughly EUR 22 million per annum.**

*Table 2: Assessment of administrative burdens (without IT and system costs at EU level) by item of legislation (reference numbers in brackets, see Annex 1 for detailed name of legislation). Source: "Study to Support the Review of Environmental Monitoring and Reporting Obligations", 2017 (forthcoming)*

| Type | Approximate annual administrative burden attributable to Reporting | Incidence of burden | Items of legislation falling into this category (and reference number) |
| --- | --- | --- | --- |
| Regular reporting with direct obligation for large numbers of businesses / operators as well as MS authorities | Large  More than EUR 1 million | Business, MS, EC | Packaging Waste Directive (31), WEEE Directive (34) |
| Regular reporting by MS of very detailed and extensive information that should already (e.g. through on the ground environmental monitoring) be available but requires significant time to compile | Fairly Large  EUR 100,000 to 1 million p.a. | MS, EC | Ambient Air Quality Directive (1)***\*\**** + Arsenic, cadmium, mercury, nickel and PAH in ambient air (2)***\*\****; Environmental Noise Directive (3), Water Framework Directive (4)\*, MSFD (7), Drinking Water Directive (8), Habitats Directive (10), Birds Directive (11), EPRTR Regulation (13)***\*\*\****, Industrial Emissions Directive (14); National Emissions Ceilings Directive (16), Urban WW Treatment Directive (17), Nitrates Directive (18), EMAS Regulation (19), Landfill Directive (20), Extractive (Mining) Waste Directive (21), Waste Framework Directive (27), Waste Shipments Regulation (29), Batteries and Accumulators Directive (30), End of Life Vehicles Directive (33), REACH Regulation (39), INSPIRE Directive (45), Regulation on Trade in Wild Fauna and Flora (47), FLEGT Regulation (51), Timber Market Regulation (52) |
| Reporting by MS of detailed information that should already be available | Moderate  EUR 30,000 – 100,000 p.a. | MS, EC | EQS Directive (5), Floods Directive (6), Bathing Water Directive (9), IAS Regulation (12), Sulphur content of liquid fuels Directive (15), Fracking Recommendation (25), Sewage Sludge Directive (26), Mercury Regulation (36), VOCs Directive (37), CLP regulation (40), EIA Directive (43), SEA Directive (44), Access and Benefits Sharing Regulation (50), Ship Recycling Regulation (53), Medium Combustion Plant Directive (54), Asbestos Directive (56) |
| Regular or ad hoc reporting by MS of a limited amount of available information; or more detailed information by EC only | Small  Zero – EUR 30,000 p.a. | MS, EC | VOC emissions Directive (22), Petrol vapour recovery Directive (23), Seveso Directive (24), Ecolabelling Regulation (28), RoHS Directive (35), POPs Regulation (38), Regulation on Export and Import of Hazardous Chemicals (41), Regulation on Trade in Seal Products (55), EEA/ EIONET Regulation (57) |
| No further reporting required | Zero | - | PCBs Directive (32), Environmental Liability Directive (42), Directive on Public Access to Environmental Information (46), Regulation on Imports of Whale Products (48), Regulation on Trade in Seal Skins (49) |

*Notes for table 2:*

*\* For the Water Framework Directive, the actual costs of the last reporting exercise of 2016 are likely to amount to several million Euro due to the setting up of the reporting systems but the costs of future 6-year reporting is expected to be considerably lower due to stabilisation of the reporting model.*

*\*\* There is a shared reporting system for the Directives on Ambient Air Quality and Arsenic, cadmium, mercury, nickel and PAH in ambient air, and costs are therefore shared between them.*

*\*\*\* The majority of this burden stems from internationally-derived obligations (in this case the UNECE Kiev protocol) and thus the RO for E-PRTR does not stem from the EU legislation and the Commission is not empowered to alter the requirements.*

Most ongoing reporting obligations are seen to provide clear benefits, though these are beyond quantification. However, there is clear evidence that such obligations are an important part of policy compliance and make an important contribution to the achievement of the environmental policy objectives. In qualitative terms, the benefits are numerous, however. They include:

* Checking and verifying compliance with legislation and making sure that the agreed objectives are being met;
* Supporting implementation at the national and EU level;
* Informing citizens and stakeholders of the state of the environment and the implementation of environmental legislation;
* Enabling compilation of environmental information at EU level, thereby providing information about the state of Europe’s environment, trends, pressures and responses;
* Providing up to date information about arrangements for implementation, including responsible authorities, methods of implementation, enforcement arrangements and penalties for non-compliance;
* Aiding the identification and resolution of problems in implementing EU legislation as well as triggering improvements in the environmental performance of economic sectors boosting innovation that can increase the competitiveness of the sectors; and
* Informing the regulatory monitoring and evaluation of EU environmental legislation (as set out in the Better Regulation Guidelines).

An attempt was made to identify the qualitative benefits for each RO in the above-mentioned fiches (see footnote 40). This shows that all ROs aim to fulfil the compliance checking purpose and, in many cases, some of the additional purposes mentioned above. However, the purpose and benefits varies by reporting obligation. The use of environmental reporting in compliance verification is also providing information and arguments for potential subsequent enforcement action. A study of 244 infringement cases concluded that the potential beneficial monetary value of compliance with EU law achieved through enforcement is very high.

Some ROs (e.g. those relating to bathing water and air quality) also provide important environmental information to the public. Other ROs help demonstrate that a particular industrial sector is innovative and environmentally friendly by publicly disseminating emission data of individual facilities (e.g. under the E-PRTR) or that some agricultural practices are more beneficial (less polluting) for the environment than others (e.g. under the Nitrates Directive). The potential benefits from providing environmental information are considerable. Reported information is also essential for wider, cross-cutting and integrated environmental assessment such as the EEA's State-of-the-Environment report.

Many assessments show that reporting and regulatory monitoring plays an important part in ensuring proper implementation of environmental legislation: the benefits of environmental policy depend on high quality reporting. At the same time, better reporting can avoid time- and resource-consuming legal proceedings by allowing swifter and targeted intervention both at national and EU level. Further details on benefits issues are provided in Annex 5.

It is reasonable to say that overall the costs of reporting are proportionate, forming a small part of the overall costs of policy but being essential to allow for implementation and the periodic review of legislation. Where there are indications that some specific elements of reporting obligations are not proportionate, and this is investigated further in section 7.

Finally, it is worth putting the overall costs into perspective. Compared to the huge benefits resulting from successful environmental protection policy, the costs of reporting obligations are marginal. Total national environmental protection expenditures in the EU – not all of which relate to legislation, let alone EU legislation was EUR 297 billion in 2014[[45]](#footnote-45). It is impossible to say with any level of precision how much is currently spent on environmentally related compliance assurance (including monitoring, inspections, enforcement and permitting costs), but it could be a figure in the range of half to a billion Euros per annum[[46]](#footnote-46).

# Answers to the evaluation questions

The following chapter answers the evaluation questions concerning the five central evaluation criteria of effectiveness, efficiency, relevance, coherence and EU added value presented in chapter 3. A more detailed analysis of these five criteria can be found in the respective chapters of the underlying study[[47]](#footnote-47) supporting the Commission's evaluation.

## Effectiveness

The evaluation of effectiveness looks at the extent to which environmental reporting fulfils the objectives it is meant to achieve by producing the needed information to a high level of quality. Based on the intervention logic, the main purposes (or objectives) for carrying out environmental reporting are:

1. to allow for an assessment of whether EU legal obligations are being met;
2. to allow stakeholders to understand the state of the environment and actions taken to maintain and improve it;
3. to indicate how well the legislation is working (i.e. costs and benefits);
4. to ensure access to environmental information for citizens;
5. to allow sharing of best practice between Member States regarding how best to implement EU environment law.

### Overall approach

**Additional assessment question: "Is environmental reporting following a consistent corporate approach?"**

**Overall response: A more consistent and corporate approach to reporting could be followed. There are a number of very good examples and quality is improving, but best practices still need to be systematically spread. A risk-based approach to reporting offers a possible corporate approach, with more tiered reporting building on the implementation of key indicators or benchmarks.**

*What is the issue?*

This question relates to whether reporting differs for good reasons between ROs, or whether a more corporate approach could be introduced with a more strategic and harmonised approach. A corporate approach would involve sharing best practice across ROs and having a reason why some RO are, for example, dealt with by the EEA, primarily textual, are timely completed etc. In other words, a standard approach that makes sure ROs are well designed and managed to improve effectiveness, efficiency etc.

*What are the findings?*

There are some very good examples of indicators such as:

* The indicators on air quality, drinking and bathing water quality or nature favourable conservation status giving a quantitative picture on whether and to what extent the core objectives in the respective legislation is met.
* The emission data collected under the European Pollutant Release and Transfer Register or the compliance figures with emission limit values under the Urban Wastewater Treatment Directive.

What is common amongst the best examples is that the objectives and quantifiable obligations are laid down in a sufficient level of detail that you can define meaningful quantitative indicators. In other words, the legislation has already set out a harmonised and quantifiable objective which then is translated into the reporting process. A large part of EU environment legislation does, however, not include a high degree of harmonisation but sets out a framework and general rules which can be adapted by Member States and applied in different ways. It is therefore not straightforward to determine what constitutes a compliant situation.

*Example of environmental obligations which are difficult to monitor in a comparable manner*

*- the Marine Strategy Framework Directive requires Member States to ensure that "good environmental status" is reached in marine waters[[48]](#footnote-48). However, the definition of what "good environmental status" is and how it is monitored is left to the Member States. The Commission has demonstrated in its report[[49]](#footnote-49) that the range of definitions in Member States is so significant that no comparative analysis is possible. As a result, the Commission reviewed[[50]](#footnote-50) the criteria and methods for establishing "good environmental status" in order to improve comparability.*

*- earlier EU emission legislation such as the directives regulating urban wastewater treatment or large combustion plants have laid down numeric emission limit values which determine whether a certain installation complies with the law. When the Industrial Pollution Prevention and Control Directive (IPPC) Directive was adopted in 1996, a concept of permits based on "Best Available Techniques" (BAT) was introduced across all industrial sectors covered by the Directive. It was up to the Member State to define BAT on a case-by-case basis taking account of non-binding reference documents which were elaborated at EU level. Implementation of the IPPC Directive showed that this flexible approach had advantages and disadvantages[[51]](#footnote-51) but did not allow for an easy reporting and regulatory monitoring of whether the Directive's objectives had been reached. The new subsequent Industrial Emission Directive of 2010 aims to overcome some of these deficiencies and a new reporting system is now being introduced.*

Hence, comparable, let alone harmonised, indicators can often not be established (easily). Member States often argue that a country-specific or case-by-case assessment should take place instead. Moreover, a large part of currently reported information is still "text-based" (see figure 6 and 7 in section 5.1.2). This means that Member States do not report numeric or spatial data which are easier to compare and process. Instead, the reports contain significant amounts of textual information on processes (e.g. the administrative structures in a Member State or public consultation processes which were carried out), plans and programmes which include the actions and measures (such as issuing permits or authorisations) that are being taken at a national level or justifications for derogations or lack of implementation regarding specific provisions. Experience shows that analysing this type of information is more difficult and time consuming. Interpreting and assessing such reports requires specific legal, technical and linguistic skills. The quality and timeliness of the information provided by the Member States as well as the results presented by the Commission vary considerably and parts are often only accessible to an expert audience[[52]](#footnote-52).

*Example of streamlining reporting on measures*

*Learning from the first reporting exercise, the second round of reporting under the Water Framework Directive has introduced the concept of 25 pre-defined "Key Types of Measures (KTMs)". It was developed in 2012 to simplify reporting. This approach was the consequence of the large differences in level of detail reported in 2010. Some Member States reported 10-20 measures whilst others reported hundreds or even thousands. KTMs are groups of measures identified by Member States in their programme which target the same pressure or purpose. The approach has been applied successfully in the 4th Implementation Report[[53]](#footnote-53) and has since been developed further and used in other legislation, such as the Marine Strategy Framework Directive.*

Another approach is a more "risk-based" and tiered reporting. Rather than requesting information on all provisions of the Directive and to a sufficient level of detail to allow for an in-depth and legally sound compliance assessment, a risk-based reporting is used. Such risk-based reporting identifies the key provisions of the legislation which can give an overall indication of whether the objectives are being met or whether implementation gaps exist. Building on this analysis, quantitative indicators or qualitative criteria are established which can also be presented and communicated in overviews or scoreboards. Once reporting has been analysed, the Member States are put into different risk groups according to the risk of poor implementation. For the group with the highest risk of failing compliance additional information can then be requested, in order to evaluate the risks in more detail or specific action can be taken to help Member States reduce that risk.

Such an approach has been carried out successfully in the area of municipal waste management[[54]](#footnote-54). An overall report showed how municipal waste is managed by grading Member States via 18 criteria using green, orange and red flags. The Commission used the report to prepare fact sheets – a diagnosis of the situation - and roadmaps – including recommendations - for the ten lowest classified Member States. These roadmaps were discussed with national authorities at bilateral seminars.

This two-stage, risk based approach is now applied also in other areas. It requires the systematic identification of implementation benchmarks (or key performance indicators, KPIs). With such an approach, risk-based reporting can then be combined with targeted compliance promotion or assistance efforts which are now also promoted through the Environment Implementation Review[[55]](#footnote-55). It has the advantage that less and more focused information is needed in comparison to a more comprehensive compliance reporting and such information is easier and faster to process. However, such a high level approach will often not allow a detailed legal assessment of whether any of the provisions are breached. For this, additional information could still be gathered in a second step (outside the regular reporting, e.g. through an EU pilot) and only for those Member States where there are indications of breaches.

These developments and good practices are achieving promising results in relation to improving the effectiveness of reporting on compliance. However, they are not used systematically throughout environmental reporting (yet) although there are ongoing efforts to apply such best approaches in a systematic and consistent way (e.g. through guidance, checklists or good practice exchanges)[[56]](#footnote-56). They improve effectiveness by making sure that the information really needed is reported, and also improve efficiency by avoiding reporting of excessive information.

### Reporting performance in relation to quality and timing

**Assessment question: "Are environmental reporting requirements met and with good quality, timely data?"**

**Overall response: Member States have problems in delivering complete, good quality and timely reports; but the situation is improving. The reporting performance is influence by a wide variety of factors (e.g. sufficiency of quality control/assurance, language regime, clarity and frequency of reporting, time available and sequencing as well as maturity of reporting). They all have in common that they are influenced by the resources available, which are often insufficient.**

*What is the issue?*

For reporting obligations to satisfy the objectives for which they have been designed, they must be fulfilled and the data reported must be of sufficient quality and sufficiently up-to-date to serve its required purpose. The most important criteria are the quality of the reports, i.e. the completeness and accuracy, and the timeliness (i.e. that the data are up-to-date and the report is delivered on time).

*What are the findings?*

The results of the inventory on the delays for reporting and the timeliness of delivery clearly show that there is an issue to address (see section 5.1.3). Whilst there are many good examples, at the slowest it can also take three and a half years from the reporting deadline until the Commission publishes its findings. As shown in this analysis, one important factor for this delay is the late submission from Member States.

According to analysis of the EEA's priority data flows, the overall average score was 78% in 2015, with some variation across the EU28 countries (0% means that no data have been delivered at all and 100% means that complete datasets for all areas have been delivered on time) see Figure 12 below. In a similar vein, an internal survey in the DG Environment[[57]](#footnote-57) revealed that around a third of Member State reporting (out of a sample of 30 pieces of legislation) is deemed to have quality problems. Both reports recognise that the situation was improving with time, e.g. as demonstrated by the positive trends in recent years in the EEA priority data flows scoring.



*Figure 12: Overall performance of countries reporting EEA priority data flows (over May 2014-April 2015)[[58]](#footnote-58)*

Such issues have already become apparent in the development of the Shared Environment Information System[[59]](#footnote-59), which finds that "*Where monitoring criteria have been laid down explicitly, such as in the areas of air quality, greenhouse gas emissions and bathing water monitoring, the comparability and other quality aspects of the monitoring information have significantly improved. This suggests that improvement is indeed achievable and that there may well be a need for clearer guidance from either the EU or from national authorities, setting out agreed quality criteria for information and the supporting data.*" It is also recognised that there is a trade-off between quantity and quality of reporting.

Similarly, within the Commission there have been 92 infringements or EU pilot cases linked to the failure of Member States to comply with reporting obligations since 2010 (for example, non-reporting of programmes of measures, incomplete reports etc.)[[60]](#footnote-60). These cases support the analysis elsewhere in this Fitness Check.

There are numerous factors which seem to influence the quality and timeliness in the reporting process in addition to the potential difficulties in generating the necessary information in the first place. These factors are:

* Adequacy of data checking procedures;
* Language;
* Clarity of purpose, adequacy of guidelines and format;
* Time to conduct reporting / sequencing of reporting;
* Frequency of reporting; and
* Maturity of legislation and/or reporting obligations.

In particular the resourcing of reporting is relevant for all other factors. The current pressure on national public budgets is often leading to budget cuts that could undermine the effectiveness of current reporting, unless resources are used more efficiently. This pressure occurs despite reporting being only a very small part of overall policy costs.

### Delivering information on the state of implementation

**Assessment question: "Does environmental reporting provide sufficient information on the state and the effectiveness of implementation of the environmental *acquis*?"**

**Overall response: The information reported is broadly sufficient but with a few cases where information may not be needed. In some reporting areas, the focus is more on administrative and legal questions rather than the effectiveness of implementation, and there is even less information reported on the state of the environment. Often, the reported information is sufficient to make a general but not an in-depth judgement, which would require either more detail or a tiered approach. The situation has improved over time, but needs to improve further on the basis of a rolling programme of evaluations and the Environmental Implementation Review.**

*What is the issue?*

Many reporting obligations focus on giving an overall picture of the state of the implementation, establishing the "distance to target" and, in case of gaps in implementation, the measures taken to close these gaps. In some cases, such an assessment of effectiveness is easier to do than in others. But this issue also relates to whether we have a systemic assessment of the state of environment and whether information can be inter-connected. Often the uncertainty linked to the effects that certain measures may have or the multi combination of measures that can be taken where the combined effect is difficult to establish, make an assessment of effectiveness complex. To allow for a sound assessment, a significant amount of data would need to be collected which would then result in increased administrative burden.

*What are the findings?*

Section 5.1.2 showed that the focus of reporting obligations is on the measures being implemented to address environmental problems ("response") and to a lesser extent on the state-of-the-environment and the positive and negative impacts on the environment and on the measures implemented. Moreover, reported information is largely text based as it looks more at the implementation processes and procedures rather than the state-of-the-environment and the objectives to be reached through EU environmental legislation.

*In the public consultation, the majority of respondents agreed strongly with the assertion that reporting should allow for an assessment of whether EU legal obligations are being met. On a scale from 1 to 10, 50% assigned a score of 10 to this objective and 80% a score of 8 and higher (see figure 7 in the report)*[[61]](#footnote-61)*. On average, this was the highest score amongst the questions asking about the main purpose of reporting.*

*Public consultation respondents also indicated that the amount of information reported was appropriate (see figure 5 in the report)*[[62]](#footnote-62)*. A strong majority of respondents felt that existing amounts of information collected in the air quality and pollution, chemicals, noise and waste were ‘about right’ to meet policy objectives. Respondents generally felt that more information was required in relation to biodiversity and nature protection, natural resources and soil, whilst respondents with knowledge of water policy were divided on whether existing information requirements were appropriate or too demanding, with some suggesting that this represents the heterogeneity of water resources across the EU.*

Through the inventory and internal surveys, the experts in the Commission's DG Environment were asked about the sufficiency and usefulness of the information reported. The picture is mixed: in most cases the reported information (79 out of 180) and the resulting Commission reports (58) are considered 'very useful'. However, there are also cases where either the reported information (25), the Commission report (24) or both (18) are considered to have 'low' usefulness. Reflecting this, there are already proposals and plans to amend or replace a number of reporting obligations with low usefulness, e.g. through the 2015 Commission proposals on waste legislation[[63]](#footnote-63).

These results broadly mirror the feedback from the public consultation, which found that most people felt the amount of information reported was appropriate but with some people feeling there was too much, and similar numbers feeling it is too little.

It is interesting to look at the reasons for low usefulness which included, in particular:

* Member States have little to report unless significant changes occur e.g. reporting on the structure of relevant competent and other authorities;
* Member States have little to report as the article being reported on is not / seldom used and hence the information is of little use;
* Insufficient information is required on which to make useful analyses;
* Problems with the quality of reported information inhibit its usefulness; and
* Timing of reporting.

The Commission experts also made a number of suggestions for improvements, including:

* Improving the underlying evidence base through more systematic and comprehensive capturing of relevant information and subsequent improvement in analysis and interpretation;
* Collation of quantitative or qualitative key indicators on progress towards objectives (see also 6.4.3);
* Improved accessibility of the report (e.g. via online resources and web viewers).

*Specific feedback from public consultation, the stakeholder workshops and the 'Make It Work' project highlighted that not all reporting is currently allowing for an effective assessment of compliance (e.g. on environmental liability) or sometimes more information would be helpful, e.g. under the E-PRTR it would be useful if more information on the actual capacity threshold/output levels was available and compared with emissions data and if (basic) emission data would be transmitted to the authorities for all facilities in the specified categories of economic activity regardless of the cumulative release thresholds for pollutants. In this context, performance scoreboards to publicise compliance levels (such as the Natura 2000 barometer[[64]](#footnote-64)) were mentioned as a good instrument which could be used more widely. It was also suggested that traditional compliance reporting might be replaced or supplemented by alternatives, such as air quality modelling (instead of only relying on environmental monitoring) or using other available information (e.g. from remote sensing using Copernicus[[65]](#footnote-65)). Moreover, the potential of involving citizens to collect data (e.g. through citizens science)[[66]](#footnote-66) was highlighted as having great potential. The biggest problem with the reports that the Commission makes publicly available is with their timelines e.g. COM's triennial report on shipments of waste includes outdated information.*

Another issue which is common across several reporting obligations is the lack of information provided by (some) Member States. For example, a significant percentage of “unknown” assessments are reported by Member States under the Habitats Directive. Such data gaps are often a result of lack of appropriate environmental monitoring at national level.

Positively, the situation has improved over time and this process of improvement seems to be supported by the rolling programme of evaluations (often under REFIT). In addition, the Commission’s Environmental Implementation Review (EIR) will provide a new focus on what type of information and data are needed to best identify the "distance-to-target" and gain a better understanding of implementation challenges from a cross-cutting perspective.

### Is the public properly informed

**Assessment question: "Does environmental reporting allow for the public to be properly informed about the state of the environment?"**

**Overall response: There have been significant improvements in the ability for the public to be informed about the state of the environment. The European Environment Agency plays a strong role for the reporting obligations it covers. Further progress can be made by developing further open data policies and better applying the legal requirements on making available information to the public about the state of the environment that are in the Directives on Access to Environmental Information and INSPIRE.**

*What is the issue?*

One objective of reporting is to ensure that the public has access to environmental information regarding the state of the environment. In practice, the issue is wider than just the state of the environment as there is an obligation on the EU to inform the public on the progress of implementation, the state of the environment and actions being taken. For the public to be considered properly informed, the indicators should be appropriate and meaningful to them, and should be readily accessible.

*What are the findings?*

The European Environment Agency (EEA) that has the lead role at the EU level on providing public access to information on the state of the environment, having been set up precisely for the above-mentioned purpose[[67]](#footnote-67). To this end, the EEA publishes a "State-of-the-Environment Report" every five years and collects information thorough its European Environment Information and Observation Network (EIONET). For some reporting obligations (e.g. air quality, state of nature or bathing water), the EEA is the main service provider.

When the EEA deals with reporting obligations, public access to the information is usually ensured and subject to high demand (e.g. in relation to the bathing water report). There have been efforts to streamline the reporting streams between those collected through EIONET and those stemming from environmental legislation (e.g. in the field of water policy or protected areas). Presently more than 70 environmental data flows are reported through EIONET Reportnet, around 80% of which are as a result of EU legal requirements. The same is true for the EEA's EIONET priority dataflows. However, there are still inconsistencies and duplications which could be addressed. A particular issue is the fact that the EEA does not carry out the reporting process for the majority of obligations (see also section 5.1.4) and that the 'state of the environment' needs to look more into the systemic interaction between individual pieces of legislation.

*In the public consultation, the majority of respondents agreed strongly with the assertion that reporting should allow stakeholders to understand the state of the environment and the actions taken to maintain and improve it. On a scale from 1 to 10, 46% assigned a score of 10 to this objective and 79% a score of 8 and higher (see figure 8 in the report)* [[68]](#footnote-68)*. On average, this was the second highest score amongst the questions asking about the main purpose of reporting.*

*In addition, the public consultation showed strong agreement for the statement that reporting should generate reliable environmental information and ensure access to environmental information for* *citizens. On a scale from 1 to 10, 35% assigned a score of 10 to this objective and 70% a score of 8 and higher (see figure 10 in the report)*[[69]](#footnote-69)*.*

*There was even stronger support that reported information should be fully available to the general public, after due consideration of the appropriate level of aggregation and subject to appropriate confidentiality constraints. On a scale from 1 to 10, 47% assigned a score of 10 to this objective and 79% a score of 8 and higher (see figure 16 in the report)*[[70]](#footnote-70)*. In the stakeholder events, experts highlighted that such information can help identify front-runners and good practices which could then be shared with those having similar implementation issues. Reporting can also be an important tool for industry and other sectors to improve their environmental performance and promote eco-innovation by sharing best practices.*

*Feedback was also made that some important and relevant information is not collected (sufficiently) such as e.g. air quality information based on modelling or nature reporting on screening results and outcomes of Appropriate Assessment which would be necessary to assess the effectiveness of the Directives in achieving their objectives.*

*With regard to REACH, the ECHA’s new dissemination portal[[71]](#footnote-71) was highlighted as best practice in regulatory monitoring, and thought to have made information more easily accessible to the public.*

For the reporting obligations not dealt with by the EEA, the picture is more mixed as to whether the public is informed. Firstly, a key route for public accessibility is the publication of Commission reports or a general requirement for Member States and the Commission to make this information publically available through other means. The inventory records that, of 181 identified reporting obligations, there is a specific legal obligation for public provision of information in 68 cases. In addition, information is also made available from other reporting obligations.

Directive 2003/4/EC on access to environmental information requires Member States authorities to publish at regular intervals reports on the state of the environment and to promote active and systematic dissemination of environmental information to the public. This is underpinned by the INSPIRE Directive which facilitates public access to spatial information in an easy to use manner. There are also initiatives such as SEIS[[72]](#footnote-72) and SIIFs[[73]](#footnote-73) that are improving electronic access to certain information relevant for environmental legislation held by public bodies. A specific example is the study on "*Active dissemination of environmental information in relation to the Birds and Habitats Directive*"[[74]](#footnote-74), which formulated recommendations on active dissemination of environmental information. Taken together, there is a framework for sharing environmental information, including data obtained from environmental monitoring. This framework is already leading to more active dissemination, but could be used more widely especially as the technology develops. However, there are some issues that need to be addressed such as data quality and comparability (see also section 7.5.2).

Partial onward dissemination could be justified. Indeed, many reporting obligations are of an administrative nature (e.g. notifications of competent authorities). Several other obligations such as the reporting on drinking water, invasive species, waste and chemicals include important information on the state of environment and the measures taken under these instruments. Moreover, there are a number of obligations which relate to measures (e.g. inspections) or which relate to cross-cutting instruments such as the European Liability Directive, the Environmental Impact Assessment or the Strategic Environment Assessment Directives which need to be assessed regarding their effectiveness. The reporting across these pieces of legislation is diverse and may not convey the information that the public wishes on them.

As such, whilst it can be concluded that there is information available for the public that can allow them to be properly informed about the state of the environment, care must be taken in ensuring that the specific needs of citizens, particularly around non-technical interpretation and ease of access, are addressed. Information to the public should be presented in a way that it can be easily understood. Public information requirements need to be better captured and the often large amounts of information available need to be better tailored to the public need. The idea of providing the public access to the underlying datasets was identified in the stakeholder workshops – in such instances ensuring that the data is tailored to and navigable by the public is clearly important.

### Gaining an insight for decision making

**Assessment question: "Does environmental reporting allow for evidence based decision making including evaluations of regulatory fitness and impact assessments?"**

**Overall response: Reporting obligations are widely used to generate part of the evidence base, providing data on key issues in a comparable manner. However, reporting obligations are not the only source. For some legislation, making more use of reporting obligations to underpin evaluations and Fitness Checks would be appropriate but this would place additional demands on Member States who may not readily have such information (for example on costs and benefits).**

*What is the issue?*

The Better Regulation Guidelines[[75]](#footnote-75) highlight that a regulatory monitoring and reporting system is a *"necessary and an integral part of Better Regulation helping to:*

* *Identify whether a policy is being applied on the ground as expected;*
* *Addressing implementation problems of an intervention; and/or*
* *Identifying whether further action is required to ensure that it can achieve the intended objectives."*

The Better Regulation agenda is about designing and evaluating EU policies and laws transparently, on the basis of an evidence base. Evaluations (such as this Fitness Check) assess what is working and what is not, and then Impact Assessments look at the economic, social and environmental impacts of options for change. Reporting obligations are one important way for Member States provide the information needed to enable this evidence-based regulation.

*What is the finding?*

The Regulatory Scrutiny Board provides quality checks of Commission evaluations and Impact Assessments, and its findings suggest that the evidence base whilst adequate for developing policy could be stronger[[76]](#footnote-76). The Board's opinions raise:

* [regulatory] monitoring and evaluation as a structural issue in around two fifths of cases;
* the need for environmental information on options in around a third of cases;
* the need for further quantification in most cases.

The experience of the Commission is that reporting is a crucial part of the evidence base for most evaluation and Impact Assessments. Indeed, reporting on implementation is normally the first step before the preparation of the evaluation report and subsequent Impact Assessment of options for change. So, reporting provides the base on which the analytical pyramid is built.

However, the analytical base provided through reporting is never wide enough or even consistent enough to allow for the full analysis. A typical evaluation requires information on the state of the environment, the drivers and pressures, the responses taken and their impacts. Parts of this information may be provided by reporting from Member States, however, never all of it.

*Respondents to the public consultation (see section 2.2 in the report)*[[77]](#footnote-77) *highlighted the importance of reporting in assessing whether legal obligations are being met, improving stakeholder understanding of the state of the environment, and providing environmental information for citizens. All of these objectives are relevant for evaluations and Impact Assessments.*

One of the issues is that not all of the necessary information is held by Member States: no Member State systematically evaluates implementation in their own country and then reports this information to the Commission. The result is that almost all evaluations and Impact Assessments need to be complemented by additional primary data collection.

The weakest element of reporting is on the costs and benefits of measures undertaken. The environmental legislation where this should be mostly available are those that require analysis in the Member States (River Basin Management Plans under the Water Framework Directive, Noise Action Plans under the Environmental Noise Directive, and analysis under the SEA Directive etc.). However, even Commission evaluations of these Directives suffer from a lack of data on the costs and benefits of implementation, as it is not usually collected by Member States or reported. Even for the INSPIRE Directive, where there is an explicit obligation for Member States to report costs and benefits[[78]](#footnote-78), it is not possible to make an evaluation of costs and benefits across the EU mainly because many Member States do not collect such information systematically[[79]](#footnote-79).

However, simply because all information needed for evaluations and Impact Assessments is not reported, does not imply that reporting is the right channel to receive all the needed information. Indeed, stakeholders ranked the objective most closely associated with this as lowest. Discussions with stakeholder indicated that such information was a 'nice to have [or give]' but not the priority.

On the other hand, some Member States state they have systematic evaluation practices in place (such as UK, NL, DE). Effectiveness would be improved by these countries transparently sharing their evaluations and Impact Assessments on a regular basis with the Commission. Moreover, such information would be useful in the context of the Environmental Implementation Review (EIR)[[80]](#footnote-80).

## Efficiency

The evaluation of efficiency looks at whether effectiveness could be improved, in particular whether costs could be cut without reducing effectiveness or whilst improving quality. In terms of costs, the focus is on the administrative costs of reporting.

### Justification and proportionality of costs

**Assessment question: "To what extent are the costs involved justified and proportionate?"**

**Overall response: In overall terms, the costs are moderate and a small proportion of the implementation costs of legislation. Most individual reporting obligations are justified and proportionate in comparison with the benefits and have benefited from past or ongoing streamlining exercises. Nevertheless, some reporting obligations go beyond what is legally required or do not appear proportionate to some stakeholders. Whilst the trend is positive, further evaluations of specific pieces of legislation need to investigate more detailed changes and check that good practices are being applied to deliver further simplification and burden reduction.**

*What is the issue?*

The question of proportionality essentially asks if the benefit of the information reported is greater than the cost of that reporting.

*What are the findings?*

The evidence from the costs and benefits (see section 5.2 and section 6 of support study) provided a discussion of this at an aggregated level. Costs appear to be around EUR 22.4 million per annum, with around EUR 13 million of this being met by Member States directly. It is not possible to estimate the benefits of reporting obligations in quantified terms but, clearly, the benefits far exceed the costs overall as demonstrated in section 6.2. Without reporting obligations there can be no confidence in implementation and as to whether legislation is working or not.

*In the public consultation, respondents were asked about their perceptions of the efficiency of the reporting process (with regard to cost and administrative burden) in the policy domains with which they were most familiar. There was a spread of opinion in all policy domains about whether or not current reporting arrangements are efficient, generally with a higher percentage of respondents considering it as efficient (see figure below). In all areas, a small but significant proportion of respondents (between 14% - 30%) viewed that there is potential for significant improvements to be made (see figure 6 in the report)* [[81]](#footnote-81)*.*

As identified also by the stakeholders, there are some specific reporting obligations where the potential for improving proportionality has been identified (e.g. INSPIRE Directive).

*The stakeholder consultation identified a number of good practices where reporting is particularly efficient (e.g. some reporting asks for web links to existing documents to be provided rather than writing summary text only for the purpose of reporting). However, many suggestions were made on very specific improvements which would result in higher efficiency, such as the need to avoid regular changes and updating of reporting guidance which triggers time consuming follow up at national level (see contribution from France on Water Framework Directive, page 93 of support study). Moreover, the justification and use made by reported dated can be communicated better in some areas which would alter the perception on proportionality (see contribution from Germany, page 92 of support study).*

It is also very clear that many specific reporting obligations are best challenged through evaluations of the specific reporting obligations. This horizontal exercise has identified stakeholder concerns for some obligations, but many of these now need to be validated through more in-depth evaluations of the specific legislation, benefiting from the insights of this horizontal exercise. Where clearly obsolete or out-of-date, changes can be made on an ongoing basis such as the proposal to repeal the Standardised Reporting Directive (91/692/EEC).

This can be achieved through connecting the results of this Fitness Check and its understanding of best practice and the ideal corporate structure with the ongoing and planned evaluations for particular pieces of legislation (some of which are under REFIT, others are not). Overall, most environmental legislation covered by this Fitness Check has or will undergo an evaluation. Where evaluations were ongoing, the link has been made (see e.g. INSPIRE[[82]](#footnote-82)) or it will be factored in future exercises.

Annexes 6 to 8 already identify issues that merit further attention to see how reporting can better deliver, and to make specific changes in the interests of further simplification and burden reduction. Annex 8 sets out a number of indicators of quality that are discussed throughout this Fitness Check report: usefulness, indicators, textual, coherence, delays and process, and format. For example:

* whilst two-fifths of reporting is considered as of high usefulness, one-fifth is considered as of low usefulness implying the potential to simplify;
* one quarter of reporting suffers delays that indicate the potential to improve the efficiency of the process and also the quality (timeliness) of the final report;
* three quarters of reporting is mainly textual information, which can often be of lower quality (use) than indicators and numeric information.

Moreover, there is a need to promote good practices and standardise tried-and-tested approaches across all environmental policy domains including the improvement of communication on what happens with the reported data and how they are used.

### Factors influencing efficiency

**Assessment question: What factors influenced the efficiency with which environmental reporting takes place?**

**Overall response: Efficiency is affected by the complexity of the obligations, whether they are complied with and the processes. Examples exist where these factors have been optimised. Identifying these good practices can help improve efficiency of other reporting obligations through simplification, burden reduction and improved quality. Any changes should look at factors addressing both costs and benefits and analyse what influence they have on one another in case of changes.**

*What is the issue?*

This question looks at the factors that determine the efficiency, i.e. the relationship between costs and benefits of reporting and how it can be improved. On the cost side, the main factors are included in the Standard Cost Model (i.e. number of entities reporting, time required, frequency and hourly costs as well as the costs of outsourcing). On the benefits side, the quality, timeliness, relevance and use of the data play an important role.

*What are the findings?*

As regards the costs, there are a number of factors where there is potential for improving efficiency. The number of reporting entities is mostly addressing Member State authorities. However, in cases where business or other operators need to be involved in the reporting, the administrative burden increases. This may be justified and proportionate but needs to be validated. The frequency of reporting appears mostly streamlined. However, in the water policy area there are questions about the timing and frequency of reporting of legislation which is interrelated (see more details in section 6.2.5).

The time taken for reporting is influenced by the content, format and process of reporting. It varies considerably between different reporting obligations. In particular, the introduction of IT tools and electronic reporting can enhance the efficiency but requires initial investment which has not taken place across all Member States (see more details in sections 6.2.4, 6.2.5 and 6.4.4).

*A stakeholder identified specific factors in the context of Water Framework Directive reporting which influence their costs from their country's perspective, e.g. the changes in guidance, code list and new formats, delays and additional checks in QA/QC procedures (although these could reduce costs over time) as well as the constraints caused by capacity problems of the EEA's Reportnet (see contribution from France on Water Framework Directive, page 93 of support study). It was recognised in the Stakeholder Workshops, however, that the reporting under the Water Framework Directive has undergone significant changes from the first to the second round of reporting as a result of feedback from Member States and after extensive consultation and agreement with Member States. Reporting under this new approach is still ongoing but during a first reflection on the experiences at the last meeting of Working Group Data Information and Sharing (DIS) under the Common Implementation Strategy of the Water Framework Directive (October 2016), the Member States reiterated the need for a stable reporting mechanism[[83]](#footnote-83). In other words, for future reporting obligation, the Member States collectively are not in favour of changing the current schema as described in the revised WFD Guidance.*

The factors influencing the benefits are more difficult to analyse but are addressed throughout the rest of Section 7. Overall, there could be greater emphasis on users which includes the EU institutions but also the Member State authorities, businesses and citizens relying on reporting for one reason or another. There is a wide range of approaches in the different ROs and there are some good examples where the benefits are high and factors such as relevance, timeliness, quality etc. seemed to be "optimised" (e.g. bathing water or air quality). In other areas, there seem to be some deficiencies which could be addressed at reasonable cost would help to enhance the overall efficiency of reporting. However, any potential changes designed to reduce the costs of reporting also need to be viewed in the light of these factors that influence benefits. For example, reducing the frequency of reporting will reduce costs, but an assessment of efficiency needs to examine the potential effects on the benefits of having current and up-to-date information. Finally, there is some data that could be usefully reported, that is not the case at present.

### Good examples for efficient reporting

**Assessment question: "Are there examples of good practice in environmental reporting at the national or regional level that imply it could be undertaken more efficiently, and if so how?**

**Overall response: Many good examples were identified which included the enhanced use of IT systems, the integration of information systems, the use of centralised dashboards, databases or web portals and the coordination of reporting processes between Member States at a regional level. Wider adoption of efficient implementation would improve the efficiency at the EU level, perhaps through a more “corporate” (EU coordinated) approach to facilitate sharing of information across domains.**

*What is the issue?*

Illustrative examples on how to improve the efficiency of reporting can be identified at the EU, regional and Member State level, and be more widely applied. There were a number of actions aiming to streamline and rationalise (national) reporting procedures. Such reforms reduce the administrative costs and increase benefits. Good practices can help improve efficiency through promoting their wider use.

*What are the findings?*

At EU level, there are a number of areas where improvements have been made that facilitated better practice at national or regional levels. Such examples were listed already[[84]](#footnote-84), and include the reporting and mutual exchange of information under the Ambient Air Quality Directives and the Bathing Water Directive. On air quality, the dedicated internet interface, i.e. the so-called air quality portal[[85]](#footnote-85), utilises a state-of-the-art electronic reporting approach by which air quality information is made available in a standardised, machine-readable and INSPIRE compliant[[86]](#footnote-86) manner. For bathing water, Member States are required to report annually on the results of environmental monitoring. While environmental monitoring of bathing water is required to cover a range of parameters, the EU report focuses on a simple indicator of bathing water quality, the numbers of waters in each Member State that meet different quality standards. The reported data are made publically available and the EU web tool is linked to the Member State information systems where the bathing water profiles can be found[[87]](#footnote-87). Such an approach is exemplary for the concept of "Structured Information and Implementation Systems" (SIIFs) building on state-of-the-art IT tools, making information available in a comparable, interoperable and easy-to-use manner.

At national level, there are many good examples and the support study[[88]](#footnote-88) is only able to list a sample from which some wider lessons can be learnt, in particular:

* The Austrian electronic data management system is currently under development as an integrated eGovernment application. The aim is to reduce administrative burden by creating synergies and reducing redundancies of current parallel systems and processes.
* The Irish Environment Protection Agency (EPA)**[[89]](#footnote-89)** has invested in streamlining after it found in a 2014 evaluation of their reporting systems on industry and waste some inefficiencies (e.g. duplication or uselessness of data). Their current projects will lead to significant efficiency gains, improved quality and accessibility of data (leading to better decision making and environmental outcomes) and improved public information.
* The Baltic Marine Environment Protection Commission (HELCOM)[[90]](#footnote-90) regional reporting system provides a platform where all the Member States of the Baltic region share their data. Collaboration with the EU/EEA ensures these data are also used in the context of reporting under the Marine Strategy Framework Directive.
* Scotland's Environment Web[[91]](#footnote-91) is good practice for active dissemination. It demonstrates how a national portal can in an easily understandable and accessible way inform the wider public and other authorities, and stakeholders. It uses extensively the technologies developed by the INSPIRE Directive by making over 300 datasets available, in an easily accessible way.

Despite ongoing developments in certain Member States, the potential for adapting national systems to the developments in the field of digital technologies seems only tapped to a limited degree.

There are also examples where investments and efforts have not necessarily resulted in higher benefits or efficiencies. For example, Bulgaria, has launched some spatial data portals that allow public access to the data they administer. In addition, Bulgaria participates in multilateral data exchanges projects and initiatives (such as DanubeFloodRisk, DanubeGIS, WISE). Nonetheless, the usability of this data by the Commission and EU is generally poor – with information largely available only on request (often for a fee) and strong variations in the quality and accessibility of information available between government authorities[[92]](#footnote-92).

Looking at all these examples it is noticeable that there are few mechanisms in place to identify and share such good practices so as to ensure their wider use. Some exchanges of best practices exist in sectoral or individual reporting groups organised by the Commission (e.g. on water and nature). However, no cross-cutting mechanism at EU level is in place (yet).

### Improving the efficiency of the process

**Assessment question: "Could improvements be made to the process for environmental reporting to cut costs?"**

**Overall response: Process improvements are possible and may well offer greater opportunities to reduce burdens than reductions in the reporting obligations themselves. They will reduce costs or increase benefits, in particular by more widely applying the most efficient processes and by increasing the use of electronic tools, templates and solutions (including those developed by the EEA) as well as through better guidance. This can require initial investment which will, however, pay off in the mid- and long-term.**

*What is the issue?*

This question looks at the process for compiling, transmitting, analysing and publishing information reported by the Member States to the EU. In particular, the service providers and the reporting format/templates/guidance offer process options.

*What are the findings?*

One measure of efficiency is the time it takes from the deadline set out in the Directive to the publication of the Commission report. On average, the Commission takes 630 days to do this (in contrast, the EEA is aiming to deliver reports within 180 days). There are many reasons for this delay including late submission of Member State reports[[93]](#footnote-93), time for translation, processing of data which takes longer if data are of poorer quality and the need for detailed assessment of a mixture of qualitative and quantitative data. One factor that appears to influence the overall process delay is the choice of service providers.

Section 5.1.4 and figure 11 provide an overview on the different service providers for the reporting process. The EEA processes data quicker (on average 497 days) with annual bathing water and the national emission ceilings reports done in 146 and 162 days respectively. By far the longest delay occurs in the mixed process where the EEA infrastructure is used initially but then the processing of the reports is outsourced (695 days). This is not surprising for two reasons:

1. the EEA is specialised in reporting processes and has an interest to optimise and standardise procedures. This allows the EEA to handle its own priority dataflows of the EIONET within a mere 180 days on average.
2. the outsourcing such services is highly diverse and a wide variety of different consultants are used with similar variety of diversity of the process management.

The outsourcing option has other disadvantages: transparency and continuity of the support is not always guaranteed. For example, the databases generated by a consultant are often not publically available and sometimes differ from those held at the EEA. The consultant may also change from one reporting round to the next meaning expertise is lost. Moreover, the coordination needs between the higher number of actors (from Commission services, EEA and consultants) may be time and resource consuming.

The reason why the EEA is not handling a higher number of reporting processes is quite simply that it was not foreseen in many legal acts and therefore no dedicated resources were allocated to the EEA. Only in eight out of the 57 pieces of legislation analysed is the EEA mentioned, and then mostly in assisting or cooperating with the Commission in the reporting process. In most cases, this did not result in the allocation of additional budget to the EEA.

*The public consultation concluded that respondents generally felt that IT systems have significant potential to support streamlining of reporting processes and reduced administrative burden. Almost all categories of respondents expressed the view that IT technology is not used to its full potential and could support harmonisation of environmental monitoring and reporting between policy areas, with a majority agreeing that the INSPIRE Directive can help support a common approach and reduction in administrative burden. Nonetheless, a substantial proportion of respondents (67%) felt that more support is needed for Member States in preparing reports, including the development of common tools.*

Another aspect is the use of improved reporting format/templates/guidance as well as the use of information technology (IT):

* The use of templates and standardized formats is still not the case for all reporting obligations (see figure 10 in section 5.1.4);
* Outside the EEA's Reportnet process, a large variety of processes and tools exist, and their harmonization could improve efficiency;
* The large extent of textual information makes it more difficult to automate the process using IT tools, especially when multiple languages are used;
* The application of quality assurance (QA) and quality control (QC) has significant influence on efficiency making reported data more robust, complete and reliable but can also create delays and inefficiencies; and
* The use of the INSPIRE Directive could be strengthened.

The application of the INSPIRE Directive was analysed in the context of the REFIT evaluation[[94]](#footnote-94). This evaluation found significant room for improvement in the use of INSPIRE standards and services for reporting purposes but that this would require further investment at national and EU level. Such investments would also contribute to enhanced transparency and active dissemination (see section 6.2.6).

*Strong support was expressed during the public consultation for the INSPIRE Directive to provide a common approach for reporting, reducing administrative burden and facilitating reuse of the reporting process and information across different levels of government. 55% of respondents totally agreed or tended to agree with this statement, although 30% expressed no opinion or did not answer.*

*At the Stakeholder Workshops, suggestions were made on how the process can be improved:*

*- Make environmental data INSPIRE compliant*

*- INSPIRE metadata should include an ‘authorisation’ stamp to indicate that data is officially authorised. This is an important issue for any future data harvesting.*

*- Establish INSPIRE as the first point of review when data is required i.e. the availability of data on INSPIRE should be considered first before any new data is requested.*

*- Use EU working groups to define EU products under INSPIRE*

*- Improve communication and joint working between environmental monitoring and reporting and INSPIRE communities*

*- Ensure INSPIRE data is made adequately available*

*INSPIRE can help to address these issues by improving harmonisation. There was a major effort in the Netherlands to map data to a new data model, and significant costs (e.g. 200,000 euro for air quality). Working groups need to bring together the INSPIRE and reporting communities, harmonise approaches across Member States and across legislation. It was also noted that, given the cost of developing INSPIRE compliant datasets, this is not necessarily the lowest cost or most efficient way of achieving harmonisation.*

Improving the process management and enhanced application of IT can contribute significantly to the reduction of administrative burden. Such cost reductions and efficiency gains would be the major benefits of reviewing and optimising the process for reporting. Some Member States which have gone through such an optimisation process report significant time savings. For example, the Irish Environment Protection Agency was able, as part of their LEMA programme (Licensing, Enforcement and Monitoring Application)[[95]](#footnote-95),to reduce the time needed for reporting under the Industrial Emission Directive from 6 months (in 2010) to half a day (2012)[[96]](#footnote-96).

*A common issue raised by a variety of Member States and stakeholders is that reporting involves a learning process, whose effectiveness and efficiency improves over time. Early reporting rounds under each item of legislation may require a large amount of data on various aspects of implementation as well as on the state and pressures on the environment. They also require reporting processes and systems to be established. Over time, as the legislation becomes more mature, environmental monitoring and reporting can become more focused on ongoing implementation issues, while the processes also improve with experience. While it is important to ensure sufficient consistency in reporting requirements and processes to facilitate efficient reporting processes at Member State and EU level, the process needs to be sufficiently dynamic to enable improvements to be made that enhance efficiency – and hence lower costs – over time.*

### Streamlining of timing of reporting

**Assessment question: "Could the timing of reports be better synchronised or streamlined to cut costs?"**

**Overall response: Frequencies and synchronisation of timing of reporting are factors influencing the costs and benefits. There are many good reasons why the currently agreed timings exist. Some improvements can be made to reduce the burden on national authorities but it needs to be examined on a case by case basis to ensure reporting still delivers the needed information.**

*What is the issue?*

The frequency of reporting processes and the synchronisation of deadlines for reporting are the two main aspects assessed in relation to timing. These timing elements are usually laid down in the legislation and are a combination of legal logic (such as the link of reporting to the timing of a material provision), technical considerations (such as availability of data or frequency of environmental monitoring) and political compromise.

*What are the findings?*

Looking at the environmental reporting obligations, there is a significant diversity as regards the frequencies. Figure 8 (and section 5.1.3) shows the wide range from monthly reporting cycles up to six years. Noticeably, a majority (97 ROs) are *ad hoc* or one-offs such as the submission of a list of competent authorities. These 97 ROs do not have significant costs and are not considered further in the assessment of timing. Figure 13 shows the frequencies for the 82 reporting obligations linked (in the legislation) to a Commission report.

*Figure 13: Frequencies of those 82 reporting obligations which are associated with a Commission report*

It is noticeable that some *ad hoc* and one off obligations requires the preparation of such a report (for 14 ROs) whereas some repetitive reporting is not associated with a Commission report (18 ROs)[[97]](#footnote-97).

From the regular 82 ROs, most require annual (19 ROs) and triennial (19 ROs) reports. Annual reporting exists in areas such as air quality, bathing water, industrial or air emissions (under for example E-PRTR, IED and NEC), waste streams (waste shipment, batteries, packaging, WEEE and ELV) and trading figures (POPs, FLEGT, CITES) as well as the INSPIRE Directive. Most of this annual information is essential for compliance assessment, information to the public and wider policy making. These data are also outdated quickly which is why many of them are published within months of submission by the Member States. On average, the Commission reports are presented 419 days after the reporting deadline (well below the overall average, see 5.1.3).

The group related to reporting frequencies of three years includes reporting for drinking water, industrial emissions (including VOC), waste (framework directive as well as landfills, extractive waste, WEEE and batteries) and INSPIRE.

The third biggest group is legislation where the main reports are every six years (19 ROs) linked to water and marine management (WFD, FRMD, EQS and MSFD), nature protection (habitats, birds, invasive species) and the EIA Directive. Water, marine and nature policy is linked to the availability of key biological and ecosystem data which are only monitored every couple of years due to the higher cost of environmental monitoring and the slower change of the parameters.

The other reporting cycles of two, four or five years cover a range of different reporting obligations. For these, there does not appear to be a particular overarching logic or reason for a particular frequency.

There are 50 key reporting obligations that trigger reports from the Commission to the public (overall reports on implementation, plans, programmes, etc.), the frequencies vary similarly to the above (see table 3) reflecting the way in which that information is used.

*Table 3: Frequency of key reporting obligations towards the Commission (overall reports on implementation, plans, programmes, etc.)*

|  |  |
| --- | --- |
| Ad-hoc | 2 |
| One-off | 10 |
| Annual | 10 |
| Every 2yrs | 5 |
| Every 3yrs | 16 |
| Every 4yrs | 2 |
| Every 5yrs | 6 |
| Every 6yrs | 8 |

The frequency of reporting has an influence on the costs. If some report cycles were to be changed from two to three years or from four/five years to six years, this would reduce costs. The question on whether this would also reduce the benefits of the reports has to be answered on a case-by-case basis.

It is certainly beneficial that some reports continue to be on an annual basis since these tend to be in high demand (e.g. bathing water or air quality reporting) and to deliver multiple benefits for the work on compliance, policy evaluation and development as well as information to the public. In some cases, reporting may be more beneficial if their frequency was increased.

*Example on benefits from increasing frequency*

*The current three yearly drinking water reporting is hardly of interest to the wider public and has limited use for compliance assessment since the data are outdated by the time they are analysed. The recently published evaluation for the Drinking Water Directive (DWD)[[98]](#footnote-98) concluded "The DWD is directly relevant for citizens but they want to see more up-to-date and easily understandable information published online." Member States collect (and many publish online) drinking water data on an annual basis but the practices are very diverse. Having a similar approach to the bathing water reporting (which is reported annually) may increase the value of these reports significantly. A similar feedback was also received from the stakeholder consultation in relation to the annual Eurostat water statistics being more valuable than the biannual reporting on the urban wastewater directive.*

Other factors to consider when deciding on a more cost-effective frequency of reporting are key products or policy cycles for which such reported data would be beneficial, such as:

* The EEA's State-of-the-Environment Report (SoER) (every five years);
* The envisaged country reports for the Environmental Implementation Review (every two years);
* The cycle of the Multi-Annual Financial Framework (every six to seven years); or
* The evaluation cycle in the REFIT Programme (usually every five to seven years).

It will not be possible to have reporting cycles which match all these different processes. However, so far, they are often not factored into the reporting process which means that when, e.g. the EEA publishes its next SoER in 2019, some implementation and compliance data for key environmental legislation will be out of data (e.g. nature data collected before 2013 will be used).

Another aspect of timing is the synchronisation of related reporting obligations. With the increase in environmental legislation, there are significant, and sometimes complex, relationships between different pieces of legislation. This can lead to the same data being needed for different reporting obligations or synergies being possible. To this end, it is positive to note that the legislator has already synchronised the six year cycle for management and reporting in water and marine policy (2016, 2022, 2028, …) as is the cycle for nature reporting (2013, 2019, 2025, …). However, there is a lack of synchronisation between these major policy areas whereas there are some overlaps in reporting between them[[99]](#footnote-99).

Also within a certain domain, there are questions as to why the reporting cycles are not synchronised further. For example, savings have been estimated at EUR 159.000 if the reporting cycle of the Nitrates and the Urban Wastewater Treatment Directives were aligned with the Water Framework Directive cycle[[100]](#footnote-100). These rough estimates show that cost savings would be possible but this would need to be viewed carefully against the potential loss of benefits from less frequent reporting and the potential benefits of more consistent information.

On the other hand, Member States could not produce all the different reporting obligations at the same time. Doing so would overload the responsible people instead of spreading workloads over time.

*Participants in the Stakeholder Workshops[[101]](#footnote-101) highlighted the scope to reduce administrative burdens by streamlining timing under the water-related directives. It was also argued, however, that synchronisation of reporting should take account of the capacity of the Member State authorities, and that there could be problems and resource constraints if everything had to be reported at once.* Moreover, a logical and staggered system needs to properly have local and sectoral reporting feeding into more national/regional and holistic reporting.

Also in other areas, some minor synchronisation questions could be raised. At the same time, there are also areas where synchronisation of timing has already been achieved (e.g. on nature).

### Promotion of active dissemination

**Assessment question: "Could the promotion of active dissemination of data (in the context of Directives 2003/4/EC and 2007/2/EC) alleviate environmental reporting burden whilst improving access for public authorities, businesses and citizens?"**

**Overall response: There is further scope for active dissemination (or open data), i.e. sharing of data in a structured and easily accessible way. Ultimately, such developments could make more information available at source and thereby reduce the need for detailed reporting if effective tools for data harvesting were to be developed. Active dissemination also provides more timely and fit for purpose information to citizens, businesses and Member State authorities. More transparency and accountability in relation to implementation of EU law offers opportunities for businesses to use the same data to create new products or services. This potential has not been fully exploited yet. It is unlikely, however, that active dissemination will lead to the complete replacement of reporting ("zero reporting") but can create efficiency gains if used in a complementary and joined up way.**

*What is the issue?*

Environment policy was an early embracer of full transparency and the 'open data' concept by requiring such approaches through the Access to Environmental Information Directive[[102]](#footnote-102). The INSPIRE Directive further facilitates this by creating the underlying enabling frameworks for active dissemination of environmental information (services, interoperability and metadata). As can be seen in section 6.2.3, there are a number of good examples of active dissemination of information. The question is whether and to what extent active dissemination could more widely serve reporting needs?

*What are the findings?*

It can be seen that stakeholders are making more and more use of the EU legal framework and the infrastructure of modern technologies (especially IT) as an enabler for process efficiency. In accordance with the principle of improving access to environmental information for public authorities, as well as the ethos of the INSPIRE Directive, a number of public authorities are undertaking efforts to promote active dissemination of information. The support study presents a number of examples and good practices in this area, in particular from France, Hungary, Ireland, Spain and the United Kingdom[[103]](#footnote-103).

*In the public consultation, the majority of respondents agreed strongly with the assertion that reporting should result in information being fully available to the general public after due considerations of the appropriate level of aggregation and subject to the appropriate confidentiality constraints. On a scale from 1 to 10, 47% assigned a score of 10 to this objective and 79% a score of 8 and higher (see figure 16 in the report)* [[104]](#footnote-104)*.*

*The majority of respondents also agreed with the assertion that reporting should generate reliable environmental information for citizens so they understand what EU legislation achieves, in line with qualitative responses pointing to the potential to maximize the value of data in the context of the INSIRE Directive. On a scale from 1 to 10, 35% assigned a score of 10 to this objective and 70% a score of 8 and higher (see figure 10 in the report)* [[105]](#footnote-105)*.*

*One respondent to the public consultation from a public authority suggested that while INSPIRE will contribute to the harmonisation of spatial data, there are risks inherent in converting too much data to INSPIRE compliance as technical specifications and formats become outdated, resulting in cumbersome systems. While harmonisation of reporting is supported, it poses challenges from an IT perspective.*

*Participants in the stakeholder workshop highlighted the potential for development of standardised tools and protocols to support data harvesting in specific areas – for example, WFD River Basin District data, or MSFD harvesting data in line with Regional Sea Conventions.*

There is enthusiasm about the potential for active dissemination to over time reduce costs associated with reporting obligations through reducing the duplication of reporting effort. However, experience from Member States indicates that active dissemination may not in itself reduce costs (at least in the short to medium term), as authorities will still need to access, compile and quality check data. Given existing deficiencies in data for established reporting obligations in some areas and regions, there is concern amongst some stakeholders that this could lead to less consistent and harmonised data. The greatest potential for cost reduction may lie in better streamlining e.g. if online dissemination occurs in a more joined up way and allows data to be used for a range of reporting purposes. Active dissemination has some potential for replacing and/or complementing traditional reporting obligations to the Commission, with significant co-benefits, helping to enhance public access to the reported information as well as the timeliness of information dissemination. However, if data was to be made available just voluntarily then there would clearly be gaps and the objectives of reporting would not be met.

In addition to national administrations, regional and local authorities play an important role when it comes to disseminating environmental information and informing its citizens. To this end, the Committee of the Region made a strong call on the Commission to use the Fitness Check to improve the current system by reducing administrative burden on the authorities and working together to enhance active dissemination.

The Committee of the Regions prepared and adopted an Outlook Opinion entitled "EU environment law: improving reporting and compliance" in its session of 7 April 2016 (CDR 5660/2015)[[106]](#footnote-106). As regards the Fitness Check, the "*Committee of the Regions:*

* *urges the European Commission to explore efficiency gains and address unnecessary administrative burden in environmental monitoring and reporting (M&R) in particular by automatisation of the reporting tools, and by looking at synergies across reporting obligations under different directives; "implementation scoreboards" should be established for additional directives;*
* *calls on the European Commission and the EEA to further explore within pilot projects how environmental M&R requirements on local and regional authorities can be reduced by ICT and eGovernment without affecting the impact of legislation;*
* *supports further development of INSPIRE as an eGovernment tool to provide the central common format and process for data collecting on environmental spatial information for streamlining environmental M&R; urges Member States, with support from the European Commission, to strengthen the involvement of their regional and local authorities in the INSPIRE process*;
* […]"

Finally, it is important to consider that while efforts to promote standardisation and greater use of data harvesting techniques may in fact incur greater costs on public authorities, for reporting obligations where there are information requirements placed on businesses such approaches could at the same time lower administrative and particularly transaction costs by creating a ‘level playing field’ across the EU. E.g. it may be easier possible to compare the application of the environmental rules from one country to another with the view to establishing whether businesses are subject to the same obligations for the same activities. This redistribution of costs and benefits has been highlighted in previous studies, including work to assess the costs of implementing EU environmental policy[[107]](#footnote-107).

## Coherence

Coherence is concerned with how well different EU interventions work together, both internally and with other interventions in other EU legislative areas such as agriculture, climate, consumer and health protection, energy, maritime and fisheries, statistics. The analysis of coherence with these other policy areas was carried out step-by-step looking first through a screening across all other policy areas where a duplication was likely to occur or where there was a potential to better use the data of these other areas for environmental policy purposes. Thereafter, a more in-depth analysis took place in particular in those areas where the screening identified some relevant issues or which were raised by stakeholders. These areas included agriculture, climate policy, fisheries, and statistical data. Moreover, the coherence of EU environmental reporting and such reporting under international commitments is analysed in this section. Given the significant number of EU legislation and international commitments which may potentially be relevant in this context, further in-depth evaluation may be necessary in some areas.

### Report once and use many times

**Assessment question: "Is some data reported multiple times, when it could be reported once and then used for multiple purposes?"**

**Overall response: Most information is only reported once and few instances were identified where the same data is reported twice. However, some specific examples have been highlighted by stakeholders and other examples concern situations where the information requested is similar but not identical. Moreover, there may be possibilities for improvements in relation to coherence with reporting under other EU policy areas, such as agriculture, climate action and waste.**

*What is the issue?*

The provision of data and information is associated with certain costs and administrative burden which is why it has become a widely recognised principle that the maximum benefit should be derived from what is reported. In particular, the “report once and use many times” principle is laid down in many EU policy documents[[108]](#footnote-108).

*What are the findings?*

*In the public consultation, the principle of "report once, use many times" was ranked as the most important one amongst the respondents. The majority of respondents agreed strongly with the assertion that "information should be collected once and shared where possible for many purposes". On a scale from 1 to 10, 50% assigned a score of 10 to this principle and 83% a score of 8 and higher (see figure 14 in the report)*[[109]](#footnote-109)*.*

Looking at the reporting obligations, there are a few specific examples where exactly the same data needs to be reported under different reporting obligations. As a result, making cross- references and using available data has become common place (e.g. reporting under the Marine Strategy Framework Directive makes effective use of data reported under the Water Framework, the Habitats and Birds Directive or the Bathing Water Directive). The evaluations have contributed in identifying such issues and dedicated sectoral initiatives have helped to address and improve coherence.

There are some examples, however, where similar data are being requested, reported and published separately sometimes leading to different messages from different parts of the EU institutions (see overview table on page 130-131 of support study). One example is nitrate pollution in freshwaters under the Water Framework Directive and the Nitrates Directive as well as the EEA's voluntary reporting. The purpose and the need for such data differs under the two Directives, however, which may justify the differences. The assessment of action programmes (or derogations) under the Nitrates Directive requires more detailed and specific data linked to pollution in comparison to the more generic need under the Water Framework Directive looking at all sources of nutrient pollution. Nevertheless, it is important to coordinate these reporting processes better and improve communication of the results to the public in order to explain the differences in a better way.

Obstacles to overcoming incoherence include that the governance of reporting obligations is sometimes fragmented (i.e. different groups discuss related issues with, in the above case, each reporting flow overseen by a different group of experts and sometimes the reporting is managed by different MS authorities) and there are costs to overcoming incoherent situations which do not necessarily result in (short-term) benefits for those dealing with the reporting obligations. Hence, a case-by-case assessment (e.g. as part of future evaluations of the legislation) is necessary to determine whether the reporting of similar, but not identical data is justified or whether there is a potential for streamlining in the reporting of similar data, which are reported for different purposes.

In terms of the potential for multiple reporting across EU policy areas, the initial screening found that the greatest policy overlap is between environment and agriculture, climate action and fisheries and statistics[[110]](#footnote-110). For example:

* The coherence between EU waste legislation and the Waste Statistics Regulation was highlighted by stakeholders as creating duplication and inefficiency that needs addressing. The Commission proposal on the waste legislation in the context of the Circular Economy package addresses this issue partially and proposes to eliminate textual waste reporting based on questionnaires to use the waste statistics instead. However, this proposal still needs to be adopted by the EU Institutions and this may well change the reporting needs. Moreover, the package does not cover all waste legislation and there are some specific areas where duplication still exists. Thus there may need to be further alignment of the waste reporting with the Waste Statistics Regulation.
* The NEC Directive and – in the climate action policy area – the Climate Monitoring Mechanism Regulation (Regulation (EU) No 525/2013, MMR), relate to pollution inventories and greenhouse gas inventories respectively. These inventories cover some of the same pollutants. Having developed separately, attention has recently been paid to improving consistency and coherence. The MMR increased synergies and coherence of greenhouse gas inventories reporting with reporting under the NEC Directive. The new NEC Directive substantially harmonised the timetables for reporting and simplified reporting for Member States. This process continued with the Commission proposal for a Regulation on the Governance of the Energy Union, and an inventory review exercise under the new NEC Directive is ongoing. This review will identify the need for further action.
* There has been progress in the development of the 28 agri-environmental indicators[[111]](#footnote-111), which are the result of the collaboration between several departments of the European Commission (namely DG ENV and DG AGRI, together with DG ESTAT and DG JRC) as well as the EEA. Moreover, the EU legislation on agriculture and rural development provides for a Common Monitoring and Evaluation Framework (CMEF)[[112]](#footnote-112), established with a view to measuring the performance of the whole CAP, which includes a number of output, result and impact indicators related to agri-environmental issues.

Although there is good practice, and a number of rules and procedures on data management are in place, there are weaknesses to ensure an effective and efficient process for managing data.

*During the stakeholder workshops, many national experts as well as experts from industry highlighted the issue of the lack of coherence between waste legislation and waste statistics. At the first workshop[[113]](#footnote-113), three presentations were given on this subject with similar conclusions. To illustrate this, the statement from Hazardous Waste Europe best illustrates the situation: "There are problems in reporting on hazardous waste, with inconsistencies between E-PRTR, Waste Shipment Regulation and Waste Statistics Regulation, resulting in quite different quantities of hazardous waste reported." Similar issues in national reporting also affect the comparability and consistency between Member States and affect decision-making for waste management and in using Regional Funds.*

A good example where potential incoherence has been addressed and emphasis was given on "collecting once, using several times" is the 2015 Commission proposal on the recast of the Data Collection Framework of data in the fisheries sector (DCF)[[114]](#footnote-114). The revision of the DCF was used as an opportunity to, on the one hand, ensure better availability of fisheries data to a wider circle of interested parties, and on the other hand, to reduce the burden of data requests on Member States by using the most recent technical developments. Through this, coherence and synergy gains with the reporting under the Marine Strategy Framework Directive and the provisions laid down in the INSPIRE Directive were suggested. The proposal is still being discussed in the Institutions.

### Coherence of reporting to the Commission

**Assessment question: "Is data reported (including to other parts of the Commission) but then full use not made of it?"**

**Overall response: Information reported under environmental legislation is usually but not always used to the fullest extent. There is some potential to exploit other data sources more for environmental policy, building on positive examples such as in the area of agriculture-environment-climate data. Finally, there is potential in aligning definitions, code lists or other data specifications in order to facilitate re-use and interoperability of data.**

*What is the issue?*

This question asks if all information reported to the Commission (or the EEA, where relevant) is used to the full extent. This includes whether information reported in other EU policy areas may be useful for fulfilling the purposes of environmental reporting but is not being used so far.

*What are the findings?*

In most cases of reporting, reported information is exploited as far as possible. Increasingly, there are cross-references between the reporting processes related to environmental legislation and use is being made of reporting under one Directive for another (see table 1, water and marine example). There are only few examples listed by stakeholders where this is either not the case or where, at least, the use is not clear and communicated well (see also section 6.4.2).

As regards the information that is provided to the Commission overall and which could be usefully exploited in more detail for environment policy purposes, there seems to be scope for improvement although only few specific examples have been found. One such example is agricultural legislation which requires a wealth of information to be maintained by agencies (and made available for audit) on the detailed practices adopted at farm level, but has relatively limited requirements for the transmission of that data to EU level. Lack of transmission is in part due to the volumes and complexity of the data that would be involved. This barrier to transmission is an example of an issue that may be surmountable through alternative reporting approaches, such as data harvesting.

While limited formal overlaps between reporting obligations exist, it seems likely that there is scope for significantly greater use, at Member State and regional level, of the data available from paying agencies to inform national and regional policy-making on the extent to which the objectives of various elements of European environmental policy are being delivered (water quality, particularly nitrates pollution; biodiversity impacts; emissions to air, particularly ammonia). Greater use of agricultural data could improve the EEA’s understanding of the various pressures on land and support its reports on the state of, trends in and prospects for the environment across Europe.

An example of good practice is found in an audit of the processes for managing and sharing data on agri-environmental-climate issues in the Directorate Generals responsible for agriculture, climate and environment the Internal Audit Service, and the responses made to this. The objective was to assess whether there are effective and efficient processes in place for managing this cross cutting data. Whilst the audit found a number of strengths, it also identified weaknesses such as the absence of a Commission-wide framework for managing and sharing data, and deficiencies in sharing between Directorate Generals. In response, the three Directorate Generals have committed to better data sharing and better working together to improve coherence.

Another issue is the usability of other information and data. Sometimes, similar information is collected but cannot be used because the categories, code lists or data specifications are slightly different.

Overall, there is some limited streamlining potential from increased coherence in reporting obligations of the other related policy areas (with agriculture, climate, energy and statistics being the most relevant).

### Coherence with reporting to the international level

**Assessment question: "Is there coherence between reporting to the EU level and to other international levels?"**

**Overall response: There are many examples where EU Member States have to report similar information to the EU institutions under EU law and to international bodies. Whilst this leads to duplication, it can be ensured that this not burdensome in practice. Some good efforts to improve coherence have taken place but there is room for further improvement. This will require, however, the willingness of the international bodies to (re-)negotiate their reporting commitments.**

*What is the issue?*

Similar to the coherence with other EU legislation, there is a question regarding the coherence between EU environmental reporting and similar commitments under international agreements. Such agreements are taken in the context of the United Nations (UN), the UN Economic Committee for Europe (UNECE), the Convention for Biological Diversity (CBD) or many regional international bodies such as regional marine conventions (such as HELCOM for the Baltic) or international river basins (such as the Danube or the Rhine). In all these agreements, the EU or at least the EU Member States are members but there are also always countries which are not part of the EU. Negotiations on reporting obligations are therefore not always driven by the existence of EU obligations.

*What are the findings?*

Some EU reporting obligation actually stem from international obligations (e.g. for E-PRTR the obligation stems from the UNECE Kiev protocol and thus the costs associated with fulfilling this RO do not stem from the EU legislation). In such cases, the reporting obligations are mostly coherent although sometimes small technical differences occur that for example originate from the need/desire to align the international reporting obligations with related (similar) pre-existing EU legal (reporting) obligations. Similarly, it is common that EU Member States have an obligation to report the same or similar data to the EU and to other international bodies in the context of international environmental commitments. The evaluation provides a first overview of good and less good examples of coherence[[115]](#footnote-115).

In some areas, a process is set to facilitate such reporting processes for Member States, e.g. the context of air emissions reporting (to the UNECE Convention on Long-Range Transboundary Air Pollution) where the EEA plays a coordinating role. In most instances, the Member States have to report in parallel, sometimes at different times or to a different level of detail. Improvements have been made in some areas; for instance the new National Emission Ceilings Directive[[116]](#footnote-116) aligns the EU reporting requirements of emissions of air pollutants with the reporting process under the UNECE Convention on Long-Range Transboundary Air Pollution.

This issue could potentially offer significant room for improvements. However, this is dependent on the willingness of the international bodies responsible for such reporting agreeing to engage in such negotiations to amend existing obligations. This can become time consuming and complex since all international commitments involve countries which are not part of the EU and therefore may not have a high interest to align content and timing of reporting to EU obligations.

## Relevance

The evaluation of relevance looks at the relation between the objectives for environmental reporting and the current needs, in particular if the current needs have changed in comparison to the past.

The needs and problems of society which triggered action for environmental reporting have not changed. According to the intervention logic, to achieve the aims of environmental protection laid down by the Treaty and by successive Community action programmes on the environment, the EU and the Member States need information on the state of the environment, implementation of measures and the effects of their environmental policies (see also figure 3 in section 2.3).

### Relevance of the process

**Assessment question: "Is the process of environmental reporting still relevant (as opposed to harvesting of data)?"**

**Overall response: Current reporting processes remain relevant. The increase of relevant environmental information in the public domain and the full implementation of the INSPIRE Directive will though make it easier in the future to "harvest" information for the purposes of regulatory monitoring of compliance. However, whilst there is potential to change the reporting process, a number of pre-conditions need to be fulfilled and there are also some limitations (such as the availability of tools and the formal status of harvested data). Rather than replacing reporting, there will be opportunities in future for a better combination of current reporting and harvesting of data.**

*What is the issue?*

The process of reporting from Member States to the European Commission has been set up in most pieces of legislation as a means to allow regulatory monitoring of the implementation of EU law by the Commission. This process was, in most cases, designed so that a competent national authority would send a (paper) report to the European Commission (see also section 2.1). Over the years, the use of electronic transmission and digital formats became commonplace in most reporting processes. With the obligation to promote "active dissemination" in the Access to Environmental Information Directive[[117]](#footnote-117) and the adoption of the INSPIRE Directive[[118]](#footnote-118), the amount of available data and its access through electronic means (such as the internet) has increased dramatically.

*What are the findings?*

The INSPIRE Directive was designed, amongst other objectives, to improve the availability and the sharing of spatial data relevant for environment policy and thereby facilitate reporting. The recent evaluation of the Directive[[119]](#footnote-119) has demonstrated that despite the good progress made, "*further efforts are needed at EU and Member State level to close the significant implementation gaps…*"[[120]](#footnote-120). In relation to environmental reporting, it noted that "*inefficient EU-level coordination (the European Commission and EEA) in guiding Member States towards priorities in identifying the spatial datasets for environmental and related policies (e.g. for reporting)*" prevents the wider use of INSPIRE-related services for reporting so far. Moreover, "*there are currently few end-user applications[[121]](#footnote-121) that allow harvesting the potential of data using the INSPIRE approach at EU level. On reporting, some pilot projects have been completed, such as the air quality reporting pilot, but none has reached full operational maturity. National priority setting differs greatly in terms of identifying those spatial datasets most needed for cross-border applications or for reporting activities at EU level (i.e. some focus on air quality[[122]](#footnote-122), others on marine data[[123]](#footnote-123)).*" Moreover, important implementation deadlines of the Directive are still in the future, in particular the requirement for Member States to transform their datasets on the basis of agreed data specifications for the purpose of "interoperability" will only be due in 2020.

Notwithstanding these findings, there is a widespread recognition that the implementation of the INSPIRE Directive will improve effectiveness and efficiency of the reprorting process (see section 6.1.4 and 6.2.6). At the same time, there were some concerns raised when using datasets provided through the INSPIRE infrastructure for reporting and thereby limitations to harvesting.

*Overall, a majority of respondents (55%) in the public consultation (totally or tended to) agree (and only 15% disagreeing) that the INSPIRE Directive can provide a common approach for reporting, reducing administrative burden and facilitating reuse of the reporting process and information across different levels of government (see figure 24 in the report)*[[124]](#footnote-124)*.*

*During the Stakeholder Workshops, it was noted that INSPIRE would help to promote the harvesting of data. However, there are legal, organisational and resource challenges. Moreover, for some purposes such as compliance checking, data needs to be quality checked and officially authorised. Raw data made publicly available may not be fit for purpose.*

The main concerns regarding harvesting are, in particular:

* The question of authorisation and legal value of the data obtained through harvesting (e.g. when using them in Court proceedings)[[125]](#footnote-125);
* The process of aggregation and quality assurance which can influence the findings of any data analysis;
* The comparability of data from different sources, in particular if no harmonised standards have been used;
* The updating of data after the moment when they have been harvested;
* The continuity of data services and data availability (e.g. when servers are down).

As demonstrated in the INSPIRE evaluation, the setting up and maintenance of such services require also additional investments, in particular in the beginning, which have not yet taken place in all Member States. As long as such services are not available in all Member States, it will be difficult to replace the current system of submitting reports which is easier to enforce. Moreover, tools for harvesting need to be developed which is currently not the case yet. Hence, there is significant future potential but also some limitations for streamlining reporting and reducing administrative burden through harvesting using the INSPIRE Directive solutions.

Other than using INSPIRE-related solution for spatial data, a number of other suggestions have been made which could be explored, in particular:

* The harvesting of textual information similar to a literature research and study. Any analysis resulting from such a process which would be used for compliance checking or other reporting purposes would then be sent to the national authorities for validation before it is being published.
* There is also increasing potential for using software for systematic textual data mining which are currently being explored in some areas[[126]](#footnote-126).
* The reporting of measures and examples for implementation as a means to share good practices could be replaced by workshops and targeted studies rather than a formal reporting obligation[[127]](#footnote-127).

Such ideas would need to be explored further as regards their relevance and effectiveness. The support study has looked at this question in more detail and a thematic fiche on data harvesting[[128]](#footnote-128) has been prepared.

### Relevance of the requirements

**Assessment question: "Are all environmental reporting requirements still relevant?"**

**Overall response: Overall most but not all environmental reporting obligations are still relevant. Many improvements have been made over the past years (also as a result of the rolling programme of evaluations, many under REFIT). However, the context and the maturity of environmental legislation are constantly evolving and therefore the relevance of some aspects will continue to change over time. Some improvements have been identified in this context. Moreover, it is also important to communicate the relevance to stakeholders so that it is clear and understood.**

*What is the issue?*

Whereas the above questions look at the relevance of the reporting process, this question focusses on the relevance of the content of the environmental reporting obligations. In particular, this will look at whether the information provided is relevant to the assessment of compliance as well as the other objectives for reporting (see section 2.3). Sometimes adaptations are necessary over time in order to ensure the continued relevance of obligations or requirements as objectives change over time.

*What are the findings?*

Most of the reporting obligations are still highly relevant and are able to fulfil several or all the objectives for environmental reporting. Examples are reporting on air quality, water or nature protection. Moreover, a number of actions have been taken over the past years also with the aim to making the reporting obligations more relevant (see table 1 in section 2.2).

However, some reporting obligations have been highlighted where relevance may be an issue. In particular, around a third of reporting obligations are not seen to be highly useful. Even where a reporting obligation is marked as low usefulness overall, elements may well still be useful but they clearly need to be looked at closely.

The most pertinent example where reporting obligations have become irrelevant to the extent that they are now obsolete is the Standardised Reporting Directive (see 2.1). Consequently, the Commission proposed its repeal.

The Commission services have also identified in the inventory a number of reporting obligations that are no longer relevant (e.g. an obligation under the Packing Waste or the VOC Directives). Also the stakeholder consultation mentioned a number of areas where the continued relevance was questioned.

Often the relevance of the reporting is questioned because it is not well understood. In particular through the consultation process with Member States and the 'Make It Work' initiative, the issue of explaining and communicating the purpose as well as the need for establishing regular feedback mechanisms between senders and receivers of the reported information was highlighted. Also the further away the data providers, such as regional and local authorities, are from the data users at EU level the more it appeared that they did question the relevance of the reported information.

*At the third stakeholder workshop it was suggested that where the relevance of reporting is not understood by data providers, the level of attention / resources given to reporting, and the comprehension of what is to be reported, may be diminished. This can affect the completeness and quality of reported information and hence undermine the effectiveness of reporting. At the workshop it was also suggested that improving Member State’s understanding of the relevance of the reported information may also lead to co-benefits as it helps Member States understand the legislation.*

*In this respect, the 'Make it Work' drafting principles[[129]](#footnote-129) concludes under the heading "Making the purpose(s) clear" the following:*

*"Once the information need has been identified it is important to make this purpose clear. This applies not only to the overall framework of the information needed, but also to individual aspects of it. Doing this will ensure that this purpose continues to guide the development of the processes of information gathering and informs those involved in information provision (sometimes in years to come). For example, if reporting is determined as the best method to obtain information, it would be appropriate to state the purpose or purposes of this reporting in a basic reporting requirement in the directive, keeping in mind that they may change over time (see also section 2.6). The purpose of each individual piece of information that Member States would be required to report could be stated in the reporting guidance developed to support that directive, together with the planned output (e.g. compliance report, State of the Environment statistic). This would also support communication of the reasons for requirements to those who provide the requested data at the regional or local level. Good practice in this regard is the revised reporting guidance for the Water Framework Directive where a statement of purpose is provided against each item of information requested in the reporting guidance."*

There are two more issues which were found when analysing the relevance of reporting requirements, namely “gold plating” and “maturity”. Gold plating of reporting means that Member States independently chose to go beyond agreed reporting at EU level. Maturity describes the changes that occur during the lifetime of a legislation where the implementation status and the role in directing the Member States changes. Both issues were raised but could not be covered by a more detailed analysis, for example, because they are issues specific to how Member States organise themselves.

### Relevance in relation to Better Regulation indicators

**Assessment question: "Are environmental reporting requirements relevant for assessing progress with Key Performance Indicators (building on the indicators system introduced by the Better Regulation Guidelines)?"**

**Overall response: Most of the current obligations have been defined before the Better Regulation Guidelines were adopted. Nevertheless, some good examples for such indicators exist or the data collected could be easily used to derive such indicators. At the same time, many current reporting obligations, in particular where textual reporting is required, have not made systematic use of indicators and cannot be aligned easily. Stakeholders support such an approach and highlight a number of ideas but also risks if this approach is developed further.**

*What is the issue?*

Evaluation of legislation has become increasingly important and the drive of the European Commission for Better Regulation has put this need at the heart of European policy. The Better Regulation Guidelines in the guidelines on monitoring[[130]](#footnote-130) suggests, amongst other things, to link the monitoring system with relevant indicators. Three types of indicators are introduced, output, outcome/result and impact indicators (here referred to as key performance indicators). Such indicators go beyond a legal compliance report, looking at the objectives of the legislation and linking up the policy cycle from the impact assessment to the evaluation. The question is whether reporting obligations reflect this, having mostly been designed to prepare implementation reports which often do not constitute a full evaluation of the legislation[[131]](#footnote-131).

*What are the findings?*

Most of the environmental monitoring and reporting obligations have been agreed before the Better Regulation Guidelines were adopted. Having said this, the concepts described in the Guidelines are not new and have been applied in environmental policy before.

Some good examples of Implementation Benchmarks (or key performance indicators (KPIs)) exist in various reporting processes, e.g. the assessment of quality of air, water or nature, the waste target indicators or the compliance indicators (e.g. regarding urban wastewater). However, the current reporting obligations have not been systematically defined by using the approach set out in the Better Regulation Guidelines. In particular when it comes to the high degree of textual data, a limited use of applying result indicators (instead of textual description of the implementation) has been made. An initial scoping of all the 181 ROs revealed that in 12 cases, reporting indicators are already linked to established KPIs whereas in 38 cases the reported information could potentially be used in this way. The evidence from this screening analysis of the inventory suggests also that the bulk of reporting obligations are not closely aligned with reporting on the policy outcomes of environmental legislation. This matches the earlier finding that they are primarily focused on assessing whether the legal requirements of the legislation are being complied with in practice based on more textual information rather than indicators. Moreover, it was found that currently no consistent, systematic approach on how to assess reported information is in place across the environmental reporting domains.

*During the Stakeholder consultation and Workshops, the suggestion to focus on the wider use of (headline) indicators (or limited number of key performance indicators per legislation), i.e. core data set and information needs on what is essential for decision-making at EU level, was made repeatedly.* Moreover, *the idea of a two-level approach to reporting, involving EU level reporting of selected key indicators, allowing MS more flexibility in reporting at national level in more detail according to their specific needs. This line of thinking resulted also from the Make It Work project[[132]](#footnote-132). The stakeholders also recognised that there are sensitivities around Member State legal compliance. Hence, when defining indicators, they should be disconnected from information on legal compliance. The compliance could be assessed in a separate step following the indicator-based assessment and targeting only those Member States where there are indications for non-compliance ("risk-based approach"). There were also contrasting views about the limitations of (key performance) indicators given that the reporting obligations are diverse and serve different purposes. Moreover, where large volumes of textual information are collated, this may present opportunities but also challenges for simplification or condensing through (key performance) indicators. In addition, continuity of indicators was highlighted as important in order to understand trends over time.*

There is, however, significant potential and widespread agreement that such a systematic use of (key performance) indicators would be beneficial for a number of reasons:

* To improve the comparability of the data;
* To allow processing of the data more easily (in comparison to information which is largely text based);
* To focus on the essential information for a first assessment across the EU (and leave a more detailed assessment for a second level);
* To combine objectives and intention of the legislation with the evaluation of whether they have been achieved;
* To facilitate communication of reported results, e.g. through the use of scoreboards;
* To be consistent with the Better Regulation Guidelines.

At the same time, some concerns were raised when applying such an approach, namely that there is a risk of oversimplification, a tendency towards a "one-size, fits all" approach and the potential loss of valuable information. Hence, a more detailed case-by-case analysis of the relevant reporting obligations may be needed to establish whether and how they could be developed to replace and streamline current reporting obligations.

### Relevance of technical solutions

**Assessment question: "Has the process of reporting taken advantage of technology: including advances in IT, increasing provision of data through Copernicus etc.?"**

**Overall response: Despite clear progress made in the area of modernisation of reporting processes, opportunities are not being universally exploited. Preliminary results indicate that there are some inconsistencies in environmental reporting. Moreover, the reporting process can be made more efficient by using emerging technologies and sources including Copernicus, applying agreed standards (such as those of the INSPIRE Directive) and making better use of established systems such as Reportnet. Also the role of citizen science as alternative source of information can be enhanced.**

*What is the issue?*

Technological advances provide opportunities for improving the efficiency and robustness of reporting processes (e.g. greater automation of data transfer and storage), and the nature of data that is reported (e.g. increase in geospatial and numeric data in place of textual information). The question looks at how the use of technology has evolved and to what extent they have been adopted.

*What are the findings?*

Systems for reporting have been evolving from paper-based reporting to electronic reporting including differing degrees of standardisation and automation. Important drivers for this process were the development of EEA's Reportnet, the application of the INSPIRE Directive and the adoption of the Directive 2003/4/EC on Public Access to Environmental Information. Moreover, there are a number of sectorial initiatives which have helped create an additional impetus for the development and use of electronic (reporting) tools (e.g. WISE or E-PRTR).

The recently published INSPIRE SWD[[133]](#footnote-133) shows also the importance of INSPIRE and IT tools/applications useful also for reporting and data management:

"*In addition to EU-wide application and uses, the INSPIRE Directive was also designed to create EU added value through improved cross-border cooperation spatial data management, not just in the environmental field. Whether it is sharing data on air quality, marine pollution or flood risk management, environmental solutions often need cross-border collaboration. To address also other policy areas and used national priority setting which differs greatly in terms of identifying those spatial datasets most needed for cross-border applications or for reporting activities at EU level (i.e. some focus on air quality,[[134]](#footnote-134) others on marine data[[135]](#footnote-135)) can be coordinated better across the EU or between Member States. Finally, collaboration between the Commission and Member States has generally been seen as positive but can be strengthened further by, for example, developing implementing tools and components together rather than each Member State ‘reinventing the wheel’.*

A Member State-led initiative Make It Work (MIW)[[136]](#footnote-136) was also launched in 2015 on environmental reporting with the aim to identify reporting drafting principles found that INSPIRE could be a tool for smart reporting: ***"****The INSPIRE Directive is intended as a vehicle to streamline existing reporting processes and make them more effective and efficient. INSPIRE aims to create a spatial data infrastructure to enable the sharing of environmental spatial information among public sector organisations and facilitate public access to spatial information across Europe. Furthermore, INSPIRE aims to assist policy-making across boundaries. Therefore, the spatial information considered under the directive is extensive and includes a great variety of themes."*

Having said this, there are still many reporting obligations where no electronic reporting formats exist. For only 56 ROs, electronic reporting appears to be supported. Another internal analysis[[137]](#footnote-137) suggested that 20 out of 30 Directives/Regulations reviewed make use of electronic reporting systems with Reportnet used in 75% of such instances. However, the research[[138]](#footnote-138) found that even when Reportnet is available, some Member States chose to report hard copies and/or via email (e.g. under the Noise Directive). But in no instances was reporting only paper-based. Hence, there is ample scope to enhance the use of Reportnet more widely.

*Despite the above described initiatives, respondents to the public consultation indicated that insufficient use of IT was made within environmental reporting (across collection, processing and dissemination), with 55% either totally disagreeing or tending to disagree that IT was adequately used (see figure 22 in the report)*[[139]](#footnote-139)*.*

Another issue is the heterogeneous application of information technology. Despite the efforts made by Reportnet, INSPIRE and other initiatives, the tools, systems, approaches and software used varies significantly. Some streamlining and coordination in this respect may be beneficial: for example, making more use of XML-type reporting.

Another aspect is the exploitation of new data sources. E.g. the Earth Observation data and products from the European Earth Observation program "Copernicus"[[140]](#footnote-140) which are made available under a full, free and open data policy by the Union offer objective and inter-country comparable data for regulatory monitoring and reporting.

*At the September 2016 workshop, stakeholders identified that Copernicus could provide new ways of collecting data, thus potentially reducing the burden of reporting. Specific suggestions received from stakeholders in responses to this study included: satellite data could be used to track land use change as part of environmental monitoring of Natura 2000 sites (source: Birdlife International); satellite data could be combined with other forms of data collection to enhance information (and improve efficiency) for air quality reporting (source: Netherlands).*

However, in practice, this has not happened and further efforts are needed on how such information stemming from Copernicus could be used to replace or complement information coming from environmental reporting. Also the use of the standards set out by the INSPIRE Directive when harvesting data from Copernicus will be important in order to ensure their usability for different purposes from the outset.

Another promising source for complementary information and data on environmental issues is citizen science[[141]](#footnote-141). Citizen science, powered by mobile, online and computing tools, offers another way to collect environmental data, useful for regulatory (and environmental) monitoring, in a cost-effective manner, while increasing awareness and empowering citizens. In practice citizen science is not (yet) used widely as an effective tool to monitor environmental directives at EU level[[142]](#footnote-142).

In Member States data collected by volunteers are already used to monitor, report and respond to EU environmental legislation. This can be very cost effective: for example, in the UK, a £7M government investment into volunteer schemes generated data estimated to be worth £20m[[143]](#footnote-143). In France, savings of 1-4M euro have been estimated per year in the Citizen Science Biodiversity Monitoring Programme of the French National Museum for Natural History[[144]](#footnote-144).

Exploiting the potential of citizen science requires adequate standards and infrastructure in local, regional or national government agencies, revised data validation protocols, methods for data quality, data interoperability and management, and innovative and robust technologies. A further coordination between organisations at different levels of governance is also still needed. There are still few European wide programmes and networks in place to connect the emerging citizen science initiatives with each other, and with the already existing knowledge and policy schemes[[145]](#footnote-145).

Whilst the enhanced use of technology offers significant benefits in the future, there are a number of pitfalls which need to be addressed; in particular the tools should be easy to use, well documented and stable for operation. Substantial investments have already been made in creating some good practices in relying on IT tools in reporting, however, there may need to be further investment to move to more electronic reporting at national level may be significant.

## EU Added Value

### Added value of EU reporting

**Assessment question: "What is the additional value resulting from reporting to the EU intervention(s), compared to what could be achieved by Member States at national and/or regional levels?"**

**Overall response: An EU-level approach delivers clear benefits that could not be achieved through reporting at MS level alone, particularly in relation to trans-boundary issues and the need to achieve a consistent overview of the state of the environment and progress in implementation of legislation across the EU. The Commission/EU is best placed to coordinate efforts on making reporting processes more efficient and effective.**

*What is the issue?*

Environmental reporting obligations, like all requirements linked to EU legislation, should be subject to the principle of subsidiarity, which is fundamental to the functioning of the European Union. In this regard, there is a need to demonstrate a clear case for reporting at the EU level, compared to reporting at the local or national levels only.

*What are the findings?*

The Commission needs regular and consistent information on how successfully EU laws are being implemented across the EU, in order to be able to confirm whether implementation is satisfactory. This can also be crucial in supporting enforcement, and indeed such information plays a key role in the Environmental Implementation Review process.

One specific area where the added value of EU level reporting is most clear is for transboundary issues; which is relevant for many of Europe’s environmental challenges. Some respondents to the public consultation argued that as many of the problems legislation seeks to address are transboundary, there are clear benefits to data reported being cross-comparable.

In the transboundary context, INSPIRE is an important tool to channel efforts towards simplification and more reliance on automated IT services. The recent INSPIRE evaluation's observations on EU added value are relevant[[146]](#footnote-146):

*"In particular, cross-border and EU level use cases can demonstrate where the application of the INSPIRE Directive has an added value which would have not been possible without EU level action… Member States, in particular those where implementation has progressed most, reported positive effects in breaking down their internal obstacles preventing the more effective sharing of their spatial data between public administrations and across borders (including in some cases across their regional borders). Simplification and harmonisation of data policies and licenses combined with a technical infrastructure allowing easier discovery, access and use of spatial data are attributed to a large extent to INSPIRE. This has also generated a number of cross-border collaborations and improvements when it comes to environmental data sharing (e.g. BE, DE, IT, NL and UK reported efficiency gains and improved sharing across-borders when applying INSPIRE solutions to air quality data sharing)."*

This shows that using IT tools for data management at EU level clearly has the benefits of being able to address transboundary issues, through a harmonised approach. If this objective would be delivered by Member States individually then their efforts would surely result in overlaps, inconsistencies and inefficiencies, as compared to a well-coordinated harmonised approach.

As well as transboundary issues, there is considerable benefit to having systemic information across environmental issues, where consistent and comparable information allows for better addressing of cross-cutting environmental issues.

The stakeholder consultation confirmed the importance of reporting and the benefits of data generated both in terms of demonstrating compliance with EU legislation, and highlighting issues and learning points in the implementation of this legislation within national regulatory frameworks. This implies a need for consistent information to be made available across the EU. Furthermore, the responses to the public consultation and discussions at the stakeholder workshops indicated a general acceptance of the need for reporting to continue at EU level.

### Replacing reporting with transparency and active dissemination

**Assessment question: "What would be the most likely consequences of stopping or repealing the existing EU reporting requirements and replacing them by increased transparency and active dissemination?"**

**Overall response: A system based solely on transparency and active dissemination would not be fit for purpose. However, there is more scope for better use of IT solutions to benefit all stakeholders, in particular citizens and public authorities via citizens' science, open data and promotion of eGovernment processes. Active dissemination could only replace traditional reporting processes in the future if the necessary information has to be made available and in a consistent way.**

*What is the issue?*

The development of information and communication technologies creates opportunities for active dissemination and improved transparency of environmental reporting. This question seeks to assess the likely consequences of, in this context, replacing EU level environmental reporting with alternative arrangements which involve Member States making the relevant information publicly available.

*What are the findings?*

In certain policy areas, for Member States with more developed reporting processes in place, it is conceivable that the processes of formal reporting of data to the Commission and subsequent analysis and dissemination in the form of periodic reports, could be replaced by continuous reporting and active dissemination (in the form of accessible databases and web pages) at the Member State level. This publicly available data could then be mined and harvested as appropriate by the Commission and other EU Executive Agencies to produce reports, in lieu of formalised reporting systems.

Two scenarios are considered by the supporting study. Firstly, repealing all legal obligations and replacing them by non-binding requirements of active dissemination. This first scenario would have major ramifications in terms of data availability. There would be gaps in the information reported, with a tendency for Member States to follow their own interests, or to supply the most easily provided data, rather than those most relevant to assess implementation, compliance and development of EU law. Inconsistencies in reported data including differences in definitions, timelines, specifications and assessment methods would occur unless some mechanism remained in place to ensure common approaches between Member States. The absence of common quality management processes would affect the robustness of data and the confidence of users. There would also be differences in the accessibility and navigability of the information provided in the absence of common templates and access routes. Overall, these risks would have significant consequences for the ability of the reporting system to meet its objectives (see in section 7.5.1).

The second scenario would entail the rationalisation of reporting processes and replacement of formal reporting process by legally binding active dissemination requirements that are equally detailed as the formal reporting processes they are intended to replace. As presented already under sections 7.2.3. and 7.2.6 on promotion of active dissemination and good examples of reporting, one of the likely consequences of stopping or repealing the existing EU reporting requirements and replacing them with increased transparency and active dissemination would be the emergence of a system that continued to provide much information about the state of the environment and the actions being taken to improve it, the state of implementation of the EU environmental *acquis* and the compliance with current legal obligations.

While increased transparency and active dissemination have the potential over time to meet the objectives of the current reporting system, this is likely to depend on a continuing legal requirement to provide the information needed, as well as common arrangements and standards for data specification, quality checking and presentation building on already developed infrastructures and processes.

The ‘zero environmental reporting’ vision is found both in the INSPIRE Directive and the enhanced active dissemination requirements in the Directive on access to environmental information. However it is recognised that Member States are at very different levels of maturity with regard to transparency and active dissemination, and zero reporting is not realistic in the immediate future.

It seems reasonable to conclude, therefore, that new technological processes like citizen science, data mining and data harvesting offer only limited potential for simplification and burden reduction in the short term. As the techniques are explored and developed though confidence in these approaches could increase, and so in the longer term they offer more potential.

# Conclusions

This Staff Working Document presents the findings of the Fitness Check evaluation on the reporting obligations in relation to environmental legislation. In total, there are 181 reporting obligations (ROs) in 58 pieces of legislation.

The inventory of environmental ROs showed that the majority of obligations are primarily text based and give information on responses to environmental problems such as plans, programmes, and measures including authorisations or licences. Looking at the 181 environmental ROs, 82 required the Member States to regularly report to the Commission while 99 ROs were either one-off or ad-hoc requirements[[147]](#footnote-147). As regards the process, nearly half of the ROs are carried out without a reporting template. Most of the process (90 ROs) is handled by the Commission (Directorate-General (DG) Environment) often with the help of outsourcing. Meanwhile, the European Environment Agency (EEA) carries out or assists in many ROs (48) and in fewer cases, the Commission services of DG EUROSTAT (6) or DG Joint Research Centre (2) assist DG Environment.

The Fitness Check was conducted based on data compiled into an inventory, a study on administrative burden looking at costs and benefits as well as an extensive stakeholder engagement through a public consultation and four Stakeholder Workshops. The key findings are presented below in relation to the assessment categories.

*Effectiveness*

**Effectiveness has improved significantly in many areas over the years and is considered satisfactory. Nevertheless, potential for improvements are identified for some cross-cutting issues (such as the streamlining towards a more corporate process) as well as for improving the quality and usefulness of reporting for some specific pieces of legislation.**

Factors positively influencing effectiveness:

* Many good examples for effective reporting exist (such bathing water and air quality) of good quality, timely data which could be spread more widely;
* The definition and wider use of a corporate, streamlined and targeted reporting approach in all areas through risk-based or tiered assessment increasing the use of indicators and reducing the reliance on textual information;
* Improvements in streamlining and effectiveness are taking place and are planned, including those triggered by evaluations, largely as part of the REFIT programme;
* Increasing body of relevant information made available by Member States (through active dissemination) and the European Environment Agency;
* Enhanced use of information technology in the reporting process.

Factors negatively influencing effectiveness:

* Lack of clarity and flexibility in legal obligations making it difficult to establish effective reporting obligations;
* Completeness, timeliness and quality of reporting from Member States are still an issue in some areas;
* Available information from Member States (through active dissemination) is not relevant, up-to-date, easily accessible and user friendly enough to allow for its use instead of reporting such information;
* Reported information is sometimes insufficient to establish an understanding on the implementation or the state of the environment and it is often not sufficiently robust, relevant and complete to use for EU decision-making (e.g. as input to impact assessments or evaluations).

*Efficiency*

**Reporting is largely efficient and the administrative burden is moderate, justified and proportionate (estimated costs of 22 million euro annually). The benefits, such as improved implementation and better information of the public, outweigh the costs by far although quantification was not possible. Some efficiency gains could be expected through streamlining the process in a more horizontal and strategic manner to simplify and reduce burdens. Some content, timing, frequency and process adjustments could also lead to efficiency gains and better quality reporting but may require amendment of the legislation concerned. Potential issues in different areas have been identified where the quality of reporting could be improved.**

Factors positively influencing efficiency:

* Promotion of good practices and streamlined (harmonised) processes including the more advanced and systematic use of information technology as well as the wider application of the INSPIRE[[148]](#footnote-148) Directive;
* Full ownership or, at least, involvement of the European Environment Agency in the reporting process;
* Promising examples of improvements in efficiency of national systems and processes exist and such good practices can be applied more widely;
* Pushing for wide spread active dissemination of environmental information at national level creating multiple benefits (but not necessarily reduce costs) also beyond using such information for reporting.

Factors negatively influencing efficiency:

* Where data reported is not of good quality, their use and usefulness decreases, the costs of quality assurance increase and the reliability of the analyses and reports made on their basis is reduced;
* Diverse use of information technology and uncoordinated outsourcing of reporting following different models and approaches;
* Timing inconsistencies and lack of alignment of frequencies (there are arguments that this is the case in the water area);
* Insufficient communication and explanation on the purpose and the use of reporting to the data providers.

*Coherence*

**Coherence is achieved between the environmental reporting obligations to a large extent but some specific areas for improvement may need to be tackled. There are links between environmental reporting and reporting on agriculture, climate, energy, marine policy etc. The possibility to improve data use among some EU policy areas should be considered as well as with obligations stemming from international commitments. Work has already been done to improve this situation, for example with the revised NEC Directive and the Energy Union Governance proposal. Moreover, better use of information submitted to other Commission services can be made in some areas so as to better inform environment policy.**

Factors positively influencing coherence:

* Coherent terminology and definitions in legal acts;
* Dedicated initiative to improve coherence in many areas;
* Re-use of information available in other parts of the Commission;
* Increased use of data sharing tools and alignment of definitions, terms and standards; Efforts together with international organisations to improve coherence and streamlining.

Factors negatively influencing coherence:

* Lack of coherent legal obligations agreed by the co-legislator (e.g. in the waste area in relation to waste statistics);
* Fragmented governance and decision-making;
* Insufficient coordination and collaboration between different actors in related areas (e.g. between experts on environment reporting and geospatial data linked to the INSPIRE Directive);
* Overall, one quarter of reporting obligations have some (partial) coherence issues.

*Relevance*

**Relevance of most reporting obligations is achieved as many improvements have been made in the past or are ongoing. But further opportunities for improvements (e.g. advanced technical solutions) and alternative or complementary approaches exist. In particular, there is significant potential to focus the content of environmental reporting more towards a strategic, quantitative and better regulation-driven information (e.g. by using key indicators) and thereby reducing the extent of textual information that is currently requested.**

Factors positively influencing relevance:

* Regular review of reporting obligations (e.g. as part of the evaluations) to maintain the level of relevance over time;
* Around two thirds of reporting obligations are considered highly useful (and one third are not);
* More wide spread use of key indicators (such as output, outcome and impact indicators) whilst reducing the need for textual information;
* Complementing reported information with other data sources though harvesting, citizen science or using data coming from the Copernicus programme.

Factors negatively influencing relevance:

* Lack of structured, coordinated and output-oriented approach when defining reporting needs;
* Definition of reported information for one purpose only (i.e. compliance assessment) not considering other needs (e.g. state-of-the-environment, decision-making or information to public);
* Not using tried and tested reporting processes and tools (e.g. EEA's Reportnet).

*EU added value*

**EU added value is still ensured because current reporting still delivers clear benefits in the form of comparable and consistent information, which is not available at national level alone. However, alternative approaches such as active dissemination of relevant environmental information at national level could be explored further and potentially reduce the need for reporting to the EU level if certain conditions were met.**

Factors positively influencing EU added value:

* Focus on EU and cross-border where reporting is often the main source of comparable, consistent, timely and quality checked information in relation to EU legislation;
* Provides the evidence base for the application of the Better Regulation Guidelines (evaluation and Impact Assessment);
* New technological approaches like citizen science, data mining and data harvesting are not yet fully operational, but may offer potential for simplification and burden reduction in the longer term.

Factors negatively influencing EU added value:

* Structured availability of relevant environmental information at national level which is easily accessible and useable.

As regards the specific findings per legislation, the following table provides an overview. Annexes 6-8 set out the different issues identified for specific pieces of legislation (also analysed in table 9.4 of the support study). Many are shown to have one or more issues, though this is not necessarily indicative that they need amendment. Often, the issues refer to one particular reporting obligation in cases where there are several within a piece of legislation. A more detailed analysis is necessary to identify the best ways forward with the aim of streamlining the existing reporting obligations further. In most cases, such a review can take place in the ongoing or envisaged evaluations for that legislation.

*Table 4: Overview of findings (for more details, see Annexes 6-8). The percentage is related either to the 58 pieces of legislation or 181 reporting obligations analysed, depending on the available data.*

|  |  |
| --- | --- |
| Issue | Percentage |
| Amendment of legislation already proposed by the Commission which streamlines reporting (linked to legislation) | 16% |
| Reporting issues were identified which may require legislative amendments (linked to legislation) | 12% |
| Reporting which includes best practice examples (linked to legislation) | 19% |
| Reporting which is considered of high usefulness  (linked to reporting obligations) | 39% |
| Reporting which is considered of low usefulness  (linked to reporting obligations) | 9% |
| Reporting where the use of indicators could be improved (linked to legislation, based on screening analysis) | 86% |
| Reporting which relies mainly on textual information (linked to reporting obligations) | 76% |
| Reporting where external coherence could be improved (linked to legislation, based on stakeholder feedback) | 29% |
| Reporting where the delays are significant (linked to 78 reporting obligations which are linked to Commission report) | 27% |

Overall, the Fitness Check evaluation led to the conclusion that environmental reporting, including for the purposes of regulatory monitoring, is largely fit-for-purpose. Nevertheless, a range of cross-cutting and specific issues have been identified which would benefit from further improvements. Moreover, a regular review and maintenance of the system and its components (e.g. through the evaluation programme) is needed given the evolving policy context and needs.

Next steps

Whilst this Fitness Check is the beginning of a process to improve environmental reporting, the concrete findings identified in the evaluation indicate clearly areas for future work. These next steps are further elaborated in the Commission Report that this Fitness Check accompanies, but respond to the following needs and issues:

1. **Getting the right information in the right form at the right time** – this Fitness Check identified that there is a need for a mixture of legislative and non-legislative changes to reporting for specific pieces of legislation. These changes could improve the quality of reporting through:
   * improved coherence, including improving the synchronisation of different timings for different reports to align frequencies;
   * reducing textual reporting and focussing on clear quantified indicators to improve usefulness and cut costs along the reporting chain;
   * reducing the delays along the reporting chain, whereby Member State reporting can be late and/or Commission onwards reporting is (further) delayed;
   * improving the format of reporting, e.g. through more use of templates.
2. **Streamlining the reporting process** – the Fitness Check identified the potential to harmonise and centralise (some) process provisions and make better use of technology to make reporting more effective and to reduce burdens in particular through:
   * harmonising the “business process” of reporting and exploiting more widely the opportunities from eReporting building on the best tried and tested examples (including through improving EEA’s Reportnet, and then making fuller use of it);
   * better use of the tools and specifications set out by the INSPIRE Directive;
   * promoting good practices or common open source IT tools for active collection of information and facilitation of generation databases to be disseminated in dissemination tools;
   * strengthening capacities for data harvesting as an alternative to centralised reporting.
3. **Promotion of active dissemination of environmental information at European and national level** - promoting good practices for active dissemination, i.e. improve the availability and accessibility of data related to environmental monitoring, reporting and implementation (as also required by the INSPIRE and the Access to Information Directives).
4. **Exploiting other data sources and alternative approaches complementing environmental reporting** – the Fitness Check identified some potential to make better use of complementary data sources to “classic” reporting such as data coming from EU data sources (such as Copernicus) or from citizens directly (e.g. in the context of citizen science).
5. **Improving coherence and cooperation** – The Fitness Check identified the need to ensure that there is coherence between environmental reporting and reporting in other EU policy areas, including by facilitating the use of already existing data at EU level. Similarly, coherence needs to be ensured with reporting to the international level.

Clearly, such a programme of next steps involves a mixture of horizontal actions and changes specific to individual pieces of legislation (which may or may not involve amending the legislation).

# Annexes

## *Annex 1*: List of environment legislation within the scope of the Fitness Check

| **Ref. no.** | **Title of environmental legislation** | **Short title and abbreviation** | **Short description of number and subject of reporting obligations (ROs)** |
| --- | --- | --- | --- |
| 1 | Directive 2008/50/EC on ambient air quality and cleaner air for Europe (including Implementing Decision 2011/850/EU) | Air Quality Directive (AQD) | Two ROs covering information on ambient air quality and air quality plans in agglomerations exceeding limit or target values |
| 2 | [Directive 2004/107/EC of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air (Including Implementing Decision 2011/850/EU)](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449848701794&uri=CELEX:32004L0107) | Ambient Air Directive (As, Cd, Hg, Ni, PAHs) | One RO covering information on ambient air quality for the following parameters: As, Cd, Hg, Ni, Benzo(a)Pyrene |
| 3 | [Directive 2002/49/EC relating to the assessment and management of environmental noise](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449848763546&uri=CELEX:32002L0049) | Environmental Noise Directive (END) | Six ROs covering information on competent authorities, limit values, major infrastructure, strategic noise maps and actions already in place and planned |
| 4 | [Directive 2000/60/EC establishing a framework for Community action in the field of water policy](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060&qid=1450375730222) | Water Framework Directive (WFD) | Six ROs covering information on river basin districts and competent authorities, characterisation of river basin districts, monitoring programmes, programmes of measures, river basin management plans, and issues, which cannot be dealt with at Member State level |
| 5 | [Directive 2008/105/EC on environmental quality standards in the field of water policy (consolidated version)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0105) | Environmental Quality Standards Directive (EQS) | Two ROs covering information on Member States reporting to EC on the results of monitoring of substances included in the Watch List, and Member States communicating inventories of emissions, discharges, and losses |
| 6 | [Directive 2007/60/EC on the assessment and management of flood risks](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1450189677491&uri=CELEX:32007L0060) | Floods Directive (FD) | Four ROs covering information on preliminary flood risk assessment and areas of potential significant flood risk, flood hazard maps and flood risk maps, flood risk management plans, and units of management and competent authorities |
| 7 | [Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449849003230&uri=CELEX:32008L0056) | Marine Strategy Framework Directive (MSFD) | Six ROs covering information on information on the subdivision of marine regions and subregions, information on the competent authorities, preparation of initial assessment, determination of good environmental status, setting of environmental, monitoring programmes, programmes of measures, and interim report on programmes of measures |
| 8 | [Council Directive 98/83/EC on the quality of water intended for human consumption](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31998L0083) | Drinking Water Directive (DWD) | One RO covering information on report on quality of water for human consumption |
| 9 | [Directive 2006/7/EC concerning the management of bathing water quality](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1450189815868&uri=CELEX:32006L0007) | Bathing Water Directive (BWD) | Three ROs covering information on monitoring and classification of bathing waters, identification of bathing areas, and written observations on Commission report |
| 10 | [Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31992L0043) | Habitats Directive (HD) | Four ROs covering information on the implementation report, the national report on derogations, information on compensation measures, and information on Natura 2000 sites |
| 11 | [Directive 2009/147/EC (Codified version) replacing Directive 79/409/EEC) on the conservation of wild birds](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009L0147&qid=1450450775514) | Birds Directive (BD) | Four ROs covering information on the implementation report, the national report on derogations, information on compensation measures, and information on Natura 2000 sites |
| 12 | EU Regulation (EU) No. 1143/2014 on Invasive Alien Species | Invasive Alien Species Regulation (IAS) | Three ROs covering information on reporting on various issues, including on the surveillance system, actions plans, eradication and management measures etc., information on competent authorities, and information on provisions on penalties |
| 13 | [Regulation (EC) No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32006R0166) | European Pollutant Release and Transfer Register (E-PRTR) | Two ROs covering information on the report covering data reported by industrial facilities covering 65 economic activities within 9 industrial sectors, and a single report based on the information from the last 3 reporting years |
| 14 | [Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (Recast)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32010L0075) | Industrial Emissions Directive (IED) | Eleven ROs covering information on reporting obligations on IED-installations (including data on competent authorities, permit information (e.g. derogations), and baseline reports), the duty to inform Commission if derogations granted where failure to comply with ELVs is linked to interruption of supply of low-sulphur fuel, the duty to inform Commission if derogations granted where failure to comply with ELVs is linked to interruption of supply of gas, the communication of transitional plans covering selected pollutants from older combustion plants, changes to transitional plans, the plant to which the limited life derogation is applied, the inventory of exempted small isolated systems, the inventory of exempted district heating plants, the summary of inventories of combustion plant emissions and energy input, data on fuel used by combustions benefitting from the derogation (article 31) for indigenous solid fuel, and data on operating hours of combustion plant operating less than 1500 hours per year |
| 15 | [Directive 1999/32/EC on the sulphur content of certain liquid fuels](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31999L0032) | Sulphur Directive (SD) | Three ROs covering information on notification from a ship to its flag State and the competent authority of its port of destination when it cannot buy marine fuel in compliance with the directive and port state's notification to the Commission, information on sudden change in the supply and subsequent difficulty to apply the limits, and compliance report based on sampling, analysis and inspections |
| 16 | [Directive 2001/81/EC of 23 October 2001 on national emission ceilings for certain atmospheric pollutants and the revised NECD](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32001L0081) | National Emission Ceilings Directive (NEC) | One RO covering information on national emission inventories and emission projections |
| 17 | [Council Directive 91/271/EEC concerning urban waste-water treatment](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31991L0271) | Urban Wastewater Treatment Directive (UWWD) | Three ROs covering information on the information on monitoring results, the situation report on the disposal of urban waste water and sludge in MS areas, and national implementation programmes |
| 18 | [Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural source](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1450276037442&uri=CELEX:31991L0676) | Nitrates Directive (ND) | Three ROs covering information on the Monitoring and Implementation report, vulnerable zones notification, and details of MS codes of good agricultural practice to be implemented by farmers on voluntary basis |
| 19 | [Regulation (EC) No 1221/2009 o of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009R1221) | EMAS Regulation | Three ROs covering information on communication of changes to the EMAS register, information on the structure and procedures relating to the functioning of the Competent Bodies and Accreditation and Licensing Bodies, and Member States shall report to the Commission updated information on the measures taken pursuant to this Regulation |
| 20 | [Council Directive 1999/31/EC on the landfill of waste](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449584981431&uri=CELEX:31999L0031) | Landfill Directive | Four ROs covering information on the report on implementation of Directive, in particular on National Strategies required by Art 5, MS to notify Commission of exempted islands and isolated settlements, MS to notify Commission of national plan to reduce biodegradable waste to landfill, and MS seeking to postpone attainment of targets in Art 5 must inform Commission "in advance" |
| 21 | [Directive 2006/21/EC on the management of waste from extractive industries and amending Directive 2004/35/EC](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449586441396&uri=CELEX:32006L0021) | Extractive (Mining) Waste Directive | Three ROs covering information on MS implementation reports, including information on accidents or near-accidents, MS to transmit to Commission information on events notified by the operators of extractive waste facilities, and MS to notify Commission of exemptions under Article 24.4 (facilities that stopped accepting waste before 1 May 2006, were completing closure procedures, or would be effectively closed by 31 December 2010) |
| 22 | [Directive 94/63/EC on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31994L0063) | Volatile Organic Compound Directive (VOC) | Two ROs covering information on the report on implementation, and reporting on special measures |
| 23 | [Directive 2009/126/EC on Stage II petrol vapour recovery during refuelling of motor vehicles at service stations](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0126) | VOC-Stage II Directive | One RO covering information on penalties in place |
| 24 | Directive 2012/18/EU of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC | Seveso III Directive | Four ROs covering information on notification and information on major accidents, the report on implementation, information on establishments, and penalties |
| 25 | [Commission Recommendation of 22 January 2014 on minimum principles for the exploration and production of hydrocarbons (such as shale gas) using high-volume hydraulic fracturing (2014/70/EU)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014H0070) | Shale Gas Recommendation | One RO covering information on the report on measures put in place in response to the Recommendation Note: reporting to the Commission which is then made publicly available |
| 26 | [Council Directive 86/278/EEC on the protection of the soil, when sewage sludge is used in agriculture](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449830132292&uri=CELEX:31986L0278) | Sewage Sludge Directive | Two ROs covering information on the report on the use of sludge in agriculture: the quantities used, the criteria followed and any difficulties encountered, and information on the methods of treatment and the results of the analyses |
| 27 | Directive 2008/98/EC of 19 November 2008 on waste and repealing certain Directives | Waste Framework Directive (WFD) | Six ROs covering information on MS implementation reports, including info on waste oil management, reuse & recycling targets, progress on implementation of waste management & prevention programmes and changes to programmes, info on extended producer responsibility measures, MS to report on targets in the Directive, MS to notify Commission "without delay" deviations from the list of waste, MS to inform Commission of general rules specifying types & quantities of waste that may be covered by a permit exemption as per Article 24, method of treatment to be used, and specific conditions for exemptions relating to hazardous waste, MS to notify Commission of case by case decisions on whether certain waste has ceased to be waste (in accordance with Directive 98/34/EC), and MS to notify Commission of any decision to limit incoming shipments of waste destined to incinerators that are classified as recovery |
| 28 | [Regulation (EC) No 66/2010 of 25 November 2009 on the EU Eco-label + individual Commission Decisions establishing criteria for the 32 product groups](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449586684470&uri=CELEX:32010R0066) | Eco-label Regulation | Three ROs covering information on MS to notify Commission of provisions/rules on penalties applicable to infringements of the Regulation's provisions, and to notify Commission of any subsequent amendment affecting them, the competent body awarding the EU Ecolabel to a product to notify the Commission thereof, and the competent body to inform all other competent bodies & Commission of prohibition of use of the EU Ecolabel on a product |
| 29 | [Regulation (EC) No 1013/2006 on shipments of waste](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449587102330&uri=CELEX:32006R1013) | Waste Shipment Regulation | Eight ROs covering information on MS report to Basel Convention Secretariat & Commission on waste shipments, MS additional report to Commission on waste shipments, MS to inform Commission of deviations from the export prohibition provision of Art 36, MS with overseas countries/territories to notify Commission if they apply national procedures to shipments from those overseas countries & territories, MS to notify Commission of national legislation relating to prevention & detection of illegal shipments & penalties for such shipments, MS to notify Commission of designations & details of: competent authorities (Art 53); correspondents (Art 54); and where appropriate customs offices (Art 55), MS to inform Commission of provisions of national law adopted pursuant to Art 6 on financial guarantee, and MS to inform Commission of their system for supervision & control of shipments of waste exclusively within their jurisdiction |
| 30 | Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators | Batteries Directive | Seven ROs covering information on MS implementation reports, MS reports on compliance with batteries collection targets, MS reports on compliance with batteries recycling targets, MS to transmit to Commission voluntary agreements related to Arts 8, 15 & 20, and to report to the Commission on their results, MS to notify Commission of measures related to the implementation of any economic instruments to promote the collection of waste batteries/ accumulators or to promote the use of batteries/ accumulators containing less polluting substances, MS to notify Commission & other MS of draft measures (and grounds for proposing them) to exempt small producers from Article 16(1) requirements, and MS to notify Commission of draft measures to allow disposal of certain types of batteries/ accumulators in landfills or underground storage |
| 31 | [Directive 94/62/EC on packaging and packaging waste](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449587399148&uri=CELEX:31994L0062) | Packaging Waster Directive | Six ROs covering information on MS implementation reports, waste packaging yearly statistics report, waste packaging hazardous contents report and other voluntary data on packaging and packaging waste, before adopting economic instruments, MS to notify Commission of drafts the intended measures, MS to inform Commission if they have, or will, set programmes going beyond the targets of Article 6, and MS to communicate to Commission the text of their national standards on essential requirements |
| 32 | [Directive 96/59/EC on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT)](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449587439504&uri=CELEX:31996L0059) | PCB Directive | One RO covering information on MS to draw up: plans for decontamination and/or disposal of inventoried equipment and its PCBs; and outlines for collection & subsequent disposal of equipment not subject to inventory |
| 33 | [Directive 2000/53/EC on end-of life vehicles](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449587471163&uri=CELEX:32000L0053) | End-of life Vehicles Directive (ELV) | Five ROs covering information on MS implementation reports, ELV reuse/recycling/ recovery targets compliance report, MS to transmit to Commission agreements to transpose provisions of Arts 4(1), 5(1), 7(1), 8(1), 8(3) & 9(2) and to specify detailed rules of implementation of Art 5(4), and to report to Commission on their results, MS making use of Art 5(3) must inform Commission of the reason why, and MS to inform Commission & other MS of reason for laying down lower targets for vehicles produced before 1 Jan 1980 |
| 34 | [Directive 2012/19/EU by 14/2/2014 on waste electrical and electronic equipment (WEEE)](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449587102330&uri=CELEX:32012L0019) | WEEE Directive | Seven ROs covering information on MS implementation reports, MS to collect information on quantities & categories of EEE placed on their markets, collected through all routes, prepared for re-use, recycled & recovered within the MS, and on separately collected WEEE exported, by weight, MS to report to Commission if they set more ambitious rates for separate collection of WEEE, MS to transmit to Commission agreements to transpose provisions of Arts 8(6), 14(2) & 15, and to report to Commission on their results, MS to notify Commission of provisions re rules on penalties applicable to infringements of the national provisions adopted pursuant to the Directive, and notify Commission of any subsequent amendment affecting them, MS making use of derogation from Art 5(2)(b) (re return of WEEE to distributor) to inform the Commission, and MS which opt to set up minimum quality standards for treatment of collected WEEE shall inform the Commission thereof |
| 35 | [Directive 2011/65/EU of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449587502520&uri=CELEX:32011L0065) | RoHS Directive | One RO covering information on MS to notify Commission of provisions re rules on penalties applicable to infringements of the national provisions adopted pursuant to the Directive, and notify Commission of any subsequent amendment affecting them |
| 36 | [Regulation (EC) No 1102/2008 of 22 October 2008 on the banning of exports of metallic mercury and certain mercury compounds and mixtures and the safe storage of metallic mercury](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449587552131&uri=CELEX:32008R1102) | Mercury Regulation | Five ROs covering information on MS to submit to Commission a copy of any permit issued for a facility designated to store metallic mercury temporarily or permanently, accompanied by the respective safety assessment pursuant to Art 4(1), MS to inform Commission on application & market effects of the Regulation in their territory, mercury importers, exporters and relevant economic operators to submit to the Commission and to MS concerned info on mercury volume, price and countries of origin and of destination and on the expected use of mercury and info on the volume, price and countries of origin and of destination of mercury waste when transported within the EU, economic operators targeted in Art. 2 to submit to Commission and MS info on quantity of mercury that is still used, stored and gained and on volume of mercury waste sent to waste storage facilities and contact details of such facilities, and MS to notify Commission of provisions on penalties applicable to infringements of the Regulation, and notify Commission of any subsequent amendment affecting them |
| 37 | [Directive 2004/42/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32004L0042) | Paints Directive | One RO covering information on MS required to report to the Commission periodically on (i) their monitoring of compliance and (ii) quantities of products licensed under a derogation |
| 38 | [Regulation (EC) No 850/2004 of 29 April 2004 on persistent organic pollutants](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32004R0850&from=en) | POPs Regulation | Five ROs covering information on MS to inform Commission in cases where prohibited substances occur in products already in use, the bbligation to inform the Commission on derogations granted under article 7 (4), information on application, including infringements and penalties, data on volumes produced / placed on the market, and summary information on impacts |
| 39 | [Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02006R1907-20140410) | REACH Regulation | One RO covering information on the report on the operation of the legislation |
| 40 | [Regulation (EC) No 1272/2008 of 16 December 2008 on classification, labelling and packaging of substances and mixture](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF) | CLP Regulation | Two ROs covering information on competent authorities to inform Commission, where relevant, of cancellation of authorisations, and Member State report on implementation |
| 41 | [Regulation (EU) No 649/2012 of 4 July 2012 concerning the export and import of hazardous chemicals](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:201:0060:0106:en:PDF) | PIC Regulation | Two ROs covering information on operation of procedures under the Regulation, and quantities of chemicals exported |
| 42 | [Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32004L0035&qid=1449761351036) | ELD Directive | One RO covering information on the report on the experience gained in the application of this Directive |
| 43 | [Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment , as amended by Directive 2014/52/EU, (EIA)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32011L0092) | EIA Directive | Three ROs covering information from Members States to the Commission on certain EIA data, Member States have to inform the Commission on projects to be exempted from the application of the EIA Directive, and information from Member States on projects adopted by a specific act of national legislation |
| 44 | [Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA)](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449835947970&uri=CELEX:32001L0042) | SEA Directive | Two ROs covering information on the report on the application and effectiveness of the SEA Directive, and on the types of plans and programmes which would be subject to an environmental assessment |
| 45 | [Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) (Including Commission Decision of 5 June 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards monitoring and reporting)](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449844466209&uri=CELEX:32007L0002) | INSPIRE Directive | Two ROs covering information on the country report on implementation and use of infrastructures for spatial information, and monitoring of implementation and use of infrastructures for spatial information |
| 46 | [Directive 2003/4/EC on public access to environmental information](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449767564522&uri=CELEX:32003L0004) | Access to Information Directive (A2I) | One RO covering information on the report on experience gained in the application of the Directive |
| 47 | [Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein (Including Commission Regulation (EC) No 939/97 of 26 May 1997 laying down detailed rules concerning the implementation of Council Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein)](http://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:31997R0338) | Wildlife Trade Regulation (CITES) | Two ROs covering information on annual reports, and biennial reports |
| 48 | [Council Regulation (EEC) No 348/81 on common rules for imports of whales or other cetacean products](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:01981R0348-19950101) | Whales Regulation | One RO covering information on names and addresses of the authorities |
| 49 | [Council Directive 83/129/EEC of 28 March 1983 concerning the importation into Member States of skins of certain seal pups and products derived there from](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:31983L0129) | Seal Products Directive | One RO covering information on necessary measures |
| 50 | [Regulation No 511/2014 on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization in the Union (including Commission Implementing Regulation (EU) 2015/1866)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32014R0511) | ABS Regulation | Three ROs covering information on the report on application of the Regulation, notification on collection, and notification on competent authorities and focal points |
| 51 | [Council Regulation (EC) No 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449759786164&uri=CELEX:32005R2173) | FLEGT Regulation | Two ROs covering information on the report with quantitative data on timber imports, licences granted and enforcement, and notification of circumvention of the Regulation |
| 52 | [Regulation (EU) No 995/2010 of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449743925721&uri=CELEX:32010R0995) | Timber Regulation | Four ROs covering information on the report on implementation of the regulation and effectiveness of the prohibition of the placing on the market of illegally harvested timber and timber products, EC information on the names of competent authorities or changes to their contact details, information about the monitoring organisation no longer compliant with the regulation, and exchange information on serious shortcomings |
| 53 | [Regulation (EU) No 1257/2013 on ship recycling](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013R1257) | Ship Recycling Regulation | Three ROs covering information on the report by MS on the application of the Regulation, MS to communicate list of authorised ship recycling facilities and EC to publish a European List of ship recycling facilities, and MS to designate competent authorities and administrations responsible for application of the Regulation, and contact persons responsible for informing or advising natural or legal persons making enquiries |
| 54 | [Directive (EU) 2015/2193 of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015L2193) | Medium Combustion Plants Directive (MCP) | Two ROs covering information on MS required to report on implementation to EC, and the report with an estimate of the total annual emissions of CO |
| 55 | [Regulation (EC) No 1007/2009 of 16 September 2009 on trade in seal products (including Implementing Regulation No 2015/1850)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009R1007) | Seals Products Directive | Three ROs covering information on the report on application of the Regulation, notification on penalties and enforcement, and notification of designated competent authorities |
| 56 | [Council Directive 87/217/EEC of 19 march 1987 on the prevention and reduction of environmental pollution by asbestos](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1987L0217:20030605:EN:PDF) | Asbestos Directive | Two ROs covering information on MS to notify to Commission the procedures and methods for measuring asbestos emissions and releases from industrial discharge ducts and facilities manufacturing asbestos cement and paper and board, and MS to report to Commission on implementation of the Directive |
| 57 | [Regulation (EC) No 401/2009 of 23 April 2009 on the European Environment Agency and the European Environment Information and Observation Network](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009R0401) | EEA Regulation | One RO covering information on MS shall keep the Agency informed of the main component elements of their national environment information networks |
| 58 | Directive 2010/63/EU of 22 September 2010 on the protection of animals used for scientific purposes | Animal Testing Directive | Three ROs covering information on Implementation of the Directive and in particular Articles 10(1), 26, 28, 34, 38, 39, 43, statistical information on the use of animals and procedures, including information on the actual severity of the procedures and the origin and species of non-human primates used in procedures, and exemptions granted under Article 6(4)(a) from killing methods contained in Annex IV |

**List of environmental legislation not included in the scope of the Fitness Check**

|  | **Title of environmental legislation** | **Reason for being out of scope** |
| --- | --- | --- |
| 59 | Council Directive 1999/22/EC of 29 March 1999 relating to the keeping of wild animals in zoos | No reporting obligations were identified |
| 60 | Council Regulation (EEC) No 3254/91 of 4 November 1991 prohibiting the use of leg-hold traps in the Community and the introduction into the Community of pelts and manufactured goods of certain wild animal species originating in countries which catch them by means of leg-hold traps or trapping methods which do not meet international humane trapping standards | No reporting obligations were identified |
| 61 | Regulation 1367/2006 on the application of the Aarhus Convention to Community institutions and bodies | The reporting obligations under it were placed on the Commission and were not linked to MS reporting |
| 62 | Directive 2003/35/EC providing for public participation in respect of drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC | The reporting obligations under it were placed on the Commission and were not linked to MS reporting |
| 63 | Council Directive 2006/11//EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration | No reporting obligations were identified beyond the ones foreseen in the Water Framework Directive |
| 64 | Regulation (EU) No 1293/2013 of the European Parliament and of the Council of 11 December 2013 on the establishment of a Programme for the Environment and Climate Action (LIFE) and repealing Regulation (EC) No 614/2007 | Financial instrument for which different budgetary reporting obligations apply (note that this is though subject to a separate evaluation) |

## *Annex 2*: Procedural information

*Lead DG and internal references*

The "Fitness Check of monitoring and reporting obligations in environment policy" was led by DG Environment. It was included as item 2017/ENV/002 in the Agenda Planning (AP) and as Commission's REFIT Initiative item 9 in the Commission Work Programme of 2016[[149]](#footnote-149) as well as part of package item 21 "A more strategic approach to enforcement of EU law" in the Commission Work Programme of 2017[[150]](#footnote-150).

This initiative is linked to two other actions delivered in 2016, the Commission Staff Working Document "Towards a Fitness Check of EU environmental monitoring and reporting: to ensure effective monitoring, more transparency and focused reporting of EU environment policy" (SWD(2016) 188, AP no. 2016/ENV/084) and the proposal to repeal the Standardised Reporting Directive (91/692/EEC) and related questionnaires (COM(2016) 789, AP no. 2016/ENV/089).

*Organisation and timing*

An inter-service steering group (ISG) was set up in November 2015 (Ares(2015)5058423 - 13/11/2015) with representatives from the Directorate Generals for Environment; Agriculture and Rural Development; Climate Action; Communication Networks, Content and Technology; Energy; Eurostat; Financial Stability, Financial Services and Capital Markets Union; Health and Food Safety; Humanitarian Aid & Civil Protection; Informatics; Internal Market, Industry, Entrepreneurship and SMEs; Joint Research Centre; Justice and Consumers; Maritime Affaires and Fisheries; Mobility and Transport; Regional and Urban Policy; Research and Innovation, the Legal Service and the Secretariat General. In addition, representatives from the European Environmental Agency were invited to the meetings as experts. Moreover, the Internal Audit Service joined some of the meetings in the light of their work on the internal audit of the process for managing and sharing on agri-environmental-climate issues in DG AGRI, DG CLIMA and DG ENV.

Table of Annex 2: ISG meeting dates and topics of discussion as well as other consultations

| **Date** | **Topics of discussion** |
| --- | --- |
| 01.12.2015 | Fitness Check Mandate (draft Roadmap); Questionnaire for the Public Consultation and document for consultation strategy. Presentation of first draft proposal for the Repeal of the Standardised Reporting Directive (SRD). Outline of Commission Staff Working Document which was subsequently circulated for comments. Information on outcome of the first Stakeholder Workshop and the cooperation with "Make It Work" initiative. |
| 18.05.2016 | Terms of References for the actual Fitness Check study by the external consultant (extension to support contract); Presentation of interim results of ongoing preparatory work and evidence gathering by the external consultant; Presentation of results from Public Consultation. |
| 12.10.2016 | Presentation of preliminary results of supporting study send to ISG Members by email for comments until 14 October; First draft of Fitness Check Commission Staff Working Document. |
| 07.12.2016 | Final Meeting of the ISG before the RSB; Presentation of the final draft of the supporting study and the complete draft Fitness Check Staff Working Document; Comments (at the meeting and in writing) invited to both documents. Discussion on the quality assessment of the supporting study concluding positively about the quality of the work done. The form for Quality Assessment of the supporting study will be completed once the final version of the study is approved in February 2017. |
| 08.02.2017 | Final meeting before the adoption; presentation of the outcome of the Regulatory Scrutiny Board. Presentation and discussion of the draft Communication including the follow up actions with possibility to send written comments. |

In addition, a DG Environment Focus Group was set up which involved all affected or interested Directorates and Units within DG Environment as well as the main service providers for reporting, namely the European Environment Agency, the Joint Research Centre and Eurostat. The Focus Group met eleven times between September 2015 and January 2017. It prepared, reviewed and validated the evidence base for this Fitness Check.

*Consultation of the Regulatory Scrutiny Board*

The Regulatory Scrutiny Board has discussed the file at its meeting on the 1 February 2017 and issued a positive opinion on 3 February 2017[[151]](#footnote-151). The Board highlighted aspects for improvement:

In addition, the Board identified further considerations in relation to design and methodology, efficiency and effectiveness, coherence and validity of the conclusions and relevance for further action. All the issues identified by the Board have been taken into account when finalising the Fitness Check evaluation.

|  |  |
| --- | --- |
| RSB comment | Action taken |
| Better explain and justify the scope of the fitness check | The titles has been changed, Section 1.2 updated, terminology checked throughout to make clearer differences between environmental monitoring, reporting and regulatory monitoring. |
| Amend conclusions to draw lessons from concrete findings and clearly identify areas for further work as well as refining the conclusions on relevance and coherence to fully reflect the identified shortcomings | The Annexes have been expanded to discuss more the specific problems for specific pieces of legislation: in particular Annex 8 sets out quality issues by piece of legislation. Summary tables have been included in the report and the executive summary. Discussion of simplification potential strengthened. |
| Provide more specific and operational conclusions on the overlaps and inconsistencies with reporting obligations from other policy areas (coherence section) | Discussion of coherence expanded including additional reference to Internal Audit Service findings. Additional information put on the follow-up envisaged. |

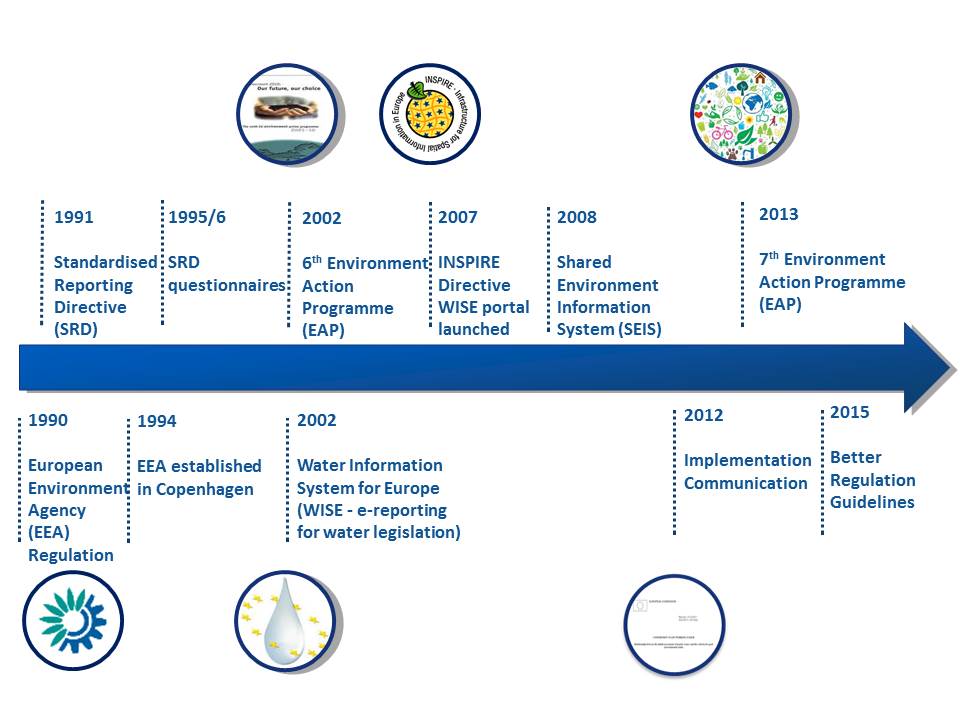
In addition, the Board identified further considerations in relation to design and methodology, efficiency and effectiveness, coherence and validity of the conclusions and relevance for further action. All the issues identified by the Board have been taken into account when finalising the Fitness Check evaluation.

*External Expertise*

The analysis underpinning this Fitness Check was undertaken by an independent study commissioned by DG Environment. The "Study to Support the Review of Environmental Monitoring and Reporting Obligations" was undertaken by a consortium of ICF Consulting Services in association with IEEP (Institute for European Environment Policy) and Denkstatt from 18 October 2015 until 18 February 2017. The initial study on general evidence gathering and establishment of an inventory was extended following the adoption of the Roadmap to cover all relevant aspects to support the preparation of the Fitness Check and following the consultation of the terms of references in the ISG.

## *Annex 3*: History of environmental reporting

Since the 1970s, the amount of environment legislation has increased steadily. The question of reporting and how to organise this most effectively was on the agenda from the start, and the process of trying to streamline reporting can be shown through the milestones in the figure below.



*Figure: Main milestones in the history of environmental reporting*

Already in 1991, the European Economic Community adopted a Directive to streamline reporting and improve the ability of the Commission to monitor the application of EU law.

The next milestone was the establishment of the European Environment Agency (EEA) in 1994. As part of its mandate[[152]](#footnote-152), the EEA is tasked, in particular:

* to provide the EU and the Member States with objective information necessary for framing and implementing sound and effective environmental policies,
* to record, collate and assess data on the state of the environment,
* to draw up expert reports on the quality, sensitivity and pressures on the environment within the territory of the European Union, and
* to provide uniform assessment criteria for environmental data to be applied in all Member States.

The **Standardised Reporting Directive** (SRD-91/692/EEC)[[153]](#footnote-153) – the first milestone

The Directive aimed at rationalizing and improving, on a sectoral basis, the provisions on the transmission of information and the publication of reports. It covered some 32 legal acts on the protection of the environment at the time (e.g. in the areas of water and waste). The Directive streamlined procedures and introduced a three-year reporting cycle for all covered legislation. The detailed content was then laid down in sector specific questionnaires. Consequently, a large number of implementing acts were adopted by the Commission over the years.

Over the last 25 years, the SRD proved to be difficult to implement, and became increasingly obsolete. The main drivers that eroded the SRD’s relevance were:

(i) the development of the environmental *acquis*, including revisions of individual pieces of environmental legislation, which have frequently removed reporting obligations from the ambit of the SRD;

(ii) radical progress in information and communications technologies (ICT);

(iii) the European Environment Agency’s assistance to the reporting obligations; and

(iv) an unprecedented scale-up of the need for timely, cross-border, and interactive environmental information.

As a result, during the preparation of this Fitness Check and as an early deliverable, the Commission proposed the repeal of the SRD and its implementing acts in 2016[[154]](#footnote-154). A more detailed overview on the SRD and an analysis of the effects is available[[155]](#footnote-155).

Several sectoral initiatives, e.g. in the field of water or biodiversity policy, have contributed significantly to the next stage of modernising reporting. The Water Information System for Europe (WISE) was developed as a result of the Water Framework Directive which advocates an integrated and holistic approach to water management. It covers environmental monitoring and reporting of all water-related legislation, but also goes beyond. WISE looks at ways of streamlining legislative reporting with the EEA's state-of-the-environment data flows. Since it was launched in 2007, it has:

* led to a move to electronic reporting only, getting rid of paper reporting;
* harmonised electronic reporting to build comparable publicly accessible EU datasets;
* streamlined with State of the Environment reporting to avoid duplication and ensure complementarity – "provide once, use often";
* stimulated the development of national information systems (Sweden, France, Spain, Austria, Ireland…).

**What are the EEA’s EIONET and REPORTNET?**

The European Environment Agency (EEA) is an agency of the European Union. Its task is to provide sound, independent information on the environment. The EEA coordinates the European environment information and observation network (Eionet).

The EEA has 33 member countries and six cooperating countries. Eionet is a partnership network of the EEA and the countries. The EEA is responsible for developing the network and coordinating its activities. To do so, the EEA works closely together with national focal points, typically national environment agencies or environment ministries. They are responsible for coordinating national networks involving many institutions (about 350 in all).

In order to manage reporting in operational terms, the EEA set up Reportnet[[156]](#footnote-156) an infrastructure for supporting and improving data and information flows. Reportnet is based on a set of inter-related tools and processes which all build on the active use of the World Wide Web. Reportnet has been in operational use since 2002. It was initially used for reporting environmental data to EEA, but now also hosts some of DG Environment’s reporting tasks.

The Biodiversity Information System for Europe (BISE) is a single entry point for data and information on biodiversity supporting the implementation of the EU strategy and the Aichi targets in Europe. Bringing together facts and figures on biodiversity and ecosystem services, it links to related policies, environmental data centres, assessments and research findings from various sources. It is being developed to strengthen the knowledge base in support of the implementation of the EU biodiversity strategy and the assessment of progress in achieving the 2020 targets.

Since then, also the use of information technology (IT) has expanded and reporting has become increasingly electronic. Using electronic means for transmission and making reported data available online, e.g. through maps, triggered the need to define and harmonise electronic data standards. As a result, the INSPIRE Directive[[157]](#footnote-157) was adopted in 2007 to create a European Union spatial data infrastructure for the purposes of EU environmental policies and policies or activities which may have an impact on the environment. The INSPIRE Directive sets technical standards for the interoperability of spatial data and for the online availability of data discovery and access services, therefore promoting comparability and data sharing.

The related development of the Shared Environment Information System (SEIS)[[158]](#footnote-158), introduced a more modern and effective, horizontal approach on information management and reporting. The Commission concluded at the time that "[…] *a key step in implementing SEIS, and especially to trigger the expected simplification benefits, will be to modernise the legal provisions relating to the way in which information required by environmental legislation is made available. It is expected that this will be done by revising the Standardised Reporting directive 91/692/EC, which needs to be updated and brought into line with the SEIS principles. To this end, the Commission intends to come forward with a relevant legislative proposal in 2008, including a repeal of outdated provisions in the current standardised reporting directive."*

The Impact Assessment[[159]](#footnote-159) conducted for the preparation of SEIS highlights issues which are still pertinent today. In particular the following conclusion: *"A major challenge in Europe and globally is to organise the vast array of already collected environmental data and information, to integrate these, where desirable, with existing data and information from the social and economic realms, to make them available together with tools that allow experts to do their own analyses, and to communicate them in ways which the public policy makers and the public can readily understand and use as a basis for their own actions. At the same time, Member States and EU institutions need an efficient and modern 'reporting system' to fulfil their legal obligations related to Community and international environmental policies and legislation, avoiding duplication of efforts, overlapping and redundancies."*

Ultimately, the Commission decided not to come forward with a new legal instrument on reporting but to pursue this agenda through a non-legal approach (see EU Shared Environmental Information System-Implementation Outlook[[160]](#footnote-160)) combined with coordinated action in the different environmental policy areas (such as water, air, nature, etc.).

In 2012, the Commission’s Implementation Communication[[161]](#footnote-161) put emphasis on the importance of a reliable and accessible knowledge base and set out ideas to improve the collection and dissemination of knowledge both at national and EU level. For example, more systematic information and active dissemination would ensure up-to-date and comparable information across Europe and would allow earlier identification of implementation problems. The Strutured Information and Implementation (SIIF)[[162]](#footnote-162) projects translated these ideas into practical examples.

This history illustrates the long-standing effort to streamline reporting and reduce the administrative burden to collectors, reporters and users. The Fitness Check takes this story forwards another chapter: however, as a horizontal exercise it has to be seen together and coordinated with the efforts in the different sectoral areas of environment policy. In particular, it needs to ensure that the regular evaluation and critical review of the provisions and practices in specific pieces of legislation that takes place in future, takes place with a cross-cutting perspective.

## *Annex 4*: Synopsis report of stakeholder consultation

**Executive Summary**

The Commission launched an online public consultation from November 2015 to February 2016. In total, 150 responses were received, mainly from public authorities, business and non-governmental organisations.[[163]](#footnote-163) The responses to this public consultation fed into the Commission's fitness check of reporting obligations. The Commission also organised a number of stakeholder events to discuss environmental reporting in November 2015, April, September and December 2016.[[164]](#footnote-164) Moreover, input and feedback was received by the Committee of the Regions and by the 'Make It Work' project, a Member State-led initiative.

The main conclusions that can be summarized based on the online consultation are as follows:

- A majority of respondents are fairly satisfied with existing reporting arrangements, although they see some specific areas for improvement in certain policy domains.

- Respondents generally regard existing information requirements as appropriate, with some exceptions.

Efficiency of most reporting requirements were viewed as neutral, with specific areas of improvement possible. - In terms of the principles and objectives of reporting, respondents felt that the most important principle is that reporting should collect information once, and share it where possible for many purposes.

- The EU is seen as the most appropriate level of governance for harmonisation of reporting processes.

- Respondents generally felt that IT systems have significant potential to support streamlining of reporting processes and reduced administrative burden.

The Stakeholder Workshops provided input and evidence and reviewed the draft final supporting study, in particular its draft conclusions. Overall, there was broad support for the findings of the study and some specific suggestions for improvements were made at the final stakeholder event, e.g. the potential for an enhanced use of citizens' science.

The findings of the online consultation and the stakeholder workshop need to be looked at carefully and validated since the overall number of participants is not as high as it could have been.

**Aim of consultation activities**

The stakeholder consultation is used to identify the most relevant issues in relation to the reporting and to collect data in response to those questions. The consultation will allow stakeholders to identify specific issues that they perceived as a problem and to explain why.

The stakeholder consultation aims to approach all relevant stakeholders, in particular, national public authorities (central, regional or local government) and private companies, research organisations, universities and academic institutions, citizens, and NGOs.

**Public consultation - introduction and approach**

As part of the Fitness Check, the Commission launched an online public consultation in November 2015. The consultation sought the views of stakeholders and the public about the principles to be applied in setting reporting requirements, as well as current shortcomings, overlaps and potential improvements that should be examined during the process. Moreover, the respondents were invited to provide evidence for the evaluation through the consultation process.

The public consultation took the form of an online questionnaire and ran between 18 November 2015 and 10 February 2016. Responses submitted late[[165]](#footnote-165) were also accepted after this deadline. The questionnaire included 15 questions. These were organised in 6 sections (introduction, general information, general principles and objectives relating to reporting, current perceptions, areas for further consideration and additional evidence), and were presented in a variety of closed-ended and open-ended formats. Respondents were also invited to submit supporting documentation, as relevant. The questions of the consultation were formulated so as to respect the Commission's new 'better regulation' requirements.

To ensure transparency, individual contributions were made publicly available on the DG ENV website[[166]](#footnote-166). Statistical contributions were evaluated via a customised spreadsheet model, while the qualitative submissions were methodologically assessed with the help of a cluster analysis. All quantitative figures are derived from a dataset that was retrieved from the consultation website.

**Participants to the public consultation**

A total of 150 responses were made by stakeholders, citizens and organisations across the EU. The majority of these (56%) were public authorities, including EU executive agencies and Member State national authorities. This group included representatives of government departments and environmental agencies at the national and sub-national level. One in six respondents were individual citizens, while representatives of civil society organisations and professional bodies made up a further 9% of the sample each. A large number of responses were received from individuals or organisations based in Germany (33%), followed by Belgium (22%), Denmark (7%), and the UK and Sweden (5% respectively).

These figures mask differences in the profile of respondents; the relatively high number of Belgian responses can be explained by the fact that some 19/33 (58%) of these are pan-European organisations or institutions based in Brussels. Similarly, of the high number of responses from Germany, some 23/49 (47%) represented state or municipal level authorities, with the remainder representing federal (national) level authorities, private businesses and civil society associations.

Late responses were received after the formal deadline from two Member State authorities which needed to undertake extensive cross-departmental consultation to establish common positions on the survey content. Whilst these survey responses were not included within the quantitative analysis, the extensive qualitative evidence and position statements provided were integrated into the findings of the study report. The findings of the public consultation were presented at a stakeholder workshop, held in Brussels on 27 April 2016.

*Main outcomes of the public consultation*

**The majority of respondents are fairly satisfied with existing reporting arrangements, although they see some specific areas for improvement in certain policy domains**. Some 65% of consultation respondents indicated that they were satisfied or fairly satisfied with existing arrangements, although nearly a third were dissatisfied. Public authorities appeared to report the highest satisfaction with current arrangements, whilst professional organisations, private enterprise and academic/research institutions appeared amongst the most dissatisfied.

**Respondents generally regard existing information requirements as appropriate, with some exceptions**. The larger proportion of respondents felt that existing amounts of information collected in the air quality and pollution (51%), chemicals (68%), noise (61%) and waste (47%) were ‘about right’ to meet policy objectives. Respondents generally felt that more information was required in relation to biodiversity and nature protection, natural resources and soil, whilst respondents with knowledge of water policywere divided on whether existing information requirements were appropriate or too demanding **–** with some suggesting that this represents the heterogeneity of water resources across the EU.

**Most reporting requirements were viewed as neither efficient nor inefficient, with specific areas of improvement possible**. Noise was the policy domain where the current process was thought by the largest share of respondents to be efficient (39%), with waste (30%) and natural resources (29%) having the greatest share of respondents viewing them as inefficient.

**In terms of the principles and objectives, respondents felt that the most important principle is that reporting should collect information once, and share it where possible for many purposes**. There is strong support for the INSPIRE Directive[[167]](#footnote-167) as a means to realise this principle and minimise overlap. The most important objective, meanwhile, is to allow for an assessment of whether EU legal obligations are being met, and to allow stakeholders to understand the environment and the actions taken to maintain and improve it. For both of these objectives, it was felt that there are possible areas for improvement in most policy domains.

**The EU is seen as the most appropriate level of focus for harmonisation of reporting processes**. Whilst respondents acknowledged the growing range of national and international reporting obligations, they generally viewed the European Commission as the most appropriate area of focus for harmonisation between policy areas. Similarly, there was much stronger support for reporting obligations to be formalised within legislation and harmonisation achieved through collaborative action rather than ad-hoc arrangements between Member States.

**Respondents generally felt that IT systems have significant potential to support streamlining of reporting processes and reduced administrative burden**. Almost all categories of respondents expressed the view that IT technology is not being used to its full potential and could support harmonisation of reporting between policy areas, with a majority agreeing that the INSPIRE Directive can help support a common approach and reduction in administrative burden. Nonetheless, a substantial proportion of respondents (67%) felt that more support is needed for Member States in preparing reports, including the development of common tools.

**Other consultation activities**

In line with the consultation strategy, Commission services organised four Stakeholder Workshops. Between 40-100 experts from Member States, other countries (such as Norway), EU institutions (European Parliament, Council and Committee of the Regions), business and non-governmental organisations took part. The workshop programmes, the documents and presentations were made available online[[168]](#footnote-168) where also the summary reports can be found.

The Stakeholder Workshops discussed the approach (1st Workshop, November 2015), the outcome of the public consultation as well as some preliminary results (2nd Workshop, April 2016), the interim results on the inventory and the administrative burden assessment (costs and benefits) (3rd Workshop, September 2016) as well as the draft final study report (4th Workshop, December 2016). All workshops were also an opportunity for experts to provide input and evidence to the evaluation and several experts made use of this opportunity.

The input to all workshops was substantial and well informed and overall there was support for the Fitness Check and its approach. Particular emphasis was given to ensure that the benefits of reporting received similar attention in the evaluation as the costs. In the final workshop, the draft final study report was circulated and discussed, in particular the conclusions. Overall, stakeholders found that the support study contained a large number of useful findings, observations and proposals, in particular the last two sections (9.4 Emerging options for improving the system, 9.5 Information gaps and further research needs) were considered as helpful. Moreover, the ideas for cross-sectoral integration, harmonisation and simplification were appreciated.

In addition to the stakeholder events, the Commission services followed and collaborated with the parallel reporting project of the 'Make It Work' (MiW) initiative. This Member State-led initiative was launched by the Netherlands (Ministry of Infrastructure and the Environment) and the United Kingdom (Department for Environment, Food & Rural Affairs). Now the project team includes in addition representatives from Germany (Federal Ministry of Environment, Nature Conservation, Building and Nuclear Safety), Sweden (Ministry of Environment and Energy) and Czech Republic (Ministry of the Environment). The aim of the project is to identify concrete opportunities to improve the quality of EU environmental law and thus help to achieve the benefits associated with the law while delivering a more level playing field across the EU. In particular, it aims at establishing a more coherent and consistent framework for the EU environmental *acquis* through developing drafting principles on the use of cross-cutting instruments and procedures in EU environmental directives and regulations.

The first project of MiW focused on compliance assurance. In 2015, MiW also started working on environmental reporting looking at cross-cutting principles to streamline and improve it. The first stakeholder workshop in November 2015 was co-organized between Commission services (DG Environment) and MiW and included a specific session organised by the MiW project where national experts had a chance to discuss their experiences as regards reporting. Throughout the Fitness Check, the MiW team participated actively in the stakeholder workshops and provided useful evidence for the support study. On 22 November 2016, the MiW initiative published its final document[[169]](#footnote-169) on "Drafting principles for smarter environmental reporting" which was also presented at the 4th Stakeholder Workshop. This document provides a useful complement to the evaluation. In their presentation, the MiW team recognised that the findings of the support study for the Fitness Check align well with their findings and suggestions.

Another consultation and collaboration took place with the Committee of the Regions. Following an exchange with the Commission, the Committee of the Regions prepared and adopted an Outlook Opinion entitled "EU environment law: improving reporting and compliance" in its session of 7 April 2016 (CDR 5660/2015)[[170]](#footnote-170). Also following the finalization of the opinion, experts of the Committee of the Regions were involved in the Stakeholder Workshops.

## *Annex 5:* Methods and Analytical models used in preparing the Fitness Check

This Fitness Check is one of the first on reporting obligations, and can be seen as a pilot for the future analysis of reporting obligations in the rest of the European Union *acquis*.

The evaluation is underpinned by a comprehensive support study prepared by ICF, IEEP and Denkstatt (2017)[[171]](#footnote-171): "Support to the Fitness Check of monitoring and reporting obligations arising from EU environmental legislation". The study report documents the method, data and evidence in more detail. The analysis basically took place on the basis of information and data gathering and on the assessment of the costs and benefits of reporting obligations in the support study.

First, the gathering of data on the existing reporting obligations was conducted and their expected role and impacts was clarified. Second, an assessment of the costs and benefits of reporting obligations was undertaken and third, the existing obligations were evaluated along the five Better Regulation evaluation criteria and based on the information gathered in the first two steps.

The legislative obligations considered in the Fitness Check were identified in an internal screening exercise of the whole EU *acquis* under the responsibility of the Directorate-General for the Environment of the European Commission. The results of the screening were used to establish an extensive inventory in late 2015 which was updated and refined throughout 2016.

As a general rule, the analysis in this report is mainly retrospective assessing the obligations currently in force. Some predictions are also included as regards agreed or planned streamlining of reporting (e.g. the Commission proposals on waste of December 2015 – see section 3.2).

Preparatory work, evidence gathering and some consultations started in the summer of 2015, alongside the start of the validation process for the Evaluation Roadmap, which was required before work could officially begin. The detailed Fitness Check evaluation started after the Commission approved the Evaluation Roadmap in March 2016 with in particular the signature of the evaluation support study. Stakeholders were consulted on and involved in agreeing the methodology.

Due to the horizontal and specific nature of this Fitness Check, no modelling was done in the framework of this Fitness Check. Therefore, also no baseline scenario was developed and the analysis describes the current situation.

**Analysis of benefits**

An attempt was made to identify the qualitative benefits for each RO in the above-mentioned fiches40. This shows that all ROs aim to fulfil the compliance checking purpose and, in many cases, some of the additional purposes mentioned above. However, the purpose and benefits varies by reporting obligation. Some ROs (e.g. those relating to bathing water and air quality) also provide also important environmental information to the public. Other ROs help demonstrate that a particular industrial sector is innovative and environmentally friendly by publicly disseminating emission data of individual facilities (e.g. under the E-PRTR) or that some agricultural practices are more beneficial (less polluting) for the environment than others (e.g. under the Nitrates Directive).

Reported information is also essential for wider, cross-cutting and integrated environmental assessment such as the EEA's State-of-the-Environment report. The benefits of information stemming from individual pieces of legislation (e.g. air quality) are important but could be further enhanced if available in a more harmonised and interoperable way to allow for addressing cross-cutting issues.

At the same time, some ROs have been less beneficial than originally foreseen. In most such cases, steps are being taken to address this issue, either by repealing the obligation or by improving the quality and consistency of reporting.

The use of environmental reporting in compliance verification is also providing information and arguments for potential subsequent enforcement action. A study of 244 infringement cases concluded that the potential beneficial monetary value of compliance with EU law achieved through enforcement is very high. For example, improving the quality of bathing water and its impact on health and the economy (Bathing Water Directive). *"The benefits of improved bathing water quality were estimated to amount to EUR 97 million on average per case analysed, per year*"[[172]](#footnote-172). Similar figures were calculated for other Directives.

There are many other studies and assessments where the benefits of proper implementation of environmental legislation have been assessed and reporting play an important part. One illustrative example demonstrating that benefits far outweigh the costs comes from the area of air pollution. The EU Impact Assessment[[173]](#footnote-173) accompanying the legislative proposal assesses that full implementation of the EU proposed policy option results in:

* A reduction of total external costs of air pollution with a further €45bn (on the most conservative valuation) or ten times the compliance cost.
* Direct economic benefits of the policy proposal includes reduced labour productivity losses over the baseline of €2bn, reduced health care costs of €650m, reduced crop value losses of €270m, and reduced damage to the built environment of €140m.
* When productivity improvements are taken into account, the policy also results in around 110 thousand additional jobs.

An EEA study[[174]](#footnote-174) in area of industrial emissions revealed that in 2012, the aggregated cost of damage over the period 2008–2012 caused by emissions from the E-PRTR industrial facilities is estimated as being at least EUR 329 billion (and up to EUR 1 053 billion). A small number of industrial facilities are responsible for the majority of the damage costs — fifty per cent of the total damage cost occurs as a result of emissions from just 147 (or 1 %) of the 14 325 facilities. The reporting under the E-PRTR and the EU Industrial emissions legislation are instrumental to reducing these damage costs.

Whilst these figures cannot be fully attributed as benefits of reporting, many such benefits would not have materialised without high quality reporting. At the same time, better reporting can avoid time- and resource-consuming legal proceedings by allowing swifter and targeted intervention both at national and EU level.

The potential benefits from providing environmental information can be expected to be considerable as was analysed in the Impact Assessment for the Shared Environment Information System (SEIS)[[175]](#footnote-175). *"Since environmental data and information is of potential use to a great many players for many purposes, improving the mechanisms for collecting, exchanging and using the data can be expected to significantly increase the use that is made of such data, together with a significant reduction in cost for the users. There are also positive examples of such freely available data being successfully used on a commercial basis. Overall, use of data can be expected to extend from small thematic or geographic communities of policy makers to include policy makers in other themes or sectors, informed public and researchers. This will render monitoring investments made by Member States considerably more cost-effective. Improvements in the access and interoperability of data systems will also reduce the need for reporting requirements, leading to a streamlining of data requirements and data flows, including the phasing out or repeal of outdated or redundant reporting requirements."* In quantitative terms, the UK Environment Agency for England and Wales estimated the benefits of improved environmental management and in reducing environmental risk through making environmental spatial data available and re-useable by implementing the INSPIRE Directive (which would be a pre-requisite for developing SEIS) to be equivalent to £5.1 million/year[[176]](#footnote-176).

It is worth putting the overall costs into perspective. Compared to the huge benefits resulting from successful environmental protection policy, the costs of reporting obligations are marginal. Total national environmental protection expenditures in the EU – not all of which relate to legislation, let alone EU legislation was EUR 297 billion in 2014[[177]](#footnote-177). It is impossible to say with any level of precision how much is currently spent on environmentally related compliance assurance (including monitoring, inspections, enforcement and permitting costs), but it could be a figure in the range of half to a billion Euros per annum.

## *Annex 6:* Overview of results of the Fitness Check evaluation in relation to the legal text

| **Ref. no.** | **Environmental legislation** | **Identified specific issues** | **Comments** |
| --- | --- | --- | --- |
| 3 | Environmental Noise Directive (END) | - adjustment of timetable for preparation of noise maps | Evaluation completed SWD(2016) 454 |
| 7 | Marine Strategy Framework Directive (MSFD) | - alignment of timing/frequency of reporting under Articles 8, 9 and 10 with Habitats Directive cycle  - link of Article 11 reporting to Water Framework Directive |  |
| 8 | Drinking Water Directive (DWD) | - adaptation of timing/frequency and delivery mechanism (public) | Evaluation completed SWD(2016) 428 and impact assessment under preparation |
| 17 | Urban Wastewater Treatment Directive (UWWD) | - alignment of timing/frequency with Water Framework Directive | Link to analytical methods and reporting cycles with the Sewage Sludge Directive (26) could also be addressed |
| 18 | Nitrates Directive (ND) | - alignment of timing/frequency with Water Framework Directive |  |
| 45 | INSPIRE Directive | - elimination of three annual reporting under Article 21.3 for strengthening annual monitoring (Art. 21.1) | Implementation report and evaluation completed (COM(2016) 478 and SWD(2016) 273) |

## *Annex 7:* Best Practices - Findings of the evaluation which could be applied in other reporting areas

| **Ref. no.** | **Environmental legislation** | **Best practices issues** | **Comments** |
| --- | --- | --- | --- |
| 1 / 2 | Ambient Air Quality Directive (AAQD) | - good set of key indicators  - monitoring criteria improving comparability and quality  - near-real time ozone data  - interoperability and potential for harvesting of data (INSPIRE pilot) | [Link to more information](http://ec.europa.eu/environment/air/quality/legislation/public_info.htm) |
| 4 / 6 / 7 | Water Framework Directive (WFD) / Floods Directive (FD) / Marine Strategy Framework Directive (MSFD | - communication of purpose and use of reported information  - significant reduction of textual information  - prior definition of reporting products and scoreboards to monitor progress  - streamlining, coherence and relevance linked to FD (6) and MSFD (7)  - overall improvement of reporting process (including quality assurance) through WISE | Many improvements were introduced in the second reporting cycle under the WFD (2016) and the evaluation of these improvements is still ongoing |
| 9 | Bathing Water Directive (BWD) | - good set of key indicators  - monitoring criteria improving comparability and quality  - timely reporting and quickest publication (less than six months)  - good active dissemination, high public interest  - link between EU information (map viewer) and national information (beach profiles) | [Link to more information](http://ec.europa.eu/environment/water/water-bathing/index_en.html) |
| 10 / 11 | Habitats Directive (HD) / Birds Directive (BD) | - good set of key indicators  - streamlining and coherence between habitats and birds directive  - good active dissemination including scoreboards to monitor progress  - integration into wider data, information and knowledge management platform (BISE)  - good re-use of Natura2000 data | [Link to more information](http://ec.europa.eu/environment/nature/knowledge/index_en.htm) (overview) including, [Natura 2000 viewer](http://natura2000.eea.europa.eu/), [Conservation status online tool](http://bd.eionet.europa.eu/activities/Reporting/Article_17/Reports_2007/index_html) and [BISE](http://biodiversity.europa.eu/) |
| 13 | European Pollutant Release and Transfer Register (E-PRTR) | - many examples of good practices at national level creating efficiency gains (e.g. through efficient data management)  - good active dissemination  - streamlining and coherence with industrial emissions ongoing | [Link to more information](http://prtr.ec.europa.eu/#/home) |
| 15 | Sulphur Directive (SD) | - new information system used for reporting | Link to more information |
| 17 | Urban Wastewater Treatment Directive (UWWD) | - good set of key indicators (also including investment information, Art. 17 reporting)  - interoperability and potential for harvesting of data (INSPIRE pilot)  - link between EU information (map viewer) and national information (beach profiles) (SIIF pilot) | [Link to more information](http://uwwtd.oieau.fr/) |

## *Annex 8:* Overview of findings of the Fitness Check evaluation per legislation

This table presents the findings of the evaluation for issues which could be subject to further streamlining. Where indicated, the issues are related to specific reporting obligations and not necessarily to all reporting under the legislation. More details can be found in the inventory for the following five criteria used to systematically record potential issues:

(1) Usefulness? This reflects the identification of the potential to increase the usefulness of a particular reporting obligation either to the Commission, or of the subsequent report by the Commission. It is used as a simple indication and relates to preliminary findings that the reporting could be streamlined to deliver more useful information, which could result in lower costs and/or higher benefits. (Source: inventory: columns G2 and G5)

(2) Indicators? This reflects a screening of where no or only some indicators "X" have been identified or where data exist to create indicators "(X)" but are not currently used as key indicators. As a result, key indicators in line with the Better Regulation Guidelines could be developed embedding information reported under existing legislation, which would result in lower costs and/or higher benefits. (Source: inventory: tab "key performance indicators")

(3) Textual? This reflects whether the reporting is mainly relying on textual information. Where all of the reporting obligations for a piece of legislation are mainly textual, they are marked as "X" and where only some of the reporting obligations are mainly textual they are marked as "(X)". Whilst scoring is on whether it is mainly textual, many have multiple elements. As a result, the textual information could be potentially reduced or simplified which would result in lower costs and/or higher benefits. (Source: inventory: column C1)

(4) Coherence? This reflects the findings in relation to external coherence (i.e. the relationship of the reporting under that legislation with other legislation or policies) mainly on the basis of the stakeholder feedback and other available sources. Where coherence could be improved, this would result in lower costs and/or higher benefits. (Source: table 9.4 in support study and other evidence presented in the support study)

(5) Delays/process? This reflects the analysis of the time delays between the reporting deadline and the publication of the Commission report. All delays above one year (360 days) are included as "(X)" and all delays above 500 days as "X". It is used as a simple indication in relation to the process efficiency. As a result, efficiency gains could be introduced to reduce delays. (Source: inventory: column D8 and tab "statistics – delays")

(6) Format? This reflects whether there is potential for electronic reporting or for format requirements to be put in place. (Source: the inventory: columns E3 and E6)

This summarised overview presents the findings of the work undertaken for this evaluation: in particular, as reported in the inventory of the support study. In many cases, only specific reporting obligations (not all) under a particular piece of legislation are affected. More detailed analysis and consultations of experts in each specific area will be needed in order to validate or clarify the issues and propose appropriate solutions.

As well as the specific issues identified in the Annex, there are horizontal streamlining efforts that could be of benefit to these pieces of legislation: for example, additional use of EEA reporting infrastructure, improved application of INSPIRE principles, etc.

| **Ref. no.** | **Environmental legislation** | **(1)**  **Usefulness?** | **(2)**  **Indicators?** | **(3)**  **Textual?** | **(4)**  **Coherence?** | **(5)**  **Delays/ process?** | **(6)**  **Format?** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Air Quality Directive (AQD) |  |  | (X) |  | (X) | X | Some other issues identified  (e.g. improvement of active dissemination) Evaluation provisionally scheduled |
| 2 | Ambient Air Directive (As, Cd, Hg, Ni, PAH) |  |  |  |  | (X) |  | (see above) |
| 3 | Environmental Noise Directive (END) |  | X | (X) | X | X |  | Evaluation completed. Some other issues identified |
| 4 | Water Framework Directive (WFD) |  | (X) | (X) | X | X |  | Evaluation provisionally scheduled |
| 5 | Environmental Quality Standards Directive (EQS) |  | (X) | (X) | X |  | X | Evaluation provisionally scheduled |
| 6 | Floods Directive (FD) |  |  | (X) |  |  |  | Evaluation provisionally scheduled |
| 7 | Marine Strategy Framework Directive (MSFD) |  | (X) | (X) | X | (X) |  | Some other issues identified  Evaluation provisionally scheduled |
| 8 | Drinking Water Directive (DWD) |  | (X) |  | X | X |  | Evaluation completed  Some other issues identified  (e.g. improvement of data quality) |
| 9 | Bathing Water Directive (BWD) |  |  |  |  |  |  |  |
| 10 | Habitats Directive (HD) | X  (only COM report on derogations-Article 16) |  | (X) (only compensation measures) | X | X |  | Evaluation completed (see SWD(2016) 472), other issues identified  (e.g. improvement of data quality). The Commission composite report on derogations has been abolished in the meantime. |
| 11 | Birds Directive (BD) | X  (only COM report on derogations-Article 9) |  | (X) (only compensation measures) |  | X |  | Evaluation completed (see SWD(2016) 472), other issues identified (e.g. improvement of data quality).  The Commission composite report on derogations has been abolished in the meantime. |
| 12 | Invasive Alien Species Regulation (IAS) |  |  | (X) |  |  | X | New reporting |
| 13 | European Pollutant Release and Transfer Register (E-PRTR) |  |  |  | X | X |  | Evaluation ongoing  Other issues identified |
| 14 | Industrial Emissions Directive (IED) |  | (X) | (X) | X |  |  | Some other issues identified. Ongoing streamlining of reporting of data and compliance information regarding both E-PRTR and IED. |
| 15 | Sulphur Directive (SD) |  |  | X |  |  |  | New reporting system facilitates implementation and reporting for MS |
| 16 | National Emission Ceilings Directive (NEC) |  | (X) |  | X |  |  | Indicators and coherence with greenhouse gases (GHG) reporting were updated in recent revision of Directive (published as Directive 2016/2284/EU) |
| 17 | Urban Wastewater Treatment Directive (UWWD) | X  (only disposal- Article 16) | (X) | (X) | X | X |  | Evaluation provisionally scheduled |
| 18 | Nitrates Directive (ND) |  | (X) | (X) | X | (X) | X | ND data could be integrated by EEA in the Environmental Data Centre website on Water (MS already report Art. 10 information via EIONET, with the format requirements clearly defined) |
| 19 | EMAS Regulation |  | X | X |  |  |  | Evaluation ongoing, possible action identified |
| 20 | Landfill Directive | X  (likely to be amended) | X | X |  | X | X | Commission proposals includes streamlining of reporting (COM(2015) 594)  Once revised EU waste legislation is adopted, an assessment of the coherence of EU Waste Statistics Regulation with reporting obligations is needed |
| 21 | Extractive (Mining) Waste Directive | X (only implementation report-Article 18) | (X) | X |  | X | X | Some other issues identified (see report COM(2016) 553) which could result in amendment of Commission Decision 2009/358/EC in order to ensure better comparability and relevance of reported information as well as more active dissemination |
| 22 | Volatile Organic Compound Directive (VOC) | X (only implementation report-Article 9) | X | X |  |  |  | COM proposal on the repeal of Standardised Reporting Directive (COM(2016) 789) eliminates further reporting under Article 9 of that Directive. |
| 23 | VOC-Stage II Directive |  | X | X |  |  |  | Evaluation ongoing. Only reporting by Member States is on penalties. |
| 24 | Seveso III Directive |  | (X) | X | X |  |  | Work ongoing to enhance coherence with reporting under E-PRTR and IED |
| 25 | Shale Gas Recommendation |  | X | X |  |  |  | Proposals for action already made in recent report (COM(2016) 794) |
| 26 | Sewage Sludge Directive | X | (X) | X |  | (X) | X |  |
| 27 | Waste Framework Directive (WFD) | X  (likely to be amended) | (X) | (X) | X |  | X | Commission proposals includes streamlining of reporting (COM(2015) 595)  Once revised EU waste legislation is adopted, an assessment of the coherence of EU Waste Statistics Regulation with reporting obligations is needed |
| 28 | Eco-label Regulation |  | X | X |  |  |  | Evaluation ongoing |
| 29 | Waste Shipment Regulation | X  (only for Article 6) | X | X | X | X | X | Evaluation planned (see Roadmap)[[178]](#footnote-178) |
| 30 | Batteries Directive | X  (likely to be amended) | (X) | (X) |  |  | X | Evaluation ongoing, and some streamlining activities ongoing (see Commission proposals (COM(2015) 593 and section 3.2 of SWD).  Once revised EU waste legislation is adopted, an assessment of the coherence of EU Waste Statistics Regulation with reporting obligations is needed. |
| 31 | Packaging Waste Directive | X  (likely to be amended) | (X) | X |  | X |  | Some streamlining activities ongoing (see Commission proposals (COM(2015) 596 and section 3.2 of SWD).  Once revised EU waste legislation is adopted, an assessment of the coherence of EU Waste Statistics Regulation with reporting obligations is needed. |
| 32 | PCB Directive |  | X | X |  |  |  | No more reporting envisaged |
| 33 | End-of life Vehicles Directive (ELV) | X  (likely to be amended) | (X) | X |  |  | X | Some streamlining activities ongoing (see Commission proposals (COM(2015) 593 and section 3.2 of SWD).  Once revised EU waste legislation is adopted, an assessment of the coherence of EU Waste Statistics Regulation with reporting obligations is needed. |
| 34 | WEEE Directive | X  (likely to be amended) | (X) | (X) | X |  | X | Some streamlining activities ongoing (see Commission proposals (COM(2015) 593 and section 3.2 of SWD).  Once revised EU waste legislation is adopted, an assessment of the coherence of EU Waste Statistics Regulation with reporting obligations is needed. |
| 35 | RoHS Directive | X | X | X |  |  | X | No more reporting envisaged |
| 36 | Mercury Regulation |  | (X) | (X) | X |  | X | Regulation revised in 2017 – new reporting system to be established through implementing acts |
| 37 | Paints Directive |  | X | X |  | X |  |  |
| 38 | POPs Regulation |  | (X) | (X) | X | (X) | X |  |
| 39 | REACH Regulation |  | X | X |  | X |  | Evaluation ongoing |
| 40 | CLP Regulation |  | X | (X) |  |  | X | Evaluation ongoing |
| 41 | PIC Regulation |  | (X) | (X) |  | (X) |  |  |
| 42 | ELD Directive | X | X | X |  |  | X | No more reporting envisaged |
| 43 | EIA Directive |  | X | X |  |  | X | New reporting |
| 44 | SEA Directive |  | X | X |  |  | X | Evaluation provisionally scheduled |
| 45 | INSPIRE Directive |  | (X) | (X) |  | X |  | Evaluation completed.  Other issues identified which could result in amending Commission Decision 2009/442/EC. |
| 46 | Access to Information Directive (A2I) | X | X | X |  |  |  | No more reporting envisaged |
| 47 | Wildlife Trade Regulation (CITES) |  | (X) | X |  | (X) |  | A new reporting format has been agreed within the context of the Convention on International trade in Endangered Species (CITES), which will start to apply from 2017 |
| 48 | Whales Products Directive |  | X | X |  |  |  |  |
| 49 | Seals Products Directive I |  | X |  |  |  |  |  |
| 50 | ABS Regulation |  | X | X |  |  | X | No reporting exercise so far - recommendations from the evaluation will be taken into account as the reporting format and process are being developed |
| 51 | FLEGT Regulation |  | (X) | (X) |  |  |  | First reports will be submitted in 2017 on the basis of a new format agreed with the Member States in 2016 |
| 52 | Timber Regulation |  | X | X |  |  | X | For the next exercise (2017), minor updates were included in the reporting format as agreed with the Member States and based on the experience from the previous exercise |
| 53 | Ship Recycling Regulation |  | X | X |  |  | X |  |
| 54 | Medium Combustion Plants Directive (MCP) |  | (X) | (X) |  |  |  | Reporting set out in the new Directive is limited to mainly two exercises at key stages of implementation |
| 55 | Seals Products Directive II |  | X | X |  |  |  |  |
| 56 | Asbestos Directive | X | X | X |  |  | X | COM proposal on the repeal of Standardised Reporting Directive (COM(2016) 789) eliminates further reporting under that Directive |
| 57 | EEA Regulation |  | X | X |  |  |  |  |
| 58 | Animal Testing Directive |  | (X) | (X) |  |  |  |  |

1. Smart Regulation in the European Union (COM(2010) 543 final; 8 October 2010) [↑](#footnote-ref-1)
2. "Better regulation for better results - An EU agenda (COM(2015) 215 final; 19 May 2015) [↑](#footnote-ref-2)
3. Commission Work Programme 2016 - No time for business as usual - (COM(2015) 610 final; 27 October 2015) [↑](#footnote-ref-3)
4. See Fitness Check Roadmap available at: <http://ec.europa.eu/smart-regulation/roadmaps/docs/2017_env_002_monitoring_and_reporting_obligations_en.pdf> [↑](#footnote-ref-4)
5. Commission Work Programme 2017 - Delivering a Europe that protects, empowers and defends (COM(2016) 710 final of 25 October 2016) [↑](#footnote-ref-5)
6. See SWD(2016) 188 "Towards a Fitness Check of EU environmental monitoring and reporting: to ensure effective monitoring, more transparency and focused reporting of EU environment policy" [↑](#footnote-ref-6)
7. "Proposal for a Regulation of the European Parliament and of the Council on the Governance of the Energy Union" COM(2016) 759 [↑](#footnote-ref-7)
8. In most cases, such environmental monitoring obligations are laid down in separate articles to reporting and would continue to apply even if reporting would no longer take place since they have a wider benefit. At the same time, many reporting obligations require the submission of aggregated observation data stemming from these environmental monitoring obligations. [↑](#footnote-ref-8)
9. For example, Article 8 of the Water Framework Directive (2000/60/EC) requires Member States to establish a monitoring programme in order to fulfil the objectives of that Directive. Reporting of these monitoring programmes is regulated in Article 15. Hence, this Fitness Check only evaluated the effects resulting from Article 15, not Article 8, since the Member States would still need to carry out monitoring even if the reporting obligations would be repealed. [↑](#footnote-ref-9)
10. <http://ec.europa.eu/smart-regulation/roadmaps/docs/2017_env_005_reach_refit_en.pdf> [↑](#footnote-ref-10)
11. This type of monitoring is described in the Section V of the Better Regulation Guidelines   
     (SWD(2015) 111) [↑](#footnote-ref-11)
12. Council Directive 91/692/EEC of 23 December 1991 standardizing and rationalizing reports on the implementation of certain Directives relating to the environment (OJ L 377, 31/12/1991, p. 48–54) [↑](#footnote-ref-12)
13. <https://www.eionet.europa.eu/reportnet> [↑](#footnote-ref-13)
14. Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) (for more details, see <http://inspire.ec.europa.eu/>) [↑](#footnote-ref-14)
15. COM(2015) 614 and COM(2015) 595 [↑](#footnote-ref-15)
16. <http://uwwtd.oieau.fr/> and <https://github.com/OIEau/uwwtd> [↑](#footnote-ref-16)
17. SWD(2015) 111 [↑](#footnote-ref-17)
18. See <http://ec.europa.eu/smart-regulation/roadmaps/docs/2017_env_002_monitoring_and_reporting_obligations_en.pdf> [↑](#footnote-ref-18)
19. [Published online](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN) [↑](#footnote-ref-19)
20. <http://rod.eionet.europa.eu/> [↑](#footnote-ref-20)
21. <http://ec.europa.eu/environment/legal/reporting/workshops_en.htm> [↑](#footnote-ref-21)
22. <http://www.ieep.eu/assets/2154/MiW_Drafting_principles_on_environmental_reporting_-_version_adopted_by_project_team_2016-11-22.pdf> [↑](#footnote-ref-22)
23. Committee of the Regions session of 7 April 2016, document CDR 5660/2015   
     ([http://cor.europa.eu/en/activities/opinions/pages/opinion-factsheet.aspx?OpinionNumber=CDR 5660/2015](http://cor.europa.eu/en/activities/opinions/pages/opinion-factsheet.aspx?OpinionNumber=CDR%205660/2015)) [↑](#footnote-ref-23)
24. See: <http://ec.europa.eu/smart-regulation/guidelines/docs/br_toolbox_en.pdf> [↑](#footnote-ref-24)
25. See section 6.2 for details on the analysis of costs and benefits [↑](#footnote-ref-25)
26. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01- 17-202-EN-N – EN) [↑](#footnote-ref-26)
27. <http://rod.eionet.europa.eu/> [↑](#footnote-ref-27)
28. <http://ec.europa.eu/environment/legal/reporting/workshops_en.htm> [↑](#footnote-ref-28)
29. Directive 2002/49/EC relating to the assessment and management of environmental noise [↑](#footnote-ref-29)
30. Directive 94/62/EC on packaging and packaging waste [↑](#footnote-ref-30)
31. Council Directive 86/278/EEC on the protection of the soil, when sewage sludge is used in agriculture [↑](#footnote-ref-31)
32. Reference: inventory, Annex 1 of [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) [↑](#footnote-ref-32)
33. ROD is the EEA's reporting obligations database, which records the environmental reporting obligations that countries have towards international organisations: <http://rod.eionet.europa.eu/> [↑](#footnote-ref-33)
34. Reference: inventory, Annex 1 of [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) [↑](#footnote-ref-34)
35. For more information on the DPSIR framework please visit the EEA’s page at   
     <http://ia2dec.pbe.eea.europa.eu/knowledge_base/Frameworks/doc101182> [↑](#footnote-ref-35)
36. Reference: inventory, Annex 1 of [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) [↑](#footnote-ref-36)
37. Reference: inventory, Annex 1 of [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) [↑](#footnote-ref-37)
38. Reference: inventory, Annex 1 of [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) [↑](#footnote-ref-38)
39. Reference: inventory, Annex 1 of [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) [↑](#footnote-ref-39)
40. Annex 3 of [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) [↑](#footnote-ref-40)
41. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN) [↑](#footnote-ref-41)
42. SWD(2016) 396 and 397 (<https://ec.europa.eu/energy/en/news/commission-proposes-new-rules-consumer-centred-clean-energy-transition>) [↑](#footnote-ref-42)
43. These estimated costs for the EEA are an average for the years 2014-2016 and include outsourcing (through the European Topic Centres) as well as some staff costs. However, a number of assumptions have been made and these costs can be regarded being at the low end. [↑](#footnote-ref-43)
44. These estimated figures for DG Environment are an average for the years 2014-2016 and only cover outsourcing, not staff costs [↑](#footnote-ref-44)
45. EUROSTAT (2016) (<http://ec.europa.eu/eurostat/documents/3217494/7731525/KS-DK-16-001-EN-N.pdf/cc2b4de7-146c-4254-9521-dcbd6e6fafa6>) [↑](#footnote-ref-45)
46. Internal analysis undertaken of compliance assurance in Member States. This analysis is approximate, based on data gathering using publications from competent authorities, Member State reports and a literature search. [↑](#footnote-ref-46)
47. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN) [↑](#footnote-ref-47)
48. There are specific conditions and derogations to this objective, for details please refer to Directive   
     2008/56/EC, in particular Articles 9 and 14 [↑](#footnote-ref-48)
49. COM(2014) 97 [↑](#footnote-ref-49)
50. Commission Decision on criteria and methodological standards repealing Commission Decision   
     2010/477/EU [↑](#footnote-ref-50)
51. See Impact Assessment ([SEC(2007) 1682](http://ec.europa.eu/environment/archives/air/stationary/ippc/pdf/recast/ia_sum_en.pdf)) [↑](#footnote-ref-51)
52. Example: <http://ec.europa.eu/environment/iczm/nat_reports.htm> [↑](#footnote-ref-52)
53. <http://ec.europa.eu/environment/water/water-framework/impl_reports.htm#fourth> [↑](#footnote-ref-53)
54. <http://ec.europa.eu/environment/waste/framework/support_implementation_1st_phase.htm> [↑](#footnote-ref-54)
55. COM(2016) 316 and COM(2017) 63 (<http://ec.europa.eu/environment/eir/index_en.htm>) [↑](#footnote-ref-55)
56. DG Environment has set up an internal Focus Group on Reporting and has organised some workshops   
     to this end already. [↑](#footnote-ref-56)
57. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN) [↑](#footnote-ref-57)
58. Source: EEA (2015). Eionet priority data flows. May 2014–April 2015. ISSN 1830-770 [↑](#footnote-ref-58)
59. SWD(2013) 18 "EU Shared Environmental Information System - Implementation Outlook" [↑](#footnote-ref-59)
60. Overall, there were around 6300 reports from EU Member States in regular environment reporting areas. This means that around 1.4% of all reports ended up as EU pilots and only 0.16% resulted in infringements. [↑](#footnote-ref-60)
61. Annex 5 to [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N –   
     EN) (<http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf>) [↑](#footnote-ref-61)
62. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-62)
63. COM(2015) 595 (<http://ec.europa.eu/environment/circular-economy/index_en.htm>) [↑](#footnote-ref-63)
64. <http://ec.europa.eu/environment/nature/natura2000/barometer/index_en.htm> [↑](#footnote-ref-64)
65. Copernicus is the European Programme for the establishment of a European capacity for Earth   
     Observation (<http://www.copernicus.eu/>) [↑](#footnote-ref-65)
66. See [http://ec.europa.eu/environment/integration/research/newsalert/pdf/IR9\_en.pdf](http://ec.europa.eu/environment/integration/research/newsalert/pdf/IR9_en.pdfo) or   
     <http://ecsa.citizen-science.net/> [↑](#footnote-ref-66)
67. See Article 1 of Regulation (EEC) No 1210/90 as amended by Regulation (EC) No 401/2009) [↑](#footnote-ref-67)
68. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-68)
69. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-69)
70. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-70)
71. European Chemicals Agency (ECHA) is the driving force among regulatory authorities in implementing the EU chemicals legislation [↑](#footnote-ref-71)
72. SEIS COMMUNICATION (COM(2008) 46) – on a Shared Environmental Information System [↑](#footnote-ref-72)
73. The Structured Implementation and Information Frameworks (SIIF) was piloted for the Urban Wastewater Treatment Directive (see <uwwtd.oieau.org>) [↑](#footnote-ref-73)
74. <http://ec.europa.eu/environment/aarhus/pdf/siif_report.pdf>   
    It found that "*each data provider should review and simplify its arrangements for providing public access to spatial information and make them compliant with INSPIRE as soon as possible. It is suggested that view services providing public access to nature data and the nature data themselves are offered free of charge since they are collected as part of environmental reporting obligations. Most other view services are preferably free as well, while access to services can only be limited under well-specified conditions. Data providers should define the use conditions of each data set and services by making use of the two INSPIRE model licenses or other (national) model licenses.*" [↑](#footnote-ref-74)
75. SWD(2015) 111 [↑](#footnote-ref-75)
76. <http://ec.europa.eu/smart-regulation/impact/iab/board_reports_en.htm> [↑](#footnote-ref-76)
77. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-77)
78. Article 21.2(e) of Directive 2007/2/EC [↑](#footnote-ref-78)
79. See COM(2016) 478 and SWD(2016) 273 [↑](#footnote-ref-79)
80. COM(2016) 316 [↑](#footnote-ref-80)
81. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-81)
82. COM(2016) 478 and SWD(2016) 273 [↑](#footnote-ref-82)
83. [Summary Report of WFD WG DIS](Summary%20Report%20of%20WFD%20WG%20DIS) of October 2016 [↑](#footnote-ref-83)
84. "Towards a Fitness Check of EU environmental monitoring and reporting: to ensure effective monitoring, more transparency and focused reporting of EU environment policy" (SWD(2016) 188) [↑](#footnote-ref-84)
85. Commission Implementing Decision 2011/850/EU and <http://www.eionet.europa.eu/aqportal> [↑](#footnote-ref-85)
86. I.e. in line with the specifications set by Directive 2007/2/EC [↑](#footnote-ref-86)
87. Source: European Environment Agency (2016) European Bathing Water Quality in 2015. <http://www.eea.europa.eu//publications/european-bathing-water-quality-2015> [↑](#footnote-ref-87)
88. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN), see section 6.4 [↑](#footnote-ref-88)
89. E.g. the Irish LEMA programme (Licensing, Enforcement and Monitoring Application) or their current "Common View of Authorisations" project (<http://www.epa.ie>) [↑](#footnote-ref-89)
90. [www.helcom.fi](http://www.helcom.fi) [↑](#footnote-ref-90)
91. <http://www.environment.scotland.gov.uk/> (it was co-financed by the LIFE+ Programme) [↑](#footnote-ref-91)
92. <http://inspire.ec.europa.eu/reports/country_reports_mr2012/BG-INSPIRE-Report-2013_ENV-2013-00446-00-00-EN-TRA-00.pdf> [↑](#footnote-ref-92)
93. For example, for the Nitrates Directive, the time elapsed between when MSs are supposed to report and when the EC reports is 461 days, but in practice the days between the latest data delivery from MS and the publication of the EC report is 113 days. [↑](#footnote-ref-93)
94. See COM(2016) 478 and SWD(2016) 273 [↑](#footnote-ref-94)
95. For more information: LEMA: <http://www.epa.ie> [↑](#footnote-ref-95)
96. See also SWD(2016) 188 [↑](#footnote-ref-96)
97. E.g. on urban wastewater where Member States report every two years (under Article 15) but no explicit requirement exists for the Commission to publish a report [↑](#footnote-ref-97)
98. SWD(2016) 428 [↑](#footnote-ref-98)
99. These have to be reported under the Marine Strategy Framework Directive in 2018 (and every six years thereafter) and under Birds and Habitats Directives in 2019 (and every six years thereafter). [↑](#footnote-ref-99)
100. ICF, IEEP and Denkstatt (2017): Study on "Support to the Fitness Check of monitoring and reporting obligations arising from EU environmental legislation", see p. 117 (version 19 December 2016) [↑](#footnote-ref-100)
101. <http://ec.europa.eu/environment/legal/reporting/workshops_en.htm> [↑](#footnote-ref-101)
102. [2003/4/EC](http://www.eionet.europa.eu/seis/principles) Article 7 [↑](#footnote-ref-102)
103. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN,   
      see section 6.7. [↑](#footnote-ref-103)
104. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-104)
105. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-105)
106. [http://cor.europa.eu/en/activities/opinions/pages/opinion-factsheet.aspx?OpinionNumber=CDR 5660/2015](http://cor.europa.eu/en/activities/opinions/pages/opinion-factsheet.aspx?OpinionNumber=CDR%205660/2015) [↑](#footnote-ref-106)
107. Farmer, et al. (2015) Study to analyse differences in the costs of implementing EU policy. A report to the European Commission, DG Environment [↑](#footnote-ref-107)
108. In particular, the INSPIRE Directive (2007/2/EC), the Communication on a Shared Environment Information System (COM(2008) 46), the Better Regulation Guidelines (SWD(2015) 111) and, more recently, the eGovernment Action Plan (COM(2016) 179) [↑](#footnote-ref-108)
109. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-109)
110. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN),   
      see section 7.2 [↑](#footnote-ref-110)
111. Defined in Commission Communication "Development of agri-environmental indicators for monitoring the integration of environmental concerns into the common agricultural policy" COM(2006) 508 [↑](#footnote-ref-111)
112. For detailed information see, in particular, Commission Implementing Regulation No 834/2014 [↑](#footnote-ref-112)
113. [Summary report of the First MIW Workshop](http://www.ieep.eu/assets/1975/Minutes_of_the_MiW_Nov_2015_Workshop_on_Environmental_Monitoring_and_Reporting.pdf) [↑](#footnote-ref-113)
114. COM(2015) 294 [↑](#footnote-ref-114)
115. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN),   
      see section 7.4 [↑](#footnote-ref-115)
116. [Directive 2016/2284/EU](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.344.01.0001.01.ENG&toc=OJ:L:2016:344:TOC) on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC [↑](#footnote-ref-116)
117. Directive 2003/4/EC and in particular Article 7 thereof [↑](#footnote-ref-117)
118. Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Union (INSPIRE) [↑](#footnote-ref-118)
119. [COM(2016) 478 and SWD(2016) 273](http://inspire.ec.europa.eu/news/commissions-inspire-report-and-refit-evaluation-published) [↑](#footnote-ref-119)
120. SWD(2016) 243 [↑](#footnote-ref-120)
121. E.g. the [Information Platform for Chemical Monitoring](https://ipchem.jrc.ec.europa.eu/) using basic INSPIRE features to access a multitude of data sources. For other examples, see footnote 28. [↑](#footnote-ref-121)
122. [Geodateninfrastruktur Deutschland: INSPIRE success story — Implementing e-reporting of air quality based on INSPIRE at national level](https://ies-svn.jrc.ec.europa.eu/projects/mig-inspire/wiki/National_implementation_webinars) [↑](#footnote-ref-122)
123. [The German Marine Data Infrastructure and the Marine Strategy Framework Directive](https://www.google.be/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=2&ved=0CCYQFjAB&url=https%3A%2F%2Fies-svn.jrc.ec.europa.eu%2Fattachments%2Fdownload%2F1025%2FJMelles_MDI-DE_and_MSFD.pdf&ei=Ba9QVZXlNoqOsAHahoGoBw&usg=AFQjCNFGKIISI1Ftukrj87NhTD8RArYC3Q&sig2=-OnK3BTpBbxBTCnveizuug&bvm=bv.92885102,d.bGg), 2015 [↑](#footnote-ref-123)
124. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-124)
125. Although this could be overcome by an authorisation stamp as proposed by some experts (see page 54) [↑](#footnote-ref-125)
126. E.g. "Tools for Innovative Monitoring" (TIM) developed by the Joint Research Centre [↑](#footnote-ref-126)
127. See "Drafting principles for smarter environmental reporting" by the Make It Work initiative (<http://www.ieep.eu/work-areas/environmental-governance/better-regulation/make-it-work/subjects/2015/08/monitoring-and-reporting>) [↑](#footnote-ref-127)
128. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN),   
      see Annex 5 [↑](#footnote-ref-128)
129. [MIW Drafting principles on reporting](http://www.ieep.eu/work-areas/environmental-governance/better-regulation/make-it-work/subjects/2015/08/monitoring-and-reporting) [↑](#footnote-ref-129)
130. See chapter V, p. 42 of SWD(2016) 111 [↑](#footnote-ref-130)
131. See Box 1, p. 45 of SWD(2016) 111 [↑](#footnote-ref-131)
132. [MIW Drafting principles on reporting](http://www.ieep.eu/work-areas/environmental-governance/better-regulation/make-it-work/subjects/2015/08/monitoring-and-reporting) [↑](#footnote-ref-132)
133. SWD(2016) 0273 final [↑](#footnote-ref-133)
134. [Geodateninfrastruktur Deutschland: INSPIRE success story — Implementing e-reporting of air quality based on INSPIRE at national level](https://ies-svn.jrc.ec.europa.eu/projects/mig-inspire/wiki/National_implementation_webinars) [↑](#footnote-ref-134)
135. [The German Marine Data Infrastructure and the Marine Strategy Framework Directive](https://www.google.be/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=2&ved=0CCYQFjAB&url=https%3A%2F%2Fies-svn.jrc.ec.europa.eu%2Fattachments%2Fdownload%2F1025%2FJMelles_MDI-DE_and_MSFD.pdf&ei=Ba9QVZXlNoqOsAHahoGoBw&usg=AFQjCNFGKIISI1Ftukrj87NhTD8RArYC3Q&sig2=-OnK3BTpBbxBTCnveizuug&bvm=bv.92885102,d.bGg), 2015 [↑](#footnote-ref-135)
136. The Make it Work Project is a Member State led initiative which produced the document on "[Drafting principles for smarter environmental reporting](http://www.ieep.eu/work-areas/environmental-governance/better-regulation/make-it-work/subjects/2015/08/monitoring-and-reporting)" (22 November 2016) [↑](#footnote-ref-136)
137. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN), ICF using internal analysis [↑](#footnote-ref-137)
138. [ICF, IEEP and Denkstatt (2017)](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN), ICF analysis of internal raw survey data [↑](#footnote-ref-138)
139. <http://ec.europa.eu/environment/consultations/pdf/summary_reporting.pdf> [↑](#footnote-ref-139)
140. See <http://www.copernicus.eu> (in addition, the Group on Earth Observation (GEO) and the Global Earth Observation System of Systems (GEOSS) play an important role) [↑](#footnote-ref-140)
141. See SWD(2016) 188 and [Science for the Environment–In-depth report (Issue 9)](http://ec.europa.eu/environment/integration/research/newsalert/pdf/IR9_en.pdf): "Environmental Citizen Science" (December 2013) [↑](#footnote-ref-141)
142. http://eurobirdportal.org/ [↑](#footnote-ref-142)
143. Makechnie, C., Maskell. L. C., Norton, L. R. & Roy, D.B. (2011) The Role of ‘Big Society’ in monitoring the state of the natural environment. *Journal of Environmental Monitoring,* 13(10), 2687-2691 [↑](#footnote-ref-143)
144. Levrel, H., Fontaine, B., Henry, P-Y., Jiguet, F., Julilard, R., Kerbiriou, C. & Couvet, D. (2010) Balancing state and volunteer investment in biodiversity monitoring for the implementation of CBD indicators: A French example. *Ecological Economics*, 69(7), 1580-1586 [↑](#footnote-ref-144)
145. Nascimento, S., Rubio-Iglesias, J.M., Owen, R., Schade, S., Shanley, L. (forthcoming) 'Citizen Science for better policy formulation and implementation' In Citizen Science – Innovation in Open Science, Society and Policy, edited by A. Bonn, M. Haklay, S. Hecker, L. Robinson and A. Bowser, UCL Press, London [↑](#footnote-ref-145)
146. SWD(2016) 273 [↑](#footnote-ref-146)
147. A one-off reporting obligation is for instance a requirement to transmit the list of competent authorities dealing with the legislation whereas ad-hoc reporting is linked to the occurrence of a specific event. The frequencies of the recurring ROs range from annual to every six years in most cases. [↑](#footnote-ref-147)
148. Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Union [↑](#footnote-ref-148)
149. Annex II of COM(2015) 610 [↑](#footnote-ref-149)
150. Annex 1 of COM(2016) 710 [↑](#footnote-ref-150)
151. <http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm> [↑](#footnote-ref-151)
152. See Regulation (EEC) No 1210/90 of 7 May 1990 on the establishment of the European Environment Agency and the European environment information and observation network [↑](#footnote-ref-152)
153. Council Directive 91/692/EEC of 23 December 1991 standardizing and rationalizing reports on the implementation of certain Directives relating to the environment (OJ L 377, 31/12/1991, p. 48–54) [↑](#footnote-ref-153)
154. COM(2016) 789 [↑](#footnote-ref-154)
155. "Study on the Standardised Reporting Directive (91/692/EEC) repeal - background document" (<http://ec.europa.eu/environment/legal/reporting/pdf/Study_SRD_repeal_IEEP.pdf>) [↑](#footnote-ref-155)
156. <https://www.eionet.europa.eu/reportnet> [↑](#footnote-ref-156)
157. Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) (for more details, see <http://inspire.ec.europa.eu/>) [↑](#footnote-ref-157)
158. COM(2008) 46 of 1 February 2008 [↑](#footnote-ref-158)
159. SEC(2008) 111 [↑](#footnote-ref-159)
160. SWD(2013) 18 of 25 January 2013 [↑](#footnote-ref-160)
161. “Improving the delivery of benefits from EU environment measures: building confidence through better knowledge and responsiveness” (COM(2012) 95) [↑](#footnote-ref-161)
162. SIIF Principles: Focus on compliance; Be easy to access and focus on user's need; be up-to-date, accurate and comparable; be forward looking; decentralize, self-assess and qualify; share automatically; increase efficiency and reduce administrative burden; develop step-by-step. As an example, see the open source urban waste water website that has implemented these principles: <http://uwwtd.oieau.fr/> and will be replicated for the other 27 Member States. [↑](#footnote-ref-162)
163. Summary of the public consultation is published on the following web page:

     <http://ec.europa.eu/environment/legal/reporting/index_en.htm> [↑](#footnote-ref-163)
164. <http://ec.europa.eu/environment/legal/reporting/workshops_en.htm> [↑](#footnote-ref-164)
165. Via the functional email address [↑](#footnote-ref-165)
166. <http://ec.europa.eu/environment/consultations/reporting_en.htm> [↑](#footnote-ref-166)
167. OJ L 108, 25.4.2007, p. 1–14 [↑](#footnote-ref-167)
168. <http://ec.europa.eu/environment/legal/reporting/workshops_en.htm> [↑](#footnote-ref-168)
169. <http://www.ieep.eu/work-areas/environmental-governance/better-regulation/make-it-work/subjects/2015/08/monitoring-and-reporting> [↑](#footnote-ref-169)
170. [http://cor.europa.eu/en/activities/opinions/pages/opinion-factsheet.aspx?OpinionNumber=CDR 5660/2015](http://cor.europa.eu/en/activities/opinions/pages/opinion-factsheet.aspx?OpinionNumber=CDR%205660/2015) [↑](#footnote-ref-170)
171. [Published online](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm) (ISBN: 978-92-79-6626-5 / EUR - KH-01-17-202-EN-N – EN) [↑](#footnote-ref-171)
172. "Study to assess the benefits delivered through the enforcement of EU environmental legislation" (Final report of project 070203/2015/711789/ETU/ENV.D.2) [to be published shortly] [↑](#footnote-ref-172)
173. SWD(2013) 531 [↑](#footnote-ref-173)
174. "Costs of air pollution from European industrial facilities 2008-2012" (EEA Technical report No 20/2014, European Environment Agency) [↑](#footnote-ref-174)
175. SEC(2008) 111 [↑](#footnote-ref-175)
176. INSPIRE REFIT evaluation (SWD(2016) 173) [↑](#footnote-ref-176)
177. EUROSTAT (2016) (<http://ec.europa.eu/eurostat/documents/3217494/7731525/KS-DK-16-001-EN-N.pdf/cc2b4de7-146c-4254-9521-dcbd6e6fafa6>) [↑](#footnote-ref-177)
178. <http://ec.europa.eu/smart-regulation/roadmaps/docs/2017_env_026_waste_shipment_evaluation_env.pdf> [↑](#footnote-ref-178)