EUROPEAN
COMMISSION

Brussels, 19.9.2025
COM(2025) 508 final

REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

ON THE IMPLEMENTATION AND EFFICIENT FUNCTIONING OF DIRECTIVE 2012/18/EU ON THE CONTROL OF MAJOR-ACCIDENT HAZARDS INVOLVING DANGEROUS SUBSTANCES FOR THE PERIOD 2019-2022

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INTRODUCTION

Major accidents involving dangerous substances pose a significant threat to humans and the environment and often cause substantial economic losses and disrupt sustainable growth.

In this context, Directive 2012/18/EU[1] on the control of major accident hazards involving dangerous substances ('Seveso III Directive') sets out the relevant framework on risk management measures to prevent major accidents involving dangerous substances and ensure appropriate preparedness, prevention and response should such accidents nevertheless occur.

This Directive had to be transposed by Member States by 1 June 2015 and covers establishments where dangerous substances may be present (e.g. during processing or storage) in quantities exceeding certain thresholds. Depending on the number of dangerous substances present or likely to be present, establishments are categorised into lower and upper tiers, with the latter being subject to more stringent requirements.

The Seveso III Directive thus plays a key role in steering the highly industrialised EU towards zero pollution from industrial accidents, a commitment set out in the European Green Deal and the Zero Pollution Action Plan. Member States are to provide the Commission with a four-yearly report on implementation of the Seveso III Directive, in accordance with Article 21(2) thereof. The present report summarises Member States' submissions for the period 2019-2022, pursuant to Article 29[2], to provide information to the European Parliament and the Council on the current state of implementation of the Seveso III Directive.

It follows a first report which was published in 2021 and covered the period 2015-2018[3].

This report includes two parts:

- Part I summarises information provided by the Member States on the implementation of the Seveso III Directive. Section 1.1 covers information gathered through the reports submitted by Member States in line with Commission Implementing Decision 2014/896/EU[4], which focuses on earlier identified problem areas, supplemented with data on Seveso establishments extracted from the Seveso Plants Information Retrieval System (eSPIRS)[5] database. The aim of this summary is to assess the level of implementation of the Directive and to identify any shortcomings that need to be addressed. Section 1.2 supplements the previous section with data on accidents

([1]) Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC, OJ L 197, 24.7.2012, p. 1-37.

([2]) Data for United Kingdom were considered for the number of Seveso establishments reported in 2019, when the UK was still a Member State.

([3]) Report from the Commission to the European Parliament and the Council on the implementation and efficient functioning of Directive 2012/18/EU on the control of major accident hazards involving dangerous substances for the period 2015-2018, 29/09/2021, COM(2021) 599.

([4]) 2014/896/EU: Commission Implementing Decision of 10 December 2014 establishing the format for communicating information from Member States on the implementation of Directive 2012/18/EU of the European Parliament and of the Council on the control of major accident hazards involving dangerous substances (notified under document C(2014) 9335).

([5]) EUROPA - eSPIRS Dashboard - European Commission

obtained from an analysis of the database of major accidents (eMARS)[6], operated by the Major Accident Hazard Bureau (MAHB) of the Joint Research Centre of the European Commission.

- Part II outlines the anticipated actions the Commission will take to work with Member States to further improve the prevention of industrial accidents and preparedness, including by addressing shortcomings in implementation.

As in the case of previous assessments, the findings of this report are primarily based on the information contained in the reports submitted by Member States and on their detailed analysis[7] as well as on other relevant data extracted from eSPIRS and eMARS databases.

The 27 Member State reports covering the 2019-2022 reporting periods and previous reporting periods are publicly available[8].

1. SUMMARY OF THE MEMBER STATES' REPORTS

All 27 Member States submitted their quadrennial reports to the Commission for the period 2019-2022.

1.1. Statistics on establishments

1.1.1. Number of establishments

In 2022, a total of 11 059 establishments in the EU27 fell within the scope of the Seveso III Directive (cf. *Figure 1*). This is an increase of 168 additional establishments compared to the previous reporting period, with 10 836 establishments reported in the same 27 Member States in 2018[9]. During the reporting period, the Member States with the largest share of Seveso establishments were Germany (34%), France (11%), Italy (9%), Spain (8%) and Poland (4%).

The proportions of upper-tier establishments (UTE)[10] and lower-tier establishments (LTE)[11] were constant during the reporting period and since the previous reporting period, with 43% on average being UTE and 57% LTE.

([6]) Major Accident Reporting System (https://emars.jrc.ec.europa.eu).

([7]) Analysis and summary of Member States' reports on implementation of Directive 2012/18/EU on the control of major accident hazards involving dangerous substances according to the format established by Commission Implementing Decision 2014/896/EU

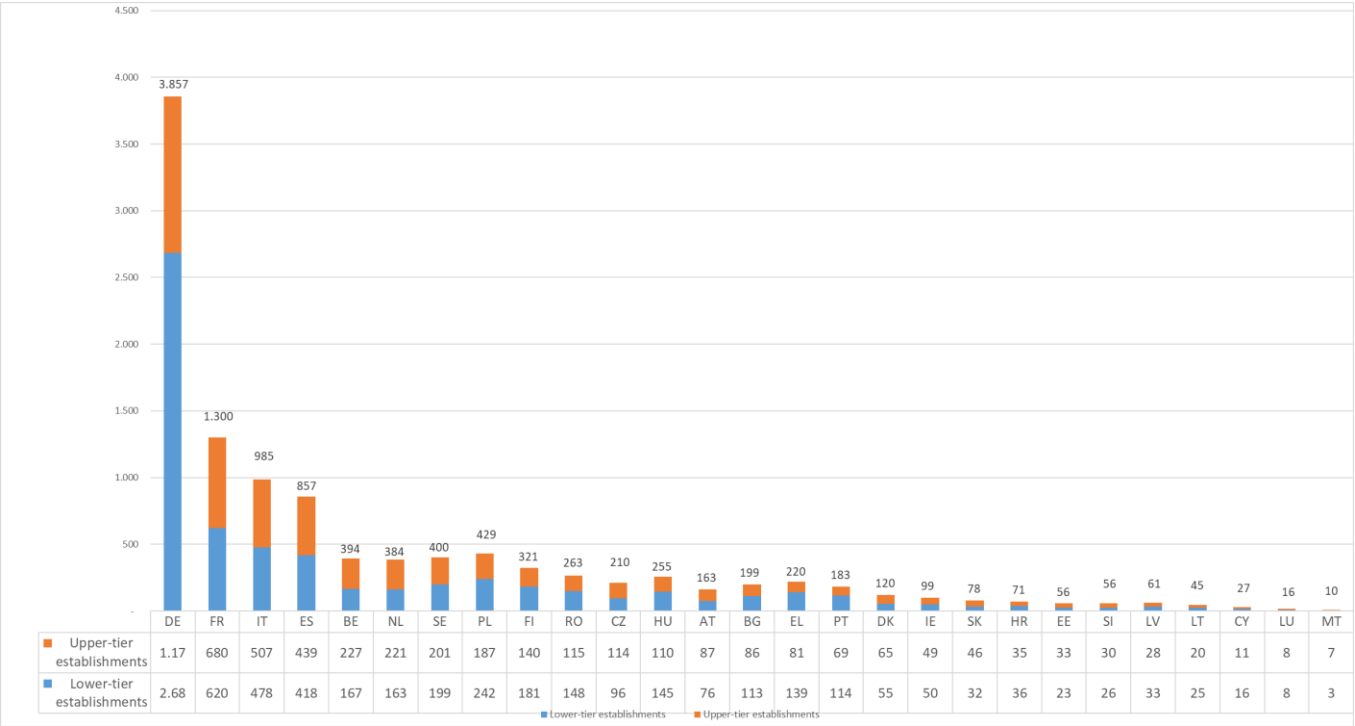
([8]) https://circabc.europa.eu/w/browse/4cc9ca17-0920-4d8a-8796-6ffa170612b7

([9]) However, with the withdrawal of the United Kingdom from the EU, the total number of Seveso establishments reported in 2022 was lower than the total number of Seveso establishments reported in 2018 (by 717). This figure included data from the UK, which was at the time the country with the fourth highest number of Seveso establishments in the EU.

([10]) Article 3.2 of the Seveso III Directive: 'lower-tier establishment' means an establishment where dangerous substances are present in quantities equal to or in excess of the quantities listed in Column 2 of Part 1 or in Column 2 of Part 2 of Annex I, but less than the quantities listed in Column 3 of Part 1 or in Column 3 of Part 2 of Annex I, where applicable using the summation rule laid down in note 4 to Annex I.

([11]) Article 3.3 of the Seveso III Directive: 'upper-tier establishment' means an establishment where dangerous substances are present in quantities equal to or in excess of the quantities listed in Column 3 of

Figure 1: Number of Seveso establishments in 2022[12]



As shown in *Figure 2*, a slow but steady increase can be observed until 2018 in the number of establishments covered by the Directive. This needs to be put into context with three EU enlargement rounds during this period (2004, 2007 and 2013) and a change of scope of the Seveso III Directive following the revision of Directive 96/82 of 9 December 1982 on the control of major-accident hazards involving dangerous substances[13] (the Seveso-II Directive) in 2012. Data on lower-tier establishments were only reported as of the reporting period 2009-2011.

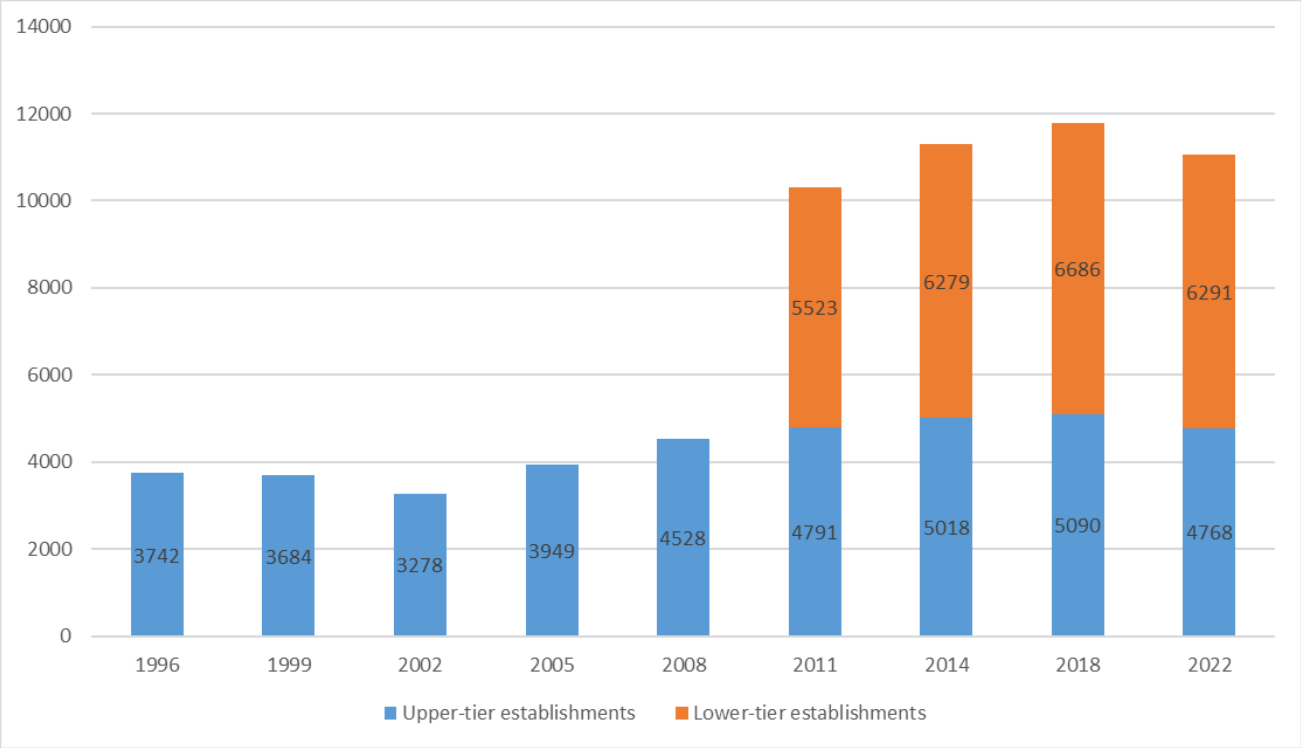
After 2018, the withdrawal of the United Kingdom from the European Union led to a decrease of the total number of Seveso establishments compared to the previous period, as the UK was, in 2018, the country with the fourth highest number of Seveso establishments in the EU (8%). However, as mentioned above, it should be noted that the number of Seveso establishments in the same 27 EU Member States increased slightly between 2018 and 2022.

Part 1 or in Column 3 of Part 2 of Annex I, where applicable using the summation rule laid down in note 4 to Annex I.

([12]) Source: eSPIRS.

([13]) Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances, *OJ L 10, 14.1.1997, p. 13–33.*

Figure 2: Evolution of the number of Seveso establishments 1996-2022[14]



The most common specific categories of activities falling under the Seveso III Directive during the reporting period are[15]:

1) Power generation, supply and distribution (15%)

2) Fuel storage (11%)

3) Wholesale and retail (9%)

1.1.2. External emergency plans

Article 12(1)(b) of the Seveso III Directive requires operators to supply competent authorities with the information necessary for them to draw up external emergency plans (EEPs) for upper-tier establishments. These plans are important to allow rapid and coordinated response to major accidents and play a vital role in minimising their effects. They also have to be reviewed and tested at intervals of no longer than three years (Article 12(6) of the Directive).

(14) Source: eSPIRS. Data for 1996 and 1999 are not fully comparable due to differing definitions on establishments and installations. Several installations in the same establishment may have been reported individually, which explains the apparent decrease in 2002. In addition, the classification of hazardous substances classification changed with the Seveso III Directive.

(15) Source: eSPIRS.

Competent authorities may decide, in view of the information contained in the safety report, and giving reasons for their decision, that the requirement to produce an EEP should not apply (Article 12(8) of the Directive).

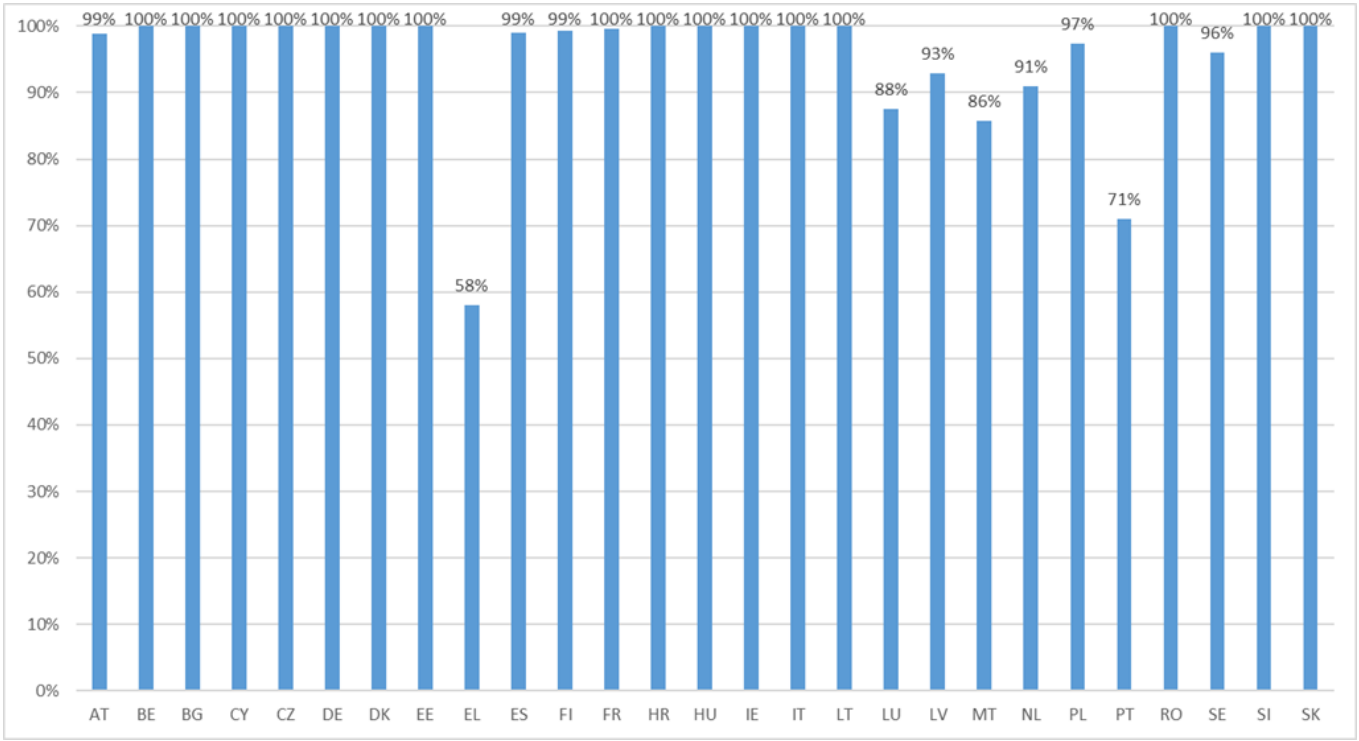
1.1.2.1. Preparation of external emergency plans

As shown in *Figure 3*, at the end of the reporting period, EEPs were drawn up for most upper-tier establishments for which this was required. On average, 96% of upper-tier establishments had an EEP during the reporting period, or were authorised not to have one.

The most common ground invoked by competent authorities to authorise the absence of an EEP is that, based on their assessment, consequences of major accidents would not extend beyond the site boundary and/or would have no potential risk to human health and the environment. Other justifications provided were the lack of continuous presence of hazardous substances in the establishment, the lack of vulnerable elements in the elements surrounding the establishments, and the limited effects of a potential accident.

The remaining 4% of upper-tier establishments did not have an EEP, indicating non-compliance with the Seveso III Directive or reporting mistakes. The situation varies among the Member States - see Figure 3.

Figure 3: Share of upper-tier establishments for which an external emergency plan was drawn up or not required during the reporting period[16]



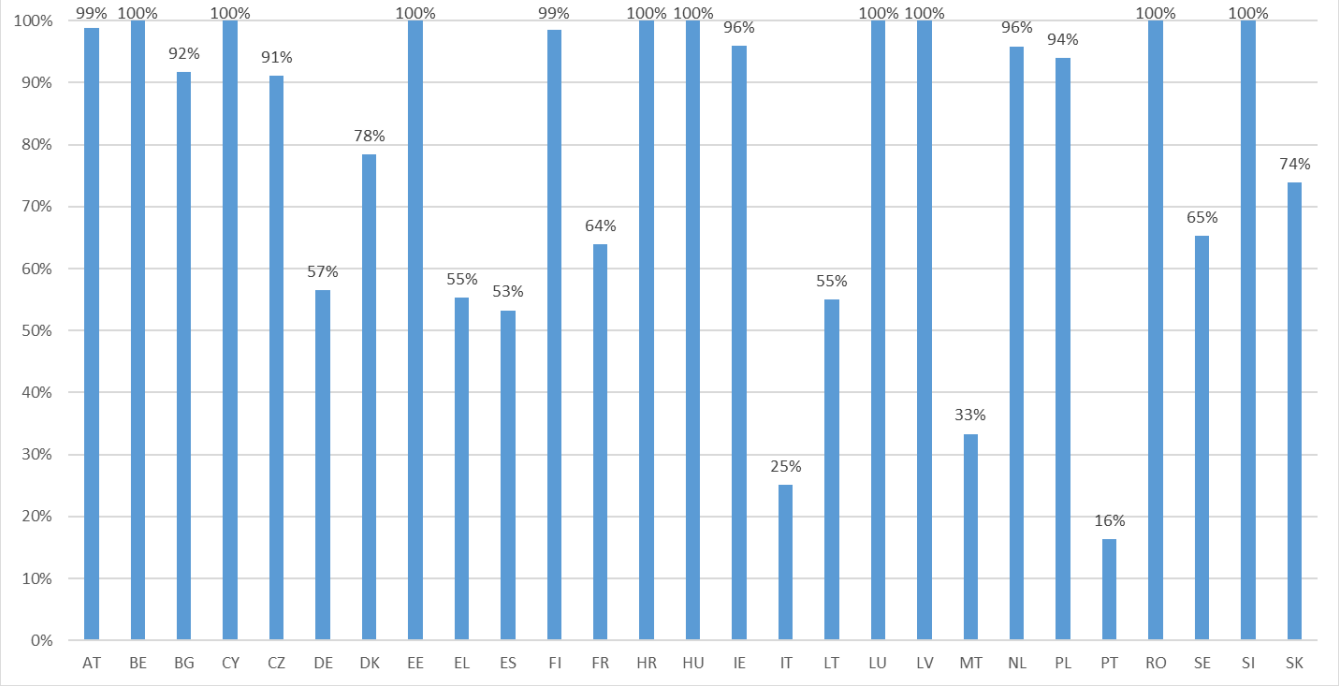
([16]) Source: Member States implementation reports and eSPIRS.

1.1.2.2.Testing and review of external emergency plans

Concerning the implementation of Article 12(6) of the Seveso III Directive on the review and testing of EEP, the 2019-2022 reporting period shows a drop in the number of external emergency plans which are reviewed, tested, and where necessary updated at suitable intervals of no longer than three years compared to the previous reporting period.

In 2022, 21% of the existing EEP had not been tested in the last three years. This is usually explained by the difficulties caused by the COVID-19 pandemic. Other reasons invoked include lack of human resources, lack of financial resources, and the fact that necessary input for external emergency plans was not being provided. The reported information is presented in *Figure 4*.

Figure 4: Share of upper-tier establishments for which external emergency plans were tested during 2019-2022[17]



1.1.3. Information to the public

Pursuant to Article 14(1), Member States must ensure that the information referred to in Annex V is permanently available to the public, including electronically, and that it is updated where necessary.

Under Annex V, all establishments are required to provide information on the name and location of the site, the site activity, the hazardous substances present, and the date of the last inspection. Upper-tier establishments must make additional information available, including a summary for the public on the nature of the accident hazards, information on safety measures as well as relevant aspects of the external emergency plan, and, where

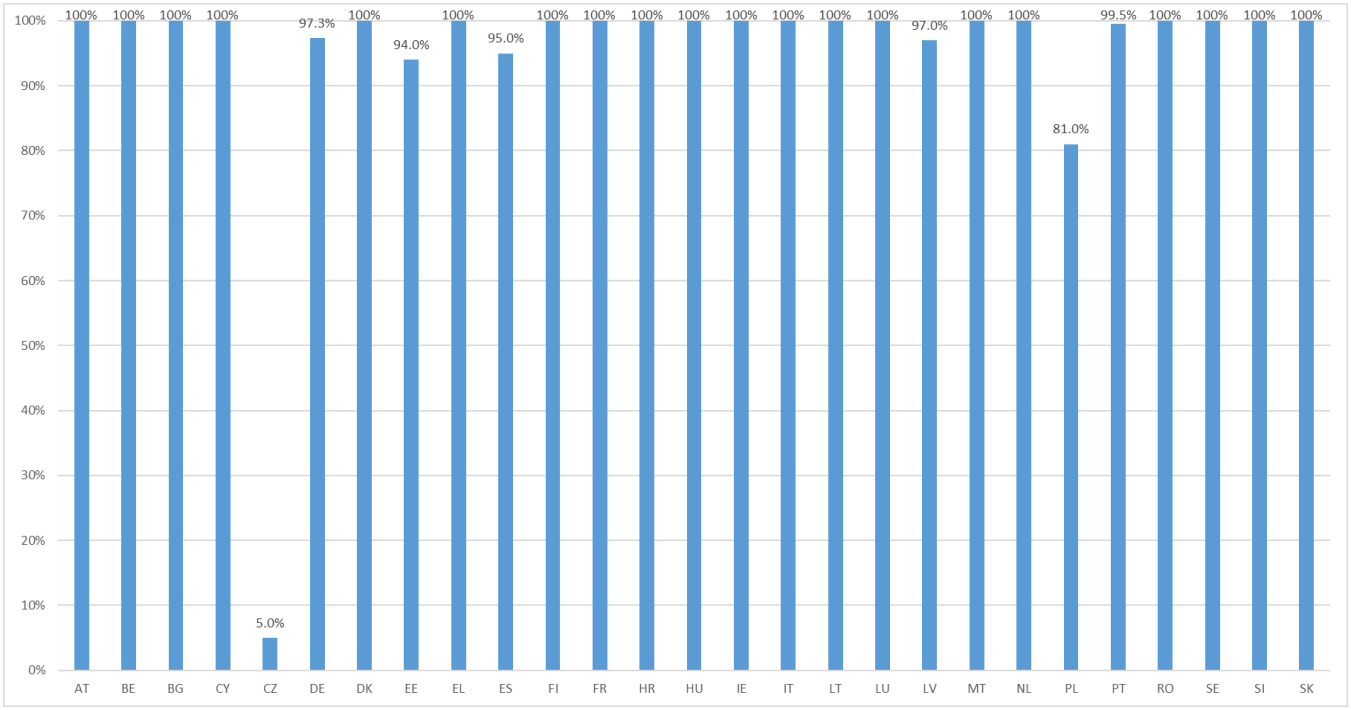
([17]) Source: Member States implementation reports and eSPIRS.

applicable, an indication of whether the establishment is close to the territory of another Member State with the possibility of a major accident with transboundary effects.

Member States were requested to report the share of establishments for which the information listed in Annex V to the Directive was not available. Overall, this provision is well implemented, with information permanently available to the public, including electronically, for 96% of all establishments across the EU. Most Member States fully comply with the provisions of the Seveso III Directive related to the permanent availability of information pursuant to Annex V. Only a limited number of Member States reported that the information requested under Annex V was not permanently available in relation to some upper-tier establishments. For most of them, such information was made available to the public upon request. Some reporting mistakes were also identified.

This information is presented in *Figure 5*.

Figure 5: Share of establishments for which the information in Annex V is made permanently available to the public[18]



Article 14(2)(a) requires that, for upper-tier establishments only, Member States ensure that all persons likely to be affected by a major accident receive regularly, without having to request it, information on safety measures and requisite behaviour in the event of a major accident.

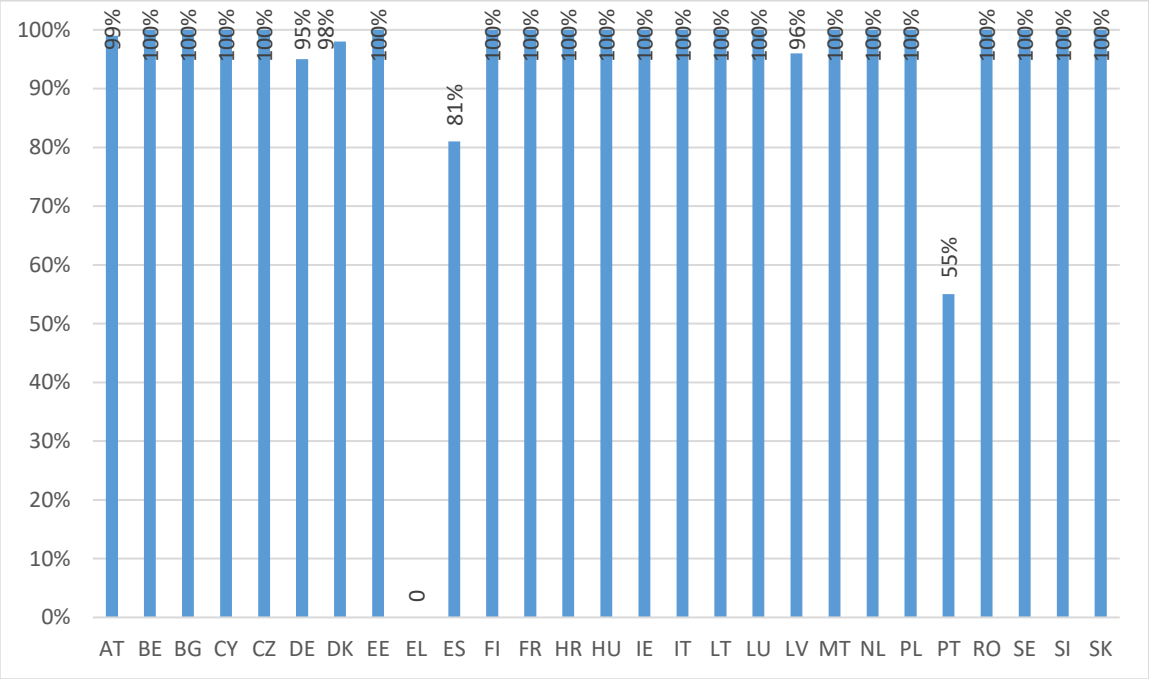
In 2022, information on safety measures and requisite behaviour in the event of a major accident was actively made available to the public concerned for 96% of all upper-tier establishments in the EU27. This is an improvement compared to the previous reporting period during which such information was made available for 91% of all upper-tier establishments in the EU27, with most Member States fully complying with the provisions

([18]) Source: Member States implementation reports.

of the Seveso III Directive and only a few Member States reporting that information is not made available. This information is presented in *Figure 6* below.

The most commonly used means by which information on safety measures and requisite behaviour was kept permanently available during the reporting period were the internet (22 EU Member States) followed by leaflets (5 EU Member States), newspapers and flyers.

Figure 6: Percentage (%) of upper-tier establishments for which information on safety measures and requisite behaviours were actively made available to the public[19]



1.1.4. Inspections

Article 20 of the Seveso III Directive requires Member States to put in place an inspection system and a programme of inspections for all establishments. Upper-tier establishments are to be inspected every 12 months and lower-tier establishments every 36 months, unless an inspection programme based on a systematic appraisal is deployed.

According to Article 20(5), the systematic appraisal of the hazards of the establishments concerned must be based on, at least, the potential impacts of the establishments concerned on human health and the environment, as well as on the record of compliance with the requirements of the Seveso III Directive. These criteria must ensure at least the same level of effectiveness as inspections carried out on an annual or triennial basis. Both upper-tier and lower-tier establishments are covered by this provision.

Where appropriate, relevant findings of inspections carried out under other EU legislation are also taken into account.

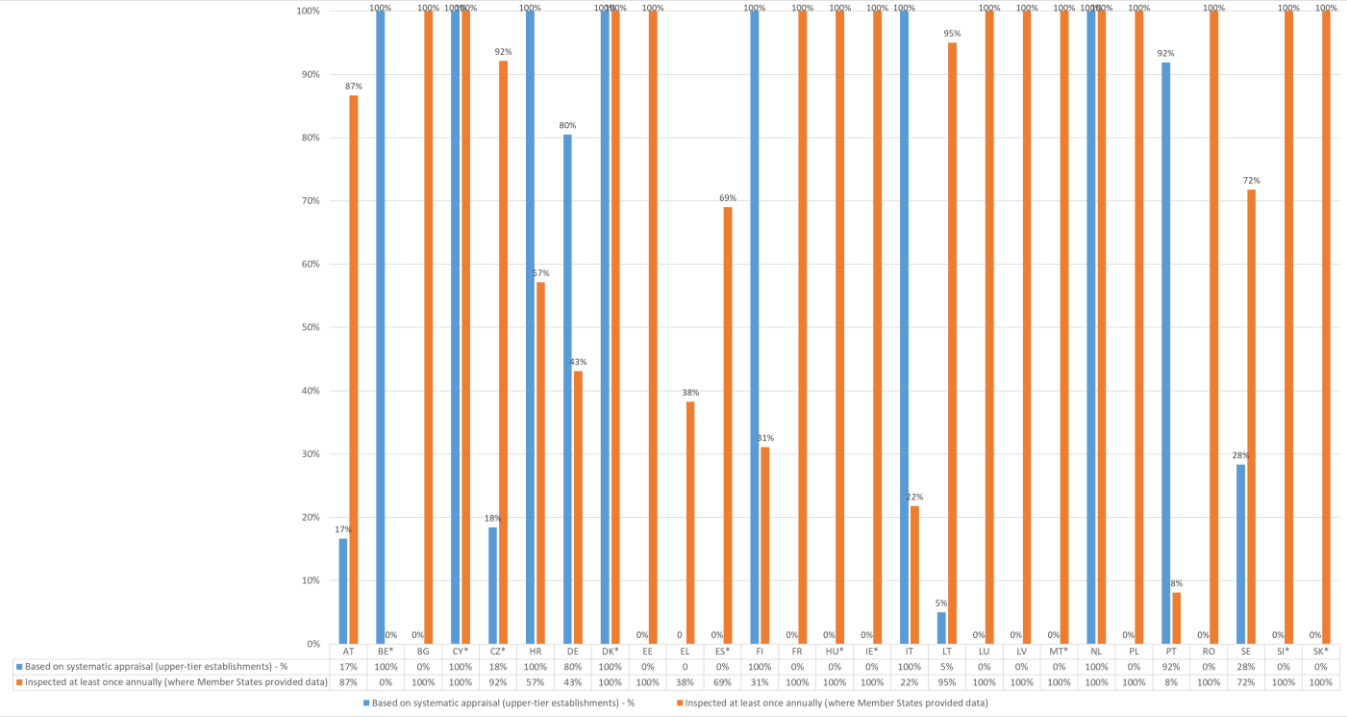
Based on data reported by the competent authorities for the reporting period, an average of 65% of the upper-tier establishments of the EU27 were inspected at least annually (cf.

([19]) Source: Member States implementation reports and eSPIRS.

Figure 7). For the remaining establishments, the inspection programme, including the frequency of site visits, was based on a systematic appraisal of the major accident hazard of the establishment concerned[20].

For lower-tier establishments, inspections were undertaken on average at least once every three years in 86% of the lower-tier establishments of the EU27 (cf. *Figure 8)*[21].

Figure 7: Share of upper-tier establishments inspected by Member States[22]

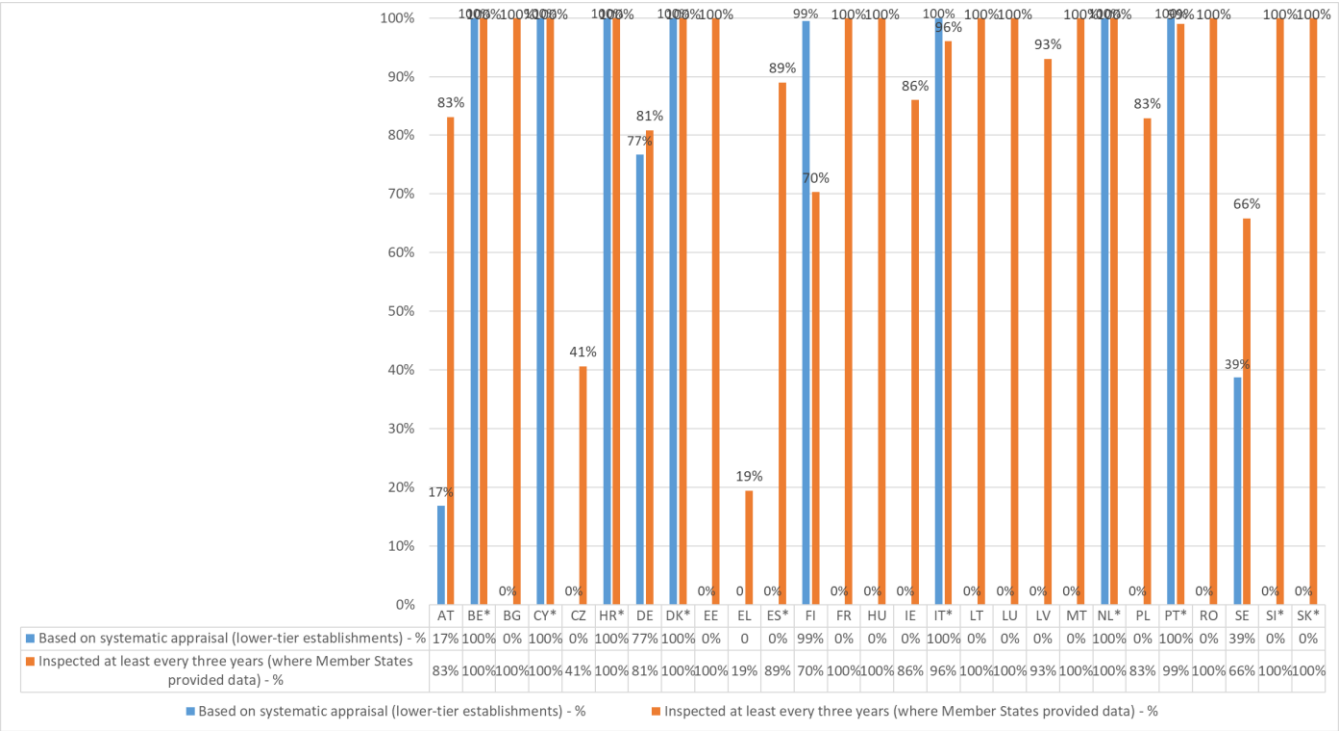


([20]) Some Member States reported overlapping data between these types of inspections, as some establishments are inspected based on a systematic appraisal of major accident hazards and also inspected at least once a year.

([21]) For upper-tier establishments, some Member States reported overlapping data, as some establishments are inspected based on a systematic appraisal while still being inspected every three years.

([22]) Source: Member States implementation reports and eSPIRS.

Figure 8: Share of lower-tier establishments inspected by Member States[23]



Overall, the proportion of upper-tier establishments inspected at least annually has decreased for the period 2019-2022 compared to the previous reporting period, with 65% of the upper-tier establishments inspected annually against 69% for the previous reporting period. However, the proportion of lower-tier establishments subject to an inspection at least every three years has increased from 65% to 86% since the last reporting period. Several Member States reported that inspections were less frequent in their country during the 2019-2022 period because of the COVID-19 pandemic.

A majority of Member States indicated that their national legislation or administrative guidance provides for coordinated or joint inspections with inspections carried out under other EU legislation, in particular Directive 2010/75/EU on Industrial Emissions (IED)[24] or Directive (EU) 2015/2193 on Medium Combustion Plants (MCPD)[25].

1.1.5. Prohibition of use, penalties and other coercive instruments

Under Article 19 of the Seveso III Directive, Member States must prohibit the operation of any establishment where the measures taken by the operator for the prevention and mitigation of major accidents are seriously deficient, for example serious failures to take the necessary actions identified in the inspection report.

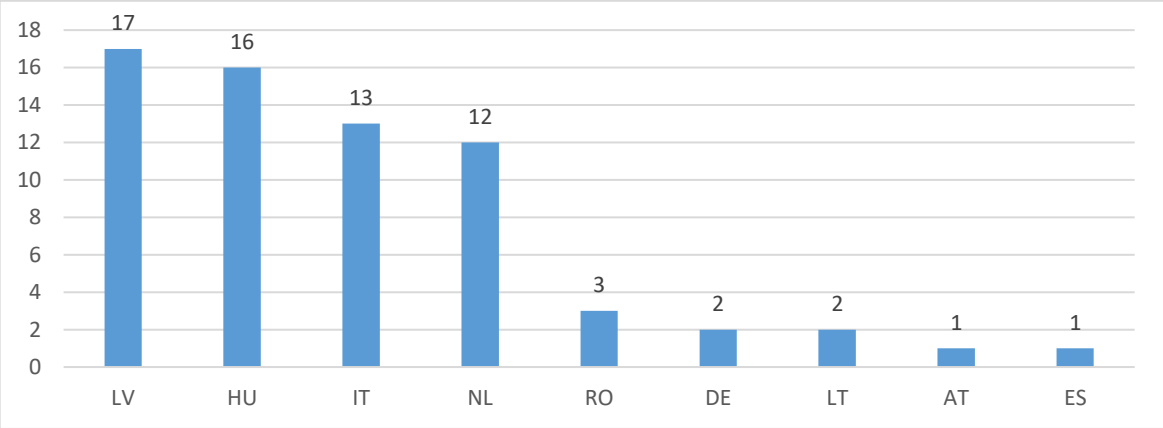
([23]) Source: Member States implementation reports and eSPIRS.

([24]) Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control) and Council Directive 1999/31/EC on the landfill of waste as amended by Directive (EU) 2024/1785 of the European Parliament and of the Council of 24 April 2024 amending (Text with EEA relevance).

([25]) Directive (EU) 2015/2193 of the European Parliament and of the Council of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants (Text with EEA relevance).

In total, during the reporting period, nine Member States reported a prohibition of operation of an establishment because the measures taken by the operator for the prevention and mitigation of major accidents were seriously deficient. This concerned 67 establishments representing 0.6% of all Seveso establishments of the EU27 (cf. *Figure 9*).

Figure 9: Total number of establishments for which the use has been prohibited during the reporting period[26]



1.2. Statistics on major accidents

The number of major accidents is one of the key indicators to measure the overall effectiveness of the Seveso III Directive in minimising them and their harmful impacts. Under Article 18, Member States are requested to notify to the Commission the major accidents which have occurred within their territory, and which meet the quantitative criteria set out in Annex VI:

- Criterion 1: any major accident meeting the following conditions: Involving dangerous substances, causing injury to persons and damage to real estate, causing immediate damage to the environment, causing damage to property, causing cross-border damage.
- Criterion 2: An accident or 'near miss' which Member States regard as being of particular technical interest for preventing major accidents and limiting their consequences and which does not meet the quantitative criteria defined under criterion 1.

Reporting of such events is done via a dedicated database (eMARS)[27] placed at the disposal of Member States to facilitate exchange of lessons learned from accidents involving dangerous substances in order to improve chemical accident prevention and mitigation of potential consequences.

([26]) Source: Member States implementation reports.

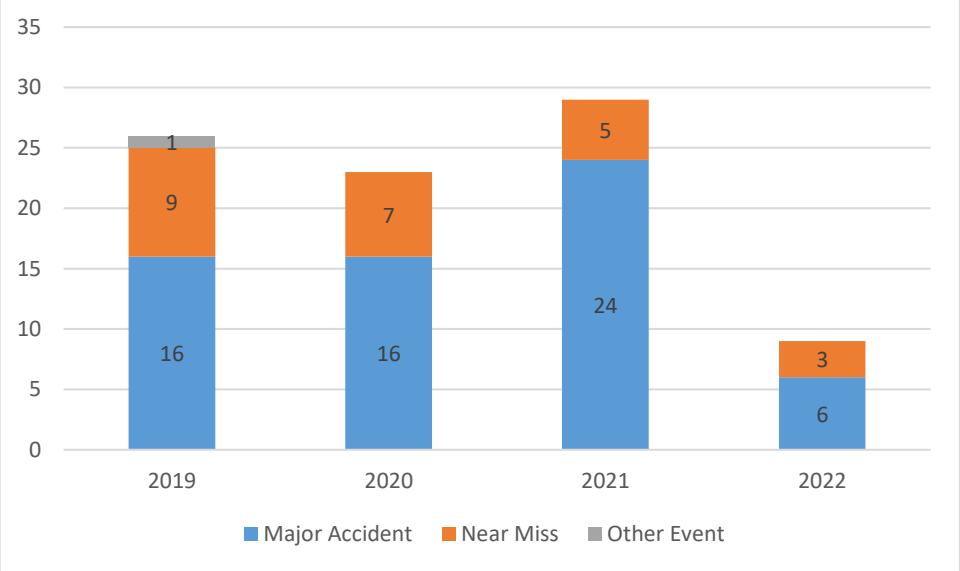
([27]) EUROPA - eMARS Dashboard - European Commission

Throughout the 2019-2022 reporting period, there were a total of 87 accidents published in the eMARS database[28] among which 62 were reported as major accidents (meeting the first criterion of Annex VI), 24 as near-misses and 1 as an 'other' event, as shown in *figures 10 and 11*. Throughout the period, most accidents published so far took place in upper-tier establishments (the timing of when reports can be finalised and published can vary depending on when investigations and legal processes are finally concluded).

Figure 10: Number of accidents by year of occurrence and by tier in years 2019-2022[29]



Figure 11: Number of accidents by year of occurrence and by event type in years 2019-2022[30]



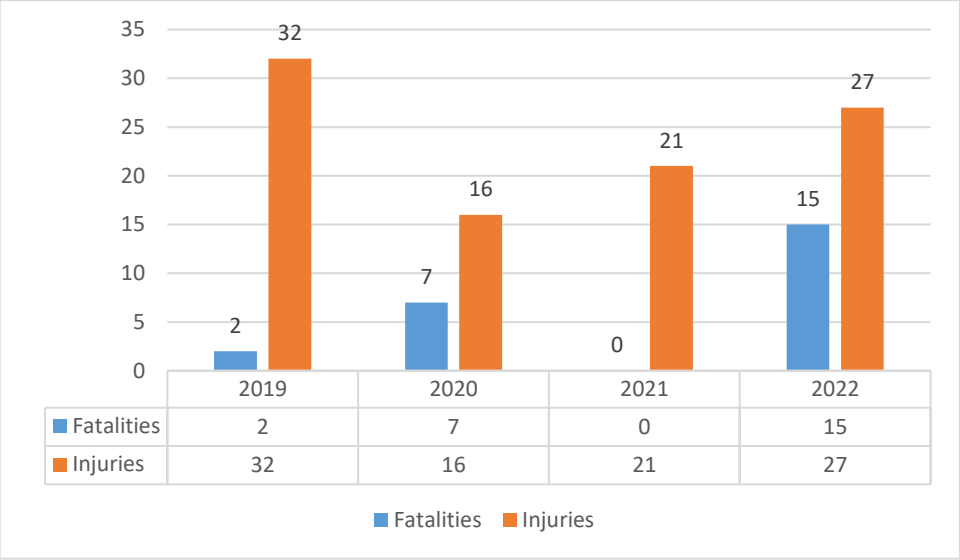
([28]) Source: eMARS. Accidents still being processed or under investigation and accidents in working status not reported.

([29]) Source: eMARS.

([30]) Source: eMARS.

The reporting Member States also publish data on the number of fatalities and injuries in major accidents and the number of accidents that involved fatalities and injuries (see *Figure 12*). In total, during the 2019-2022 reporting period, 21 reported incidents involved fatalities (39 on-site fatalities and 1 off-site fatality) and 22 incidents involved injuries (127 on-site injuries and 28 off-site injuries). 35 accidents met the threshold criterion of at least two million euros worth of property damage in the establishment, pursuant to point 4(a) of Annex VI of the Seveso III Directive.

Figure 12: Number of fatalities and injuries in Seveso Major Accidents in EU Member States in years 2019-2022[31]

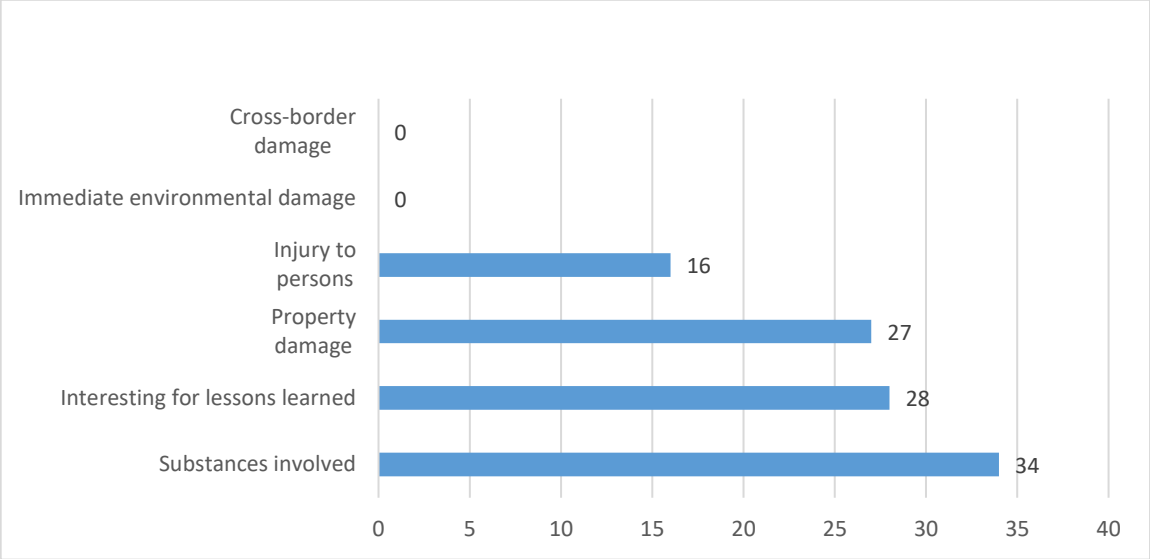


Throughout the 2019-2022 period, the most commonly reported criteria out of the six provided in Annex VI for the notification of a major accident to the Commission are (cf. *Figure 13*):

- quantity of substances involved.
- interest for lessons learned.
- damage to property.

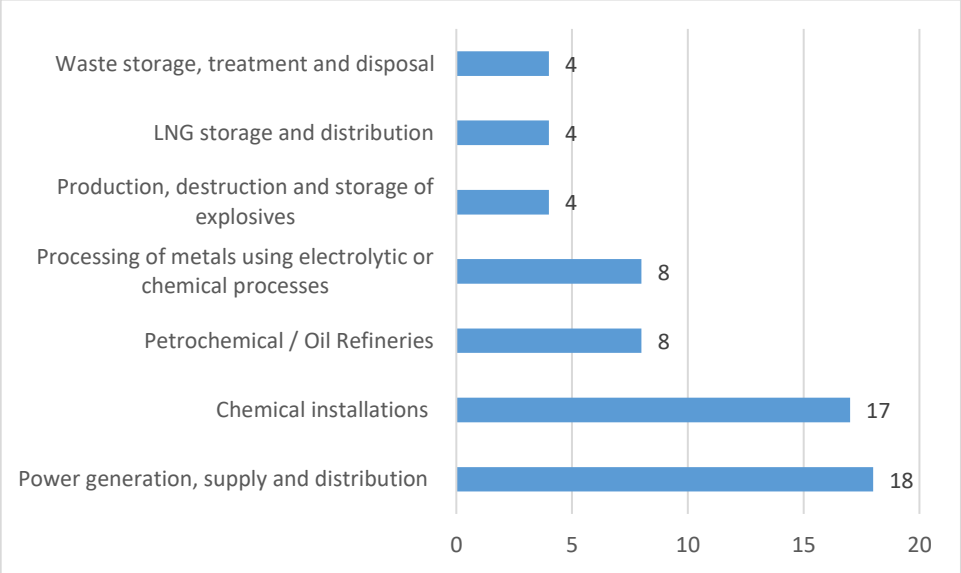
([31]) Source: eMARS.

Figure 13: Criteria for reporting major accidents in eMARS for the period 2019-2022[32]



When it comes to the industrial activity involved, the collected data shows that chemical installations (33 accidents) and the petrochemical & oil refineries sectors (29 accidents) have been the most prone to major accidents in the reporting period (cf. *Figure 14*).

Figure 14: Number of accidents and incidents by activity type in years 2019-2022[33]

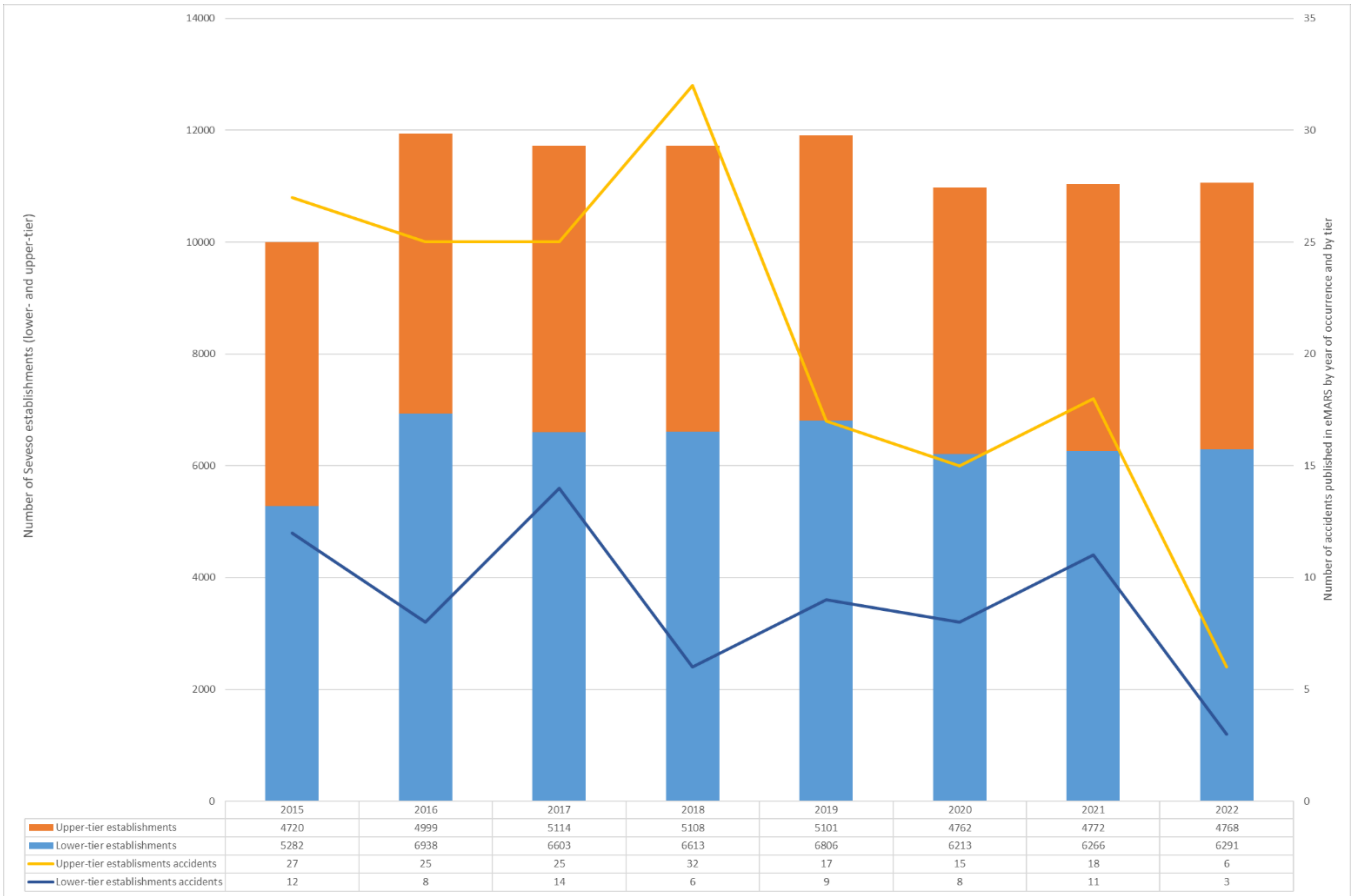


These data are evidence that the Seveso III Directive significantly contributes to achieving a low frequency of major accidents.

([32]) The sum of the criteria for reporting is higher than the total number of reported accidents reported, as one accident may fulfil several criteria.

([33]) Source: eMARS.

Figure 15: Number of accidents related to the number of Seveso plants in years 2015-2022



	2015	2016	2017	2018	2019	2020	2021	2022
Upper-tier establishments	4720	4999	5114	5108	5101	4762	4772	4768
Lower-tier establishments	5282	6938	6603	6613	6806	6213	6266	6291
Upper-tier establisments accidents	27	25	25	32	17	15	18	6
Lower-tier establishments accidents	12	8	14	6	9	8	11	3

2 WAY FORWARD TO IMPROVE INDUSTRIAL ACCIDENT PREVENTION

The data reported by the Member States on the implementation of the Seveso III Directive provide useful information to identify actions needed to further improve the prevention of industrial accidents. For this purpose, four main levers have been identified:

1. improving implementation and compliance.
2. applying simplified and streamlined reporting for the next reporting periods;
3. strengthening exchanges between the Member States and the Commission on lessons learned and good practices.
4. addressing the new challenges of industrial safety linked with climate change and the energy transition.

Improvement of the Seveso III Directive implementation and compliance

The Seveso III Directive had to be transposed by Member States by 31 May 2015**.** Transposition measures have been communicated by all Member States.

Meanwhile, the Commission has been closely monitoring the correct transposition of the Directive, with six proceedings currently open against Member States for failure to correctly transpose the Seveso III-Directive.

The information presented in Section 1 highlights a few persisting problems in certain Member States concerning the implementation and testing of external emergency planning (EEP) and public information. The Commission will investigate the underlying reasons for non-compliance in those Member States to assess whether these are the result of structural issues, in which case the Commission would consider initiating infringement proceedings as appropriate[34]. Such shortcomings might lead to increased risks of accidents, thus undermining the Directive's objectives.

To further support Member States' implementation efforts, the Commission will continue to address key issues inter alia through exchanges in the dedicated Seveso Committee, Expert Group and Technical Working Groups, as well as by means of guidance documents and technical reports.

Simplification and streamlining of reporting

Commission Implementing Decision (EU) 2022/1979[35] has been adopted in 2022 to improve the reporting process under Articles 18(1) and 21(3) for providing information to the Commission on the location of industrial plants falling under the scope of the Seveso III Directive and on the occurrence of major accidents. The re-development by the European Environmental Agency (EEA) of the two Seveso databases eSPIRS and eMARS and their integration in the '*European Industrial Emission Portal*'[36] has also led to the creation of a centralised 'one-stop-shop' providing a wealth of information on various aspects related to these industrial plants to competent authorities, industries, NGOs and the public. This contributes to the ongoing efforts to build an integrated Zero Pollution Monitoring Framework, as set out in the *Pathway to a Healthy Planet for All (flagship 9)*.

Another Commission Implementing Decision (EU) 2025/113 was adopted on 23 January 2025 setting out a new format for communicating information from Member States on the implementation of the Seveso III Directive[37] pursuant to Article 21 of that Directive.

This new decision aims to improve the relevance and quality of the data provided by the Member States while reducing the administrative burden, in line with the Commission's commitments under its new political guidelines for 2024-2029. In that regard, the reporting obligations for Member States under this implementing act were significantly simplified and streamlined in comparison with the previous reporting format laid down under Commission Implementing Decision 2014/896/EU, while also ensuring a meaningful collection of information for the next reporting rounds, starting for the period 2023-2026 (to be reported in 2027), with a focus on numerical and standardised data.

([34]) In line with the enforcement priorities as set out in the Communication 'EU law: Better results through better application'; C(2016)8600 final.

([35]) Commission Implementing Decision (EU) 2022/1979 of 31 August 2022 on establishing the form and databases for communicating the information referred to in Articles 18(1) and 21(3) of Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances and repealing Commission Implementing Decision 2014/895/EU.

([36]) https://industry.eea.europa.eu/

([37]) Commission Implementing Decision (EU) 2025/113 of 23 January 2025 establishing the format for communicating information from Member States on the implementation of Directive 2012/18/EU of the European Parliament and of the Council on the control of major accident hazards involving dangerous substances and repealing Commission Implementing Decision 2014/896/EU.

Strengthening exchanges between the Member States and the Commission

The work on lessons learned from major industrial accidents and inspections is a key pillar of the Seveso III Directive. It is essential to maintaining industrial safety culture across the European Union and improving accident prevention and mitigation.

Over the last 30 years, the Commission has provided technical and scientific support to Member States, in particular by analysing industrial accidents and providing feedback on lessons learned.

During the period covered by this report, the Commission continued to work closely with the Member States to improve their capacity building where needed. This included in particular the technical working group on inspections and a programme of mutual joint visits whereby performance measures can be identified and assessed, for example preparing a common definition of indicators for inspection, drafting guidance or organising workshops dedicated to specific policy needs (e.g. on fireworks, explosives and ammonium nitrates following up some specific major accidents involving those dangerous substances). The Commission also provided support to analyse industrial accidents and the related risks and consequences.

Addressing the new challenges of industrial safety linked with climate change, security-related risks and the energy transition

The achievement of the Seveso III Directive's objectives is now facing emerging challenges associated with the expected escalation in the intensity and frequency of natural events from climate change and with the development of new technologies accompanying the energy transition. Moreover, the European Union is facing security-related risks linked to the Russian aggression on Ukraine and hostile hybrid activities.

Natural hazards, such as earthquakes, floods, storms, extreme temperatures etc., can trigger major accidents involving fires, explosions and toxic releases at establishments that process, store or transport dangerous substances. These technological 'side effects' of natural-hazard impacts are called 'Natech' accidents and, over the past years, have been an increased focus of concern in disaster prevention and risk management at local, national and international level.

Furthermore, with strong commitments in place to decarbonise the EU and actions currently underway to transition energy sources, national governments worldwide including in the EU are adopting policies and strategies to phase out fossil fuels and switch to more sustainable energy sources for climate change mitigation. However, these novel techniques involve potential environmental, health and economic hazards, as well as risks to future development and public acceptance if they contribute to major accidents. In this context, battery and hydrogen safety issues, especially linked to warehouses and storage, are considered critical concerns[38].

In this regard, sharing knowledge, experience and good practices between authorities and experts will be an essential element of the actions needed to ensure harmonised implementation of the Seveso III Directive and to address those emerging challenges. This

([38]) The Commission (MAHB) and the Organisation for the Economic Cooperation and Development (OECD) have for example organised a series of webinars on hydrogen fuel risks since 2023, fostering exchange of knowledge and experience on those new risks, together with EU-OECD countries and experts.

is key to ensuring that climate mitigation efforts do not lead to environmental pollution and disasters and to ensure the safety and well-being of the public in the EU.

3 CONCLUSIONS

The Seveso III Directive, which covers over 11 000 establishments where dangerous substances may be present, plays an important role in steering the highly industrialised EU towards the zero pollution ambition by preventing industrial accidents. Over the 2005-2022 period, there have been, on average, fewer than 30 major accidents each year in the EU, with increasingly reduced impacts. This even went down to 22 major accidents per year over the period 2019-2022[39]. This Directive is widely considered as a benchmark for industrial accident policy and has been a role model for legislation in many countries worldwide.

The analysis of the Member States reports shows that the Seveso III Directive is overall well implemented in the EU and that there has been an improvement in the implementation of the Seveso III Directive provisions compared to the previous reporting period. However, the COVID-19 pandemic also triggered specific challenges in carrying out inspections and testing external emergency plans. The next reporting period will be important to confirm that these challenges were indeed conjunctural.

Considering this, the Commission recognises the need for continued efforts to prevent major accidents, as called for in the European Green Deal and the zero pollution action plan. This also ties in with the new political guidelines of the European Commission for 2024-2029, in which the EU preparedness and security agenda is a key priority.

Therefore, the Commission remains committed to its cooperation with Member States to improve the prevention of, preparedness and response to industrial accidents and to ensure harmonised implementation of the Directive in the EU27. In that regard, the Commission will further endeavour to strengthen exchanges of best practices for preventing, preparing for and responding to industrial accidents with Member States and to facilitate the sharing of lessons learnt from past accidents between them.

Furthermore, the Commission acknowledges the need to enhance efforts on public information and communication to maintain a safety culture and facilitate effective responses in the event of accidents. Safety is not a cost, but an investment[40].

In the changed geopolitical situation and in a context where Europe is warming twice as fast as the global average, the nexus between safety, security and environmental aspects of climate change adaptation is a high priority for the Commission for the period 2025-2029.

([39]) Data extracted from eMARS, which does not include data on newly created reports for accidents where the reports may be in 'working' status and data on accidents which are still under investigation. In addition, published data in eMARS is partial because reporting of incidents can occur, on average, anywhere between six months to two years after the incident has occurred.

([40]) Major accidents can result in direct and indirect impacts that are linked to significant potential costs, such as human costs (non-financial and financial) and costs related to evacuation, building damage, business disruption, business temporary relocation, and emergency response services. Further, wider impacts can be monetised, such as effects on the unemployment rate and the housing market, environmental costs, national supply-chain implications, effects on the aviation industry, and costs to the Government of the investigation response. RR1055 Modelling the economic impacts of an accident at major hazard sites (hse.gov.uk); hazards-26-paper-46-modelling-the-human-and-economic-costs-of-major-industrial-accidents.pdf (icheme.org).

In this regard, the Seveso III Directive is a key instrument to achieve the priorities of the new European Preparedness Union strategy[41], to better manage risks, prepare for crises, and enhance the safety and security of our population. Combined with the Clean Industrial Deal[42], this will also be the basis for Europe's sustainable prosperity and competitiveness.

([41]) Joint Communication from the European Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the EU Preparedness Strategy, JOIN (2025) 130 Final, 26.3.2025.

([42]) Communication from the European Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. The Clean Industrial Deal: a joint roadmap for competitiveness and decarbonisation, COM(2025) 85 Final, 26.2.2025.