

EVALUATION AND FITNESS CHECK (FC) ROADMAP			
TITLE OF THE EVALUATION/FC	REFIT evaluation of Directive 2009/126/EC of the European Parliament and of the Council of 21 October 2009 on Stage II petrol vapour recovery during refuelling of motor vehicles at service stations		
LEAD DG - RESPONSIBLE UNIT	ENV.C.4	DATE OF THIS ROADMAP	28 July 2016
TYPE OF EVALUATION	Evaluation Ex-post Mixed	PLANNED START DATE PLANNED COMPLETION DATE	Q3 / 2014 Q4 / 2016
This indicate	ve roadmap is provided for inform	PLANNING CALENDAR	http://ec.europa.eu/smart- regulation/evaluation/index_en.htm

# A. Purpose

#### (A.1) Purpose

The evaluation will assess the effectiveness, efficiency, relevance, coherence and EU added value of the directive and will pay particular attention to detecting and assessing regulatory burden and identifying opportunities for simplification. The objective of this evaluation is to assess the actual performance compared to initial expectations.

The evaluation will provide the Commission with key findings and lessons based on a clear set of evidence. It will present those findings and lessons, along with a set of detailed recommendations, in a report designed primarily to provide the Commission's policymakers and managers with a valuable aid both for the continued implementation of the current legal act and for further planning.

### (A.2) Justification

The Commission is systematically reviewing EU legislation in order to check that it is, and remains, "fit for purpose" through its Regulatory Fitness and Performance Programme (REFIT). REFIT emphasises the importance of EU regulation efficiently pursuing public policy objectives which are best achieved at the EU level.

In its Communication "Regulatory Fitness and Performance (REFIT): results and next steps" (COM(2013)685 final and "State of play and outlook" (COM(2014)368)<sup>1</sup>, the Commission announced that Directive 2009/126/EC<sup>2</sup> concerning petrol vapour recovery during refuelling of motor vehicles at service stations (hereinafter referred to as VOC-II) shall be evaluated

http://ec.europa.eu/smart-regulation/refit/index en.htm

Directive 2009/126/EC of the European Parliament and of the Council of 21 October 2009 on Stage II petrol vapour recovery during refuelling of motor vehicles at service stations (OJ L 285, 31/10/2009) http://eur-lex.europa.eu/legal-content/EN/NOT/?uri=CELEX:32009L0126&qid=1402400429664

# B. Content and subject of the evaluation

### (B.1) Subject area

VOC-II applies to the operations, installations, vehicles and vessels used for storage, loading and transport of petrol from one terminal to another or from a terminal to a service station.

### (B.2) Original objectives of the intervention

VOC-II aims at reducing VOC emissions from petrol storage and distribution. The Directive does not address VOC emissions from other sources or from production and use of petrol as these aspects are regulated by other acts.

To achieve this objective the Directive provides requirements on the design of storage tanks and petrol dispensers at filling stations. The Directive also puts dates by when those measures have to be fulfilled.

The measures are expected to reduce the formation of tropospheric ozone and reduce the level of harmful chemicals in the air and thereby contribute to improving air quality in the EU, and thus to reducing the number of respiratory related illnesses and casualties. In addition, the Directive contributes to achieving the commitments the EU made under international agreements.

### (B.3) How the objectives were to be achieved

### **Objectives**

- To reduce VOC emissions from petrol
- To prevent anthropogenic formation of tropospheric ozone and its adverse effects on humans, the environment and material
- To prevent harmful effects from VOC emissions other than ozone formation.
- To facilitate the implementation of the EU's international obligations (e.g. UNECE, IMO)
- Avoid distortion of competition and ensure operation of the internal market



#### Actions (VOC-II)

- Mandatory installation of petrol vapour recovery system at service stations (Article 3)
- Minimum level of petrol vapour recovery (Article 4)
- Periodic checks on said systems & provision of consumer information (Article 5)
- Member States to lay down penalties and notify Commission (Article 6)
- Commission to review directive (Article 7)
- Development of harmonised methods and standard for measures in Article 4+5. (Article 8)
- Adaptations to technical progress(Article 8)
- Member States to transpose by 1/1/2012 (Article 10)



### Consequences

- All relevant installations and containers designed, equipped and operated according to requirements
- All relevant installations have reduced emissions to the indicated reference value
- Petrol vapour is recovered at or above minimum level required
- Member States report on implementation and transposition
- Directive kept up-to-date by adaptation to technical progress



#### **Expected results / Impact**

- Reduced VOC emissions
- Lower concentrations of tropospheric ozone
- Lower concentrations of harmful VOC in ambient air
- Compliance with international obligations



#### **External factors**

- Transposition and compliance by Member States
- Mobilisation trends (No. of petrol & non-petrol using vehicles, total and average petrol consumption, etc.)
- Other legislation (e.g. vehicle type certification, fuel quality)
- Stakeholders / public concerned
- Market trends (e.g. number of players, technological progress)
- Climate change (warmer climate = more vaporisation)

# C. Scope of the evaluation

### (C.1) Topics covered

The objective of this evaluation is to assess the actual performance of VOC-II compared to initial expectations. Particular emphasis shall be placed on:

- assessing the effectiveness, efficiency, relevance, coherence and EU added value of the Directive;
- the detection and assessment of regulatory burden and identifying opportunities for simplification in the Directive.

The evaluation shall consider the broader context by taking into account aspects of wider coherence with other legislation addressing VOC and formation of tropospheric ozone. Furthermore technical developments and relevant legislation in other countries shall be reflected.

The scope of the evaluation covers all aspects of VOC-II and assesses its impact since it entered into force and cover the whole European Union. In Member States that have joined the European Union since the Directive entered into force (i.e. Croatia), the evaluation is done at least for the period since the accession date.

The work is to be carried out in accordance with the Commission guidelines for such evaluations and for public consultations as established at the start of the project.

#### (C.2) Issues to be examined

### **Effectiveness**

- Does VOC-II show the expected results? How has the Directive contributed to achieving the objective of reducing VOC emissions? What was its impact?
- What main factors have contributed to or stood in the way of achieving these objectives? How are these factors addressed by the Directive?
- How has the Directive contributed to achieving a common approach within the EU towards VOC? To what extent was the choice of management method appropriate for maximising the impacts achieved?
- What unexpected or unintended changes resulting from the Directive can be identified (positive or negative)? Why have they occurred?

### **Efficiency**

- To what extent is the overall cost of the Directive proportionate to the results and impacts being achieved? If any inefficient provisions or disproportionate sources of cost can be identified, (e.g. in relation to implementation, administration, compliance, monitoring), what has caused them? Furthermore, if the implementation cost should differ from the estimated cost (where such data is available), what has caused this difference and what lessons can be learned.
- What evidence is there that the Directive could be simplified, making it clearer and easier to understand while maintaining its integrity and purpose?
- If any adverse consequences of the Directive has been identified, what (if anything) caused differences in impact on large enterprises on the one hand and micro, small or medium sized enterprises on the other, e.g. between multinational petrol suppliers and privately owned petrol stations?
- If there any differences between Member States (e.g. implementation costs), what is causing them and what effect are they having on the observed results and impacts? What good practices in terms of cost-effective implementation of the Directive in Member States can be identified?

#### Coherence

- To what extent is the Directive satisfactorily integrated and coherent with other EU legislation with similar objectives and with the Clean Air Programme for Europe?
- What gaps, overlaps, discrepancies, contradictions or similar issues regulated in other relevant legal acts, standards or activities can be identified which hampered or improved achievement of the objectives in the Directive? This should also consider relevant international agreements.

## Relevance

- How are the key problems and concerns related to VOC emissions from petrol still addressed by the objectives of the Directive (e.g. to what extent are the objectives still relevant to meet current needs)?
- How does the Directive facilitate achieving the international obligations of the European Union?
- What (if any) obsolete provisions in the Directive can be identified and why are such provisions obsolete?

How has the Directive been adapted to any technical or other developments since its adoption?

EU added value

What has been the EU added value of the Directive? To what extent do the issues addressed by the Directive continue to require action at EU level? What would be the most likely impacts of repealing the Directive?

How did the Directive provide added value to those Member States in which similar measures were already in place and how did those Member States profit from implementing the Directive in Member States where such measures were not in place.

How did the Directive contribute to improving air quality and health in the Union?

Other issues

What is the overall perception of EU petrol vapour recovery legislation and policy among stakeholders and citizens?

Identify any technical or other development since the deployment of the directives that could contribute to achieving the objective more effectively or efficiently?

#### (C.3) Other tasks

Article 7 of VOC-II requires that the Commission shall, by 31 December 2014, review the implementation of this Directive and, in particular:

- a. the 100 m³/year threshold referred to in Article 3(1)(b) and (2)(b) of this Directive and Article 6(3) of Directive 94/63/EC;
- b. the in-service compliance record of Stage II petrol vapour recovery systems; and
- c. the need for automatic monitoring equipment.

In 2014 it became already evident that a REFIT evaluation would have to be carried out and it was thus decided to include the items in Article 7 in the evaluation exercise.

See section E

#### D. Evidence base

#### (D.1) Evidence from monitoring

The 2014 assessment of NMVOC (non-methane VOC) emissions by the European Environment Agency (EEA)<sup>3</sup> indicates that emissions have been significantly reduced since 1990, by about 57%. The main part of this reduction was achieved in the road transport sector due to the introduction of vehicle catalytic converters to reduce exhaust emissions, and carbon canisters on petrol cars for evaporative emission control. According to EEA data total NMVOC emissions in the European Union in 2011 amounted to 6 921 350 tons.

Another major contributor are VOC emitted by large industrial installations, which are covered by the Industrial Emissions Directive<sup>4</sup> which sets general conditions based on best available techniques that

<sup>&</sup>lt;sup>3</sup> http://www<u>.eea.europa.eu/data-and-maps/indicators/eea-32-non-methane-volatile-1/assessment-4</u>

<sup>&</sup>lt;sup>4</sup> Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJ L 334, 17/12/2010, p. 17–119

Member State authorities must adhere to when issuing permits. A recent study by AMEC<sup>5</sup> estimated that about 23% of the total annual anthropogenic emissions of NMVOC were coming from activities covered by the Industrial Emissions Directive (mainly from solvent uses).

There is no recent data available on how much the sector covered by VOC-II contributes. However, in their 2014 assessment on emissions of ozone precursors<sup>6</sup> the EEA data indicates that 9,8% of NMVOC emissions were coming from energy production and distribution which would probably include VOC-II.

In May 2005, ENTEC <sup>7</sup> estimated that emissions for the EU-27 plus Croatia in 2010 for vehicle refuelling and spillage would be 87 200 tons and 10 400 tons respectively which was expected to represent about 1% of total emissions of anthropogenic VOC emissions in 2005.

### (D.2) Previous evaluations and other reports

The impact assessment and Commission's proposal, as well as studies on the related costs, are available through the policy website<sup>8</sup>.

No previous evaluations of VOC-II took place.

(D.3) Evidence from assessing the implementation and application of legislation (complaints, infringement procedures)

No assessment of the implementation of VOC-II was previously undertaken.

A number of Member States did not communicate timely about the transposition of the Directives. All those cases are resolved.

The Commission is not aware of any complaints regarding the Directive.

#### (D.4) Consultation

At the beginning of the evaluation the Interservice Steering Group (ISG) agreed on the following consultation strategy:

- 1. A targeted survey based on an agreed questionnaire. The survey took place between March and May 2015. The survey was announced on the policy website<sup>9</sup> and the questionnaire was made publically available on CIRCABC (linked through the policy website)<sup>10</sup>.
- 2. Formless interviews were conducted in April and May 2015 with selected stakeholders to obtain more detailed insight where this was deemed necessary to fill gaps.
- 3. A public workshop to present the findings of the evaluation and to seek further input prior to finalising the report. The workshop took place on 21 September 2015.

The internal Commission Inter-service Group (ISG) agreed to target following stakeholders: competent authorities in EU Member States, selected 3<sup>rd</sup> countries, industry (including SME), non-governmental organisations (NGO), individual experts, and other Commission services. All stakeholders known from

MEC Environment & Infrastructure UK Limited in partnerships with Bio Intelligence Service, Milieu, IEEP and REC, 2006, Contribution of industry to pollutant emissions to air and water. (<a href="https://circabc.europa.eu/sd/a/c4bb7fee-46df-4f96-b015-977f1cca2093/Contribution%20of%20Industry%20to%20EU%20Pollutant%20Emissions-AMEC%20Final%20Report%2013298i5.pdf">https://circabc.europa.eu/sd/a/c4bb7fee-46df-4f96-b015-977f1cca2093/Contribution%20of%20Industry%20to%20EU%20Pollutant%20Emissions-AMEC%20Final%20Report%2013298i5.pdf</a>)

<sup>&</sup>lt;sup>6</sup> http://www.eea.europa.eu/data-and-maps/indicators/emissions-of-ozone-precursors-version-2/assessment-4

<sup>&</sup>lt;sup>7</sup> ENTEC UK Limited, 2005, Stage II Petrol Vapour Recovery – Final report, http://ec.europa.eu/environment/air/transport/petrol.htm

<sup>&</sup>lt;sup>8</sup> http://ec.europa.eu/environment/air/transport/petrol.htm

<sup>&</sup>lt;sup>9</sup> http://ec.europa.eu/environment/air/transport/petrol.htm

<sup>&</sup>lt;sup>10</sup> In accordance with good practice applicable at the time.

previous exercises in this policy area were directly invited to contribute.

The ISG thoroughly discussed whether or not a formal and open public consultation would be required. However, it was found that the questions related to the rather technical and specific measures of the Directive, which are addressed exclusively to economic operators, were unlikely to yield general public interest and thus a formal and open public consultation would have very limited added value. Instead it was agreed that abovementioned survey should be made publically available in case of any interest of individuals and that the workshop would be open for interested individuals.

The outcome of the consultations so far confirms this assessment. In their survey responses several stakeholders had explicitly referred to the lack of public interest. Despite repeated efforts of the consultant conducting the survey, no NGO representing the general public in the wider policy area expressed interest in the matter.

In view of the new agenda on Better Regulation<sup>11</sup> and accompanying Better Regulation Guidelines<sup>12</sup>, the requirement to carry out an open public consultation was re-assessed. Considering the well advanced stage of the file and the fact that main targeted stakeholders have been able to contribute during the fact finding period of this exercise as well as the shown lack of interest of the general public, it has been concluded that carrying out an open public consultation and its required resources would be disproportionate in relation to the added value it would bring to the file..

# (D.5) Further evidence to be gathered

VOC-II is not the only legislative act dealing with VOC or addressing the formation of tropospheric ozone. Numerous other pieces of legislation address VOC directly or indirectly and in the context of air quality policy they are also addressed by overarching policy documents such as the Environmental Action Program<sup>13</sup>.

While other legislative acts do not form part of the evaluation, they are nevertheless of relevance for the overall context in which VOC-II is embedded. The evaluation shall consider the broader context by taking into account aspects of wider coherence with other legislation addressing VOC and formation of tropospheric ozone. Furthermore technical developments and relevant legislation in third countries (e.g. US, Canada, Australia) shall be reflected.

The table below provides for an indicative and non-exhaustive list of legislation that addresses VOC directly.

<sup>12</sup> SWD(2015)111 final

<sup>&</sup>lt;sup>11</sup> COM(2015)215 final

<sup>13</sup> http://ec.europa.eu/environment/newprg

Pollutant focus	Legislation (not exhaustive)	
VOC specific	<ul> <li>Directive 94/63/EC of 20 December 1994 on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations<sup>14</sup></li> <li>The Paints Directive 2004/42/EC<sup>15</sup></li> <li>Industrial Emissions Directive, Chapter V on installations and activities using organic solvents.</li> </ul>	
VOC amongst other pollutants	<ul> <li>• National Emissions Ceilings Directive</li> <li>• Industrial Emissions Directive, Chapter II on Integrated Pollution Prevention and Control and linked BREFs<sup>16</sup> notably on refineries, chemicals processes, and surface cleaning and storage.</li> <li>• Ambient air quality directive<sup>17</sup></li> <li>• Vehicle Type Approval legislation including Euro 5 and Euro 6 Emissions Regulation<sup>18</sup></li> <li>• Fuel quality and biofuels<sup>19</sup></li> <li>• Non-road mobile machinery<sup>20</sup></li> <li>• Ecodesign<sup>21</sup></li> <li>• Member State legislation on agricultural waste and fossil fuel exploration (gas, oil, coal etc.)</li> </ul>	

#### E. Other relevant information/ remarks

To increase the cost-efficiency and effectiveness of the exercise, the evaluation of VOC-II is being conducted in parallel to the evaluation of Directive 94/63/EC of 20 December 1994 on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations. At the same time an assessment of the two directives is carried out. To take advantage of synergies the outcome of the 4 distinguished exercises will be presented in a single document with four distinctive parts.

<sup>&</sup>lt;sup>14</sup> European Parliament and Council Directive 94/63/EC of 20 December 1994 on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations )OJ L 365, 31.12.1994)

<sup>&</sup>lt;sup>15</sup> Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 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 and amending Directive 1999/13/EC (OJ L 143, 30/04/2004)

<sup>16</sup> http://eippcb.jrc.ec.europa.eu/reference/

<sup>&</sup>lt;sup>17</sup> Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (OJ L 152, 11.6.2008)

<sup>&</sup>lt;sup>18</sup> Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information (Text with EEA relevance) (OJ L 171, 29/06/2007)

<sup>&</sup>lt;sup>19</sup> http://ec.europa.eu/clima/policies/transport/fuel/index en.htm

<sup>&</sup>lt;sup>20</sup> http://ec.europa.eu/growth/sectors/automotive/environment-protection/non-road-mobile-machinery/index en.htm

<sup>&</sup>lt;sup>21</sup> http://ec.europa.eu/growth/industry/sustainability/ecodesign/index en.htm