

F-Gas Regulation  
T&D Europe

**Propositions of modifications to ENVI report** on the proposal for a regulation of the European Parliament and of the Council on fluorinated greenhouse gases, dated 21/6/2013 following vote of 19 June 2013.

Brussels, 10 September 2013

AM new	AM old	Article	Essence of amendment	T&D assessment and proposal for improvement	Rationale
5	66	Rec. (5) (new)	<b><i>Comprehensive data acquisition is necessary in order to monitor progress towards achieving the objectives relating to the reduction of emissions of fluorinated greenhouse gases. The obligation to establish and maintain records concerning equipment containing such gases should, therefore, also apply to electrical switchgear and other equipment covered by this Regulation.</i></b>	Comprehensive data acquisition is necessary in order to monitor progress towards achieving the objectives relating to the reduction of emissions of fluorinated greenhouse gases. <del>The obligation to establish and maintain records concerning equipment containing such gases should, therefore, also apply to electrical switchgear and other equipment covered by this Regulation.</del>	A comprehensive record keeping for each piece of equipment for MV and HV switchgear is not realistic due to the variety and the complexity of switchboards assemblies and not achieving the objective to measure and reduce SF6 emissions. Today's reporting has proved its rationality, practical feasibility and trustworthiness for several years.
20	93, TRAN 11	Art 1 point (4)	Revised definition: 'operator' means the natural or legal person <b><i>exercising actual control over the technical functioning of</i></b> the equipment and systems covered by this Regulation.	<b>positive</b>	For T&D, the operator is the owner, irrespective how it is phrased
27	107	Art 1 point (16) (new)	New definition: ' <b><i>Leakage</i></b> ' means the <b><i>abnormal release of fluorinated greenhouse</i></b>	<b>positive</b>	Helpful clarification of leakage to be "abnormal leakage". This supports the permissible "normal" (very low)

			<b>gases, which is significantly higher than the leakage rate specified as part of the design of the equipment if any;</b>		leakage rates prescribed by the international standard IEC 62271-1
28	108	Art 1 point (16) (new)	Definition based on Art. 4: <b>'leakage detection system' means a calibrated mechanical, electrical or electronic device for detecting leakage of fluorinated greenhouse gases which, on detection, alerts the operator;</b>	'leakage detection system' means a calibrated mechanical, electrical or electronic device for detecting leakage of fluorinated greenhouse gases which, on detection, alerts the operator;	Calibrated could mean to check periodically the calibration of the device. This is not possible for devices fixed on SF6 electrical switchgear. The calibration needs handling of SF6 with possible emission of gas or removal of the device from the switchgear for external calibration. In the worst case, the switchgear has to be taken out of service (outage of power)
29	29, 109	Art 1 point (16) (new)	Definition of "undertaking" used in the text: <b>'undertaking' means any natural or legal person which:.... operates, installs, services, maintains, repairs or decommissions equipment or systems that contain fluorinated greenhouse gases;</b>	positive	This definition is not necessary and perhaps misleading. However, it does not have an influence on the subsequent articles
32	112	Art 2.1	<b>All measures which are technically and economically feasible shall be taken to minimise leaks of fluorinated gases.</b>	Positive	The international standard IEC 62271-4 entitled: "Handling procedures for sulphur hexafluoride (SF6)" deals with this matter. New equipment complies with IEC/CENELEC standards. The T&D sector does everything feasible to reduce leakage and emission rates.
33	8	Art 2.2 (new 2 <sup>nd</sup> sentence)	Operators of equipment that contains fluorinated greenhouse gases shall take <b>precautionary measures</b> to prevent their unintentional release (hereinafter "leakage"). <b>Without</b>	Operators of equipment that contains fluorinated greenhouse gases shall take precautionary measures to prevent their unintentional release (hereinafter	The amended sentence mixes up leakage rates specified for the equipment and abnormal leakage. Operators cannot influence the intrinsic leakage rates, but only

			<b><i>prejudice to the obligation to take precautionary measures to prevent leakages, operators shall ensure that maximum leakage rates are not exceeded.</i></b>	"leakage"). <del>Without prejudice to the obligation to take precautionary measures to prevent leakages, operators shall ensure that maximum leakage rates are not exceeded.</del>	unintentional release.
34	113, TRAN 46	Art 2.3	Where a leakage of those gases is detected, the operators shall ensure that the equipment is repaired without undue delay <b><i>but no later than one week after detection and before any further use of the equipment.</i></b>	Where a leakage of those gases is detected, the operators shall ensure that the equipment is repaired as soon as possible and, in any event, within 14 days <del>without undue delay</del> of the detection of the leak. By way of derogation, where a leakage of those gases is detected in electrical switchgear, the operators shall ensure that a robust management procedure is put in place to ensure that the equipment is repaired without undue delay and that the level of action taken is proportionate to the environmental impact of the emission resulting from the leakage, taking account of potential interruptions of service.	The requirement of repair with no further use will be impossible to meet for electrical switchgear and may cause black outs in Europe, because the continuity of electricity supply is endangered.
36	125	Art 2.4 Point (c)	<b><i>recovering SF<sub>6</sub> when handling,</i></b> installing, servicing, maintaining, repairing or decommissioning electrical switchgear;	Positive	Certification shall only apply to those persons and undertakings recovering SF <sub>6</sub> .
37	127,129	Art 2.4 (d) deleted	Deleted is the certification of persons for delivery of gas	Positive	Certification shall only apply to those persons and undertakings recovering SF <sub>6</sub> .
38	132	Art 2.5	Any person who assigns the task of <b><i>handling,</i></b> installing, servicing, maintaining, repairing or decommissioning electrical switchgear	Any person who assigns the task of handling, installing, servicing, maintaining, repairing or decommissioning electrical	The wording of the amendment is not in line with the given justification. which says: " <i>Certification does not, therefore, need to cover operating</i>

			that contains SF <sub>6</sub> ... to another party shall ascertain that that other party holds the necessary certificates ....	switchgear that contains SF6 or equipment referred to in Article 3(1) to another party shall ascertain <del>that</del> that other party holds the necessary certificates pursuant to Article 8 for the required tasks, <b>if recovery of SF6 or fluorinated greenhouse gases is required.</b>	<i>personnel as a whole, but only those persons who actually handle SF6 gas”</i>
39	9	Art 2.5 (new)	<b>The Commission shall be empowered to adopt delegated acts in accordance with Article 20 specifying the minimum precautionary measures and maximum leakage rates referred to in paragraph 2, based on best practices and experience in Member States for each type of equipment. Those rules shall be adopted by [1 January 2015].</b>	delete	This task should be in the responsibility of the sectors. The T&D sector has created e.g. the international standards IEC 62271-1 entitled: “High-voltage switchgear and controlgear - Part 1: common specifications” and IEC 62271-4 entitled: “Handling procedures for sulphur hexafluoride (SF6)”
48	COMP 6	Art 5.1	Operators of equipment, <b>listed in Article 3(1)</b> , that contains fluorinated greenhouse gases  (g) if the equipment was decommissioned, the measures taken to recover and dispose of the fluorinated green-house gases.  This paragraph shall apply to operators of electrical switchgear that contains SF6 and <b>to operators</b> of the equipment referred to in Article 3(2).	This <b>Only</b> paragraph <b>(g)</b> shall apply to operators of electrical switchgear that contains SF6 and to operators of the equipment referred to in Article 3(2).	A comprehensive record keeping for each piece of equipment for MV and HV switchgear is not realistic and not achieving the objective to measure and reduce SF6 emissions.  Paragraph (g) confirms the current reporting procedure for electrical switchgear containing SF6.
54	165	Art 7a (new) Points 1 and 4	<b>1. Member States shall ensure that producer responsibility schemes are in place for the recovery of fluorinated greenhouse gases and</b>	1. Member States shall ensure that producer responsibility schemes are in place <b>or international standards are applied</b> for the recovery of	The international standard IEC 62271-4 entitled “Handling procedures for sulphur hexafluoride (SF6)” already covers this matter.

			<p><b>their recycling, reclamation or destruction.</b></p> <p><b>4. For the purposes of environmental protection, the Commission shall develop minimum quality standards for the recovery of fluorinated greenhouse gases from products as well as equipment that has been collected. Those standards shall reflect the state of the art and be published by the Commission.</b></p>	<p>fluorinated greenhouse gases and their recycling, reclamation or destruction.</p> <p>4. For the purposes of environmental protection, the Commission shall ask for development of minimum quality standards, <b>if not yet available</b>, for the recovery of fluorinated greenhouse gases from products as well as equipment that has been collected.</p>	<p>New equipment shall comply with IEC/CENELEC standards.</p> <p>The commission does not need to develop standards, if they already exist.</p>
53	164	Art 7.3	<p>3. Prior to disposal of a fluorinated greenhouse gas container, the <b>operator who exercises actual control over its technical functioning</b>, shall arrange for the recovery of any residual gases <i>in order</i> to make sure <i>that those gases</i> are recycled, reclaimed or destroyed.</p>	<p>positive</p>	<p>This is in line with the current recovery procedure</p>
55	170, COMP 5	Art 8.1	<p>1. Member States shall establish <b>and maintain</b> certification programmes <b>including evaluation processes, and shall ensure that training is available</b> for the following persons:</p> <p>(b) persons who install, service, maintain, repair or decommission electrical switchgear that contains SF6 <b>in systems which are not hermetically sealed;</b></p>	<p>1. Member States shall establish and maintain certification programmes including evaluation processes, and shall ensure that training is available for the following persons:</p> <p>(b) persons who install, service, maintain, repair or decommission electrical switchgear that contains SF6 in systems <del>which are not hermetically sealed</del> <b>where recovery of SF6 is required;</b></p>	<p>It is misleading to speak here of “not hermetically sealed systems”, where in the articles above reference is given to the task with “recovery of SF6”.</p>
55	COMP 5	Art 8.5	<p>The <b>new</b> certificates provided for in paragraphs 1 and 3 shall be <b>issued on the condition that the holder provides</b></p>	<p>Positive</p>	<p>Existing certificates can remain valid and new certificates can be prolonged by a periodic training.</p>

			<p><b>proof of having updated relevant knowledge and skills at intervals no longer than 5 years.</b></p> <p>Member States <b>shall</b> prolong the validity of the certificates provided for in paragraph 1 when the person concerned is undergoing compulsory periodic training every five years to update the knowledge on the subjects referred to in paragraph 2.</p> <p><b>Existing certificates, issued in accordance with Regulation (EU) No 842/2006, shall remain valid, on condition that, by 1 January 2020, all persons holding such certificates shall have undertaken an evaluation process in relation to technologies referred to point (e) of paragraph 2.</b></p>		
56 (13)	COMP 1	Annex III, Art. 9, Recital 20	<p><b>By 1 Jan 2018 the Commission shall assess whether effective, reliable alternatives exist which will enable SF6 to be replaced, at reasonable cost, in new medium voltage secondary switchgear.</b></p> <p><b>Based on the result, the Commission shall be empowered to amend list in Annex III to include MV secondary switchgear that contains fluorinated greenhouse gases. Commission also has power to authorize a time limited exemption to items in the Annex III list</b></p>	By 1 Jan <del>2018</del> <b>2024</b> the Commission shall assess whether effective, reliable alternatives exist which will enable SF6 to be replaced, at reasonable cost, in new medium voltage secondary switchgear.	<p><b>2018 is too soon for a review</b></p> <p><b>See separate T&amp;D position letter 2024 is a more reasonable timeframe to make a general review for alternatives in medium voltage.</b></p>
57	216	Art 9.3 (new)	<b>For the purposes of carrying out the activities referred to in Article 8(1)(a)</b>	delete	This poses too many restrictions on trading. This is an unnecessary and

			<b>to (d), fluorinated greenhouse gases shall only be sold to, and purchased by, undertakings and persons that hold relevant certificates in accordance with Article 8.</b>		unrealistic requirement and complicates the purchase of SF6.
61	24	Art 10.2	( c ) As of 1 January 2017, the quantity of greenhouse gases contained in the product or equipment, expressed in weight in CO <sub>2</sub> equivalent <b>and in terms of GWP.</b>	( c ) As of 1 January 2017, the quantity of greenhouse gases contained in the product or equipment, expressed in weight <del>in</del> <u>CO<sub>2</sub> equivalent and in terms of GWP.</u> and the global warming potential of those gases.	For SF6 electrical equipment the amount of equivalent CO2 is misleading, since CO2 equivalent is only relevant for emissions.
62		Art 10.5	Deleted: <b>This information shall also be included in descriptions used for advertising.</b>	Positive	
70	293	Art 17.1	By 31 March 2014 and every year after that, each producer, importer and exporter that produced, imported or exported more than <b>10</b> tonnes of CO <sub>2</sub> equivalent of fluorinated greenhouse gases ... shall report to the Commission...	1. By 31 March 2014 and every year after that, each producer, importer and exporter that produced, imported or exported more than <del>10</del> <b>500</b> tonnes of CO <sub>2</sub> equivalent of fluorinated greenhouse gases and gases listed in Annex II during the preceding calendar year shall report to the Commission the data specified in Annex VII on each of those substances for that calendar year.	For SF6, the new limit is far too small and increases administration a lot. 500 tonnes may be appropriate.
71	36	Art 17.2	By 31 March 2014 and every year after that, each undertaking that destroyed more than one metric tonne or <b>500</b> tonnes of CO <sub>2</sub> equivalent of fluorinated greenhouse gases ... shall report to the Commission ...	Positive	A reduction of a factor 2 from 1000 to 500t CO <sub>2</sub> , which is 22 kg of SF6, is acceptable in order to implement recycling companies more into the regulation
77 (74)	311	Art 19.3 (new)	No later than 31 December <b>2022</b> , it shall publish a comprehensive report		T&D is in favour of a review date of 2024;

			on the effects of this Regulation, including:  <i>(d) a review of the availability of technically feasible and cost-effective alternatives to products and equipment containing fluorinated greenhouse gases for products and equipment not listed in Annex III, taking into account energy-efficiency</i>	delete	See separate T&D position letter
78	313	Art 19.3 (new)	<b>No later than 31 December 2020, it shall publish a report assessing the administrative and economic cost of this Regulation to businesses, including proposals on how to reduce those costs</b>	positive	A report on the administrative and economic burden of the regulation would make sense
82	COMP 1	Art. 20a (new)	<b>Commission shall ensure a balanced participation of MS representatives including manufacturers, operators – these shall meet in a consultation forum.</b>	positive	T&D would participate in such a forum.
84	COMP 1	Annex III Point (12)	(Ban on) <b>foams containing fluorinated greenhouse gases</b> - <b>Extruded polystyrene foams from 2016</b> - <b>Other foams (including polyurethane, polyisocyanurate and phenolic) from 2020</b>	delete	Some foams contain SF6 and are used in high voltage switchgear bushings and save more than 75% of the gas used in purely gas insulated bushings. SF6 emission during normal service from these bushings is below measuring accuracy. Even in the case of a fault (break of bushing) only minimal amount of SF6 will be discharged compared to full discharge from broken SF6-filled ceramic bushings.