



Brussels, 11.3.2019  
C(2019) 1806 final

**COMMISSION DELEGATED REGULATION (EU) .../...**

**of 11.3.2019**

**supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of refrigerating appliances**

**and repealing Commission Delegated Regulation (EU) No 1060/2010**

(Text with EEA relevance)

## EXPLANATORY MEMORANDUM

### 1. CONTEXT OF THE DELEGATED ACT

#### **Legal and political context of the proposal**

Regulation (EU) 2017/1369 of the European Parliament and the Council<sup>1</sup> (Energy Labelling Framework Regulation) sets a framework for setting energy labelling requirements for energy-related products at EU level. Energy labelling is a key EU policy instrument for informing consumers about the energy efficiency and other environmental aspects of energy-related products placed on the internal market. The energy label is recognised and used by 85 % of Europeans<sup>2</sup>.

Under this framework, household refrigerating appliances are regulated by Commission Delegated Regulation (EU) No 1060/2010<sup>3</sup> (current Energy Labelling Regulation or current Regulation).

Article 7 of the Energy Labelling Regulation for household refrigerators requires this Regulation to be reviewed in the light of technological progress no later than four years after its entry into force. This review should in particular assess the verification tolerances set out in Annex VII and the possibilities for removing or reducing the values of the correction factors in Annex VIII.

In addition, in August 2017, the new Energy Labelling Framework Regulation entered into force, repealing Directive 2010/30/EU of the European Parliament and the Council<sup>4</sup> (Energy Labelling Framework Directive). Under the repealed Energy Labelling Directive, energy labels were allowed to include A+ to A+++ classes to address the overpopulation of the top classes. Over time, due to technological development, the A+ to A+++ class also became overpopulated, rendering the labels significantly less effective. To resolve this, the Energy Labelling Framework Regulation requires a rescaling of existing energy labels, back to the original A to G scale. Article 11 of the Energy Labelling Framework Regulation lists five priority product groups for which new delegated acts with rescaled energy labels must be adopted at the latest on 2 November 2018. Household refrigerating appliances is one of the priority product groups.

Finally, several new policy initiatives indicate that ecodesign and energy labelling policies are relevant in a broader political context. The main initiatives in question are:

- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank COM(2015)080 final<sup>5</sup> (energy union framework strategy), which calls for a sustainable, low-carbon and climate-friendly economy;

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<sup>1</sup> Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU (OJ L 198, 28.7.2017, p. 1).

<sup>2</sup> Study on the impact of the energy label – and potential changes to it – on consumer understanding and on purchase decisions - LE London Economics and IPSOS, October 2014.

<sup>3</sup> Commission Delegated Regulation (EU) No 1060/2010 of 28 September 2010 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of household refrigerating appliances (OJ L 314, 30.11.2010, p. 17).

<sup>4</sup> Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (OJ L 153, 18.6.2010, p. 1).

<sup>5</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank - A

- the Paris Agreement<sup>6</sup>, which calls for a renewed effort in carbon emission abatement;
- the Gothenburg Protocol<sup>7</sup>, intended to control air pollution;
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions COM(2015)0614 final<sup>8</sup> (circular economy action plan), which stresses the need to include reparability, recyclability and durability in ecodesign;
- the Emissions Trading Scheme<sup>9</sup> (ETS), intended to achieve cost-effective greenhouse gas (GHG) emissions reductions. GHG emissions are indirectly affected by the energy consumption of electricity-using products covered by ecodesign and energy labelling policies;
- Communication from the Commission to the European Parliament and the Council COM(2014)0330 final<sup>10</sup> (energy security strategy), which aims to ensure a stable and abundant supply of energy.

### General context

The review of the current Regulation has been carried out during several studies: a 2014 omnibus review study<sup>11</sup>, a 2016 review study<sup>12</sup> and a 2017 complementary study<sup>13</sup>. The Commission Ecodesign Consultation Forum decided in May 2014 that a more extensive preparatory review study was necessary. The second review study confirmed this and concluded that setting stricter ecodesign requirements in combination with energy labelling requirements would achieve energy savings of about 10 TWh in 2030, leading to a level of 47 TWh/a. In addition, it proposed possible measures on spare parts to tackle circular economy aspects of household refrigerating appliances.

The 2017 complementary study investigated the possible role of household refrigeration in reducing food waste and concluded that refrigerating appliances could indeed contribute to the reduction of food waste.

Following the conclusions of these review studies, the main objectives of this proposal are to:

- update the current energy label for refrigerating appliances, as it no longer allows consumers to differentiate effectively and sufficiently between the appliances on the market;
- clarify the scope and set appropriate requirements for the different product groups. The current Regulation has an unclear and technology-prescriptive scope, this creates

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framework strategy for a resilient energy union with a forward-looking climate change policy, COM(2015)080 final, 25.02.2015.

<sup>6</sup> <https://unfccc.int/process/the-paris-agreement/what-is-the-paris-agreement>.

<sup>7</sup> [http://www.unece.org/env/lrtap/multi\\_h1.html](http://www.unece.org/env/lrtap/multi_h1.html).

<sup>8</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - Closing the loop - An EU action plan for the circular economy, COM(2015)0614 final, 02.12.2015.

<sup>9</sup> [https://ec.europa.eu/clima/policies/ets\\_en](https://ec.europa.eu/clima/policies/ets_en).

<sup>10</sup> Communication from the Commission to the European Parliament and the Council, European security strategy, COM(2014)0330 final, 25.8.2014.

<sup>11</sup> Omnibus review study on cold appliances, washing machines, dishwashers, washer-driers, lighting, set-top boxes and pumps – VHK, VITO, Viegand Maagøe and Wuppertal institute, March 2014.

<sup>12</sup> Preparatory/review study on Commission Regulation (EC) No. 643/2009 and Commission Delegated Regulation (EU) No. 1060/2010, Final report. VHK, March 2016.

<sup>13</sup> Preparatory/review study on Commission Regulation (EC) No. 643/2009 and Commission Delegated Regulation (EU) No. 1060/2010 – complementary research on optimal food storage conditions in refrigeration appliances – VHK, February 2017.

uncertainty as to whether some products are in or out of the scope of the current Regulation, this creates possible loopholes, and results in less appropriate requirements. This causes an unlevel playing field for industry, and Market Surveillance Authorities (MSAs) have difficulties to evaluate the scope and perform proper market surveillance.

### **Consistency with existing provisions in the policy area**

The **current Energy Labelling Regulation** sets energy labelling requirements for household refrigerating appliances and in doing so complements the Ecodesign Regulation. The scope of the current Regulation is household refrigerating appliances with a volume lower than or equal to 1500 l. This also includes household refrigerating appliances sold for non-household use or for the refrigeration of items other than foodstuffs and electric mains-operated household refrigerating appliances that can be battery-operated. It excludes refrigerating appliances powered by energy sources other than electricity, battery-operated appliances, custom made appliances, appliances for the tertiary sector and appliances where the primary function is not the storage of foodstuffs. This proposal clarifies the scope and makes it technologically neutral, it does not change the intended scope. The current Regulation for household refrigerating appliances includes an energy label with an A+++ to G scale. This proposal suggests an energy label with an A to G scale, according to the new Energy Labelling Framework Regulation with energy efficiency classes updated in the light of technological progress. It is the aim to repeal the current Energy Labelling Regulation as of the date of application of the revised Regulation.

Ecodesign regulations, setting ecodesign requirements, are usually adopted in parallel with energy labelling measures. This is to ensure a coherent impact of the two measures: energy labelling should reward the best performing products through mandatory rating, while ecodesign should ban the worst performers. **Commission Regulation (EC) No 643/2009**<sup>14</sup> sets some generic requirements and minimum energy efficiency requirements for household refrigerating appliances. The scope is the same as the scope of the current Energy Labelling Regulation. This Ecodesign Regulation is also being revised. It is the intention to align the application date of the revised Ecodesign and Energy Labelling Regulation simultaneously to ensure maximum interaction.

The **Commission Delegated Regulation (EU) 2015/1094**<sup>15</sup> includes professional refrigerated storage cabinets and blast cabinets, condensing units operating at low or medium temperature or both, process chillers intended to operate at low or medium temperature. This proposal exempts products in the scope of the Ecodesign Regulation for professional refrigeration, therefore there will not be overlapping requirements.

**Energy Labelling Regulations on components** - In addition to Energy Labelling Regulations on the final products, energy labelling requirements might be applicable to the product's components. Currently, there is one component that is regulated under energy

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<sup>14</sup> Commission Regulation (EC) No 643/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for household refrigerating appliances (OJ L 191, 23.7.2009, p. 53).

<sup>15</sup> Commission Delegated Regulation (EU) 2015/1094 of 5 May 2015 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of professional refrigerated storage cabinets (OJ L 177, 8.7.2015, p. 2).

labelling is the following, that is lamps (Commission Delegated Regulation (EU) 874/2012<sup>16</sup>). The components of household refrigerating appliances are not in the scope of this Regulation.

### **Consistency with other Union policies**

The **Directive 2014/35/EU of the European Parliament and the Council**<sup>17</sup> (Low Voltage Directive or LVD) regulates health and safety aspects including e.g. mechanical, chemical, noise related or ergonomic aspects. Apart from this, the directive seeks to ensure that the covered equipment benefits fully from the Single Market. The LVD covers electrical equipment operating with a voltage between 50 and 1000 V for alternating current and between 75 and 1500 V for direct current. Falling under this category, household refrigerating appliances are covered by the scope of the LVD, but there is no overlapping in terms of the type of requirements.

The **Directive 2012/19/EU of the European Parliament and the Council**<sup>18</sup> (WEEE Directive) set requirements on e.g. recovery and recycling of Waste of Electrical and Electronic Equipment to reduce the negative environmental effects resulting from the generation and management of WEEE and from resource use. The WEEE Directive applies directly to household refrigerating appliances. Ecodesign implementing measures can complement the implementation of the WEEE Directive by including e.g. measures for material efficiency, thus contributing to waste reduction, instructions for correct assembly and disassembly, thus contributing to waste prevention and others.

The **Directive 2011/65/EU of the European Parliament and the Council**<sup>19</sup> (RoHS Directive) restricts the use of six specific hazardous materials and four different phthalates found in electrical and electronic equipment (EEE). Household refrigerating appliances products are directly covered by the RoHS Directive. There is no overlapping requirement with this proposal.

The **Regulation (EC) No 1907/2006 of the European Parliament and the Council**<sup>20</sup> (REACH Regulation) restricts the use of Substances of Very High Concern (SVHC) to improve protection of human health and the environment. The REACH Regulation applies directly to household refrigerating appliances. There is no overlapping requirement with this proposal.

**Regulation (EU) No 517/2014 of the European Parliament and of the Council**<sup>21</sup> (F-gas Regulation) controls the emissions from fluorinated greenhouse gases (F-gases), including hydrofluorocarbons (HFCs). The F-gas Regulation applies to household refrigeration

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<sup>16</sup> Commission Delegated Regulation (EU) No 874/2012 of 12 July 2012 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of electrical lamps and luminaires (OJ L 258, 26.9.2012, p. 1).

<sup>17</sup> Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits (OJ L 96, 29.3.2014, p. 357).

<sup>18</sup> Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (OJ L 197 of 24.07.2012, p 38).

<sup>19</sup> Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) (OJ L 174, 1.7.2011, p. 88).

<sup>20</sup> Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1).

<sup>21</sup> OJ L 150, 20.5.2014, p.195.

appliances. In this proposal it has been decided not to include requirements on refrigerant gasses, therefore, there will not be overlapping requirements.

The **Directive 2014/30/EU of the European Parliament and the Council**<sup>22</sup> (EMC Directive) sets requirements for the Electro-Magnetic Compatibility performance of electrical equipment to ensure that electrical devices will function without causing or being affected by interference to or from other devices. The EMC Directive applies directly to household refrigerating appliances. There is no overlapping requirement with this proposal.

The **ETS** sets a cap on the total amount of certain greenhouse gasses that can be emitted by installations. This cap reduces over time, so that the total emissions fall. Within this cap companies receive or buy emission allowances which they can trade with one another as needed. They can also buy a limited amount of international credits. The ETS does not directly apply to household refrigerating appliances, however, it does apply to electricity production. This either leads to lower ETS prices (which could in turn decrease electricity prices) or to the need for less emission reductions in ETS sectors (lower renewable energy targets or less reductions of carbon emissions in industry).

## **2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY**

### **Legal basis**

The legal basis for acting at EU level through the Energy Labelling Framework Regulation is Article 114 and Article 194 of the Treaty on the Functioning of the European Union (TFEU)<sup>23</sup>. Article 114 relates to the ‘the establishment and functioning of the internal market’, while Article 194 gives the EU the objective, amongst others, ‘in the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment’ to ‘ensure security of energy supply in the Union’ and ‘promote energy efficiency and energy saving and the development of new and renewable forms of energy’.

### **Subsidiarity (for non-exclusive competence)**

Action at EU level gives end-users the guarantee that they buy an energy efficient product and provides them with harmonised information no matter in which Member States they purchase their product. This is becoming all the more relevant as online trade increases. With energy labelling at EU level, energy efficient products are promoted in all Member States, creating a larger market and hence greater incentives for the industry to develop them.

It is essential to ensure a level playing field for manufacturers and dealers in terms requirements to be met before placing an appliance on the market and in terms of the information supplied to customers for sale across the EU internal market. For this reason EU-wide legally binding rules are necessary.

Market surveillance is carried out by the market surveillance authorities appointed by the Member States. In order to be effective, the market surveillance effort must be uniform across the EU to support the internal market and incentivise businesses to invest resources in designing, making and selling energy efficient products.

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<sup>22</sup> Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility. (OJ L 96, 29.3.2014, p. 79).

<sup>23</sup> Consolidated version of the Treaty on the Functioning of the European Union. (OJ C 326, 26.10.2012, p. 47).

Finally, Regulation (EU) 2017/1369 requires the Commission to update the current Energy Labelling Regulation for household refrigerating appliances, in particular as regards rescaling the label to remove the A+ to A+++ classes.

There is clear added value in requiring energy label class limits at EU-level. Without harmonised requirements at EU level, Member States would be incentivised to lay down national product-specific energy labelling requirements in the framework of their environmental and energy policies. This would undermine the free movement of products. Before the existing energy label measures were implemented, this was in fact the case for many products.

### **Proportionality**

The Energy Labelling Framework Regulation includes a built-in proportionality and significance test in Article 16(2), which states that the delegated acts shall specify product that meet the following criteria:

- (a) the product group should have significant potential for saving energy and where relevant, other resources;
- (b) models with equivalent functionality should differ significantly in the relevant performance levels within the product group;
- (c) there should be no significant negative impact as regards the affordability and the life cycle cost of the product group;
- (d) the introduction of energy labelling requirements for a product group should not have a significant negative impact on the functionality of the product during use.

An assessment of the proposal in view of such requirements was carried out in the impact assessment. This concluded that the proposal fulfils these criteria, while achieving the objectives described in Section 1 of this Explanatory Memorandum.

### **Summary of the proposed action**

Scenarios with different levels of energy efficiency were assessed in an impact assessment, i.e:

- (a) a business-as-usual scenario, where the current Ecodesign and Energy Labelling Regulations for household refrigerating appliances and all other relevant EU-level policies and measures are assumed to continue;
- (b) a least life cycle cost scenario with:
  - an EEI equal to that of the least life cycle cost;
  - an A to G rescaled energy label;
  - measurement methods and requirements based on the latest test standard;
  - calculation methods and requirements based on new metrics;
  - requirements to improve reparability of the appliances;
  - requirements to improve the recyclability of the appliances;
  - measures to prevent food waste.
- (c) a lenient scenario with the same requirements as the least life cycle cost scenario, but with an energy efficiency index (EEI) that is 20 % higher than the least life cycle cost;

- (d) an ambitious scenario with the same requirements as the least life cycle cost scenario, but with an EEI 25 % lower than the least life cycle cost.

The least life cycle cost scenario was retained as the preferred scenario, as this was the scenario, which fulfilled the objectives in the best way, while meeting the criteria described in the previous section.

By 2030, this scenario is estimated to result in:

- energy savings of 9,6 TWh/yr and GHG emission savings of 3,1 MtCO<sub>2</sub>eq./a, i.e. 0,66 % of the Union’s 2030 target for final energy consumption savings and 0,25 % of the EU’s 2030 target for GHG-emissions savings;
- savings on annual end-user expenditure of EUR 2,8 billion and extra business revenue of EUR 0,44 billion per year;
- an alignment with technological progress and global minimum energy efficiency requirements in other economies;
- a contribution to the EU industry’s competitiveness and its leading role in high-quality manufacturing;
- safeguarding of small and medium sized enterprises working in niche markets.

### Updated energy label

Technology for household refrigerating appliances keeps evolving, thus improving energy efficiency. At the time of entry into force of Regulation (EU) No 1060/2010, no models qualified for the A+++ energy efficiency class and the share of models qualifying for the A++ energy efficiency class was less than 10 %. Today, the top three energy efficiency classes are overpopulated, with the share of models in the A+++ label being more than 11 %, and more than 40 % in the A++ class<sup>24</sup>. This makes it more difficult to distinguish between models. Moreover, the ‘A+’, ‘A++’ and ‘A+++’ classes introduced by the Energy Labelling Framework Directive (Directive 2010/30/EU) have proved to be less effective in persuading consumers to buy more efficient products than the A to G scale<sup>25</sup>.

The energy label proposal will apply from 1 March 2021 onwards. The efficiency classes are set out in Table 1. The G class will be empty for standard household refrigeration appliances, but will be used for wine storage and low noise appliances, for which more lenient limit values will be used. The A class is expected to be empty in 2021, in line with the new Energy Labelling Framework Regulation.

**Table 1**  
**LLCC - Energy efficiency classes**

Energy efficiency class	New EEI (current EEI)
A	EEI ≤ 41 (13)
B	41 (13) < EEI ≤ 51 (16)
C	51 (16) < EEI ≤ 64 (20)
D	64 (20) < EEI ≤ 80 (24)
E	80 (24) < EEI ≤ 100 (30)
F	100 (30) < EEI ≤ 125 (38)
G	EEI > 125 (38)

<sup>24</sup> Home Appliances Europe, formerly CECED (APPLiA) database 2016

<sup>25</sup> Commission Staff Working Document Impact Assessment Accompanying the document Proposal for a Regulation of the European Parliament and of the Council setting a framework for energy efficiency labelling and repealing Directive 2010/30/EU, SWD/2015/0139 final.

The number of models per energy efficiency class (current Energy Labelling Regulation) extrapolated to 2030, are shown in Figure 1.

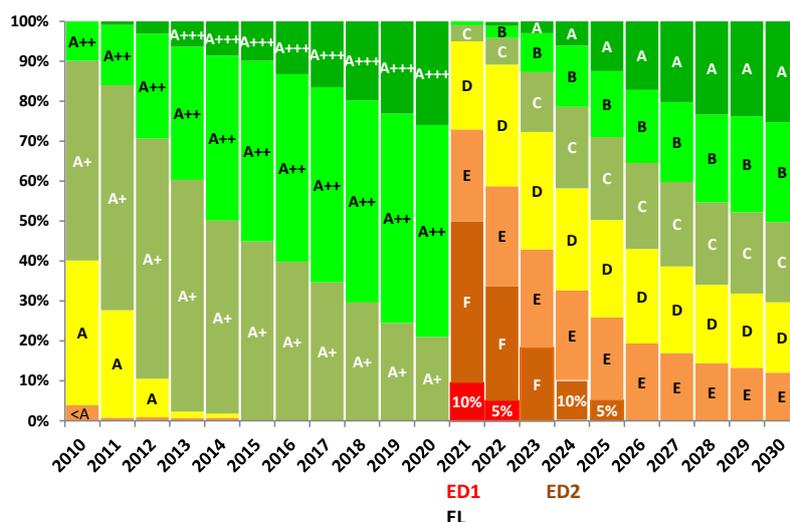


Figure 1: Energy label class distribution of standard household refrigerating appliance models available in the European Union over the period 2010-2030 (actual figures for 2010-2016 and projections for 2017-2030) with proposed LLCC-measures (APPLiA database 2016)

Table 2 gives the distribution of models in each energy efficiency class according to the current EEI and current Energy Labelling Regulation (top) and according to the proposal.

Table 2  
Energy label class distribution and EEI of household refrigerating appliances EU 2010-2030 (APPLiA database 2016)

EEI	class	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030					
Current EEI	22 A+++																										
	33 A++																										
	44 A+																										
	55 A																										
	75 <A																										
New EEI	41 A																										
	51 B																										
	62 C																										
	78 D																										
	98 E																										
	118 F																										
	130 G																										
<i>weighted average</i>																											
Current EEI		48,1	45,3	41,8	39,3	37,9	36,9	35,9	35,0	34,1	33,2	24,4	26,8	26,5	18,8	19,5	19,7	20,1	19,5	18,9	18,6	18,3					
New EEI													117	116	113	110	81	89	88	63	65	66	67	65	63	62	61

### **3 RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENT**

#### **Stakeholder consultations**

There has been extensive consultation of stakeholders during the review studies, before and after the Consultation Forum meeting, during the open public consultation and the impact assessment. The stakeholders that responded to the above consultations were a balanced mix of Member States' representatives, industry and NGOs.

In general, industry was mostly concerned about the level of the energy efficiency requirements in combination with the date of application, mainly because all refrigerating appliances have to be tested according to the new standard and calculated according to the new metrics. Industry estimated that for an application date one year after the publication date, there would be a lack of testing capacity of 75 %. Based on this estimation, it was agreed to postpone the date of application with 1 year.

Some Member States' representatives were concerned about postponing the date of application by one year. They proposed to use a conversion table to convert the EEI values from new EEI values (according to the updated test standard and metrics) to the current EEI values (according to the old test standard and metrics). This would allow manufacturers to start testing products that are placed on the market after the publication date of this proposal according to the new test standard and would reduce test time. However, such a conversion table is not accurate enough. Moreover, it will lead to false comparisons between different types of products and between calculated versus measured data. Consumers rely on the energy efficiency data to select the appliance that they need, and such a conversion table would distort these data. Furthermore, industry calculated that even with the conversion table, this still results in a lack of capacity of 27 %. For these reasons a conversion table was not included in the Regulation.

NGOs and citizens were most concerned about the circular economy aspects of the products such as the lifetime, repair, warranty and premature obsolescence. The introduction of more circular economy requirements was supported by recycling companies, while product manufacturers were more cautious and in some cases negative. Requirements in line with the requirements for the other white goods were taken up in this proposal.

#### **Feedback**

As part of the better regulation agenda, a feedback period ran from 26 January 2018 - 23 February 2018 with the aim of gathering additional views of citizens and stakeholders.

15 feedbacks were received, 9 from NGOs and 6 from companies/business associations (respectively 60 % and 40 % of the feedbacks). The respondents were predominantly from Belgium (40 %) and Germany (27 %). There was 1 respondent from each of the following 5 countries: Denmark, Italy, the Netherlands, Portugal and the UK. 14 respondents belonged to a SME (industry associations and NGOs also registered as SMES, although they represent a large share of the industry and consumers) and only 1 was a large company. 9 respondents were NGOs or environmental organisations and 6 were companies or business associations. 44% of the responses received were the same, these responses mainly came from the NGOs, environmental organisations and one company. 86% of the responses given in relation to the ecodesign regulation were the same as the responses in relation to the energy labelling regulation.

The NGOs and environmental organisations were mainly concerned about the delayed application dates, the labels should be in shops by the end of 2019; the risk of potential gaps between the different regulations for refrigerating appliances; the correction factors, especially the built-in factor which should not exceed 5 %; the icons for the volume on the energy label, which should be reduced to only one.

The industry was mainly concerned about the definition of the low noise refrigerating appliances, which should be set to 27 dBA; a possible loophole due to the definition of a combi appliance and the load factor; the different treatment of 3- and 4-star compartments; a mistake in the explanation of the freezing capacity, which should be tested at an ambient temperature of 25°C; the icon for noise on the label for the lowest class, which should not have waves and be crossed through; the QR code, which should be black, the requirements for lighting.

The concerns were considered and discussed during the expert group meeting.

### **Impact Assessment**

An impact assessment is required when the expected economic, environmental or social impacts of EU action are likely to be significant. The impact assessment for the review of Regulations (EC) No 643/2009 and (EU) No 1060/2010 was carried out between May 2017 and March 2018.

The Regulatory Scrutiny Board (RSB) delivered a positive opinion with comments on the draft of the Impact Assessment on 7 May 2018 after the meeting on 3 May.

Their main considerations (letters) and how these considerations were taken into account (dashes) are outlined below:

- (a) The report does not clearly explain how the general assessment criteria from the Ecodesign Framework Directive and the Energy Labelling Framework Regulation on affordability and significant impacts apply to household refrigerating appliances. The affordability criterion is not discussed in the context of large income disparities across the EU.
  - An explanation was added on how affordability and significance was assessed. In addition, a sensitivity analysis of the life cycle costs (LCC) based on the data in the 2016 review study and the electricity prices in Germany and Romania, which are at the higher and lower end respectively of electricity prices in the EU was included.
- (b) The report does not discuss how the primary purpose of eco-labelling, to increase energy efficiency of household refrigerating appliances, could be weakened by including the objectives of the circular economy.
  - Some text was added to give a better explanation on the correction factors for better food preservation. An explanation on the effect of the circular economy requirements on the energy consumption was added.
- (c) The methodology behind assessing the impacts of the proposed measures and the modelling results suggest the need to qualify the reported results;
  - More on the availability of spare parts, the effect of rescaling on the business revenue and a paragraph qualifying the conversion between the revenue and employment was added.

### **Choice of instrument**

The proposed form of action is a directly applicable regulation supplementing Regulation (EU) 2017/1369. This continues the current practice of the existing Energy Labelling Regulation for household refrigerating appliances.

**COMMISSION DELEGATED REGULATION (EU) .../...**

**of 11.3.2019**

**supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of refrigerating appliances**

**and repealing Commission Delegated Regulation (EU) No 1060/2010**

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU<sup>26</sup>, and in particular Article 11(5) and Article 16(1) thereof,

Whereas:

- (1) Regulation (EU) 2017/1369 empowers the Commission to adopt delegated acts as regards the labelling or re-scaling of the labelling of product groups representing significant potential for energy savings and, where relevant, other resources.
- (2) Provisions on the energy labelling of household refrigerating appliances were established by Commission Delegated Regulation (EU) No 1060/2010<sup>27</sup>.
- (3) The Communication from the Commission COM(2016)773<sup>28</sup> (ecodesign working plan) established by the Commission in application of Article 16(1) of Directive 2009/125/EC of the European Parliament and of the Council<sup>29</sup> sets out the working priorities under the ecodesign and energy labelling framework for the period 2016-2019. The ecodesign working plan identifies the energy-related product groups to be considered as priorities for the undertaking of preparatory studies and eventual adoption of implementing measures, as well as the review of Commission Regulation (EC) No 643/2009<sup>30</sup> and Regulation (EU) No 1060/2010.
- (4) Measures from the ecodesign working plan have an estimated potential to deliver in total in excess of 260 TWh of annual final energy savings in 2030, which is equivalent

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<sup>26</sup> OJ L 198, 28.7.2017, p. 1.

<sup>27</sup> Commission Delegated Regulation (EU) No 1060/2010 of 28 September 2010 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of household refrigerating appliances (OJ L 314, 30.11.2010, p. 17).

<sup>28</sup> Communication from the Commission. Ecodesign working plan 2016-2019 COM(2016)773 final, 30.11.2016.

<sup>29</sup> Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (OJ L 285, 31.10.2009, p. 10).

<sup>30</sup> Commission Regulation (EC) No 643/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for household refrigerating appliances (OJ L 191, 23.7.2009, p. 53).

to reducing greenhouse gas emissions by approximately 100 million tonnes per year in 2030. Refrigerating appliances is one of the product groups listed in the ecodesign working plan, with an estimated 10 TWh of annual final energy savings in 2030.

- (5) Household refrigerating appliances are among the product groups mentioned in Article 11(5)(b) of Regulation (EU) 2017/1369 for which the Commission should adopt a delegated act introducing an A to G rescaled label.
- (6) Regulation (EU) No 1060/2010 requires the Commission to review the Regulation on a regular basis in light of technological progress.
- (7) The Commission has reviewed Regulation (EU) No 1060/2010 as required by its Article 7 and analysed the technical, environmental and economic aspects of refrigerating appliances as well as real-life user behaviour. The review was carried out in close cooperation with stakeholders and interested parties from the Union and third countries. The results of the review were made public and presented to the Consultation Forum established by Article 14 of Regulation (EU) 2017/1369.
- (8) The review concluded that there was a need to introduce revised energy labelling requirements for refrigerating appliances.
- (9) The review concluded that the electricity use of products subject to this Regulation can be further significantly reduced by implementing energy label measures focusing on refrigerating appliances.
- (10) Refrigerating appliances with a direct sales function should be subject to a separate energy labelling regulation.
- (11) Chest freezers, including professional chest freezers, should be in the scope of this Regulation, as they are out of the scope of the Commission Delegated Regulation (EU) 2015/1094<sup>31</sup> and can be used in other environments than professional environments.
- (12) Wine storage appliances and low noise refrigerating appliances (such as minibars), including those with transparent doors, do not have a direct sales function. Wine storage appliances are usually either used in household environments or in restaurants, whereas minibars are usually used in hotel rooms. Therefore, wine storage appliances and minibars, including those with transparent doors should be covered by this Regulation.
- (13) Refrigerating appliances that are displayed at trade fairs should bear the energy label if the first unit of the model has already been placed on the market or is placed on the market at the trade fair.
- (14) The electricity used by household refrigerating appliances accounts for a significant share of total household electricity demand in the Union. In addition to the energy efficiency improvements already achieved, the scope for further reducing the energy consumption of household refrigerating appliances is substantial.
- (15) The review has shown that the electricity consumption of products subject to this Regulation can be further reduced significantly by implementing energy label measures focusing on energy efficiency and annual energy consumption. In order for end-users to make an informed decision, information on airborne acoustical noise and the compartment types should also be included.

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<sup>31</sup> Commission Delegated Regulation (EU) 2015/1094 of 5 May 2015 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of professional refrigerated storage cabinets (OJ L 177, 8.7.2015, p. 2).

- (16) The relevant product parameters should be measured using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council<sup>32</sup>.
- (17) To improve the effectiveness of this Regulation, products that automatically alter their performance in test conditions to improve the declared parameters should be prohibited.
- (18) Recognising the growth of sales of energy-related products through internet hosting platforms, rather than directly from suppliers' websites, it should be clarified that internet sales platforms should be responsible for enabling the displaying of the label provided by the supplier in proximity to the price. They should inform the supplier of that obligation, but should not be responsible for the accuracy or content of the label and the product information sheet provided. However, in application of Article 14(1)(b) of Directive 2000/31/EC on electronic commerce, such internet hosting platforms should act expeditiously to remove or to disable access to information about the product in question if they are aware of the non-compliance (e.g. missing, incomplete or incorrect label or product information sheet) for example if informed by the market surveillance authority. A supplier selling directly to end-users via its own website is covered by dealers' distance selling obligations referred to in Article 5 of Regulation (EU) 2017/1369.
- (19) The measures provided for in this Regulation were discussed by the Consultation Forum and the Member State experts in accordance Article 14 of Regulation (EU) 2017/1369.
- (20) Regulation (EU) No 1060/2010 should therefore be repealed,

HAS ADOPTED THIS REGULATION:

#### *Article 1*

#### **Subject matter and scope**

1. This Regulation establishes requirements for the labelling of, and the provision of supplementary product information on, electric mains-operated refrigerating appliances with a volume of more than 10 litres and of less than or equal to 1500 litres.
2. This Regulation does not apply to:
  - (a) professional refrigerated storage cabinets and blast cabinets, with the exception of professional chest freezers;
  - (b) refrigerating appliances with a direct sales function;
  - (c) mobile refrigerating appliances;

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<sup>32</sup> Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council (OJ L 316, 14.11.2012, p. 12).

- (d) appliances where the primary function is not the storage of foodstuffs through refrigeration.

## *Article 2* **Definitions**

For the purpose of this Regulation, the following definitions shall apply:

- (1) ‘mains’ or ‘electric mains’ means the electricity supply from the grid of 230 ( $\pm 10$  %) volt of alternating current at 50 Hz;
- (2) ‘refrigerating appliance’ means an insulated cabinet with one or more compartments that are controlled at specific temperatures, cooled by natural or forced convection whereby the cooling is obtained by one or more energy consuming means;
- (3) ‘compartment’ means an enclosed space within a refrigerating appliance, separated from other compartment(s) by a partition, container, or similar construction, which is directly accessible through one or more external doors and may itself be divided into sub-compartments. For the purpose of this Regulation, unless specified otherwise, compartment refers to both compartments and sub-compartments;
- (4) ‘external door’ is the part of a cabinet that can be moved or removed to at least allow the load to be moved from the exterior to the interior or from the interior to the exterior of the cabinet;
- (5) ‘sub-compartment’ means an enclosed space in a compartment having a different operating temperature range from the compartment in which it is located;
- (6) ‘total volume’ ( $V$ ) means the volume of the space within the inside liner of the refrigerating appliance, equal to the sum of the compartment volumes, expressed in  $\text{dm}^3$  or litres;
- (7) ‘compartment volume’ ( $V_c$ ) means the volume of the space within the inside liner of the compartment, expressed in  $\text{dm}^3$  or litres;
- (8) ‘professional refrigerated storage cabinet’ means an insulated refrigerating appliance integrating one or more compartments accessible via one or more doors or drawers, capable of continuously maintaining the temperature of foodstuffs within prescribed limits at chilled or frozen operating temperature, using a vapour compression cycle, and used for the storage of foodstuffs in non-household environments but not for the display to or access by customers, as defined in Commission Regulation (EU) 2015/1095<sup>33</sup>;
- (9) ‘blast cabinet’ means an insulated refrigerating appliance primarily intended to rapidly cool hot foodstuffs to below 10 °C in the case of chilling and below -18 °C in the case of freezing, as defined in Commission Regulation (EU) 2015/1095;
- (10) ‘professional chest freezer’ means a freezer in which the compartment(s) is accessible from the top of the appliance or which has both top-opening type and upright type compartments but where the gross volume of the top-opening type

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<sup>33</sup> Commission Regulation (EU) 2015/1095 of 5 May 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers (OJ L 177, 8.7.2015, p. 19).

compartment(s) exceeds 75 % of the total gross volume of the appliance, used for the storage of foodstuffs in non-household environments;

- (11) ‘freezer’ means a refrigerating appliance with only 4-star compartments;
- (12) ‘freezer compartment’ or ‘4-star compartment’ means a frozen compartment with a target temperature and storage conditions of -18 °C and which fulfils the requirements for the freezing capacity;
- (13) ‘frozen compartment’ means a compartment type with a target temperature equal to or below 0 °C; that is a 0-star, 1-star, 2-star, 3-star or 4-star compartment, as set out in Annex IV, Table 3;
- (14) ‘compartment type’ means the declared compartment type in accordance with the refrigerating performance parameters  $T_{\min}$ ,  $T_{\max}$ ,  $T_c$  and others set out in Annex IV, Table 3;
- (15) ‘target temperature’ ( $T_c$ ) means the reference temperature inside a compartment during testing, as set out in Annex IV, Table 3, and is the temperature for testing energy consumption expressed as the average over time and over a set of sensors;
- (16) ‘minimum temperature’ ( $T_{\min}$ ) means the minimum temperature inside a compartment during storage testing, as set out in Annex IV, Table 3;
- (17) ‘maximum temperature’ ( $T_{\max}$ ) means the maximum temperature inside a compartment during storage testing, as set out in Annex IV, Table 3;
- (18) ‘0-star compartment’ and ‘ice-making compartment’ means a frozen compartment with a target temperature and storage conditions of 0 °C, as set out in Annex IV, Table 3;
- (19) ‘1-star compartment’ means a frozen compartment with a target temperature and storage conditions of -6 °C, as set out in Annex IV, Table 3;
- (20) ‘2-star compartment’ means a frozen compartment with a target temperature and storage conditions of -12 °C, as set out in Annex IV, Table 3;
- (21) ‘3-star compartment’ means a frozen compartment with a target temperature and storage conditions of -18 °C, as set out in Annex IV, Table 3;
- (22) ‘refrigerating appliance with a direct sales function’ means a refrigerating appliance used for the functions of displaying and selling items at specified temperatures below the ambient temperature to customers, accessible directly through open sides or via one or more doors, or drawers, or both, including also cabinets with areas used for storage or assisted serving of items not accessible by the customers and excluding minibars and wine storage appliances, as defined in Commission Regulation (EU) 2019/XXX [OP please enter the number of Regulation C(2019)2127]<sup>34</sup>;
- (23) ‘minibar’ means a refrigerating appliance with a total volume of maximum 60 litres, which is primary intended for the storage and sales of foodstuffs in hotel rooms and similar premises;
- (24) ‘wine storage appliance’ means a dedicated refrigerating appliance for the storage of wine, with precision temperature control for the storage conditions and target temperature of a wine storage compartment, as defined in Annex IV, Table 3, and equipped with anti-vibration measures;

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<sup>34</sup> Commission Regulation (EU) 2019/XXX [OP please enter the full OJ-L reference of Regulation C(2019)2127].

- (25) ‘dedicated refrigerating appliance’ means a refrigerating appliance with only one type of compartment;
- (26) ‘wine storage compartment’ means an unfrozen compartment with a target temperature of 12°C, an internal humidity range from 50 % to 80 % and storage conditions ranging from 5°C to 20°C, as defined in Annex IV, Table 3;
- (27) ‘unfrozen compartment’ means a compartment type with a target temperature equal to or above 4 °C; that is a pantry, wine storage, cellar or fresh food compartment with storage conditions and target temperatures, as set out in Annex IV, Table 3;
- (28) ‘pantry compartment’ means an unfrozen compartment with a target temperature of 17 °C and storage conditions ranging from 14 °C to 20 °C, as set out in Annex IV, Table 3;
- (29) ‘cellar compartment’ means an unfrozen compartment with a target temperature of 12 °C and storage conditions ranging from 2 °C to 14 °C, as set out in Annex IV, Table 3;
- (30) ‘fresh food compartment’ means an unfrozen compartment with a target temperature of 4 °C and storage conditions ranging from 0 °C and 8 °C, as set out in Annex IV, Table 3;
- (31) ‘mobile refrigerating appliance’ means a refrigerating appliance that can be used where there is no access to the mains electricity grid and that uses extra low-voltage electricity (<120V DC) or fuel or both as the energy source for the refrigeration functionality, including a refrigerating appliance that, in addition to extra low voltage electricity or fuel, or both, can be electric mains operated. An appliance placed on the market with an AC/DC converter is not a mobile refrigerating appliance;
- (32) ‘foodstuffs’ means food, ingredients, beverages, including wine, and other items primarily used for consumption which require refrigeration at specified temperatures;
- (33) ‘point of sale’ means a location where refrigerating appliances are displayed or offered for sale, hire or hire-purchase;
- (34) ‘built-in appliance’ means a refrigerating appliance that is designed, tested and marketed exclusively:
- (a) to be installed in cabinetry or encased (top, bottom and sides) by panels;
  - (b) to be securely fastened to the sides, top or floor of the cabinetry or panels; and
  - (c) to be equipped with an integral factory-finished face or to be fitted with a custom front panel;
- (35) ‘energy efficiency index’ (EEL) means an index number for the relative energy efficiency of a refrigeration appliance, expressed in percentage, as set out in point 5 of Annex IV.

For the purposes of the Annexes, additional definitions are set out in Annex I.

### *Article 3*

#### **Obligations of suppliers**

1. Suppliers shall ensure that:
  - (a) each refrigerating appliance is supplied with a printed label in the format as set out in Annex III;

- (b) the parameters of the product information sheet, set out in Annex V, are entered into the product database;
  - (c) if specifically requested by the dealer, the product information sheet shall be made available in printed form;
  - (d) the content of the technical documentation, set out in Annex VI, is entered into the product database;
  - (e) any visual advertisement for a specific model of refrigerating appliances contains the energy efficiency class and the range of energy efficiency classes available on the label in accordance with Annex VII and Annex VIII;
  - (f) any technical promotional material concerning a specific model of refrigerating appliances, including technical promotional material on the internet, which describes its specific technical parameters includes the energy efficiency class of that model and the range of energy efficiency classes available on the label, in accordance with Annex VII;
  - (g) an electronic label in the format and containing the information, as set out in Annex III, is made available to dealers for each refrigerating appliance model;
  - (h) an electronic product information sheet, as set out in Annex V, is made available to dealers for each refrigerating appliance model.
2. The energy efficiency class shall be based on the energy efficiency index calculated in accordance with Annex II.

*Article 4*  
**Obligations of dealers**

Dealers shall ensure that:

- (a) each refrigerating appliance, at the point of sale, including at trade fairs, bears the label provided by suppliers in accordance with point 1(a) of Article 3, with the label being displayed for built-in appliances in such a way as to be clearly visible, and for all other refrigerating appliances in such a way as to be clearly visible on the outside of the front or top of the refrigerating appliance;
- (b) in the event of distance selling, the label and product information sheet are provided in accordance with Annexes VII and VIII;
- (c) any visual advertisement for a specific model of refrigerating appliance, including on the internet, contains the energy efficiency class and the range of energy efficiency classes available on the label, in accordance with Annex VII;
- (d) any technical promotional material concerning a specific model of refrigerating appliance, including technical promotional material on the internet, which describes its specific technical parameters includes the energy efficiency class of that model and the range of energy efficiency classes available on the label, in accordance with Annex VII.

#### Article 5

### **Obligations of internet hosting platforms**

Where a hosting service provider as referred to in Article 14 of Directive 2000/31/EC of the European Parliament and of the Council<sup>35</sup> allows the direct selling of refrigerating appliances through its internet site, the service provider shall enable the showing of the electronic label and electronic product information sheet provided by the dealer on the display mechanism in accordance with the provisions of Annex VIII and shall inform the dealer of the obligation to display them.

#### Article 6

### **Measurement methods**

The information to be provided pursuant to Articles 3 and 4 shall be obtained by reliable, accurate and reproducible measurement and calculation methods, which take into account the recognised state-of-the-art measurement and calculation methods set out in Annex IV.

#### Article 7

### **Verification procedure for market surveillance purposes**

Member States shall apply the verification procedure laid down in Annex IX when performing the market surveillance checks referred to in paragraph 3 of Article 8 of Regulation (EU) 2017/1369.

#### Article 8

### **Review**

The Commission shall review this Regulation in the light of technological progress and present the results of this assessment, including, if appropriate, a draft revision proposal, of this review to the Consultation Forum no later *[OP – please insert date: six years after the entry into force of the present Regulation]*. This review shall, among other matters, assess the possibility to:

- (a) address circular economy aspects;
- (b) introduce icons for compartments that may help reduce food waste; and
- (c) introduce icons for the annual energy consumption.

#### Article 9

### **Repeal**

Regulation (EU) No 1060/2010 is repealed as of 1 March 2021.

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<sup>35</sup> Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce) (OJ L 178 , 17.07.2000, p. 1).

*Article 10*  
**Transitional measures**

As from *[OP – please insert the day of entry into force of this Regulation]* until 28 February 2021, the product fiche required under point 1(b) of Article 3 of Regulation (EU) No 1060/2010 may be made available through the product database instead of being provided in printed form with the product. In that case the supplier shall ensure that if specifically requested by the dealer, the product fiche shall be made available in printed form.

*Article 11*  
**Entry into force and application**

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from 1 March 2021. However, Article 10 shall apply from *[OP – please insert the day of entry into force of this Regulation]* and point 1(a), (b) and (c) of Article 3 shall apply from 1 November 2020.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 11.3.2019

*For the Commission*  
*The President*  
*Jean-Claude JUNCKER*