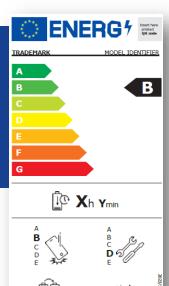
Ecodesign and energy labelling requirements smartphones, slate tablets, other mobile phones and cordless phones



Webinar for suppliers



September 30, 2025

Edited November 21, 2025





Agenda

SINEROT W

Discount of the state of the stat

- Introduction
- **External speakers**
- **➤** Introduction to new legislation
- **Ecodesign requirements**
- **➤** Energy labelling requirements
- Documentation
- ➤ Market surveillance
- Q and A section / clarifying grey areas
- **➤** Compliance Services at your service





zs8 Wvz

Moderator

Ms. Joana Fernandes, ADENE, Portugal

Guest speakers

Mr. Davide Polverini, European Commission

Ms. Giorgia Murgia, DIGITALEUROPE

Speakers

Mr. Franz Zach, AEA, Austria

Ms. Elisabeth Dreier, vores bureau, Denmark





The type of your organisation:

Share of votes

Supplier	14%
Supplier and dealer	14%
Test lab	14%
→ MSA	14%
Other	43%





European Commission

Mr. Davide Polverini, DG Internal Market, Industry, Entrepreneurship and SMEs, European Commission.



Digital Europe

Ms. Giorgia Murgia, Manager for Sustainability Policy at DIGITALEUROPE





Scope and timing of ecodesign and energy labelling regulation

Mr. Franz Zach, Senior Expert Energy Economics, Austrian Energy Agency







The regulations and the timing

Ecodesign (EU) 2023/1670

Sets minimum requirements, such as battery endurance, resistance to accidental drops, scratch resistance, repairability, etc.

Energy labelling (EU) 2023/1669

- Guides consumers to choose more energy-efficient and durable products
- Encourages manufacturers to develop new, more energy-efficient and durable products

All provisions have been applicable since the 20th of June 2025 (for products placed on the market since that date)

Legislation	Smartphones	Slate tablets	Cordless phones	Other mobile phones
Ecodesign	X	Χ	Χ	X
Energy labelling	Χ	Χ		







Which products are in scope? **Ecodesign and Energy Labelling**

zijšÃÁπ

- Designed for long-range voice communication over a cellular or a satellite telecommunications network, with SIM card, eSIM or similar
- b) Used in battery mode (connection to mains mainly for battery charging)
- c) Not to be worn on the wrist
- Wireless network connection, mobile use of internet services, operating system optimised for handheld use, able to accept original and third-party software
- e) Integrated touch screen display with diagonal size of ≥ 10,16 cm (or 4,0") and < 17,78 cm (or 7,0").

 For devices with foldable display or more than one display, at least one of the displays falls into the size range in either opened or closed mode.

≥ z۠šπš†¨€π§≥π¸Œ<<π≥ΔÁīÁ¯š†¨Œ€ŒšĞ:

- a) Integrated touch-sensitive display with diagonal size of ≥ 17,78 cm (or 7,0") and < 44,20 cm (or 17,0")
- b) Does not have an integrated, physically attached keyboard
- c) Primarily relies on a wireless network connection
- d) Powered by an internal battery and not intended to work without battery
- e) Placed on the market with an operating system designed for mobile platforms, identical or analogous to smartphones

Please find the definitions in (EU) 2023/1669 or (EU) 2023/1670 art. 2

Please note: Second-hand and used products are generally outside the scope of the regulation, but there are exceptions. For example, used products imported from outside the EU are within the scope of the regulation. For a complete list of provisions, please refer to the <u>Blue Guide</u>, page 16.







Which products are in scope? Only Ecodesign

■ fÃπ ‡ Á Œπ ι ÃÁ π,

- Designed for long-range voice communication over a cellular or a satellite telecommunications network, with SIM card, eSIM or similar.
- b) Designed for battery mode usage (connection to mains mainly for battery charging).
- c) Not to be worn on the wrist.
- d) It is no smartphone.

-Á⁻≥€π,,1ÃÁ·π,

- Designed for long-range voice communication over a landline telecommunications network.
- b) Connected to a base station through a radio interface.
- Designed for battery mode usage (connection to mains mainly for battery charging).

Please find the definitions in (EU) 2023/1670 art. 2







In which of these cases is the product out of scope?

Share of votes

➤ A slate tablet, 8 inches in diameter	0%
➤ A computer tablet	77%
➤ A slate tablet placed on the market on 22 nd of June	23%
■ I don't know/I do not want to answer	0%

The correct answer is "A computer tablet".







- Mobile phones and tablets with a flexible main display to be unrolled and rolled up partly or fully ("rollable smartphones").
- **➤** Smartphones for high security communication.
- ➤ Mobile phones designed to be worn on the wrist ("smart watches" or "wearable mobile phones")
- Computer tablets (without an operating system designed for mobile platforms)
- By amendment (not yet published): Devices intended for use in potentially explosive atmospheres and covered by Directive 2014/34/EU





Ecodesign requirements

Mr. Franz Zach, Senior Expert Energy Economics, Austrian Energy Agency







Ecodesign – main requirements

- 1 Spare parts:
 - Availability, Delivery time, Disassembly replacement, Access to information
- 2 Preparation for reuse
- 3 Recyclability
- 4 Marking of plastic components
- 5 Resistance against accidental drops
- 6 Scratch resistance
- 7 Dust and water protection
- 8 Battery endurance
- 9 Battery Management
- 10 System updates
- 11 Low-power modes
- 12 Circumvention







The ecodesign regulation (EU) 2023/1670 distinguishes between two types of spare parts:

- Spare parts available to professional repairers and end-users
- Spare parts available only to professional repairers





Spare parts – maximum delivery time

- From 1 month after placing the first unit of a model on the market until 7 years after placement of the last unit of the same model on the market, required spare parts, including fasteners if not reusable, must be available.
 - Fastener' means a hardware device or substance that mechanically, magnetically or by other means connects or fixes different parts. Fasteners shall be removable, resupplied or reusable.
- ➤ Until 5 years and 1 month after placing the first unit of a model on the market, you must deliver spare parts within 5 working days after receipt of the order.
- ➤ Afterwards the deadline is 10 working days.

(EU) 2023/1670 Annex II







Spare parts available to prof. repairers and end-users

Spare part to be available to professional repairers and end-users	Smartphones, Other mobile phones and Slate tablets	Cordless phones
Battery/-ies	Either on this or the other list (see slide 19), depending on specifications (see next slide)	X
Battery compartment cover		X
Back cover (assembly), if to be fully removed for replacement of the battery	X	
Protective foil for foldable displays	X	
Display assembly	X	
Charger, unless the device complies with <u>article</u> 3 (4) of <u>Directive 2014/53/EU</u>	X	
SIM tray and memory card tray, if there is an external slot for them	X	
Charger, unless the base-station is equipped with the USB Type-C receptacle		X
Charging cradle		X







Spare parts available only to prof. repairers – exception for batteries

Batteries can be made available only to professional repairers (not to end users), if the following requirements are fulfilled (except cordless phones):

- After 500 full charge cycles, the battery has, in a fully charged state, a remaining capacity of at least 83% of the rated capacity and 80% after 1.000 full charge cycles.
- The device meets:
 - IP67 rating (smartphones and other mobile phones)
 - IP42 rating (slate tablets).
- I.e. batteries are either to be available to professional repairers and end-users or only to professional repairers.







Spare parts available only to prof. repairers

Spare parts to be available to professional repairers	Smartphones, other mobile phones and slate tablets	Cordless phones
Battery/-ies	Either on this or the other list (see slide 17), depending on specifications (see previous slide)	
Front- and/or rear-facing camera assembly	X	
External audio connector(s)	X	Χ
External charging port(s)	X	Χ
Mechanical button(s)	X	Χ
Main microphone(s)	X	Χ
Speaker(s)	X	Χ
Hinge assembly	X	
Mechanical display folding mechanism	X	
Display assembly		Χ







Spare parts – Disassembly, replacement

Item	Spare parts available to prof. repairers and end-users without display assembly	Spare parts available only to prof. repairers <i>and</i> display assembly
Fasteners must be	Removable (except batteries), resupplied or reusable	
Replacement shall be feasible with	no tool, a tool or set of tools that is supplied with the product or spare part, or basic tools	as on the left OR commercially available tools
Replacement shall be feasible in a	use environment (i.e. everywhere)	workshop environment
Replacement shall be feasible by a	layman (i.e. everyone)	generalist

A **generalist** has general knowledge of basic repair techniques and safety precautions.

Workshop environment: No production site; machinery and/or tools are used under controlled conditions as suitable for the repair activities.

Batteries are treated as spare parts only available to professional repairers, if they fulfil the criteria (see slide 16)







Spare parts only available to professional repairers:

Can the supplier restrict the professional repairers' access to information about the spare parts?

Share of votes

No, the information must be on a publicly accessible website	74%
Yes, by requiring registration	23%
■ I don't know/I do not want to answer	0%

The correct answer is "Yes, by requiring registration".







Spare parts – access to information

Information must be available	Spare parts for end-consumers and professional repairers	Spare parts only available to professional repairers
on a	supplier's free access website	supplier's free access website or upon request, as the supplier decides, see slide 24
from	1 month after placing the first unit of a model on the market	
until	7 years after placement of the last unit of the model on the market	
(note that	if you stop providing this info, everyone else can do it (unaltered))	
requiring	nothing more than internet access	Internet access, either free or by registration, as the supplier decides, see slide 24
charging	nothing (must be for free)	reasonable fees
including	indicative pre-tax prices, at least in euros, for spare parts, fasteners and tools	
	the level of detail needed to be able to replace parts	
		Moreover: see next slide







Information to be provided on spare parts available only to professional repairers

Beside the unequivocal product identification, you need to provide (for all product types):

- Disassembly map or exploded view
- Wiring and connection diagrams required for failure analysis
- ➤ Electronic board diagrams
- List of necessary repair and test equipment
- Technical manual of instructions for repair, including marking of individual steps
- Diagnostic fault and error information incl. manufacturer-specific codes when present
- Component and diagnosis info (e.g. bandwidth of possible measurement values)
- Instructions for software and firmware (including reset software)
- Information on how to access data records of reported failure incidents stored on the device, where applicable, except personal data as on user behavior and location
- Information that professional repairers need if you require authentication (next slide)







Spare parts – access to information

If you require professional repairers to register on the supplier website to request access, the following requirements apply:

- Before providing information, you can require that the professional repairer has:
 - The technical competence to do the repair
 - A liability insurance.
- You must either accept or reject (with clear justification) it within 5 working days.
- Registration must be free of charge, but you can charge reasonable and proportionate fees for access.
- If you accept the request, you must provide access by the next working day including for equivalent models or models in the same product family.

Please find the definitions in (EU) 2023/1670 Annex II





Recyclability

- The dismantling information needed to access the components referred to in <u>Directive 2012/19/EU, Annex VII (1)</u> (e.g. batteries and PCB) must be available on a free access website, including information about the sequence of dismantling steps, tools and/or technologies.
- This information shall be available until at least 15 years after the placing on the market of the last unit of a product model.





For smartphones and tablets, you must ensure that devices:

- Encrypt by default, using a random encryption key, user data stored on the device.
- Have a function that resets the device to its factory settings and erases securely by default the encryption key and generates a new one.
- Record the following data from the battery management system in the system settings or another location accessible for end-users:
 - Battery manufacturing date
 - Date of first use of the battery after the set-up of the device by the first user
 - Number of full charge/discharge cycles based on rated capacity
 - Remaining full charge capacity relative to the rated capacity in %

For other mobile phones and cordless phones, you must ensure that devices:

➤ Have a function that resets the device to its factory settings and erases securely by default all personal information, e.g. address book, text messages, pictures, videos, settings and call history.







Marking of plastic components

Plastic components above 50 g shall be legibly marked: Type of polymer with appropriate standard symbols or abbreviated terms set between '>' and '<'.

No marking required:

- ➤ If not possible due to shape or size.
- If it would impact performance or functionality (e.g. transparent parts).
- If technically not possible because of the molding method.
- For packaging, tape, labels and stretch wraps.
- For wiring, cables and connectors, rubber parts.
- ➤ For PCB assemblies, PMMA boards, optical components, electrostatic discharge components, electromagnetic interference components, speakers.







Resistance against accidental drops – only smartphones and other mobile phones

Without loss of functionality:

- Devices must pass 45 falls without any protective foil or separate protective cover.
- Exception: Foldable devices designed to be used with a protective foil shall pass 35 falls in unextended state and additional 15 falls in extended state.

The test procedure is set out in Annex IV of (EU) 2023/1669 resp. Annex III of (EU) 2023/1670.







Scratch resistance and Solid object and water protection

Scratch resistance (except cordless phones)

The screen of the device must pass the hardness level 4 on the Mohs hardness scale, except for foldable devices designed to be used with a protective foil.

Solid object and water protection (except cordless phones)

- ➤ Smartphones and other mobile phones must be protected against the ingress of solid foreign objects of size bigger than 1 millimeter and splashing of water.
- Tablets must be protected against accidental spills of water.







Battery endurance in cycles

Minimum number of charging cycles until the battery has reached 80 % remaining capacity:

➤ Smartphones and tablets: 800

➤ Other mobile phones: 500

This number is measured under conditions where the charging rate is limited by the battery management system (not by the power delivery capabilities of the power supply).

There is no requirement for cordless phones.





Battery management – features to be provided for the user (except cordless phones)

Optional charging

- Terminates the charging process automatically when the battery is charged to 80% of its full capacity.
- The user shall be informed when charging the device for the first time or during the installation process that the life span of the battery will increase by using this feature.
- Suppliers may enable the device to periodically fully charge the battery to maintain accurate battery state of charge estimates.

Power management

■ By default, once the battery is fully charged, there is no further charging power supplied unless the charge level drops below 95% of the maximum battery capacity.







System updates (except cordless phones)

- An update of the operating system may include a security update, a corrective update, and a feature update.
- There are several requirements regarding operating system updates, including, for example, that updates must be provided free of charge for at least five years after a product is no longer placed on the market.
- You find all the requirements for the operating system in (EU) 2023/1670

 Annex II, 1.2.6.
 - Provisions (a) to (e) in the regulation are the same for the 3 product categories, but:
 - Note that there is a <u>specific requirement (f)</u> for smartphones and tablets (not present for other mobile phones or cordless phones) on deterioration of performance by updates.







Low power modes (only for cordless phones)

Base station

The networked standby power consumption P_n shall not exceed 1 W (with and without headset).

➤ Charging cradle without base station functionality

The standby power consumption P_n shall not exceed

- 0,6 W with the handset placed on the charger
- 0,3 W without handset.





Circumvention

A product must not alter its behaviour or characteristics when tested by the authorities. Likewise, it is not permitted to include test instructions intended to produce a more favourable result for the product.

A product must not change its behaviour of characteristics shortly after being put into use leading to a deterioration of the declared values of the product.

By an amendment, the clause of Article 40 of <u>(EU) 2024/1781</u> (ESPR regulation) will replace the Article 6 of the current regulation on circumvention; the main spirit of most provisions remains unchanged.





Energy labelling regulation

Smartphones and slate tablets

Ms. Elisabeth Dreier, Senior Consultant, vores bureau, Denmark







- ➤ A database operated by the European Commission
- **➤** Your obligations:
 - Register and verify your organisation in EPREL
 - Enter product information into EPREL for each energy labelled product before you place the product on the EU market
- **EPREL** consists of two sections:
 - Compliance (the information is only accessible to the MSAs)
 - Public (the information is accessible to everybody)
- Useful link for more information

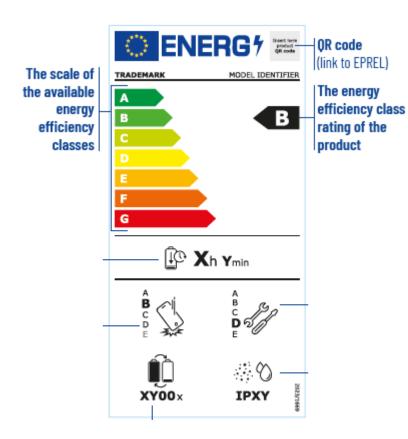
How to register in EPREL - Compliance Services





'

The energy label – values and layout



QR code

The QR code links to the product's description in the public part of EPREL.

Energy efficiency class

It is determined based on the energy efficiency index

Formula

$$\mathsf{EEI} = \frac{\mathsf{END}_{\mathsf{device}}}{\mathsf{U}_{\mathsf{nom}} \times \mathsf{C}_{\mathsf{rated}}} \times 1.000$$

Where:

- ✓ END_{device} is the battery endurance in hours
- ✓ EEI is the Energy Efficiency Index in 1/W,
- \checkmark U_{nom} is the nominal voltage in V,
- ✓ C_{rated} is the rated battery capacity in mAh.







Energy Efficiency Index (EEI)

Energy efficiency	Energy efficiency index (EEI)			
class	Smartphones	Tablets		
A (most efficient)	> 2,70	> 7,90		
В	> 2,30	> 6,32		
С	> 1,95	> 5,06		
D	> 1,66	> 4,04		
E	> 1,41	> 3,24		
F	> 1,20	> 2,59		
G (least efficient)	≤ 1,20	≤ 2,59		

The EEI represents the operating time of a device without recharging, divided by the battery's energy capacity — the higher the value, the better.

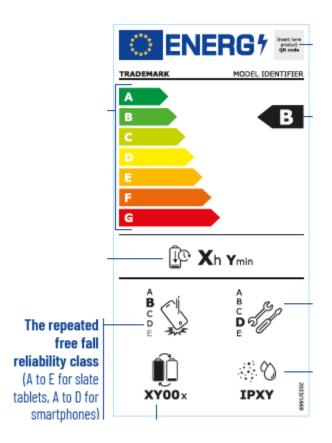
Calculation EEI

- Calculated with the operating system version installed on the product model on the date of placement on the market.
- Detailed information on measurement and calculation methods can be found in Annex IV., and, until a harmonised standard is available:
 - https://ec.europa.eu/docsroom/documents/50214, referenced in the same Regulation;
 - Considering the standards 'samples' (video, audio, etc.) available on the Commission website: https://circabc.europa.eu/ui/group/418195ae-4919-45fa-a959-3b695c9aab28/library/01c3b805-a11f-4805-a2c6-99ea88936a5e?p=1&n=10&sort=modified DESC





The repeated free-fall reliability class



Based on the number of falls from 1 meter (based on a standardised test) that five units of each model can withstand without functionality problems.

A is the most robust, and D/E is the least robust.





Repeated free fall reliability classes

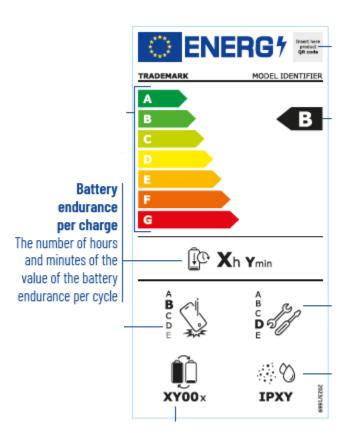
	FALLS WITHOUT DEFECT					
Repeated Free			Foldable smartphone*		Foldable tablet*	
			In un-extended	In fully extended	In un-extended	
Class	smartphone	tablet	state	state	state	extended state
A (most robust)	≥ 270	≥ 208	≥ 210	≥ 45	≥ 182	≥ 20
В	≥ 180	≥ 156	≥ 140	≥ 35	≥ 130	≥ 15
С	≥90	≥ 104	≥ 70	≥ 25	≥78	≥ 10
D	≥ 45	≥ 52	≥ 35	≥ 15	≥ 52	≥5
E (least robust)	-	< 52	-	-	< 52	< 5

^{*} For foldable products, both requirements for the respective energy label class must be met.





Battery endurance per cycle (i.e. charge)

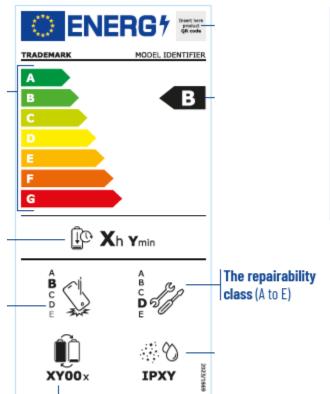


The number of hours and minutes a smartphone or slate tablet can operate with a fully charged battery until the device automatically shuts down due to an empty/drained battery.

The test shall be performed with the operating system version installed on the unit on the date of its placing on the market.



Repairability class



Repairability class	Repairability index (R)
A (most repairable)	≥ 4,00
В	≥ 3,35
C	≥ 2,55
D	≥ 1,75
E (least repairable)	≥ 1,00

Please note that due to the calculation formula, a result R < 1,00 is not possible.





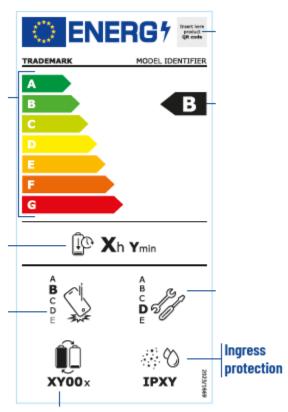
The repairability index

The repairability index (R) is calculated by adding six scoring parameters together. However, the six parameters carry different weights in the overall score.

	Abbreviation	Score parameter	Concerns	Share
			The number of steps required to remove a part,	
	SDD	The Disassembly Depth	without damaging the product	25%
+	SF	The Fasteners (type)	Removability and reusability	15%
+	ST	Tools (type)	Complexity and availability	15%
+	SSP	Spare Parts score	Availability to end-user	15%
+	SSU	Software Updates	Duration of availability after placement on the market has ended	15%
+	SRI	Repair Information	Costs for repair information to professional repairers	15%
=	R	Repairability index		100%



Ingress protection rating



Indication of the product's resistance to water and/or solid objects.

Indicated by an IP code:

- X shows the level of protection against solid objects (0-6)
- Y shows the level of protection against water (0-8)



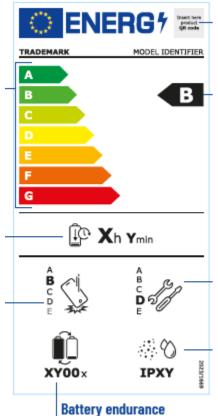
The ingress protection

Tests shall be performed without protective cover.

Rating level	Ingress of solid foreign objects (X)	of solid foreign objects (X) Ingress of water with harmful effects (
	Object size	Protection against	
0	No protection	No protection	
1	≥ 50 mm	Vertical water dripping	
	Protected from touch by fingers	Water spray less than	
2	and ≥ 12 mm	15 degrees from vertical	
3	≥ 2,5 mm	Water spray less than 60 degrees from vertical	
4	≥ 1 mm	Splashing of water	
5	Dust-protected	Jetting of water	
6	Dust-tight	Powerful jetting of water	
7	n.a.	Temporary immersion, 1 m depth	
8	n.a.	Continuous immersion, 1 m or more depth	



Battery endurance in cycles



The value of the battery endurance in cycles

The test runs until the battery has, in a fully charged state, a remaining capacity of at least 80 % of the rated capacity.

The battery shall be tested according to the default charging algorithms implemented by the manufacturer.

The resulting number of cycles shall be rounded down to full hundreds.

The battery endurance shall be calculated with the operating system version installed on the product model on the date of placement on the market.





Information requirements

- **➤** Energy label (printed and digital)
- **▶** Product Information Sheet (PIS)
- User manual
- **➤** The obligations of the dealers
 - Promotion and advertisement
 - Online sales
 - Physical shops/trade fairs





The energy label (printed and digital)

As a supplier, you must ensure that:

- Each smartphone and slate tablet unit is supplied with a printed energy label.
- ➤ An electronic energy label is made available to the dealers.
- On request, provide the dealers with a new printed energy label within 5 working days.
- Any visual advertisement or technical sales/promotional material for each model contains the energy efficiency class and the range of energy efficiency classes available on the energy label shown by an arrow (so-called energy arrow).





Size and creation of the energy label

- At least 68 mm wide and 136 mm high unless the packaging is too small; then it can be printed scaled down, but not less than 70% of the above specification, i.e. at least 47,6 mm wide and 95.2 mm high.
- ➤ If the energy label is printed in a smaller (see above) or larger format, all items must remain proportional.
- The QR code must be readable by a standard QR reader, like readers used on smartphones.
- ➤ It is permitted, but not mandatory, to print the energy label on the packaging.
- The energy label can be generated automatically when the product model is registered in EPREL.





Product Information Sheet (PIS)

Compared to the energy label, the PIS provides consumers with more detailed product information on energy performance and environmental-related aspects.

Your obligations

- Provide an electronic PIS to dealers for each smartphone and slate tablet.
- If requested by the dealer, provide them with a printed PIS.
- Enter the values of the parameters of the PIS and of the energy labelling technical documentation into EPREL.
- The energy label and the PIS can be generated automatically when the product model is registered in **EPREL**.





User manual

- The user manual and any other documentation provided with the product must clearly reference the model's **EPREL** entry.
- This can be done by including either the link (URL) to the <u>EPREL</u> entry of the product, a QR code or the <u>EPREL</u> registration number.





Requirements – Visual advertisements, technical promotional material and in distance selling, except for online sales

- An energy arrow must be displayed per product.
- The energy arrow must point to the left and be of a size that ensures it is clearly visible and legible.
- If the price is shown, the size of the letter inside the energy arrow must be at least as large as the price.
- Customers must be able to access the energy label and PIS via a link to EPREL or by requesting a printed copy.
- Only materials in black and white may use a black and white version of the energy arrow.
- Telemarketing: Inform the customer about the product's energy efficiency class and range (energy arrow), and provide access to the full energy label and the PIS either via a free-access website or, upon request, as a printed copy.



The arrows can be downloaded <u>here</u>.





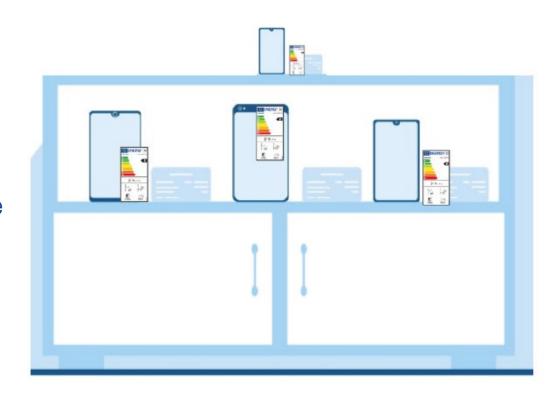
Defining your role

➤ Please note that economic operators can have several roles and therefore must meet several requirements. A supplier has the same obligations as a dealer if the supplier e.g. imports products and sells them to customers.





- Ensure that all products displayed in the shop – whether unpackaged or not – bear an energy label - close to the product or hung on it or placed in such a way as to be clearly visible and unequivocally associated with the specific model.
- Display energy labels on products also in the shop's display windows.
- Provide the product information sheet (PIS) if the customer requests it.





Requirements for dealers – Online sales

- Energy label and PIS must be shown close to the product's price.
- Instead, you can show an energy arrow and a link to the PIS (see on the right), if the energy label or PIS appear when being clicked on or hovered over.
- The energy arrow and PIS must open with only one click. For the PIS, you can also set a link directly to EPREL.
- The link to the PIS must be named "Product Information Sheet" (in local language as in legislation)
- The energy arrow must follow a specific layout and point to the left. Its size must ensure that it is clearly visible and legible.
- The letter inside the arrow must be the same size as the price.



PRODUCT INFORMATION SHEET





POLL no. 4

A webshop has a subpage displaying/mentioning the products, but it is not possible to "add the products to the basket" For example, a list view.

Share of votes

	Option	1
--	---------------	---

No specific requirements apply.

7%

Option 2

Each product must be shown with an energy arrow and link to PIS. 85%

Option 3

One single general link to EPREL is sufficient,

allowing customers to find the specific information they need. 7%

Option 4

I do not know/I do not wish to answer 0%

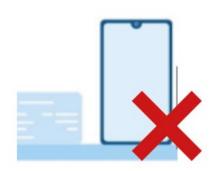
The correct answer is option 2.







Help the dealers to avoid the most frequent mistakes











In the shop/at trade fairs

Missing energy label or a black and white energy label next to the product

All products must have an energy label.

The energy label must be in the correct colors.

Be aware that if the dealers print the energy label, the dealer's printer must be of sufficient quality to reproduce the colors accurately.

Online sales

The product information sheet is incorrectly named

It is not permitted to use a different name.

The link or button must be labelled "Product information sheet" (in the local language – as in legislation)

Advertisements, promotional materials

The energy arrow is incorrectly formatted

The energy arrow must point to the left.

The letter in the energy arrow must be at least as large as the product price.

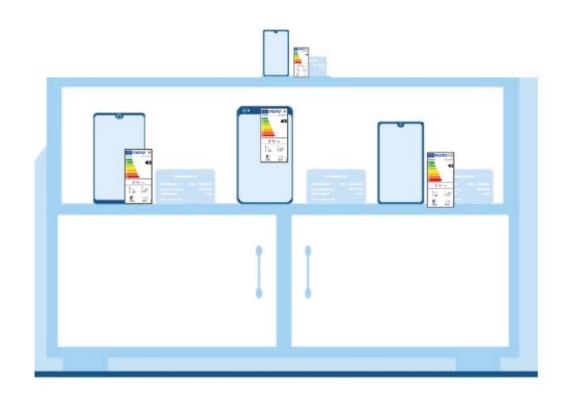




POLL

Many manufacturers have a shop-in-shop solution provided by the supplier. The solution is displayed electronically on the product itself, allowing consumers to view the different model options.

For example, a smartphone model may be available in five different colours and with different memory sizes.









The supplier must ensure...

	Share of votes
Option 1	
Nothing. There are no requirements.	0%
Option 2	
Displaying a QR code for EPREL	30%
Option 3	
Displaying the energy arrow per model option	70%
Option 4	
I do not know/I do not wish to answer	0%

The correct answer is option 3.





Market surveillance

Ecodesign and energy labelling

Ms. Elisabeth Dreier, Senior Consultant, vores bureau







How to prepare for market surveillance

Your national market surveillance authority (MSA) verifies:

Whether products and their documentation, suppliers and retailers on the EU market comply (among others) with the energy labelling and ecodesign requirements

MSAs have several methods for market surveillance activities:

- Online inspections: Web-shops, manufacturer websites, etc.
- Physical inspections: Shops, product testing, inspections at the borders, etc.
- Document inspections: Technical documentation, user manual, advertisements, etc.









MSAs have several methods for enforcement (towards suppliers or dealers):

- Demand additional or missing information (technical documentation, DoC, energy label, arrow, product information sheet, etc.) or its correction
- Apply fines if information is not correct or missing
- Remove products from the EU market (e.g. in case of severely wrong declarations on the energy label with no supplier remedy action)





Documentation

Ecodesign and energy labelling

Ms. Elisabeth Dreier, Senior Consultant, vores bureau







CE marking and EU declaration of conformity

- As a supplier, it is your responsibility to ensure that your product is correctly CE marked before placing it on the market.
- You must also prepare an EU declaration of conformity (also known as a DoC), which states that your product complies with all applicable requirements. The declaration must explicitly reference the relevant ecodesign regulation (not the energy labelling regulation).





Technical documentation

- You must ensure a complete technical documentation that demonstrates the product's compliance with ecodesign and energy labelling requirements.
- The values and classes published on the energy label or in the PIS shall not be more favourable for the supplier than the values declared in the technical documentation.

 The tolerances mentioned in <u>Annex IV</u>, (<u>EU</u>) 2023/1670 (ecodesign) and <u>Annex IX</u>, (<u>EU</u>) 5256/1669 (energy labelling) only apply to the MSAs.
- The technical documentation must be available **before** the product is placed on the market.
- The documentation must be kept for:
 - Energy labelling: 5 years from the date the last unit was placed on the market
 - Ecodesign: 10 years from the date the last unit was placed on the market







Technical documentation

The technical documentation must include, among other things

	Available	Uploaded into
	on request	EPREL
A general description of the model, sufficient to clearly and easily identify it.	Х	Х
References to the harmonised standards applied, or any other measurement standards used.	X	X
A description of the disassembly steps for each priority part as listed in Annex IV, point 5, including any tools and fasteners required at each stage, if applicable.	x	
Specific precautions that must be taken when assembling, installing, maintaining or testing the model.		х
The values of the technical parameters as specified in Annex VI, table 9. These values are regarded		
as the declared values for the purpose of the verification procedure in Annex IX.	X	X
The details and results of the calculations carried out, as described in Annex IV.	X	X
Measurement or testing conditions, if not sufficiently covered by the applicable standards – this includes any algorithms used for battery charging under standard charging procedures, if relevant.	x	х
Parameters for the initial test procedure for the energy efficiency index, if not sufficiently described under the settings in Annex IV, point 1, and Annex IV.	x	
A list of equivalent models, i.e. models with the same technical characteristics and specifications	X	







If an organisation observes a phone manufacturer's shop is not complying with the requirements for displaying the energy label, how should this be escalated?





If an organisation observes a phone manufacturer's shop is not complying with the requirements for displaying the energy label, how should this be escalated?

Answer provided by Elisabeth Dreier

The organisation should inform the national MSA about the situation. It is helpful to provide documentation to support the report, such as a screenshot if an online shop is concerned, or some photos in case of a physical shop.





The availability of harmonised standards for the compliance of products.





The availability of harmonised standards for the compliance of products.

➤ Answer provided by Franz Zach

In each country, there is a national standardisation body (NSB) that acts as the distributor for European / harmonised standards. Here you can purchase the standard.







In the field of energy efficiency, will adding circular economy requirements to regulations become a trend for all products?





Question 3

In the field of energy efficiency, will adding circular economy requirements to regulations become a trend for all products?

➤ Answer provided by Davide Polverini

Yes, the EC Commission analyses it carefully for every product group under review for new regulations, whether and how circular economy aspects can be included.





Question 4

What is the appropriate test method for defining the EEI?





Question 4

What is the appropriate test method for defining the EEI?

Answer provided by Davide Polverini

Testing procedure laid down in Annex IV, Section 1, to Delegated Regulation (EU) 2023/1669;

- Test specifications available on the Commission website¹;
 (→ to be superseded by the harmonised standard, under development)
- Standards samples (video, audio, etc.) available on the Commission website.

NB: Commission will possibly develop a tool (app) for EEI calculation

² https://circabc.europa.eu/ui/group/418195ae-4919-45fa-a959-3b695c9aab28/library/01c3b805-a11f-4805-a2c6-99ea88936a5e?p=1&n=10&sort=modified_DESC





¹ https://ec.europa.eu/docsroom/documents/50214

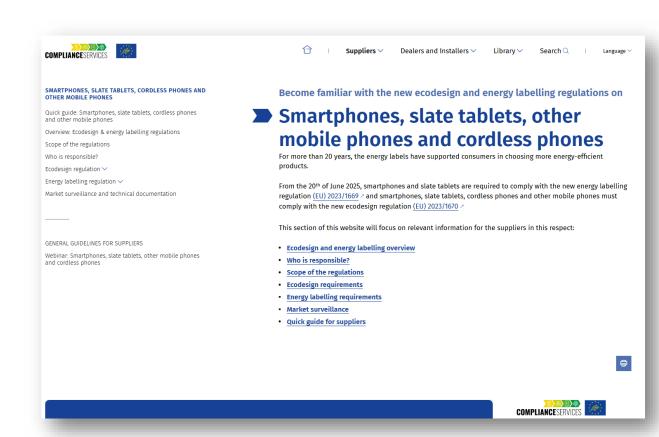
Compliance Services ... at your service

Ms. Joana Fernandes, Coordinator of the European technical projects unit, ADENE

AVAILABLE TOOLS: Full website section

Information for suppliers online:

https://www.productcomplianceservices.eu/suppliers/produ
ct-specificguidelines/electronicdevices/smartphones-slatetablets-cordless-phonesand-other-mobile-phones



All information for dealers and most elements for suppliers are available in seven languages: EN, DE, FR, IT, PT, CZ and DK

AVAILABLE TOOLS: Quick guide for suppliers

Quick guide for suppliers:

https://www.productcomplianceservices.eu/suppliers/produ ct-specificguidelines/electronicdevices/smartphones-slatetablets-cordless-phonesand-other-mobilephones/quick-guidesmartphones-slate-tabletscordless-phones-and-othermobile-phones

Ecodesign and energy labelling Supplier guideline



Smartphones, other mobile phones, cordless phones and slate tablets

Smartphones, other mobile phones, cordless phones and slate tablets are subject to ecodesian requirements, while (only) smartphones and slate tablets are subject to energy labelling requirements. The requirements apply to all products placed on the EU/EEA market.

Ecodesign and energy label

The EU sets ecodesign and energy labelling requirements for energy-related products to promote energy efficiency and reduce energy consumption. Over the past 25 years, an increasing number of products have become subject to such requirements, and from the 20th of June 2025, smartphones, other mobile phones, cordless phones and slate tablets (in this guideline named "tablets") are also covered by some of these requirer

This guidance will help you gain a quick overview of the new requirements. The complete set of requirements is described in the

- The Ecodesign regulation: (EU) 2023/1670 Sets minimum energy and resource efficiency requireme such as battery endurance, scratch, water and drop resistance, reparability, recyclability, system updates, etc.,
- and information requirements. ■ The energy labelling regulation: (EU) 2023/1669 Specifies tools to guide consumers to more energy-efficient and durable products. This includes the energy label, the product information sheet, information on the EPREL
- database, etc. Encourages manufacturers to develop new, more energy efficient and durable products.

Which products are in scope?

Ecodesign requirements apply to smartphones, other mobile phones, cordless phones and tablets, whereas energy labelling requirements apply only to smartphones and tablets

- Smartphones and tablets with a flexible main display which the user can unroll and roll up partly or fully (so-called rollable
- Smartphones for high security communication. Mobile phones designed to be worn on the wrist (so-called smart watches or wearable mobile phones).

EPREL stands for European Product Registry for Energy Labelling and is a database for all products with an energy label. All smartphones and tablets, for which units of these are placed o the market after the 20° of June 2025, must be registered in EPREL.

Ecodesign requirements in brief

efficiency, as well as for information. These include requirements

- Availability of a defined range of spare parts and repair. professional repairers and end-users.
- Maximum delivery time and indicative price of spare parts.
- Ease of disassembly into components and materials Product durability in relation to drops, screen scratches, and exposure to dust and water
- Operating system upgrades, data deletion, transfer of functionalities after use, and a provision ensuring that software updates must not degrade product performance to the point where the product no longer complies with applicable legislation, Provision of the technical documentation.
- Information for end users on a free-access website on e.g. content of critical raw materials, battery endurance, etc.

Energy labelling requirements

The energy labelling regulation requires that smartphones and tablets are supplied with a printed energy label, and that specific informati s provided in a product information sheet. Smartphones and tablets will have to display information on their energy efficiency, battery longevity, repairability, protection from dust and water and resistance to accidental drops.





Ecodesign requirements

Which requirements will apply?

Spare parts requirements

(EU) regulation 2023/1670

Minimum requirements for mandatory spare parts From one month after the date of placement on the market until at least seven years after the date of end of placement on the market, at least the following spare parts, including required fasteners if not reusable, shall be available to professional repairers and end users

Spare parts (mandatory)	Smartphones, tablets and other mobile phones	Cordless phones
Battery or batteries (only to professional repairers)		
Battery compartment cover		
Back cover or back cover assembly, if to be fully removed for replacement of the battery		
Protective foil for foldable displays		
Display assembly		
Charger, unless the device complies with article 3 (4) of Directive 2014/53/EU		
SIM tray and memory card tray, if there is an external slot for a SIM tray or memory card tray		
Charger unless the base-station is equipped with the USB Type-C receptacle, which should remain accessible and operational at all times		
Mechanical display folding mechanism		
Charging cradle		

If the following parts are present in a product, the same

requirements for them apply as above, but only for availability to

Spare parts (when present)	Smartphones, tablets and other mobile phones	Cordless phones
Front- and/or rear-facing camera assembly		
External audio connector(s)		
External charging port(s)		
Mechanical button(s)		
Main microphone(s)		
Speaker(s)		
Hinge assembly		
Mechanical display folding mechanism		
Display assembly		

Please note that a spare part must not be a component made up of multiple spare parts. However, there are a few exceptions (please

'Fastener' means a hardware device or substance that mechanically, nagnetically or by other means connects or fixes two or more objects, parts or pieces. Find more information in Annex I of the regulation.

Supplier guidelines 2

- can be made available as a spare part only to professional repairers
- (i.e. not to professional repairers and end users): After 500 full charge cycles, the battery has, in a fully charged
- state, a remaining capacity of at least 83% of the rated capacity. The battery endurance in cycles: After 1.000 full charge cycles, the battery has, in a fully charged state, a remaining capacity of at least 80 % of the rated capacity.
- The device meets: IP67 rating (mobile phones and smartphones),
- IP42 rating (tablets).

Free access website

It is your responsibility to ensure the availability of a freely accessible website containing the following information:

- List of spare parts. Procedure for ordering spare parts
- fasteners and tools.

Access to repair and maintenance information No later than one month after the product has been placed on the market, you must provide professional repairers with access to repair and maintenance information.

You may choose to do this via a freely accessible website, or by a website requiring authentication of the professional repairer

- Professional repairers can register on the website to request
- access to the information. Before providing the information, you have the right to require that the professional repairer has
- The technical competence to do the repair: No later than five working days after receiving a request, you
- must either reject or accept it. A rejection must include a clear justification. Registration itself must be free of charge, but you are entitled
- to charge reasonable and proportionate fees for access to the
- If you accept the request, you must provide access to the information no later than one working day afterwards including for equivalent models or models in the same product

replacement of spare parts. Refer to Annex II of the regulation for the mplete list of information that must be provided.

The information must be made available for seven years after the product has been taken off the market.

COMPLIANCESERVICES







AVAILABLE TOOLS: Guidelines for dealers

Guidelines for dealers on how to display energy labels at the points of sale:

https://www.productcomplianceservices.eu/dealers-andinstallers/quick-guidesdealersinstallers/guidelines-fordealers/smartphones-slatetablets-dealers



AVAILABLE TOOLS: Webinar PPT

Presentation from a webinar for dealers:

https://www.productcomplianceservices.eu/dealers-andinstallers/webinars-elearning/webinar-dealerssmartphones-and-slatetablets-has-been-held



AVAILABLE TOOLS: Q and A document for dealers

Questions and Answers for dealers:

https://www.productcomplianceservices.eu/dealers-andinstallers/webinars-elearning/webinar-dealerssmartphones-and-slate-tabletshas-been-held

Smartphones and slate tablets: Questions and answers from the Compliance Services webinar for dealers, which took place on the 11th of June 2025 Energy labelling The energy label – in the packaging......2 The energy label - in the store/trade fair......4 The energy arrow and PIS - online sales......7 The scope of the regulation..... Placing on the market and the transition period......14 Availability of energy labels......17 Ecodesign Ecodesign requirements..... Energy labelling and ecodesign regulations..... Compliance Services...... Services by the project......24 Co-funded by the European Union COMPLIANCESFRVICES Compliance Services project is funded by the LIFE programme under contract no. 101120843. Co-funded by the European Union. Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

23. Timing for implementation in EPREL

Question

According to the most recent information in the API documentation, the implementation of the new energy labels is not yet complete. Although we are aware of the new attributes, we are currently unable to fully test their integration within our systems.

We believe that the two-week period leading up to the directive's enforcement should be dedicated solely to updating the information on our website. As we prepare in advance to ensure a smooth flow of data between our systems and the EPREL API, this timeframe should not be used to troubleshoot or resolve unforeseen issues in the API implementation itself. We kindly ask for your support in this matter.

Answei

Please, be aware that our project is not directly linked to the EU Commission, which manages the EPREL database and we cannot influence its operation and structure. Therefore, please address this question to the EPREL database helpdesk.

Useful links

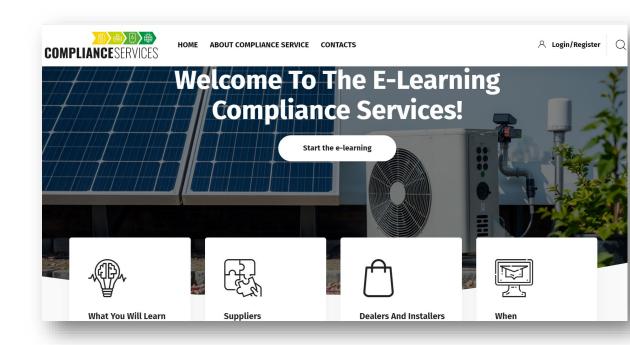
The email address for the EPREL helpdesk is ENER-EPREL-HELPDESK@ec.europa.eu

Please also see the <u>Q&A</u> from the EPREL Support help desk (you need an EU login to enter this link. You can create an EU login here: <u>EU Login user portal</u> - <u>European Union</u>)

TOOLS COMING SOON: E-learning course

E-learning courses for suppliers and dealers, module on smartphones and slate tablets

https://elearningcomplianceservices.adene.pt/



About the project

Compliance Services

At your disposal to help you properly implement the ecodesign and energy labelling legislation

Services for suppliers

If you produce or import a product for the EU market, you have to ensure that the product and the related documentation as well as information and promotion materials comply with the requirements specified in the product-specific ecodesign and energy labelling regulations.

coordinated by



European organisations





















THE EUROPEAN HEATING

FUROPEAN HEAT PUMP ASSOCIATION

FUROPEAN SOLAR THERMAL

EPIA SOLARPOWER EUROPE

ADEME Agence de l'environnement et de lamaitrise de l'energie

National organisations

Agencia para a energia

ALTROCONSUMO. EDIZIONI srl

Associação Portuguesa de Empresas de Distribuição

ENERGISTYREI SEN Danish Energy Agency

The Energy Efficiency Center z.u. VORES BUREAU

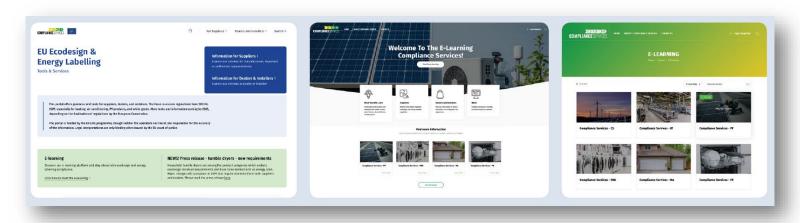
COMPLIANCE SERVICES project

- Product categories covered so far:
 - Smartphones, slate tablets, other mobile phones and cordless phones
 - Tumble dryers
 - Local space heaters (only ecodesign)
- In the pipeline (once the new regulations are published):
 - Heating products
 - Water heating products
 - Air-conditioning products
 - PV and solar panels

Visit our project webpage:

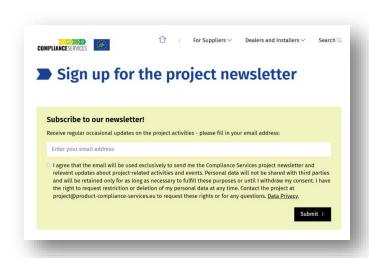
www.product-compliance-services.eu

- Guidelines (horizontal/product-specific)
- FAQs
- Webinars
- Helpdesk service (ticket system under preparation)
- E-learning (smartphones and tablets, and more)



Compliance Services newsletter

Sign up to the project newsletter to obtain future project materials and guidelines, webinar invitations, updates on new <u>energy labelling</u> and <u>ecodesign</u> legislation:



Newsletter

https://www.product-compliance-services.eu/sign-up-for-the-project-newsletter



Project website

www.product-compliance-services.eu

E-mail

project@product-compliance-services.eu

LinkedIn

https://www.linkedin.com/company/product-compliance-services

Newsletter

https://www.product-compliance-services.eu/sign-up-for-the-compliance-services-newsletter

E-learning

https://elearningcomplianceservices.adene.pt/

EC portal:

https://energy-efficient-products.ec.europa.eu/product-list/smartphones-and-tablets_en



We will share with you per e-mail links to:



- Webinar presentation
- Answers to specific questions



- Guidelines to suppliers on ecodesign and energy labelling requirements for smartphones, slate tablets, cordless phones and mobile phones
- Guidelines to dealers on new energy labels for smartphones and slate tablets

Compliance Services project is funded by the LIFE programme under contract n. 101120843.

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.



Please evaluate this webinar

Share of votes

→ Option 1

I found it very useful 65%

→ Option 2

It was ok 30%

Option 3

I did not learn anything new 4%

→ Option 4

I do not know/I do not want to answer 0%





The Compliance Services project is coordinated by the Austrian Energy Agency.





Compliance Services project is funded by the LIFE programme under contract n. 101120843.

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

The information provided in this document is not containing the complete set of requirements, reflects the project's understanding and as such is not legally binding. A binding interpretation of European Union law is the sole competence of the European Court of Justice. Any advice or instruction provided here cannot go beyond or substitute the requirements of the Energy Labelling and Ecodesign Regulations or the individual delegated acts, which are binding in their entirety and directly applicable in all Member States.

WWW.PRODUCT-COMPLIANCE-SERVICES.EU