

# Public consultation on potential measures for regulating the environmental impact of mobile phones and tablets

Fields marked with \* are mandatory.

## Introduction

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In 2020, the EU adopted a new circular economy action plan to support the European Green Deal. The initiatives set out in the action plan cover a product's entire life cycle and aim to ensure that the resources used are kept in the EU economy for as long as possible. They include new rules on designing mobile phones and tablets to be resource efficient (circular).

The relevant legislation will build on two EU laws on:

- ecodesign, promoting the durability, reparability and recyclability of products
- energy labelling, promoting energy efficiency in products.

The widespread and increasing use of mobile phones (particularly smartphones) and tablets is giving rise to a number of new challenges, for example:

-increased functionality of these devices over time has resulted in a greater demand for power, storage capacity and materials to manufacture them. Although they are used in very small quantities, some of these materials raise global concerns because of their social, economic and geopolitical impacts (e.g. critical raw materials such as tantalum and tungsten).

- at the end of their useful life, smartphones and tablets are typically left 'hibernated', i.e. unused at home. This is a waste of resources, as the devices and their materials could, with the right processes, be reused, recycled and/or recovered.

- smartphones are replaced by users every 2 to 3 years on average, as their lifetime is linked to factors such as:

1. the user wanting a new model/software (not related to the device malfunctioning).
2. the (limited) availability of the most commonly damaged spare parts (the screen, battery and sometimes the back cover).
3. the (limited) availability of updated versions of the operating system, firmware or software.
4. cost and ease of repair.
5. reduced battery endurance over time. A battery that remains charged for longer means better energy performance and efficiency, thanks to less frequent charging and longer overall battery life (total number of charging cycles).

The two new Commission initiatives[1] aim to make mobile phones and tablets more energy efficient and to improve their material efficiency (i.e. make them less prone to damage and premature obsolescence). This will make these devices less harmful to the environment, while ensuring they can still circulate freely in the single market.

The identified areas for potential regulation[2] notably relate to:

- resistance when accidentally dropped
- protection from water and dust

- battery accessibility and longevity
- availability of software/firmware/operating system updates
- product durability
- ability of the product to be disassembled
- availability of priority spare parts
- data deletion and transfer functionalities
- appropriate information for users, repairers and recyclers.

[1] See <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12797-Environmental-impact-of-mobile-phones-and-tablets-Ecodesign> and <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12798-Environmental-impact-of-mobile-phones-and-tablets-Energy-Labeling>

[2] <https://www.ecosmartphones.info/>

## About this open public consultation

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This open public consultation aims to offer smartphone and tablet users and stakeholders involved in all areas of the value chain (original equipment manufacturers, component suppliers, users, repairers, recyclers, etc.) the opportunity to express their views on how to best address the policy challenges outlined above and to provide relevant information.

Your feedback, together with evidence from different sources including desk-research and other consultations, will contribute to the analysis on the best possible policy response.

The questionnaire first gathers information about you, the respondent. It is then divided into two sections: one on smartphones and one on tablets, as these two product categories are expected to be responsible for the highest share of environmental impacts when compared to similar categories such as feature phones or cordless phones. You may wish to reply to one or both of these sections. Each section should take around 15-20 minutes. You can also attach position papers/documents to support your views.

You can fill in the questionnaire either:

- as a final user (i.e. with questions based on your experience as user, such as For how long did you use your last smartphone?), or
- with a perspective on the whole market (i.e. with questions based on your understanding of the market, such as How long do you estimate the average operational life of a smartphone produced in the last 2 years to be?).

If you have any questions about this consultation, please email them to [GROW-ECODESIGN@ec.europa.eu](mailto:GROW-ECODESIGN@ec.europa.eu) indicating 'open public consultation – mobile phones & tablets' in the subject line.

Thank you for your interest and cooperation.

## About you

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\* Language of my contribution

- Bulgarian
- Croatian
- Czech
- Danish
- Dutch
- English
- Estonian
- Finnish
- French
- German
- Greek
- Hungarian
- Irish
- Italian
- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish

\* I am giving my contribution as

- Academic/research institution
- Business association
- Company/business organisation
- Consumer organisation
- EU citizen
- Environmental organisation
- Non-EU citizen
- Non-governmental organisation (NGO)
- Public authority

- Trade union
- Other

\* First name

\* Surname

\* Email (this won't be published)

\* Scope

- International
- Local
- National
- Regional

\* Level of governance

- Local Authority
- Local Agency

\* Level of governance

- Parliament
- Authority
- Agency

\* Organisation name

*255 character(s) maximum*

\* Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)

- Large (250 or more)

## Transparency register number

*255 character(s) maximum*

Check if your organisation is on the [transparency register](#). It's a voluntary database for organisations seeking to influence EU decision-making.

## \* Country of origin

Please add your country of origin, or that of your organisation.

- |   |  |  |  |
|---|--|--|--|
| <input type="radio"/> Afghanistan         | <input type="radio"/> Djibouti           | <input type="radio"/> Libya            | <input type="radio"/> Saint Martin                     |
| <input type="radio"/> Åland Islands       | <input type="radio"/> Dominica           | <input type="radio"/> Liechtenstein    | <input type="radio"/> Saint Pierre and Miquelon        |
| <input type="radio"/> Albania             | <input type="radio"/> Dominican Republic | <input type="radio"/> Lithuania        | <input type="radio"/> Saint Vincent and the Grenadines |
| <input type="radio"/> Algeria             | <input type="radio"/> Ecuador            | <input type="radio"/> Luxembourg       | <input type="radio"/> Samoa                            |
| <input type="radio"/> American Samoa      | <input type="radio"/> Egypt              | <input type="radio"/> Macau            | <input type="radio"/> San Marino                       |
| <input type="radio"/> Andorra             | <input type="radio"/> El Salvador        | <input type="radio"/> Madagascar       | <input type="radio"/> São Tomé and Príncipe            |
| <input type="radio"/> Angola              | <input type="radio"/> Equatorial Guinea  | <input type="radio"/> Malawi           | <input type="radio"/> Saudi Arabia                     |
| <input type="radio"/> Anguilla            | <input type="radio"/> Eritrea            | <input type="radio"/> Malaysia         | <input type="radio"/> Senegal                          |
| <input type="radio"/> Antarctica          | <input type="radio"/> Estonia            | <input type="radio"/> Maldives         | <input type="radio"/> Serbia                           |
| <input type="radio"/> Antigua and Barbuda | <input type="radio"/> Eswatini           | <input type="radio"/> Mali             | <input type="radio"/> Seychelles                       |
| <input type="radio"/> Argentina           | <input type="radio"/> Ethiopia           | <input type="radio"/> Malta            | <input type="radio"/> Sierra Leone                     |
| <input type="radio"/> Armenia             | <input type="radio"/> Falkland Islands   | <input type="radio"/> Marshall Islands | <input type="radio"/> Singapore                        |
| <input type="radio"/> Aruba               | <input type="radio"/> Faroe Islands      | <input type="radio"/> Martinique       | <input type="radio"/> Sint Maarten                     |
| <input type="radio"/> Australia           | <input type="radio"/> Fiji               | <input type="radio"/> Mauritania       | <input type="radio"/> Slovakia                         |
| <input type="radio"/> Austria             | <input type="radio"/> Finland            | <input type="radio"/> Mauritius        | <input type="radio"/> Slovenia                         |
| <input type="radio"/> Azerbaijan          | <input type="radio"/> France             | <input type="radio"/> Mayotte          | <input type="radio"/> Solomon Islands                  |
| <input type="radio"/> Bahamas             | <input type="radio"/> French Guiana      | <input type="radio"/> Mexico           | <input type="radio"/> Somalia                          |

- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Belize
- Benin
- Bermuda
- Bhutan
- Bolivia
- Bonaire Saint Eustatius and Saba
- Bosnia and Herzegovina
- Botswana
- Bouvet Island
- Brazil
- British Indian Ocean Territory
- British Virgin Islands
- Brunei
- Bulgaria
- Burkina Faso
- Burundi
- French Polynesia
- French Southern and Antarctic Lands
- Gabon
- Georgia
- Germany
- Ghana
- Gibraltar
- Greece
- Greenland
- Grenada
- Guadeloupe
- Guam
- Guatemala
- Guernsey
- Guinea
- Guinea-Bissau
- Guyana
- Haiti
- Heard Island and McDonald Islands
- Honduras
- Hong Kong
- Micronesia
- Moldova
- Monaco
- Mongolia
- Montenegro
- Montserrat
- Morocco
- Mozambique
- Myanmar /Burma
- Namibia
- Nauru
- Nepal
- Netherlands
- New Caledonia
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Niue
- Norfolk Island
- Northern Mariana Islands
- South Africa
- South Georgia and the South Sandwich Islands
- South Korea
- South Sudan
- Spain
- Sri Lanka
- Sudan
- Suriname
- Svalbard and Jan Mayen
- Sweden
- Switzerland
- Syria
- Taiwan
- Tajikistan
- Tanzania
- Thailand
- The Gambia
- Timor-Leste
- Togo
- Tokelau
- Tonga

- Cambodia
- Cameroon
- Canada
- Cape Verde
- Cayman Islands
- Central African Republic
- Chad
- Chile
- China
- Christmas Island
- Clipperton
- Cocos (Keeling) Islands
- Colombia
- Comoros
- Congo
- Cook Islands
- Costa Rica
- Côte d'Ivoire
- Croatia
- Cuba
- Curaçao
- Cyprus
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland
- Isle of Man
- Israel
- Italy
- Jamaica
- Japan
- Jersey
- Jordan
- Kazakhstan
- Kenya
- Kiribati
- Kosovo
- Kuwait
- Kyrgyzstan
- Laos
- Latvia
- North Korea
- North Macedonia
- Norway
- Oman
- Pakistan
- Palau
- Palestine
- Panama
- Papua New Guinea
- Paraguay
- Peru
- Philippines
- Pitcairn Islands
- Poland
- Portugal
- Puerto Rico
- Qatar
- Réunion
- Romania
- Russia
- Rwanda
- Saint Barthélemy
- Trinidad and Tobago
- Tunisia
- Turkey
- Turkmenistan
- Turks and Caicos Islands
- Tuvalu
- Uganda
- Ukraine
- United Arab Emirates
- United Kingdom
- United States
- United States Minor Outlying Islands
- Uruguay
- US Virgin Islands
- Uzbekistan
- Vanuatu
- Vatican City
- Venezuela
- Vietnam
- Wallis and Futuna
- Western Sahara
- Yemen

- Czechia
- Lebanon
- Saint Helena  
Ascension and  
Tristan da  
Cunha
- Zambia
- Democratic  
Republic of the  
Congo
- Lesotho
- Saint Kitts and  
Nevis
- Zimbabwe
- Denmark
- Liberia
- Saint Lucia

Which of the following activities are performed by your company? (You can choose more than one option.)

	Yes	No
Original equipment manufacturer of smartphones	<input type="radio"/>	<input type="radio"/>
Original equipment manufacturer of tablets	<input type="radio"/>	<input type="radio"/>
Original equipment manufacturer of other electronic devices	<input type="radio"/>	<input type="radio"/>
Supplier of batteries for smartphones/tablets	<input type="radio"/>	<input type="radio"/>
Supplier of components, other than batteries, for smartphones/tablets	<input type="radio"/>	<input type="radio"/>
Third party involved in repair/refurbishing services	<input type="radio"/>	<input type="radio"/>
Recycler (of any kind of materials/devices)	<input type="radio"/>	<input type="radio"/>
Telecommunication network operator / service provider	<input type="radio"/>	<input type="radio"/>
Activities not at product level (software development, IT services, etc.)	<input type="radio"/>	<input type="radio"/>
My company is not involved in any of the activities listed above	<input type="radio"/>	<input type="radio"/>

Where is your company based?

- Inside the EU, with a predominantly national market (i.e. in one EU Member State)
- Inside the EU, with an EU-wide market (i.e. in more than one EU Member State)
- Outside the EU

The Commission will publish all contributions to this public consultation. You can choose whether you would prefer to have your details published or to remain anonymous when your contribution is published. **For the purpose of transparency, the type of respondent (for example, 'business association, 'consumer association', 'EU citizen') country of origin, organisation name and size, and its**



transparency register number, are always published. Your e-mail address will never be published.

Opt in to select the privacy option that best suits you. Privacy options default based on the type of respondent selected

### \* Contribution publication privacy settings

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

**Anonymous**

The type of respondent that you responded to this consultation as, your country of origin and your contribution will be published as received. Your name will not be published. Please do not include any personal data in the contribution itself.

**Public**

Your name, the type of respondent that you responded to this consultation as, your country of origin and your contribution will be published.

### \* Contribution publication privacy settings

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

**Anonymous**

Only organisation details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published as received. Your name will not be published. Please do not include any personal data in the contribution itself if you want to remain anonymous.

**Public**

Organisation details and respondent details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published. Your name will also be published.

I agree with the [personal data protection provisions](#)

How do you want to fill in the questionnaire?

- as a **final user** (i.e. with questions based on your experience as user, such as *For how long did you use your last smartphone/tablet?*). For the following questions, please focus – unless explicitly stated - on the latest smartphone /tablet in your possession. If you currently own more than one, please focus on one of them only. If you do not have a smartphone/tablet, please fill in the questionnaire based on your understanding of the product.
- with a perspective on the **whole market** (i.e. questions relate to your understanding of the market, such as *How long do you estimate the average operational life of a smartphone produced in the last 2 years to be?*).

Do you want to fill in the section on smartphones?

- Yes
- No

Do you want to fill in the section on tablets?

- Yes
- No

## Part 1 - smartphones

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1. Do you have a smartphone?

- Yes
- No

1a. Is your smartphone remanufactured/second hand?

- Yes
- No

2. When buying your most recent smartphone, which of the following characteristics did you consider to be important?

	not important	somewhat important	important	don't know
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ecodesign, e.g. durable, upgradeable, repairable designs or designs requiring fewer materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Battery endurance (meaning the amount of time your smartphone can operate, starting with an initially fully charged battery until the device shuts off automatically due to a drained battery)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-lasting battery (meaning a battery with a durability comparable to the smartphone lifetime)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performance (speed, functionalities such as quality of pictures)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brand and design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guarantee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of local repair centres	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of spare parts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of software/firmware updates for a certain period of time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accompanying information on how to repair the product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

A take-back scheme offered by the manufacturer or seller (i.e. you can take an obsolete device back to the manufacturer/seller at no cost or receive a discount when purchasing another device)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accompanying information about the environmental impact of the manufacturing phase of the product itself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1. Which of the following characteristics do users consider important when choosing a new smartphone?

	not important	somewhat important	important	don't know
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ecodesign, e.g. durable, upgradeable, repairable designs or designs requiring fewer materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Battery endurance (meaning the amount of time your smartphone can operate, starting with an initially fully charged battery until the device shuts off automatically due to a drained battery)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-lasting battery (meaning a battery with a durability comparable to the smartphone lifetime)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Performance (speed, functionalities such as quality of pictures)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brand and design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guarantee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of local repair centres	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of spare parts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of software/firmware updates for a certain period of time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accompanying information on how to repair the product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A take-back scheme offered by the manufacturer or seller (i.e. you can take an obsolete device back to the manufacturer/seller at no cost or receive a discount when purchasing another device)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accompanying information about the environmental impact of the manufacturing phase of the product itself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. How long did you use your last smartphone for (the one you had before the one you are currently using)? (NB: 'hibernated' or 'backup' smartphones left unused e.g. in a drawer, are not considered in use)

- Less than 1 year
- 1 to less than 2 years
- 2 to less than 3 years
- 3 to less than 5 years
- 5 years or more

- The smartphone currently in my possession is my first one
- I don't have a smartphone

2. How long do you estimate the average operational life of smartphones produced in the last 2 years to be? (NB1: 'hibernated' smartphones left unused e.g. in a drawer, are not considered in use; NB2: the estimate should consider the operational life of a second hand product if relevant, i.e. total number of years in use)

- Less than 1 year
- 1 to less than 2 years
- 2 to less than 3 years
- 3 to less than 5 years
- 5 years or more
- Don't know

4. Do you consider that the average operational life of a smartphone corresponds to its price?

- In general terms, the higher the price, the higher the quality and, therefore, the longer the durability.
- All smartphones have the same average durability.
- There is no link between price and durability
- Don't know

3. Do you consider that the average operational life of a smartphone corresponds to its price?

- In general terms, the higher the price, the higher the quality and, therefore, the longer the durability.
- All smartphones have the same average durability.
- There is no link between price and durability
- Don't know

5. What did you do with your last smartphone (the one you had before the one you are currently using) once you were no longer using it?

- It is still kept in my household unused
- It was sold or given away

- It was disposed of in electronic waste collection/recycling (incl. leaving it to the retailer to dispose of)
- It was disposed of but not in electronic waste collection/recycling
- The smartphone currently in my possession is my first one
- I have never had a smartphone

5a. Why is the device still kept in your household? (You can choose more than one option)

- I might need to retrieve data from it (e.g. photos, videos)
- I am afraid of security/privacy breaches of my personal data if I throw it away
- I want to keep it as a backup/ an emergency spare, in case my new device does not work
- I have no easy way to dispose of it properly or I do not know how to dispose of it properly
- Other reasons

4. When smartphones are no longer being used where do they usually end up?

- Users tend to still keep them in their household or store them (in the case of business users)
- The devices are sold or given away
- The devices are disposed of in electronic waste collection/recycling (incl. leaving it to the retailer to dispose of)
- The devices are disposed of but not in electronic waste collection/recycling
- Don't know

6. Why is your previous smartphone no longer in use? (You can choose more than one option.)

- The device (or part of the device) broke, and the price of repair was too high
- The device broke, and spare parts were not available
- The device broke, and repair was not technically feasible
- Software/security updates were no longer available
- For aesthetic reasons (e.g. I wanted a new(er) / more fashionable model)
- The device became too slow
- Lack of memory space to install new applications
- I wanted a better performing device with new or improved functionalities
- The device was lost/stolen

- I was offered another free/discounted device under the contract with my phone operator
- The smartphone currently in my possession is my first one

6a. Which was the faulty component? (You can choose more than one option.)

- Display
- Casing
- Battery
- Connectors
- Camera
- Microphone
- Loudspeakers
- Charger
- Buttons
- Hinge assembly
- Other
- Not sure

7. For which activities/functions and for how long each day, do you use your smartphone on average?

	less than 30 minutes	30 minutes- less than 1 hour	1 hour - less than 2 hours	2 hours - less than 4 hours	4 hours or more
Overall use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phone calls	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using applications for chat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Streaming media, i.e. video or music content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking pictures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing offline games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing online games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Browsing the web	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



5. For which activities/functions, and for how long each day, are smartphones used on average?

	less than 30 minutes	30 minutes- less than 1 hour	1 hour - less than 2 hours	2 hours - less than 4 hours	4 hours or more	Don't know
Overall use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phone calls	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using applications for chat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Streaming media, i.e. video or music content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking pictures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing offline games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing online games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Browsing the web	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. How long is the battery endurance of your current smartphone on average (i.e. how long can it operate starting with an initially fully charged battery until the device shuts off automatically due to a drained battery)?

- Less than 6 hours
- 6 hours - less than 12 hours
- 12 hours - less than 24 hours
- 24 hours - less than 48 hours
- 48 hours or more

6. How long is the average battery endurance of a smartphone produced in the last 2 years (i.e. how long can it operate starting with an initially fully charged battery until the device shuts off automatically due to a drained battery)?

- Less than 6 hours
- 6 hours - less than 12 hours
- 12 hours - less than 24 hours
- 24 hours - less than 48 hours
- 48 hours or more

- Don't know

9. How do you usually charge your device?

- Full charging
- Partial charging (i.e. not full charge)
- Fast charging, if the manufacturer provides a fast charger

7. How do users typically charge their device?

- Full charging
- Partial charging (i.e. not full charge)
- Fast charging, if the manufacturer provides a fast charger
- Don't know

10. Which of the following elements would, in your view, make it easier to repair smartphones compared with the current situation? (You can choose more than one option.)

- The compulsory availability of critical spare parts for a minimum amount of time (e.g. 6 years)
- A maximum cap on the price of spare parts
- Access to repair and maintenance information, such as disassembly maps of the device
- 'Do it yourself' repair/refurbishment operations for some components (e.g. the battery) that do not require technical knowledge, with commonly available tools provided
- Real time information on ageing of the device/components during the use phase, such as the number of charge/discharge cycles of the battery
- Don't know
- I think it is already easy to repair smartphones now
- Other solutions

8. Which of the following elements would, in your view, make it easier to repair smartphones compared with the current situation? (You can choose more than one option.)

- The compulsory availability of critical spare parts for a minimum amount of time (e.g. 6 years)
- A maximum cap on the price of spare parts

- Access to repair and maintenance information, such as disassembly maps of the device
- 'Do it yourself' repair/refurbishment operations for some components (e.g. the battery) that do not require technical knowledge, with commonly available tools provided
- Real time information on ageing of the device/components during the use phase, such as the number of charge/discharge cycles of the battery
- Don't know
- I think it is already easy to repair smartphones now
- Other solutions

Other solutions - please specify

11. if you were to repair your device (provided that this does not impact the warranty or risk causing harm to users or the device):

- I would like to do some repair operations myself if possible
- It should be feasible to have it repaired by independent repairers
- I prefer to have it repaired by the device's manufacturer (or by someone authorised by the manufacturer)
- Don't know/not applicable

Which of the following elements would, in your view, improve the recyclability of smartphones, when compared to the current situation? (You can choose more than one option.)

- Access to information on the critical (or precious) raw materials (e.g. cobalt, tantalum, neodymium, gold) used to make the smartphone and their estimated weight
- Access to instructions for dismantling the device
- Information about the recyclability rate of the device, expressed as the share of recyclable materials/parts of the product
- Other

(Please specify)

12. If there was an EU ecodesign regulation on smartphones, addressing material efficiency aspects in particular (such as those mentioned in the previous questions), how do you think it would affect innovation in the sector?

- I would not expect it to have any impact on the innovation capability of this sector
- The ecodesign requirements could promote innovation in this sector (please specify how/what).
- Ecodesign requirements for smartphones could indirectly cause barriers to innovation (please specify which)
- Other (please specify)
- Don't know

(Please specify)

9. If there was an EU ecodesign regulation on smartphones, addressing material efficiency aspects in particular (such as those mentioned in the previous questions), how do you think it would affect innovation in the sector?

- I would not expect it to have any impact on the innovation capability of this sector
- The ecodesign requirements could promote innovation in this sector (please specify how/what).
- Ecodesign requirements for smartphones could indirectly cause barriers to innovation (please specify which)
- Other (please specify)
- Don't know

(Please specify)

13. If there were EU rules on smartphones to ensure higher availability of repair services, spare parts, software updates, longer product lifespans and more information on reparability, how would this affect you (if at all)?

- Positively. It would make my purchasing and repair decisions easier, and I would likely keep my smartphone longer

- Neutral. It would not have any significant impact on my purchasing and repair decisions
- Negatively. It would make my purchasing and repair decisions more complex
- Other
- Don't know

(Please specify)

## Part 2 - tablets

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1. Do you have a tablet?

- Yes
- No

2. When buying your most recent tablet, which of the following characteristics did you consider to be important?

	not important	somewhat important	important	don't know
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ecodesign, e.g. durable, upgradeable, repairable designs or designs requiring fewer materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Battery endurance (meaning the amount of time your tablet can operate, starting with an initially fully charged battery until the device shuts off automatically due to a drained battery)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-lasting battery (meaning a battery with a durability comparable to the tablet lifetime)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Performance (speed, functionalities such as quality of pictures)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brand and design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guarantee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of local repair centres	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of spare parts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of software/firmware updates for a certain period of time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accompanying information on how to repair the product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A take-back scheme offered by the manufacturer or seller (i.e. you can take an obsolete device back to the manufacturer/seller at no cost or receive a discount when purchasing another device)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accompanying information about the environmental impact of the manufacturing phase of the product itself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

1. Which of the following characteristics do users consider important when choosing a new tablet?

	not important	somewhat important	important	don't know
Price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ecodesign, e.g. durable, upgradeable, repairable designs or designs requiring fewer materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Battery endurance (meaning the amount of time your tablet can operate, starting with an initially fully charged battery until the device shuts off automatically due to a drained battery)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-lasting battery (meaning a battery with a durability comparable to the tablet lifetime)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performance (speed, functionalities such as quality of pictures)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Brand and design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guarantee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of local repair centres	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of spare parts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of software/firmware updates for a certain period of time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accompanying information on how to repair the product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>A take-back scheme offered by the manufacturer or seller (i.e. you can take an obsolete device back to the manufacturer/seller at no cost or receive a discount when purchasing another device)</p>	○	○	○	○
<p>Accompanying information about the environmental impact of the manufacturing phase of the product itself</p>	○	○	○	○

3. How long did you use your last tablet for (the one you had before the one you are currently using)? (NB: 'hibernated' or 'backup' tablets left unused e.g. in a drawer, are not considered in use)

- Less than 1 year
- 1 to less than 2 years
- 2 to less than 3 years
- 3 to less than 5 years
- 5 years or more
- The tablet currently in my possession is my first one
- I don't have a tablet

2. How long do you estimate the average operational life of tablets produced in the last 2 years to be? (NB1: 'hibernated' tablets left unused e.g. in a drawer, are not considered in use; NB2: the estimate should consider the operational life of a second hand product if relevant, i.e. total number of years in use)

- Less than 1 year
- 1 to less than 2 years
- 2 to less than 3 years
- 3 to less than 5 years
- 5 years or more
- Don't know



4. Do you consider that the average operational life of a tablet corresponds to its price?

- In general terms, the higher the price, the higher the quality and, therefore, the longer the durability.
- All tablets have the same average durability.
- There is no link between price and durability
- Don't know

3. Do you consider that the average operational life of a tablet corresponds to its price?

- In general terms, the higher the price, the higher the quality and, therefore, the longer the durability.
- All tablets have the same average durability.
- There is no link between price and durability
- Don't know

5. What did you do with your last tablet (the one you had before the one you are currently using) once you were no longer using it?

- It is still kept in my household unused
- It was sold or given away
- It was disposed of in electronic waste collection/recycling (incl. leaving it to the retailer to dispose of)
- It was disposed of but not in electronic waste collection/recycling
- The tablet currently in my possession is my first one
- I have never had a tablet

5a. Why is the device still kept in your household? (You can choose more than one option)

- I might need to retrieve data from it (e.g. photos, videos)
- I am afraid of security/privacy breaches of my personal data if I throw it away
- I want to keep it as a backup/ an emergency spare, in case my new device does not work
- I have no easy way to dispose of it properly or I do not know how to dispose of it properly
- Other reasons

4. When tablets are no longer being used where do they usually end up?

- Users tend to still keep them in their household or store them (in the case of business users)
- The devices are sold or given away
- The devices are disposed of in electronic waste collection/recycling (incl. leaving it to the retailer to dispose of)
- The devices are disposed of but not in electronic waste collection/recycling
- Don't know

6. Why is your previous tablet no longer in use? (You can choose more than one option.)

- The device (or part of the device) broke, and the price of repair was too high
- The device broke, and spare parts were not available
- The device broke, and repair was not technically feasible
- Software/security updates were no longer available
- For aesthetic reasons (e.g. I wanted a new(er) / more fashionable model)
- The device became too slow
- Lack of memory space to install new applications
- I wanted a better performing device with new or improved functionalities
- The device was lost/stolen
- I was offered another free/discounted device under the contract with my phone operator
- The tablet currently in my possession is my first one

6a. Which was the faulty component? (You can choose more than one option.)

- Display
- Casing
- Battery
- Connectors
- Camera
- Microphone
- Loudspeakers
- Charger
- Other
- Not sure

7. For which activities/functions and for how long each day, do you use your tablet on average?

	less than 30 minutes	30 minutes- less than 1 hour	1 hour - less than 2 hours	2 hours - less than 4 hours	4 hours or more
Overall use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using applications for chat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Streaming media, i.e. video or music content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking pictures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing offline games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing online games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Browsing the web	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. For which activities/functions, and for how long each day, are tablets used on average?

	less than 30 minutes	30 minutes- less than 1 hour	1 hour - less than 2 hours	2 hours - less than 4 hours	4 hours or more	Don't know
Overall use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using applications for chat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Streaming media, i.e. video or music content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking pictures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing offline games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing online games	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Browsing the web	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. How long is the battery endurance of your current tablet on average (i.e. how long can it operate starting with an initially fully charged battery until the device shuts off automatically due to a drained battery)?

- Less than 6 hours
- 6 hours - less than 12 hours
- 12 hours - less than 24 hours
- 24 hours - less than 2 days
- 2 days - less than 3 days
- 3 days or more

6. How long is the average battery endurance of a tablet produced in the last 2 years (i.e. how long can it operate starting with an initially fully charged battery until the device shuts off automatically due to a drained battery)?

- Less than 6 hours
- 6 hours - less than 12 hours
- 12 hours - less than 24 hours
- 24 hours - less than 2 days
- 2 days - less than 3 days
- 3 days or more
- Don't know

9. How do you usually charge your device?

- Full charging
- Partial charging (i.e. not full charge)
- Fast charging, if the manufacturer provides a fast charger

7. How do users typically charge their device?

- Full charging
- Partial charging (i.e. not full charge)
- Fast charging, if the manufacturer provides a fast charger
- Don't know

10. Which of the following elements would, in your view, make it easier to repair tablets compared with the current situation? (You can choose more than one option.)

The compulsory availability of critical spare parts for a minimum amount of time (e.g. 6 years)

- A maximum cap on the price of spare parts
- Access to repair and maintenance information, such as disassembly maps of the device
- 'Do it yourself' repair/refurbishment operations for some components (e.g. the battery) that do not require technical knowledge, with commonly available tools provided
- Real time information on ageing of the device/components during the use phase, such as the number of charge/discharge cycles of the battery
- Don't know
- I think it is already easy to repair tablets now
- Other solutions

8. Which of the following elements would, in your view, make it easier to repair tablets compared with the current situation? (You can choose more than one option.)

- The compulsory availability of critical spare parts for a minimum amount of time (e.g. 6 years)
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- Real time information on ageing of the device/components during the use phase, such as the number of charge/discharge cycles of the battery
- Don't know
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- Other solutions

Other solutions - please specify

11. if you were to repair your device (provided that this does not impact the warranty or risk causing harm to users or the device):

- I would like to do some repair operations myself if possible
- It should be feasible to have it repaired by independent repairers
- I prefer to have it repaired by the device's manufacturer (or by someone authorised by the manufacturer)
- Don't know/not applicable

Which of the following elements would, in your view, improve the recyclability of tablets, when compared to the current situation? (You can choose more than one option.)

- Access to information on the critical (or precious) raw materials (e.g. cobalt, tantalum, neodymium, gold) used to make the tablet and their estimated weight
- Access to instructions for dismantling the device
- Information about the recyclability rate of the device, expressed as the share of recyclable materials/parts of the product
- Other

(please specify)

12. If there was an EU ecodesign regulation on tablets, addressing material efficiency aspects in particular (such as those mentioned in the previous questions), how do you think it would affect innovation in the sector?

- I would not expect it to have any impact on the innovation capability of this sector
- The ecodesign requirements could promote innovation in this sector (please specify how/what).
- Ecodesign requirements for tablets could indirectly cause barriers to innovation (please specify which)
- Other (please specify)
- Don't know

Please specify

9. If there was an EU ecodesign regulation on tablets, addressing material efficiency aspects in particular (such as those mentioned in the previous questions), how do you think it would affect innovation in the sector?

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- Other (please specify)
- Don't know

(Please specify)

13. If there were EU rules on tablets to ensure higher availability of repair services, spare parts, software updates, longer product lifespans and more information on reparability, how would this affect you (if at all)?

- Positively. It would make my purchasing and repair decisions easier, and I would likely keep my tablet longer
- Neutral. It would not have any significant impact on my purchasing and repair decisions
- Negatively. It would make my purchasing and repair decisions more complex
- Other
- Don't know

(Please specify)

## Conclusion

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Would you like to attach a position paper/document to support your views?

- Yes
- No

Please upload your file

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed