1. ------IND- 2020 0472 F-- EN- ------ 20200729 --- --- PROJET

The XXXX 2020

**Order of XXXX on the criteria, sub-criteria and scoring system for calculating and displaying the repairability index for smartphones.**

Reference number: XXXXX

The Minister for the Ecological Transition and the Minister for the Economy and Finance,

Having regard to the French Environmental Code, particularly Article L. 541-9-2 thereof;

Having regard to Decree No XXX of XXXX on the implementing rules for the repairability index for electrical and electronic products, its criteria and its calculation method;

**Article 1**

This Order applies to smartphones. A smartphone is understood to be an electronic device used for long-distance communication over a cellular network of base stations. It has similar functionality to a wireless laptop that is primarily intended for use on battery power and has a touch interface.

**Article 2**

The criteria, sub-criteria and scoring system applicable to the products defined in Article 1 and used to calculate the repairability index for each model are specified below:

CRITERION No 1 - DOCUMENTATION

Sub-criterion 1.1 Producer’s commitment on the duration of the provision, free of charge, of the technical documentation and instructions

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Column A  Producer | | | | Column B  Repairers | | | | Column C  Consumers | | | |
| Years of availability | | | | Years of availability | | | | Years of availability | | | |
| 0 to 4 | 5 | 6 | 7 or more | 0 to 4 | 5 | 6 | 7 or more | 0 to 4 | 5 | 6 | 7 or more |
| Documentation type | Number of points | | | | Number of points | | | | Number of points | | | |
| Unambiguous product identification | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Disassembly diagram or exploded view | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Wiring and connection diagram | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Circuit board diagrams | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| List of required repair and test equipment | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Technical manual of repair instructions | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Error and diagnostic codes | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Component and diagnostic information | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Software instructions (including reset) | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Access to incidents reported and recorded in the equipment | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Technical bulletins | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Specific guidelines on self-repair (recommended operations, safety and repair instructions, possible repercussions on the warranty) | | | | | | | | | 0 | 5 | 6 | 7 |
| Information on access to professional repairers | | | | | | | | | 0 | 5 | 6 | 7 |
| Fault detection and required actions (general public approach) | | | | | | | | | 0 | 5 | 6 | 7 |
| Instructions for use and maintenance instructions | | | | | | | | | 0 | 5 | 6 | 7 |

The maximum number of points is 259. Score for this sub-criterion = (number of points obtained / 259) x 10

CRITERION No 2 - DISASSEMBLY AND ACCESS, TOOLS AND FASTENERS

Sub-criterion 2.1 Ease of disassembling the parts (list 2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Number of steps for individual access to the part | | | |
| ND / NA (1) or 16 and more | 11 to 15 | 6 to 10 | 1 to 5 |
| List 2 parts | Number of points | | | |
| Battery | 0 | 1 | 2 | 3 |
| Display device | 0 | 1 | 2 | 3 |
| Back camera | 0 | 1 | 2 | 3 |
| Front camera | 0 | 1 | 2 | 3 |
| Charger |  |  |  |  |

1. ND / NA = not removable or not individually accessible

The maximum number of points is 12. Score for this sub-criterion = (number of points obtained / 12) x 10

Sub-criterion 2.2 Tools required to disassemble the parts (list 2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Type of tool | | | |
| ND / NA | Proprietary tools | Specific tools | Tool-free, common tools (2) |
| List 2 parts | Number of points (3) | | | |
| Battery | 0 | 1 | 2 | 4 |
| Display device | 0 | 1 | 2 | 4 |
| Front camera | 0 | 1 | 2 | 4 |
| Back camera | 0 | 1 | 2 | 4 |
| Charger |  |  |  |  |

1. or the tool supplied with the spare part
2. take the lowest score if several tools are involved

The maximum number of points is 16. Score for this sub-criterion = (number of points obtained / 16) x 10

Sub-criterion 2.3 Characteristics of the fasteners (for the assembly of list 1 and 2 parts)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Type of fastener | | |
| Neither removable nor reusable | Removable, non-reusable | Removable and reusable (4) |
| List 1 or list 2 parts | Number of points (5) | | |
| Charging connector | 0 | 1 | 2 |
| Connectors | 0 | 1 | 2 |
| Motherboard | 0 | 1 | 2 |
| Buttons | 0 | 1 | 2 |
| Microphone | 0 | 1 | 2 |
| Speaker | 0 | 1 | 2 |
| Battery | 0 | 1 | 2 |
| Display device | 0 | 1 | 2 |
| Front camera | 0 | 1 | 2 |
| Back camera | 0 | 1 | 2 |
| Charger |  |  |  |

1. or fastener supplied with the spare part
2. take the lowest score if multiple fasteners are involved

The maximum number of points is 20. Score for this sub-criterion = (number of points obtained / 20) x 10

CRITERION No 3 - AVAILABILITY OF SPARE PARTS

Sub-criterion 3.1 Producer's commitment on the period of availability of the list 2 parts

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Column A  Producer | | | | Column B  Spare parts distributors | | | | Column C  Repairers | | | | Column D  Consumers | | | |
| Years of availability | | | | Years of availability | | | | Years of availability | | | | Years of availability | | | |
| 0 to 4 | 5 | 6 | 7 or more | 0 to 4 | 5 | 6 | 7 or more | 0 to 4 | 5 | 6 | 7 or more | 0 to 4 | 5 | 6 | 7 or more |
| List 2 parts | Number of points | | | | Number of points | | | | Number of points | | | | Number of points | | | |
| Battery | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Display device | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Front camera | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Back camera | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Charger | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |

The maximum number of points is 140. Score for this sub-criterion = (number of points obtained / 140) x 10

Sub-criterion 3.2 Producer's commitment on the period of availability of the list 1 parts

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Column A  Producer | | | | Column B  Spare parts distributors | | | | Column C  Repairers | | | | Column D  Consumers | | | |
| Years of availability | | | | Years of availability | | | | Years of availability | | | | Years of availability | | | |
| 0 to 4 | 5 | 6 | 7 or more | 0 to 4 | 5 | 6 | 7 or more | 0 to 4 | 5 | 6 | 7 or more | 0 to 4 | 5 | 6 | 7 or more |
| List 1 parts | Number of points | | | | Number of points | | | | Number of points | | | | Number of points | | | |
| Charging connector | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Connectors | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Motherboard | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Buttons | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Microphone | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |
| Speaker | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 | 0 | 5 | 6 | 7 |

The maximum number of points is 168. Score for this sub-criterion = (number of points obtained / 168) x 10

Sub-criterion 3.3 Delivery time for list 2 parts

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Column A  Producer | | | | | Column B  Spare parts distributors | | | | | Column C  Repairers | | | | | Column D  Consumers | | | | |
| Delivery days (1) | | | | | Delivery days (1) | | | | | Delivery days (1) | | | | | Delivery days (1) | | | | |
| 11 or more | 6 to 10 | 4 to 5 | 1 to 3 | 11 or more | | 6 to 10 | 4 to 5 | 1 to 3 | 11 or more | | 6 to 10 | 4 to 5 | 1 to 3 | 11 or more | | 6 to 10 | 4 to 5 | 1 to 3 |
| List 2 parts | Number of points | | | | | Number of points | | | | | Number of points | | | | | Number of points | | | | |
| Battery | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |
| Display device | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |
| Front camera | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |
| Back camera | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |
| Charger | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |

1. working days from the day of the order

The maximum number of points is 60. Score for this sub-criterion = (number of points obtained / 60) x 10

Sub-criterion 3.4 Delivery time for list 1 parts

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Column A  Producer | | | | | Column B  Spare parts distributors | | | | | Column C  Repairers | | | | | Column D  Consumers | | | | |
| Delivery days (1) | | | | | Delivery days (1) | | | | | Delivery days (1) | | | | | Delivery days (1) | | | | |
| 11 or more | 6 to 10 | 4 to 5 | 1 to 3 | 11 or more | | 6 to 10 | 4 to 5 | 1 to 3 | 11 or more | | 6 to 10 | 4 to 5 | 1 to 3 | 11 or more | | 6 to 10 | 4 to 5 | 1 to 3 |
| List 1 parts | Number of points | | | | | Number of points | | | | | Number of points | | | | | Number of points | | | | |
| Charging connector | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |
| Connectors | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |
| Motherboard | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |
| Buttons | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |
| Microphone | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |
| Speaker | 0 | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 | 0 | | 1 | 2 | 3 |

1. working days from the day of the order

The maximum number of points is 72. Score for this sub-criterion = (number of points obtained / 72) x 10

CRITERION No 4 - PRICE OF SPARE PARTS

Sub-criterion 4.1 Ratio of the price of list 2 parts compared with the price of the new product

Based on the ratio described in the Order of XXXX on the display methods, signage and general parameters for calculating the repairability index, the number of points obtained for this criterion is determined as follows:

- if the ratio is greater than 0.3 then the number of points is 0;

- if the ratio is less than 0.1 then the number of points is 100;

- if the ratio is between 0.1 and 0.3 then the number of points is determined according to the following correspondence table:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ratio | 0.1 | 0.11 | 0.12 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | 0.2 | 0.21 | 0.22 | 0.23 | 0.24 | 0.25 | 0.26 | 0.27 | 0.28 | 0.29 | 0.3 |
| Points | 100 | 95 | 90 | 85 | 80 | 75 | 70 | 65 | 60 | 55 | 50 | 45 | 40 | 35 | 30 | 25 | 20 | 15 | 10 | 5 | 0 |

The rounding rule is as follows:

- If the number of the third decimal place is less than 5, round down to two decimal places;

- If the number of the third decimal place is greater than or equal to 5, round up to two decimal places.

The maximum number of points is 100. Score for this sub-criterion = (number of points obtained / 100) x 10

CRITERION No 5 - SPECIFIC CRITERION

For the products concerned by this Order, the coefficients of the sub-criteria of criterion 5 are defined as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Criterion** | **Sub-criterion** | **Sub-criterion score** | **Sub-criterion coefficient** | **Criterion score** | **Criterion coefficient** |
| **5. Specific criterion** | 5.1. Information on the type of update | ▀▀/10 | 1 | ▀▀/20 | 1 |
| 5.2. Free remote assistance | ▀▀/10 | 0.5 |
| 5.3. Possibility of resetting software | ▀▀/10 | 0.5 |

Sub-criterion 5.1 Information on the type of update

|  |  |  |
| --- | --- | --- |
|  | Column C  Consumers | |
| Information on the different types of update: corrective, evolving or mixed (1) | Situation | |
| Absence of information | Presence of information |
|  | Number of points | |
|  | 0 | 1 |

1. The information accompanying the update must be either ‘corrective update’, ‘evolving update’, or ‘mixed update’.

The maximum number of points is 1. Score for this sub-criterion = (number of points obtained / 1) x 10

Sub-criterion 5.2 Free remote assistance

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Column B  Repairers | | Column C  Consumers | | | |
| Type of remote assistance | None | Up-to-date information on website | None | Remote information | Remote diagnostic assistance | Remote repair assistance |
| Number of points | 0 | 1 | 0 | 1 | 2 | 4 |

The maximum number of points is 5. Score for this sub-criterion = (number of points obtained / 5) x 10

Sub-criterion 5.3 Possibility of resetting software

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Column A  Producer | | Column B  Repairers | | Column C  Consumers | |
| Possibility of resetting software free of charge and without restrictions on access to these services | Not possible | Possible | Not possible | Possible | Not possible | Possible |
|  | Number of points | | Number of points | | Number of points | |
| Operating system reset (2) | 0 | 1 | 0 | 1 | 0 | 1 |
| Firmware reset (2) | 0 | 1 | 0 | 1 | 0 | 1 |

1. including reset via external keys

The maximum number of points is 6. Score for this sub-criterion = (number of points obtained / 6) x 10

For and on behalf of the Minister for the Ecological Transition:

The Commissioner General for Sustainable Development,

T. Lesueur

For and on behalf of the Minister for the Economy and Finance:

The Director-General of Competition Policy, Consumer Affairs and Fraud Control

V. Beaumeunier