**Joint Action on HARmonized Products 2020 JAHARP2020-1 - Work Package (WP) 3**

**Grant Agreement No. GA SI2.848971**

**Call for Tender for Test Laboratories**

**Product SAR measurements on connected portable devices**

Appendix III – Financial Proposal

The tests to be carried out in the framework of this Joint Market Surveillance Action will be based on the latest editions of:

* EN 50360:2017 (Listed in Summary list of harmonised standards according to RED - Generated by EU on 22.07.2021)
* EN 50566:2017 (Listed in Summary list of harmonised standards according to RED - Generated by EU on 22.07.2021)
* EN 50663:2017
* EN 62209-1:2016
* EN 62209-2:2010/A1:2019
* EN-IEC 62311:2020

and must include the testing criteria listed in the table below. The purpose of testing is to identify non-compliances allowing a market surveillance authority to retain this/these non-compliances and to apply the appropriate measures/procedures going as far as the withdrawal and recall of the equipment from the European market. Testing must therefore focus on areas where products are likely to fail.

The testing covers connected devices in the scope of EU Radio Equipment Directive 2014/53/EU, Article 3.1(a).

The purpose of the SAR measurements is to identify for a given equipment, the highest SAR value for the configuration(s) requested. Depending on the use of the equipment, head SAR, trunk SAR or limb SAR measurements can be performed. A quick check should be undertaken to identify the configuration for the highest SAR value before the full measurement is performed.

Please provide the price in Euros per task including the price for producing a report for each product under test and a total price for product testing and test report production for each product under test.

It is reminded that:

* For cases where the maximum power is based on an algorithm implemented in the equipment in real conditions of use to ensure either the control of the transmission power (proximity sensors, accelerometer, etc.) or the control of the average value of the transmission power, this algorithm will be communicated by the requesting authority and must be implemented. The tenderer must indicate by email to the requesting authority, as well as to the JAHARP2020-1 team, what are its possibilities and limitations in this area as well as any additional costs that may be associated with the implementation of the tests.
* The tenderer shall make no price distinction between the different frequency bands to be tested on equipment using 2G, 3G, 4G, 5G networks up to 6 GHz.
* The quotation shall include an indication of the discounts proposed for quantity.
* All other important elements are specified in section 2 REQUESTED SERIVCES of the complete document.

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| **Portable connected devices according to the latest valid (harmonised) standards (quoted above)** |
| **Testing criteria** | Price (EUR) |
|  **For the measurement to be carried out on smartphones:** |  |
| 1. Head SAR measurement according to EN 50360

Measurements in right and left cheek position on the central channel |  |
|  | Identification of configuration for the highest SAR value |  |
|  | Measurement on the high and low channels in the position for which the measurement on the central channel is the highest |  |
|  | Measurement on the central channel in tilt position in the configuration for which the measurement in cheek position is the highest |  |
| 1. Trunk SAR measurement on 6-sizes at 5mm in accordance with standard EN 50566

Measurements taken at a distance of 5mm from all sides of the equipment  |  |
|  | Identification of configuration for the highest SAR value - Measurements on the central channel |  |
|  | Measurements on the high and low channels carried out for the worst case |  |
| 1. Limb SAR measurement on 6-sizes at 0mm in accordance with standard EN 50566

Measurements taken at a distance of 0mm from all sides of the equipment |  |
|  | Identification of configuration for the highest SAR value - Measurements on the central channel |  |
|  | Measurements on the high and low channels for the worst case |  |
| For the measurement to be carried out on tablets: |  |
| 1. Trunk SAR measurement on 6-sizes at 5mm in accordance with standard EN 50566

Measurements taken at a distance of 5mm from all sides of the equipmentMeasurements performed on Wi-Fi frequencies |  |
|  | Identification of configuration for the highest SAR value |  |
|  | Measurements could be carried out for the worst case |  |
| 1. Limb SAR measurement on 6-sizes at 0mm in accordance with standard EN 50566

Measurements taken at a distance of 0mm from all sides of the equipment. Measurements will be performed on Wi-Fi frequencies |  |
|  | Identification of configuration for the highest SAR value |  |
|  | Measurements could be carried out for the worst case |  |
| For the measurement to be carried out on smartwatches: |  |
| 1. Limb SAR measurement on 1-size at 0mm in accordance with standard EN 50566

Measurement taken at a distance of 0mm the side of use of the equipment |  |
|  | Measurements will be performed on Wi-Fi and/or Bluetooth frequencies - Identification of configuration for the highest SAR value |  |
|  | Measurements could be carried out for the worst case. |  |
|  | For 4G and 5G equipment, measurement only on the central channel -Identification of configuration for the highest SAR value |  |
|  | Measurements on the high and low channels will be carried out for the worst case. |  |
| 1. Head SAR measurement according to EN 50360

Measurements in one of the two possible cheek position on the central channel  |  |
|  | Measurements will be performed on Wi-Fi and/or Bluetooth frequencies - Identification of configuration for the highest SAR value |  |
|  | Measurements on the high and low channels will be carried out for the worst case. |  |
|  | For 4G and 5G equipment, measurement only on the central channel -Identification of configuration for the highest SAR value |  |
|  | Measurements on the high and low channels will be carried out for the worst case. |  |
| For the measurement to be carried out on headphones: |  |
| 1. Head SAR measurement according to EN 50360

Measurements in one of the two possible cheek position on the central channel Measurements will be performed on Wi-Fi and/or Bluetooth frequencies |  |
|  | Identification of configuration for the highest SAR value |  |
|  | Measurements could be carried out for the worst case |  |
| 1. Limb SAR measurement on 1-size at 0mm in accordance with standard EN 50566

Measurement taken at a distance of 0mm the side of use of the equipment. Measurements will be performed on Wi-Fi and/or Bluetooth frequencies |  |
|  | Identification of configuration for the highest SAR value |  |
|  |  Measurements could be carried out for the worst case |  |
| Countermeasure SAR Trunk according to EN 50566 |  |
|  | In the context of a contestation of the results or accuracy of a specific measurement, this countermeasure action consists in measuring the maximum value of the SAR for a frequency, on one side and at a distance which will be communicated by Prosafe or by the JAHARP2020-1 team |  |
| **Countermeasure SAR Limb according to EN 50566** |  |
|  | In the context of a contestation of the results or accuracy of a specific measurement, this countermeasure action consists in measuring the maximum value of the SAR for a frequency, on one side and at a distance which will be communicated by Prosafe or by the JAHARP2020-1 team |  |
| Price (EUR) for producing test report (per sample of each portable connected device)  |  |
| Cost of disposal/donation per product. |  |
| Cost of the organisation, hosting and attending of a meeting [max 1 expert from the lab] to discuss the results at the premises including catering This service is different than ad hoc and punctual participation to project meetings. |  |
| Total price (EUR) for testing and test report production of portable connected device |  |

Full name Date Signature

**Disclaimer**

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