

# Height/Length Measurement Device

**Introduction:** Recipients of the Target Product Profile (TPP) documents are able to submit questions to UNICEF. To ensure transparency, all answers and clarifications to questions received will be published in the table below. Suppliers are therefore encouraged to visit the document on a regular basis to view answers and clarifications which may be relevant to them.

**1. Q: Should suppliers respond to the TPP with proposals?**

A: No, the TPP is not a bidding document (Request for Proposals). TPPs are issued to guide industry to develop products that meet UNICEF's needs. A tender is released subsequently. More general TPP information is here: [https://www.unicef.org/supply/index\\_91816.html](https://www.unicef.org/supply/index_91816.html)

**2. Q: Will current solutions provided to UNICEF be considered for the tender?**

A: No, suppliers are asked to develop new solutions according to the requirements outlined in the TPP.

**3. Q: What are measuring principles for measuring on new device, or how to correctly measure children or adults?**

A: Please refer to the use cases in the TPP for better understanding of how the device will be used. There is no set standard for correct measurement of children or adults.

**4. Q: Should the new device be connected to a board like currently used measuring boards?**

A: The new device does not have to be connected with a board. The purpose of the TPP is to enable development and subsequent procurement of both improvements of currently available devices, and entirely new high-tech devices, responding to the Use Case Requirements. As stated in the TPP, desired solutions are: Improvements of current designs (measurement boards, stadiometers, etc.) with a digital output and/or innovative devices using technologies such as laser, infrared, ultrasound and optics.

**5. Q: When do you expect samples of new devices to be ready?**

A: A Request for Proposals will be released around Q2 2017, at which time we will request to see a sample. However, suppliers are welcome to share sample products with UNICEF as they are ready for informal feedback.

**6. Q: How long will the process take from now until LTA is awarded?**

A: It is estimated that a Request for Proposals will be released during Q2 2017. A timeline is outlined in the TPP Brief [here](#)

**7. Q: Should the device be developed in a specific region?**

A: As a supplier you may develop and produce the device wherever you choose. As UNICEF is a global organization supplying 147 countries worldwide, after procurement, the devices could be shipped anywhere in the world from Copenhagen or one of our other global transport hubs.

- 8. Q: What are the key problems with the current measuring system?**
- A: The readings from the height board are insufficiently reliable and problems with identifying the age of the child or recording & processing the data correctly. Inaccurate data can be caused by either of the following factors or as a combination; inaccurate positioning of the body, inaccurate reading, inability to document/estimate correct age, data entry error. It would also vary by country. In some countries there is no problem with age as almost all are born in a facility and/or have a birth certificate with their correct birth date.
- 9. Q: Would a solution focusing solely on young children be appropriate, or does the solution need to be applicable to all ages?**
- A: The solution needs to be applicable to all ages.
- 10. Q: What is the reason for the accuracy requirement of +-1 mm?**
- The two key use cases for this board are household surveys and health clinics. UNICEF aims to offer devices for procurement which collect the most accurate data possible.
- 11. Q: Does UNICEF require that the solution be centrally manufactured then distributed, or alternatively is in-country manufacturing desirable or acceptable?**
- A: UNICEF supports local production but does not have a preference regarding location of production and will always procure the most fit-for-purpose product the market can offer.
- 12. Q: Is there an existing data collection where the data would be downloaded into, or is this database or system something UNICEF is looking to develop/have developed for them?**
- A: There are a number of different data collection tools employed in household surveys. We are at this point not familiar with all platforms, but the Multiple Indicator Cluster Survey supported by UNICEF, as well as other big parties uses the US Census Bureau's CS Pro exclusively on tablets with Windows. We would download/transfer directly into the software with simple ascii data. The assumption is that any software (or an additional piece of coding) could handle import of such simple data, regardless of data collection application. The same would then also be the case for clinical use.
- 13. Q: What hardware would health workers use to view such data? Is there a standard issue computer/tablet/smartphone?**
- A: There is no standard issue, however both tablet and smartphones are currently being used. If anything, the closest thing to a standard would be that we would require compatibility with Windows.
- 14. Q: Is there a standard data format or structure for the data?**
- A: The requirement at this point is only to retain the measurement with a time stamp.
- 15. Q: Are there any requirements about connecting height measurements to other information such as age?**
- A: The link to case number/child will be handled by the software external to the board, e.g. for MICS the CS Pro application.
- 16. Q: Are there data protection, security and privacy requirements which must be considered?**
- A: If the measurements are stored without id no encryption is needed. This should be handled by the external software. In MICS, we transfer data from interviewers in the field via Bluetooth with limited security directly between password protected tablets. Data is then sent by field supervisor, encrypted, to a cloud server. However, if a device would utilize personal identification data such as a photography or a video to calculate the height/length of children there will be a need for stricter protocols.
- 17. Q: How does the product design/performance effect the problem of recording age?**

A: It doesn't address this aspect of the problem and isn't meant to.

**18. Q: Is wifi/bluetooth connectivity purely to reduce transcription errors or is there another perceived benefit?**

A: Yes, such connectivity would aim to reduce transcription errors. Also, for compatibility, as rest of the household survey data is collected by tablet.

**19. Q: Would a simpler mechanical solution like a car odometer or a dial be acceptable in place of a digital display?**

A: Mechanical could work – but the display must be in whole readable numbers (Not counting lines). However, this would conflict with the idea of a Wi-Fi/Bluetooth transfer.

**20. Q: How portable does it need to be? Does greater portability increase the number of people reached by nutrition programs? There any priority over size, carrying ergonomics, weight or setup time?**

A: Greater portability does not increase the number of people reached, but effects the quality of readings as exhausted surveyors are less focused and tend to skip procedural aspects. Survey teams are carrying the device from cluster to cluster in harsh conditions. It is therefore up to the supplier to prioritize the different factors (size, carrying ergonomics, weight, setup time etc.) and propose to UNICEF the most balanced device responding to the use case(s).

**21. Q: Is a lower cost design but with similar accuracy of interest, or are only 'higher performance' designs required?**

A: Yes, a lower cost design with similar accuracy is of high interest. The TPP has been developed for information about requirements for both low cost and high cost height/length measurement devices.