Risk Response Plan Form

Project: Melody

1st Step: Risk Identification

Name of the Risk:

ID N°

Bad communication between the hardware components

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Risk Description:

If the communication between the Raspberry and the ESP32 doesn't work as expected

2nd Step: Risk Evaluation

Impact: □1(Very Low) □2(Low) **X** 3(Average) □4(High) □5(Very High)

Explanation:

The communication might end up being too noisy or slow, intermittent communication errors might happen and the data transfer rate might be slower than expected. System performance would be impacted.

Probability: □1(Very Low) □2(Low) **X** 3(Average) □4(High) □5(Very High)

Explanation:

The data transfer rate requirements of the system aren't very high, communications are over short distances. But interference from other sources is still a possibility.

3rd Step: Risk Response Plan

Task, Who will do it, When it will be done!

Strategies and Tasks that should be performed in order to reduce the "Impact"/"Probability" of this risk: Prevention Tasks:

Use a power supply with enough power to power the system at max load.

Mitigation Tasks:

Separate the power supply in two circuits, one for the raspberry and ESP32 and other for the power electronics.

Transfer* (use in last case, avoid if possible):

Acceptance Tasks (avoid at all costs!):

(* At Integration Workshop 3, it would not be possible to "transfer" the Risk outside of the team!)

Re-evaluated Impact (1~5): 2 Re-evaluated Probability (1-5): 3

Elaborated by: Fernando Date: 23/04/2025

Form based on Gasnier, 2000 (IMAN Editor), adjusted by Wille(UTFPR), translated to English by Fabro(UTFPR).