Risk Response Plan Form

Project: Melody

1st Step: Risk Identification

Name of the Risk:

Power supply is unstable or insufficient

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Risk Description:

If the power supply doesn't supply enough power to the system or the power source has fluctuations

2nd Step: Risk Evaluation

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

Explanation:

There might not be enough power to actuate the motors and power the raspberry and ESP32, the motors might end up causing instabilities in the power for the electronics

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

Explanation:

The power load calculated might no be enough to the whole system, the effect of the motors in the system might be more than expected

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): 2

Elaborated by: Fernando Date: 23/04/2025

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