**NEOXA 3**

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**Date:** [DD/MM/YYYY]  
**Duration:** 6 months (Start: [1-07-2025] – End: [1-12-2025])

**1. Project Overview**

This document defines the key objectives, responsibilities, technical requirements, and expected deliverables for the development of **Neoxa 3**. Neoxa 3 is a next-generation version of the first prototype Neoxa . IT aims to be a wearable system that seamlessly integrates electronic, mechanical, and sensor-based components. The device is designed to combine **electroencephalography (EEG)**, **photoplethysmography (PPG)**, and **bone conduction audio** technologies into a single, compact, and ergonomic platform.

**2. Scope**

* Deliver a functional prototype by 1 December 2025.
* Achieve seamless hardware–firmware–mechanical coordination
* Conduct early validation
* Provide full technical documentation for all development phases

**3. Stakeholders & Responsibilities**

| **Role** | **Person** | **Main Responsibilities** |
| --- | --- | --- |
| **Coordination and supervision** | HABS | Overall coordination, requirement definition, validation |
| **Electronics Team** | Sofiatech | PCB design, microcontroller programming, electrical testing |
| **Mechatronics Team** | OVA Design | CAD design, enclosure fabrication, assembly planning |

**4. Development Phases & Timeline**

**5. Communication Structure**

* **Weekly meetings:** Every Monday at [Time]
* **Progress updates:** Biweekly via shared dashboard
* **Shared tools:** Google Drive (docs), Notion (specs), Trello (tasks), Slack (communication)

**6. Functional Requirements**

**7. Technical Requirements**

**8. Mechanical & Design Constraints**

**9. Interfaces**

**10. Deliverables by Partner**

| **Partner** | **Deliverables** |
| --- | --- |
| **Sofiatech** | PCB schematics + layout, firmware v1, testing report |
| **Mechatronics** | 3D CAD models, printed enclosures, assembly plan |
| **Supplier** | BOM with datasheets, sourcing timelines, shipping options |

**11. Risks & Mitigation**

| **Risk** | **Impact** | **Mitigation** |
| --- | --- | --- |
| Component stock shortages | High | Pre-order critical items in early phase |
| Integration mismatch (PCB–mechanical) | Medium | Hold weekly cross-team integration reviews |

**12. Approval & Sign-Off**