# Define the study and participant setup

Use one copy per shortlisted system. Tick only after the check is completed and evidence is recorded.

Organisation / lab: _____

Evaluator / date: _____

System / configuration: _____

## 01 Research requirements | Owner: Research lead

- ☐ Define the protocol, participant tasks, recording environment and required movements.
- ☐ Specify EEG channel count and locations; list auxiliary EOG, ECG, EMG and other inputs.
- ☐ Confirm whether auxiliary inputs reduce the available EEG channels or require accessories.

## 02 Electrodes, comfort and portability | Owner: Study team

- ☐ Compare electrode types, preparation, contact checks, cleaning and replacement needs.
- ☐ Test fit and full-session comfort across representative head sizes and hair types.
- ☐ Check total carried weight, amplifier mounting, cable routing and any phone or computer.
- ☐ Test compatibility with VR headsets, headphones and other participant-worn equipment.

Evidence / open issues: _____

# Verify timing, recording and data access

Compare the exact configuration and recording mode proposed by each supplier.

## 03 Sampling and synchronisation | Owner: Methods / technical lead

- ☐ Confirm sampling rates at the required channel count; separate streaming and internal rates.
- ☐ Check bandwidth and built-in filters against the planned analysis.
- ☐ Verify stimulus software, sensor integration and required trigger hardware or licences.
- ☐ Request measured event offset, jitter and clock drift for the proposed setup.

## 04 Battery, connectivity and storage | Owner: Acquisition lead

- ☐ Check runtime, charging and battery replacement under realistic recording conditions.
- ☐ Test wireless connectivity; demonstrate interruption handling and onboard backup recovery.
- ☐ Confirm storage capacity and the process for importing complete recordings.

## 05 Software and raw-data access | Owner: Data / analysis lead

- ☐ Confirm raw-data access, export formats and any API, SDK or LSL requirements.
- ☐ Import a sample into the analysis software; verify labels, timestamps and event markers.
- ☐ Check software versions, supported operating systems and associated licence costs.

Technical review: [ ] Timing checked [ ] Backup tested [ ] Sample data imported

# Test the workflow and approve the shortlist

A specification sheet is a starting point. Review a demonstration and exported data before committing.

## 06 Costs, support and documentation | Owner: Lab manager / procurement

- ☐ Obtain an itemised quote covering hardware, caps, triggers, software and consumables.
- ☐ Confirm training, technical support, warranty, repair turnaround and loan equipment options.
- ☐ Check the exact model's intended use and applicable regional regulatory documentation.

## 07 Demonstration and purchase review | Owner: Research lead + study team

- ☐ Run the lab's own protocol with representative participants, movements and session duration.
- ☐ Inspect signal quality and exported data; record limitations and missing accessories.
- ☐ Confirm the final configuration, acceptance criteria and supplier commitments in writing.

Total quoted cost: _____ Recurring costs: _____ Review date: _____

Open issues / evidence required before approval:

_____

_____

Decision: [ ] Shortlist [ ] Further testing required [ ] Do not proceed

Research lead: _____ Procurement: _____ Date: _____

Evaluation aid only. Confirm suitability for your protocol; this checklist does not certify clinical use.