

Milestone Deliverable Review Report

Deep Funding Round: RFP1

Project code: DFRFP-16

Project title: Neurotech Controls for AGI Motivational Framework

Milestone number: 1

Milestone deliverable:

https://docs.google.com/document/d/1_5iJVJQRccHHitAw2JcbFiM590oMhUkm2Mwqw3zBrhU/edit?usp=sharing

Date: 15/04/2025

Status: Accepted

Feedback (Why accepted, why rejected?):

Milestone 1 Review: Motivation System Analysis

Project: Neurotech Controls for AGI Motivational Framework

Milestone Code: DFRFP-16 M1

Date: 15/04/2025

Objective

The objective of Milestone 1 was to review existing work on the project's motivational framework and identify specific "levers" or functions that could be modulated through brain-computer interface (BCI) technologies. This includes:

Analyzing the current motivational system previously developed by the proposer.

Reviewing relevant neurocognitive and psychological theories.

Producing a list of motivation-related functions that may be controlled via brain signals.

Providing a brief explanation of why each selected function might be relevant.

Evaluation

Strengths

Clear Alignment with Milestone Scope

The milestone fulfills its declared objectives. The team reviewed the previously developed motivational framework and selected five parameters (valence, arousal, selection threshold, resolution level, goal-directedness) grounded in Dörner's Psi Theory. Each function is described with a brief rationale, consistent with the scope.

Structured Theoretical Foundation

The use of Psi Theory as the primary model provided a cohesive structure for identifying modifiable motivational features. The inclusion of Integrated Information Theory (IIT) as an exploratory conceptual lens added depth to the analysis, despite being optional.

Feasibility Awareness

The report demonstrates an understanding of current BCI technological limitations. For instance, it distinguishes between parameters that are currently feasible for modulation (e.g., arousal) and those that are more speculative (e.g., goal-directedness).

Minimalist and Efficient Delivery

The document delivers exactly what was promised—no more, no less—which demonstrates focus and adherence to milestone requirements without overreaching into subsequent development phases.

Suggested Improvements for Future Milestones

Scientific Referencing

While not required in this milestone, future deliverables would benefit from citing peer-reviewed studies or authoritative sources that support the proposed brain-signal associations. This will strengthen scientific reproducibility and transparency. The reference list cited in the proposal (via Zotero) could not be accessed for verification, so public citations embedded in future documentation are recommended.

Comparative Theoretical Justification

The choice to focus on Psi Theory is reasonable, but future documents could briefly explain how it complements or supersedes other models cited in the original proposal (e.g., CPM, Maslow, Five-Factor Model), especially if these models are ultimately excluded from implementation.

Inclusion of Visual Representations

The addition of schematic diagrams or tables mapping EEG features to motivational parameters and hypothetical AGI modules would enhance clarity and improve communication with technical and non-technical reviewers alike.

Preliminary Interface Considerations

Although not required at this stage, future milestones could benefit from a preliminary outline of how these motivational levers will eventually interface with OpenPsi/Hyperon or other AGI agents, to better contextualize their functional role.

Conclusion and Verdict

Milestone 1 meets its intended goals and is fully aligned with the project scope as outlined in the original proposal. The team delivered a structured, focused, and appropriately scoped analysis, identifying candidate motivational features and explaining their relevance for potential BCI-based modulation.

While the scientific grounding and system-level integration could be further expanded in future milestones, these are not shortcomings of this stage but natural areas of development in the broader roadmap.

Verdict: Approved

The milestone is accepted as delivered, with constructive recommendations offered to guide the next phases of the project.

If rejected, suggested changes: