BL-ENG-E2-006 Habitat Expansion Path ("Earth TWO" Pre-Study)

Domain: ENGProgram: E2

• EVOL Target: EVOL-00

• Status: Draft

Short Description & Business Value Explore scalable habitat concepts that extend Earth ONE into a larger orbital settlement, evaluating options such as a second sphere, polar rings, or dock clusters to inform future "Earth TWO" development.

Acceptance Criteria

- Three scaling options analysed (second sphere, polar rings, dock cluster)
- Mass and power budgets for each option
- Estimated crew capacity increase for each scenario

Dependencies / Cross-References

• Beyond program chapters

Owner / Next Step / Target Date

• Owner: TBD

Next Step: Trade StudyTarget Date: TBD

Score & Risks

• **Score:** TBD (RICE/WSJF)

• Risks: Technological feasibility; cost scalability