

THE PHASE 2 - ACCELERATION MASTERPLAN

Boardroom / Investor Strategy Document

VitalDrive Innovations Ltd

Prepared for: Angels, VCs, Innovate UK, HERE Technologies, Insurers

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PHASE 2 ACCELERATION MASTERPLAN

VitalDrive Innovations Ltd - December 2025 to March 2026

SECTION 1: EXECUTIVE SUMMARY

VitalDrive is entering Phase 2: *The Acceleration Phase* transitioning from early architectural development into a validated deep-tech trajectory involving:

- **Simulation-driven AI development**
- **Physiological monitoring with environmental fusion**
- **Formal retrofitted vehicle testing**
- **Partnerships with HERE, SensorIT, universities, and insurers**
- **Structured pre-seed funding at £4M valuation**

The objective of Phase 2 is to move from TRL 2-3 to TRL 4, establishing:

1. **A trained ML model achieving $\geq 80\%$ simulation accuracy**
2. **Documented drive test results with a retrofitted sensor stack**
3. **LOI from Aviva (primary), HERE (strategic), or an OEM (optional)**
4. **A successful investor close (angel + Innovate UK + VC mix)**

Phase 2 concludes with VitalDrive positioned as:

A credible, investable, deep-tech ADAS + health AI company with patents, partners, ML evidence, and a real-world test.

SECTION 2: PHASE 2 OBJECTIVES (90 DAYS)

Primary Objectives

1. ML Model ($\geq 80\%$ simulated performance)
2. Aviva LOI secured
3. HERE Technologies collaboration confirmed
4. Retrofitted drive test completed and documented
5. £50k-£150k in early capital secured
6. Pre-seed round opened at £4M valuation
7. Team completion: Senior backend CTO + 2 ML hires
8. Euro Vision 2027 alignment roadmap established

Secondary Objectives

- Updated VitalDrive website + investor materials
- Academic collaboration MoUs (Cambridge, Strathclyde, Plymouth)
- Secure pathway for FLF Round 10 (through university)

SECTION 3: PRODUCT & TECHNOLOGY STATUS

Current Stage (as of Dec 2025):

- Rule-based engine functional
- Early ML architecture defined
- ML prototype untrained
- Environmental parameters not yet integrated
- Driver-state log differentiation functional
- Early pipeline for emergency detection implemented
- Data sources incomplete (synthetic ECG, motion artefacts, tyre noise)

Tracker:

Component	Status	Target
Risk Engine v0.2	✓ Complete	v0.3 with ML (Feb)
Simulation Stack	△ Partial	Full integration Jan
Sensor Fusion	✓ Architected	Real-world validation Mar
ML Model	△ Prototype	80% accuracy Feb
Hardware Retrofit	✗ Pending	Prototype Feb
Drive Test	✗ Pending	Documented Mar

SECTION 4: TEAM & ORGANISATION

Phase 2 Core Team Structure

Role	Person	Status
CEO / Chief Architect	Naveen	Active
CTO / Senior Backend	HIRED	Active
Chief Interference Scientist	To be hired	Critical
Founding Interference Scientist / AI Scientist	To be hired	Critical
Frontend Lead	HIRED	Active
Frontend Developer	HIRED	Active
Backend Support	HIRED	Active
ECE Engineer / Prototype Builder	HIRED	Active

Team Additions in Phase 2

- 1 PhD-level ML researcher (signal simulation + noise modelling)
- 1 senior industry ML engineer (deployment + model training)

SECTION 5: PARTNERSHIPS & ECOSYSTEM STRATEGY

Tier 1 Partners (direct impact on ML, simulation, validation):

- **HERE Technologies** → environmental layers, road friction, API integration, dataset generation
- **SensorIT** → textile sensors + physiological monitoring hardware

Tier 2 Academic Partners:

- University of Plymouth
- Strathclyde University
- Cambridge University

(For ML research, signal simulation, physiological modelling)

Tier 3 Safety & Regulatory Alignment

- Euro NCAP → Vision 2027 roadmap
- NHS Innovation contacts

Tier 4 OEM + Insurance Partners:

- **Primary LOI target: Aviva**
- Secondary: Volkswagen Group, BMW, Tesla (longer timeline)

SECTION 6: FUNDING STRATEGY (90 DAYS)

Target Valuation: £4M Pre-Seed

Funding Mix Strategy:

1. **Angels** (fast capital) → £25k-£100k
2. **Innovate UK** (credibility) → £50k-£100k
3. **VCs** (scaling) → £200k-£400k
4. **Techstars London** → Accelerator positioning
5. **DASA** → Defence pipeline (submitted)

Capital Required to Complete Phase 2:

Estimated: **£9,000-£18,000**

Breakdown:

- Hardware retrofit: £5,000
- Software: £100-£200/month
- ML & compute: £500-£1,500
- Fleet access: £0-£2,000
- Data storage: £100-£300
- Prototype contingencies: £500-£1,000

This low-cost MVP allows rapid progress with minimal risk to investors.

SECTION 7: ROADMAP & MILESTONES (90 DAYS)

MONTH 1: Simulation & Team Completion

- Finalise ML hiring (PhD + senior engineer)
- Build synthetic ECG/PPG/BCG simulation pipeline
- Integrate motion artefact models
- Connect HERE environmental APIs
- SensorIT hardware requirements hashed out
- Update VitalDrive website with Phase 2 progress

Key Deliverables:

- Simulation v1
- Team expanded
- Hardware spec confirmed
- Investor Data Room v1

MONTH 2: ML Training + Hardware Retrofit

- Full simulation environment ready
- Baseline model training → target 80% simulated accuracy
- Start hardware retrofit on test vehicle
- Prepare formal testing protocol
- Engage Aviva for early LOI conversation
- Engage HERE for integration workshop

Key Deliverables:

- ML model v0.1
- Retrofitted hardware v1
- Aviva LOI (draft)
- HERE partnership confirmation

MONTH 3: Drive Test + LOI + Funding Close

- Conduct formal retrofitted drive test
- Document protocol + results
- Finalise Aviva LOI
- Open pre-seed round at £4M valuation
- Close angel + Innovate UK + VC tranche
- Prepare Euro Vision 2027 compliance plan

Key Deliverables:

- Real-world test report
- LOI confirmed
- Funding secured
- TRL 4 status achieved

SECTION 8: RISKS & MITIGATIONS

Technical Risks

- Motion artefact simulation complexity
- ML model underperforming
- Hardware availability delays

Mitigations:

- Dual ML hires
- Parallel simulation + hardware
- Partnerships with HERE + University ML labs

Execution Risks

- Founder overload
- Team coordination gaps
- Funding delays

Mitigations:

- Clear sprint structure
- CTO + ML lead to reduce load
- Mixed funding strategy to diversify risk

Partnership Risks

- SensorIT delay
- HERE approval slower than expected
- OEM cycles too long

Mitigations:

- Aviva LOI as the anchor
- University partnerships for data
- Alternative low-cost sensor retrofit

SECTION 9: EXPECTED OUTCOMES & VALUATION UPLIFT

Upon successful completion of Phase 2:

Milestone	Valuation Impact
ML model ≥80% accuracy	+£1M
HERE partnership	+£1M
Aviva LOI	+£1M-£1.5M
Real-world test (formal)	+£1M
Team completion (ML + CTO)	+£1M
Website + investor assets updated	+£250k

Projected Valuation: £5M-£8M

SECTION 10: IMMEDIATE NEXT STEPS

Next 30 days:

- Complete simulation v1
- ML model v0.1
- Hardware spec freeze
- Finalise team roles

Next 90 days:

- Drive test
- LOI
- Pre-seed raise
- TRL upgrade
- Euro Vision alignment