LEO must be commercial, but it’s getting clogged

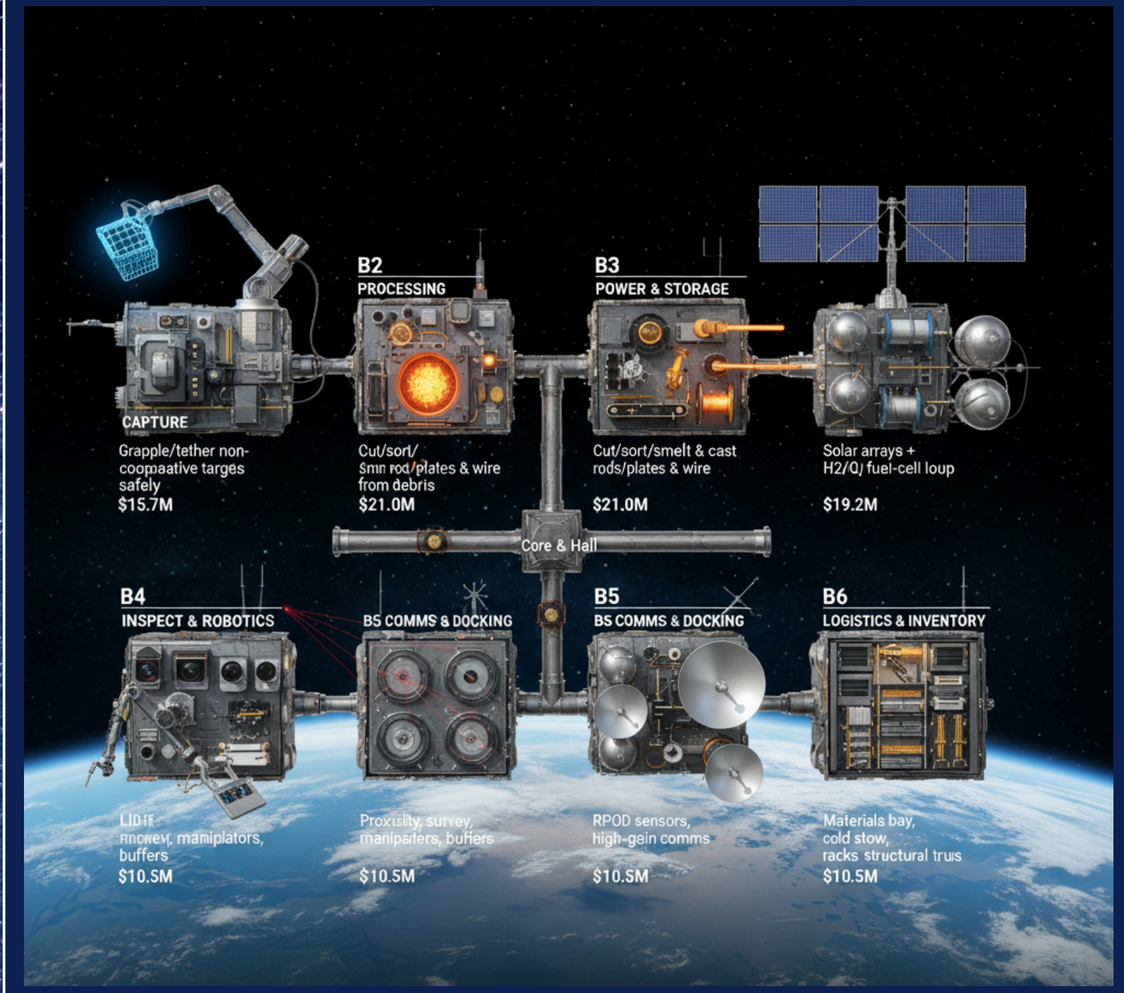
- Debris load today: ~54,000 objects
- Policy pressure: the FCC adopted a 5-year deorbit rule for LEO satellites (2022).
- Budgets are real: ADR awards now reach ~¥12–13.2 B (≈ $81–86 M) per object
- Europe’s stance: ESA’s Zero Debris aims to be debris-neutral by 2030—demand for remediation & safer reentry is rising.
- Commercial blocker: launching fresh mass for every build is slow/expensive → LEO needs an in-orbit supply chain.

Our answer: OAZIS-1 (Orbital Autonomous Zero-debris In-Situ Station)

Capture → Recycle → Sell

Turn high-risk debris into rods/plates/wire sold in orbit (MaaS).

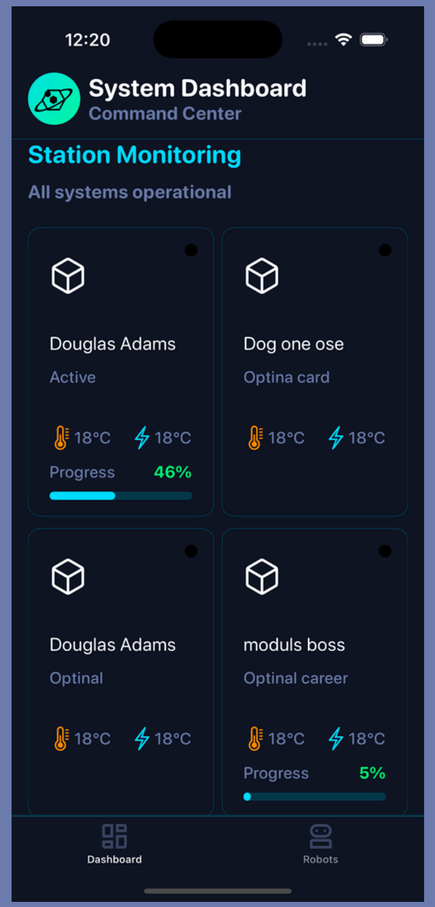
Monetize twice per sortie: ADR fee now + materials inventory later.

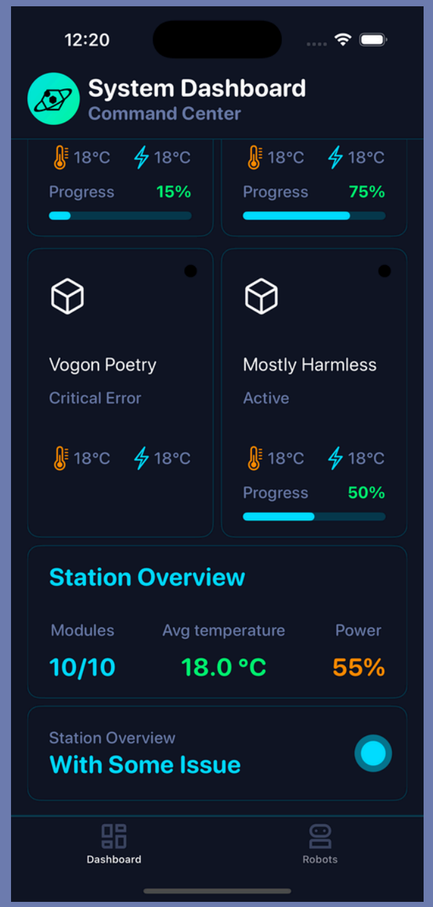


SYSTEMS OF EACH BLOCKS

- B0 Core & Hall (Spine): structure + utility hall (power/data/fluids), shielding, mounts, docking interfaces.
- B1 Capture: standoff sensing; cage/coil/arm options; retreat envelopes.
- B2 Processing: passivate → cut/sort → induction/solar smelt → cast (rods/plates/wire); slag control.
- B3 Power & Storage: solar arrays; tanks + electrolyzer; H_2/O_2 fuel-cell loop for night/peaks.
- B4 Inspect & Robotics: LiDAR+camera nav; manipulators; buffer handoff.
- B5 Comms & Docking: RPOD sensors; GN&C avionics; high-gain comms; docking ports.
- B6 Logistics & Inventory: racks; containment; truss/adapters; inventory mgmt.

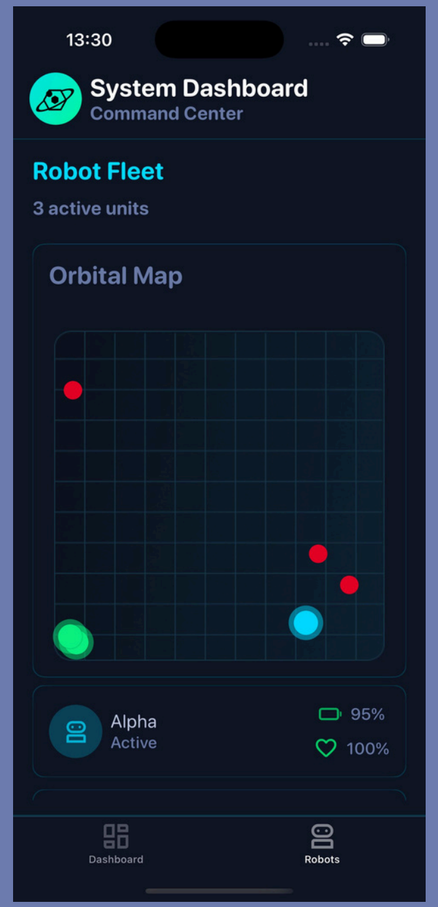
APP OAZIS

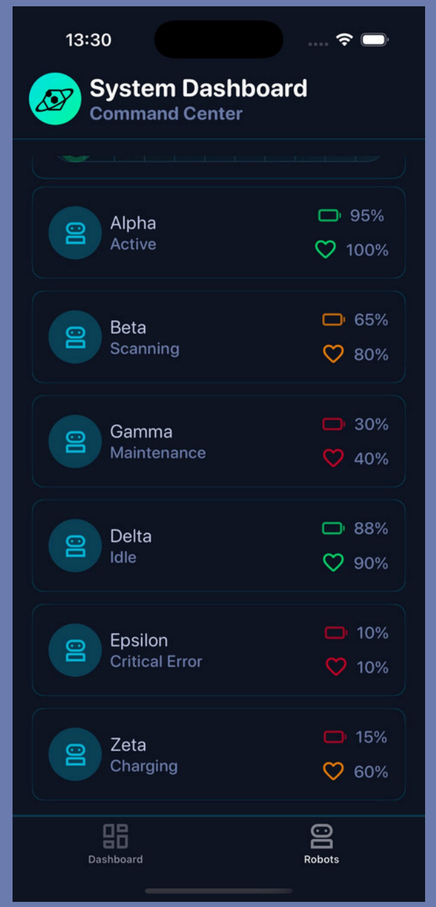




Panel 1 — Station Overview: live 7-block status; power & thermal budgets; throughput; instant alerts if limits exceeded

Panel 2 — Robot Management: map + status + task queue; direct commands (Return / Recharge / Process debris / Hold / Begin passivation); safety interlocks.





3-Year Financials (USD) Revenue

Item / Year	Year 1	Year 2	Year 3	Notes
Inspection Services	$600,000	$2,000,000	$4,300,000	Paid imaging / assessment
ADR Missions	$0	$0	$35,000,000	First large ADR delivered in Y3
MaaS (rods/plates/wire)	$0	$1,200,000	$6,000,000	~600 kg/yr (Y2) → ~3,000 kg/yr (Y3) at $2k/kg
TOTAL INCOME	**$600,000**	**$3,200,000**	**$45,300,000**	

OAZIS-1 - 3-Year Income (Revenue)

Year	Total Income (Revenue)	What's included (1 line)
Year 1	$0.6M	Inspections only
Year 2	$3.2M	Inspections + early MaaS (~600 kg @ $2k/kg)
Year 3	$45.3M	First ADR (~$35M) + MaaS (~3,000 kg @ $2k/kg) Inspections

Operating Expenses (OPEX — excludes CAPEX)

Item / Year	Year 1	Year 2	Year 3	What this covers
Ground Ops & Development	$1,200,000	$2,000,000	$4,000,000	Mission control, engineering, tooling
Data / SSA & Cloud	$300,000	$800,000	$1,000,000	Tracking data, cloud compute, storage
Insurance & Compliance	$200,000	$500,000	$1,500,000	Licensing, liability, regulatory
Marketing / Business Dev	$300,000	$700,000	$1,500,000	Sales, partnerships, outreach
TOTAL OPERATING EXPENSES	**$2,000,000**	**$4,000,000**	**$8,000,000**	

Future plans

Finalize suppliers; OF-Console v1 (2-panel dashboard); SSA data partnerships; inspection-demo PDR.

Inspection demo flight; publish imagery & targeting; sign pilot ADR; order long-lead B2/B3 hardware; start qual (vibe/acoustic/TVAC).

Cooperative capture demo; finalize launch manifest (rideshare/F9); integration & protoflight testing; insurance & ops readiness.

Launch core + 2 modules; begin MaaS at low volume (~50 kg/month); paid inspections continue.

Deliver first ADR; scale MaaS to ~250 kg/month; add remaining modules; expand partner pipeline (agencies, primes, builders).

Invest in OAZIS to clean LEO now and sell in-orbit materials tomorrow.