



Heureka
Mission:

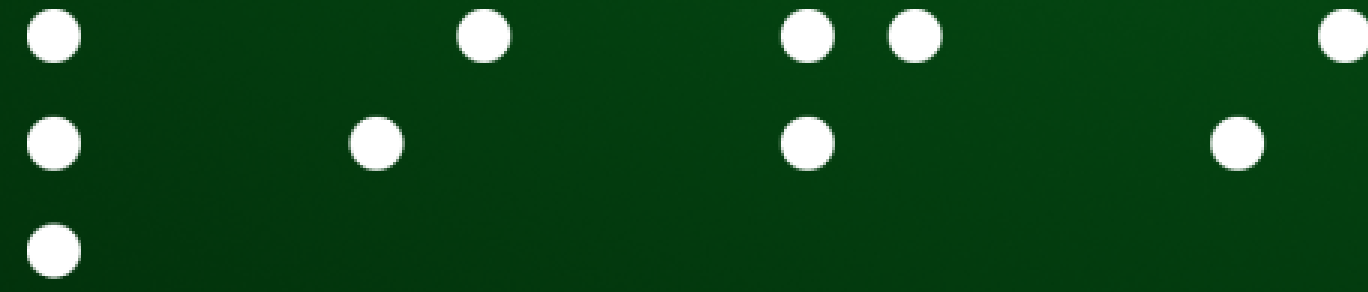
Positive
Multisensory
Memorable
Personal/shared
Inspiring

Science for everyone

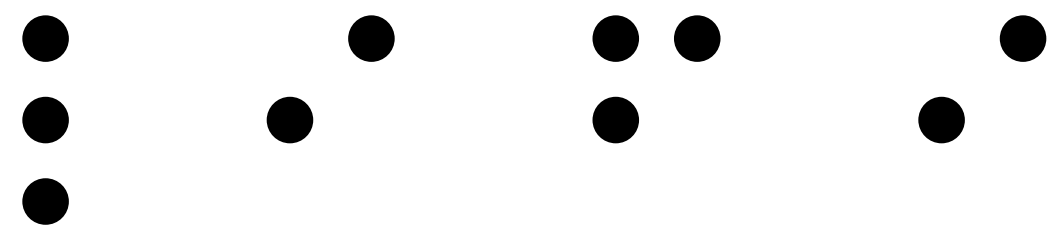
Problem
definition:

How might we **empower**
visually impaired visitors
to experience more and
roam freely?

ACCESSIBILITY, ILLUMINATED



Concept



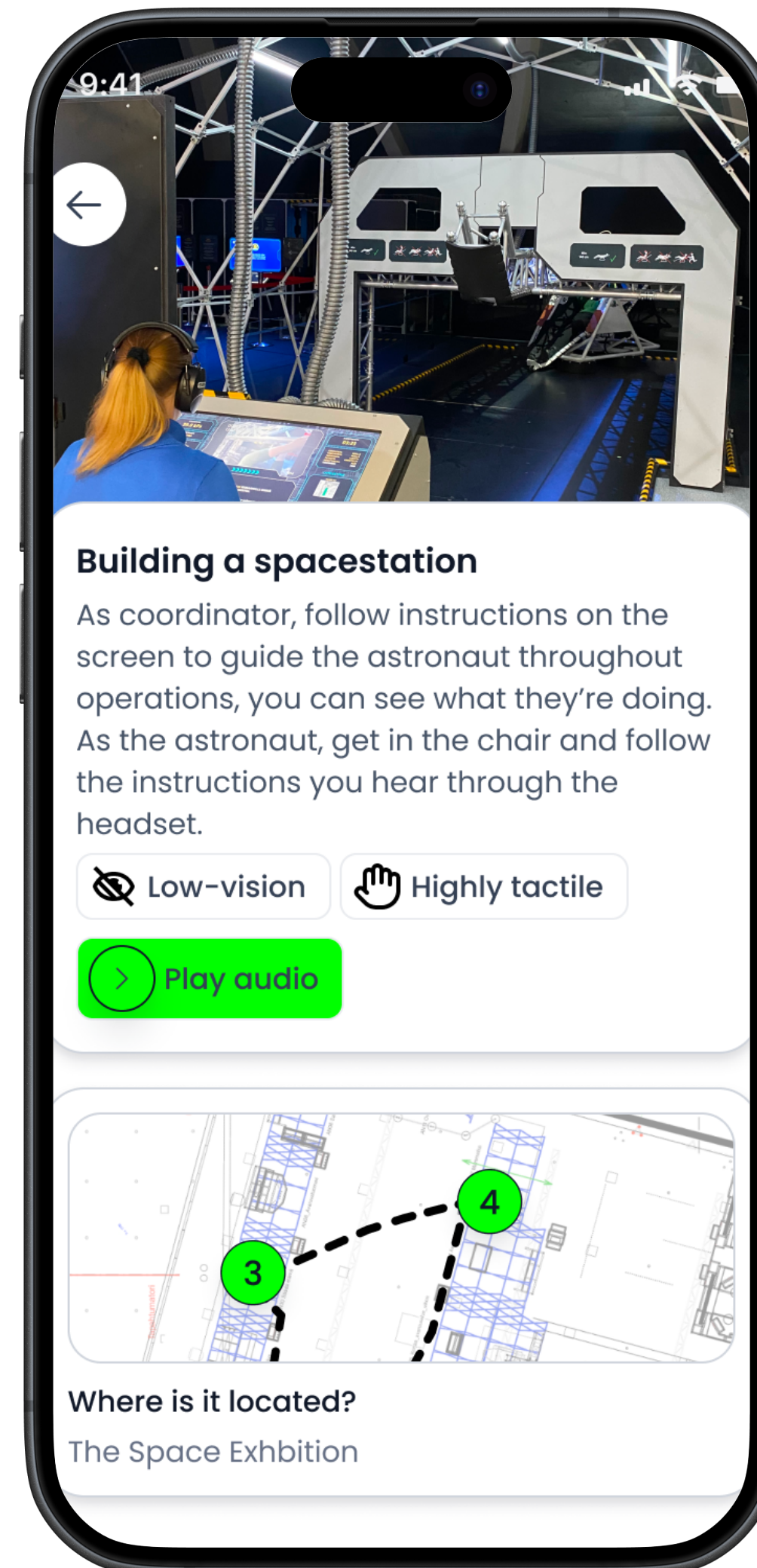
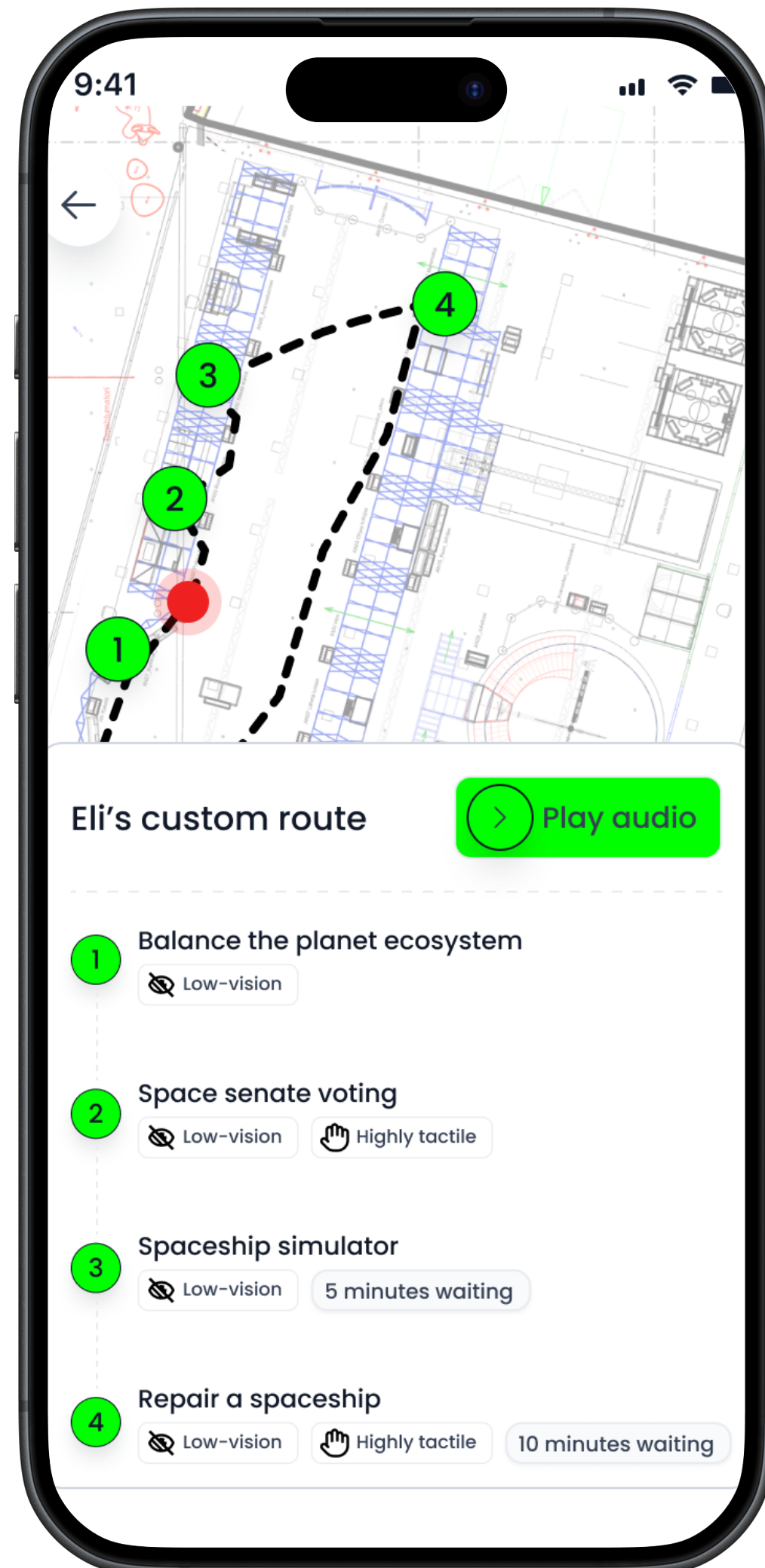
Utilizes LiFi

Integrates App

Unlocks Navigation + Audio

HEUREKA APP

Concept A

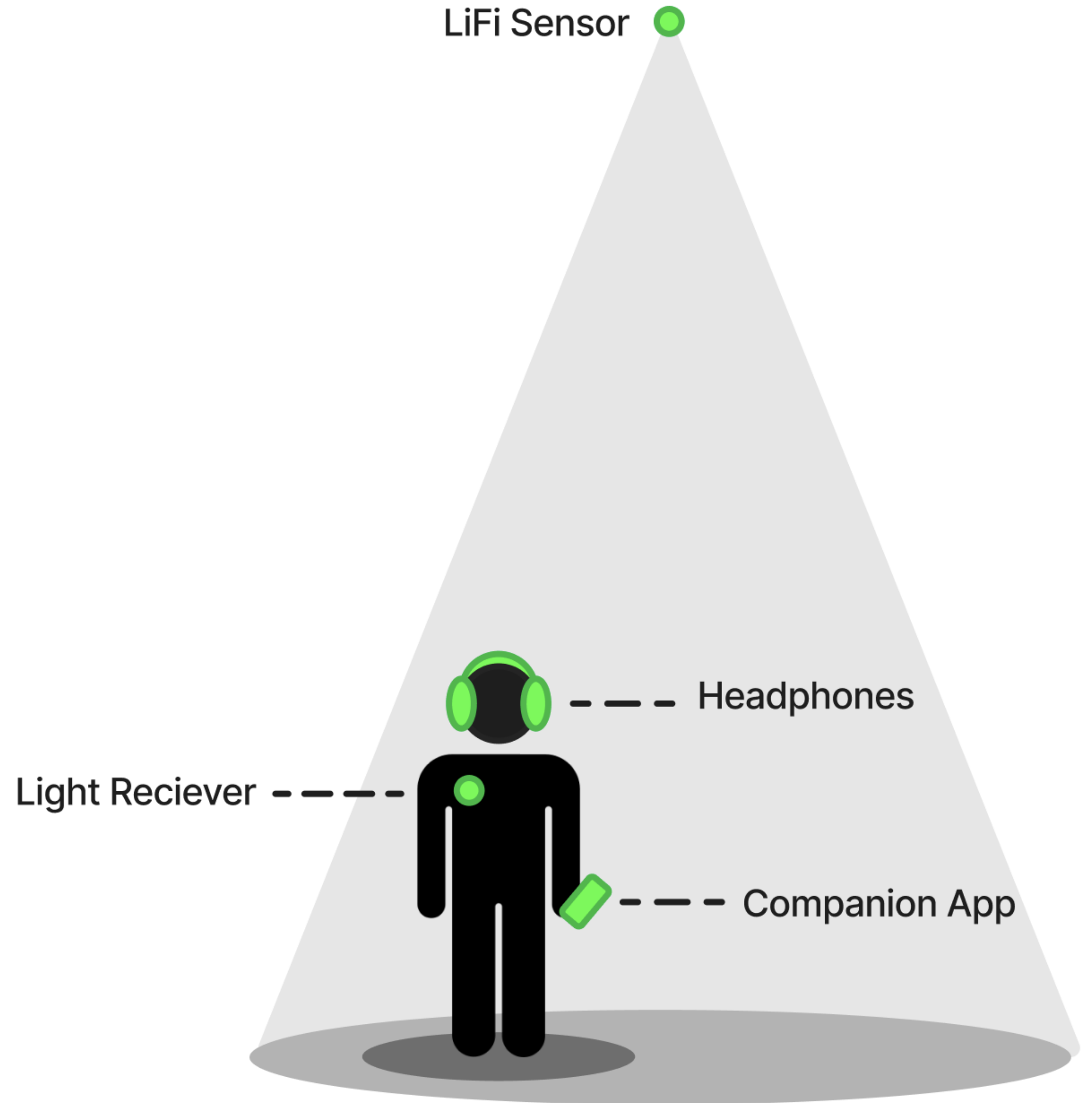


Navigation

Audio guidance

Connected to LiFi lighting system

Inspiring LiFi technology



Navigation

Accessible operation

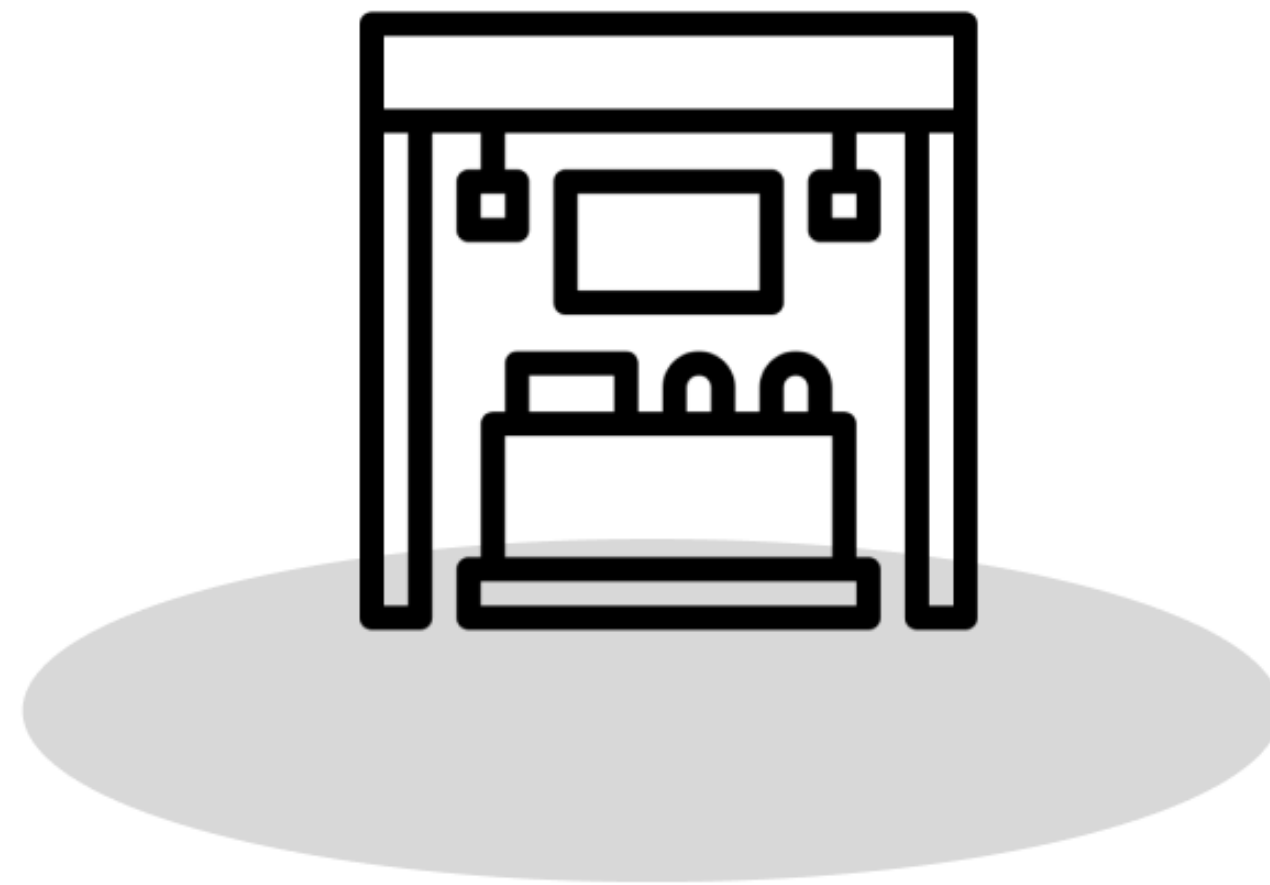
Plan route

What's interactive

Where are the queues

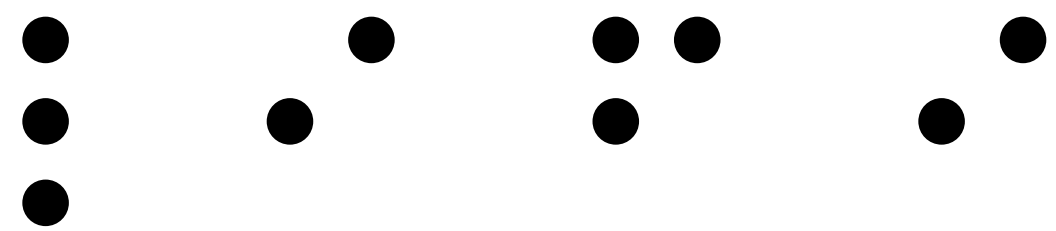
Audio/TTL supported

Boundary Detection



Multisensory interactions

Proximity triggers
Audio descriptions
Interactive elements



Personal and shared
experiences equally for
everyone

Price estimates by ChatGPT

LiFi LED unit 50-150€ / New or Added + additional features

Receiver sensor 15€-20€ / Phones with sensors (free)

Software 6,000-60,000€ / customization, integration, scale

+ Installation & Maintenance costs

Comprehensive overhaul for large facility
+ 100k€

Additional Incentive

From directive (EU) 2024/1275:

12. Member States shall lay down requirements to ensure that, where technically and economically feasible, non-residential buildings with an effective rated output for heating systems, air-conditioning systems, systems for combined space heating and ventilation, or systems for combined air conditioning and ventilation of:

- (a) over 290 kW are equipped with automatic lighting controls by 31 December 2027;
- (b) over 70 kW are equipped with automatic lighting controls by 31 December 2029.

The automatic lighting controls shall be suitably zoned and capable of occupancy detection.

Can be costly, but:



Horizon Europe

Flagship research and innovation program

Digital Europe

Digital capacities and facilitate the wide deployment of digital technologies.

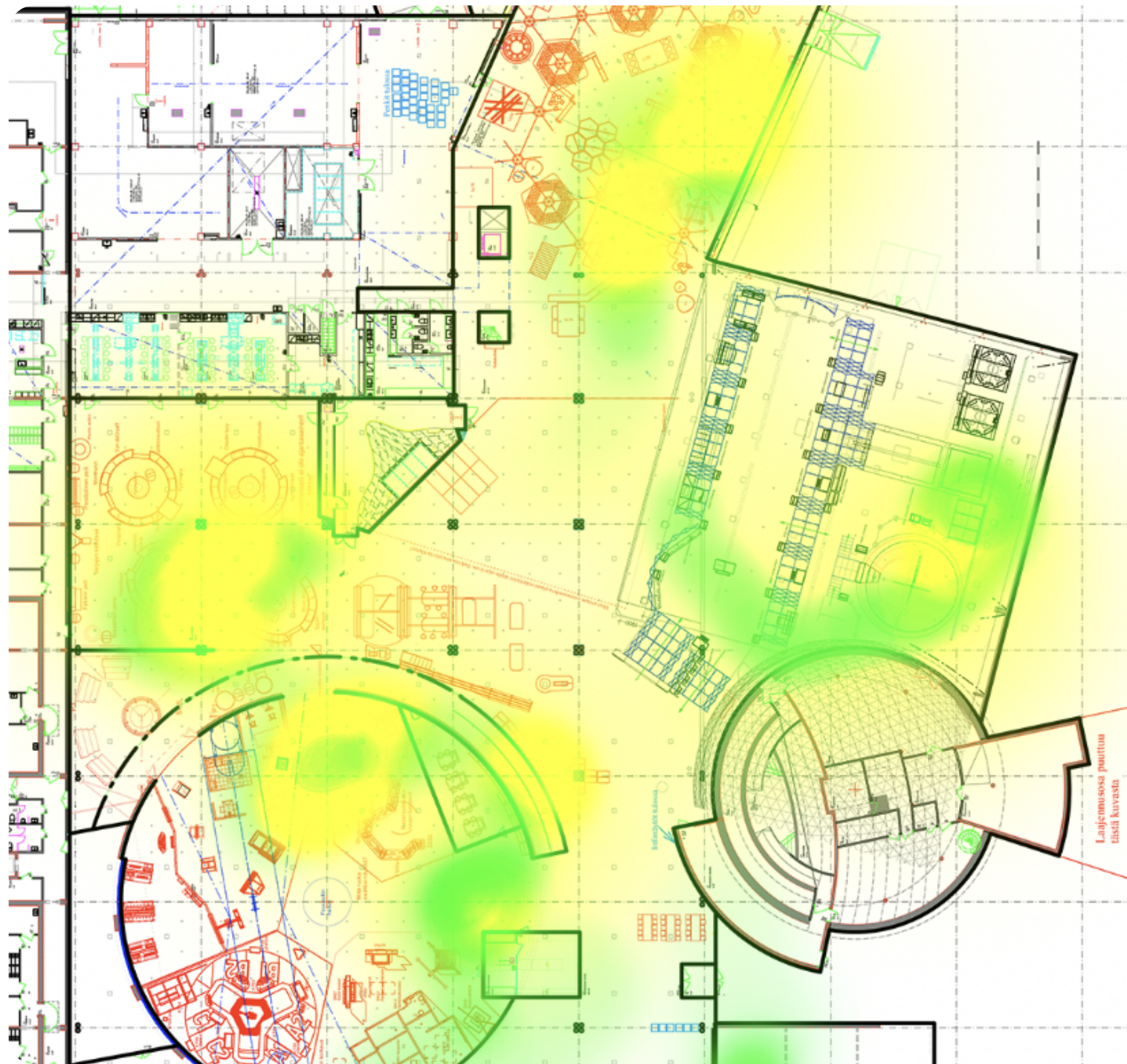
European Social Fund Plus

promoting social inclusion, and enhancing education and training.

Futureproofing

Heat Mapping

New data possibilities



Synced Ventilation and Heating

Real-time, energy efficient

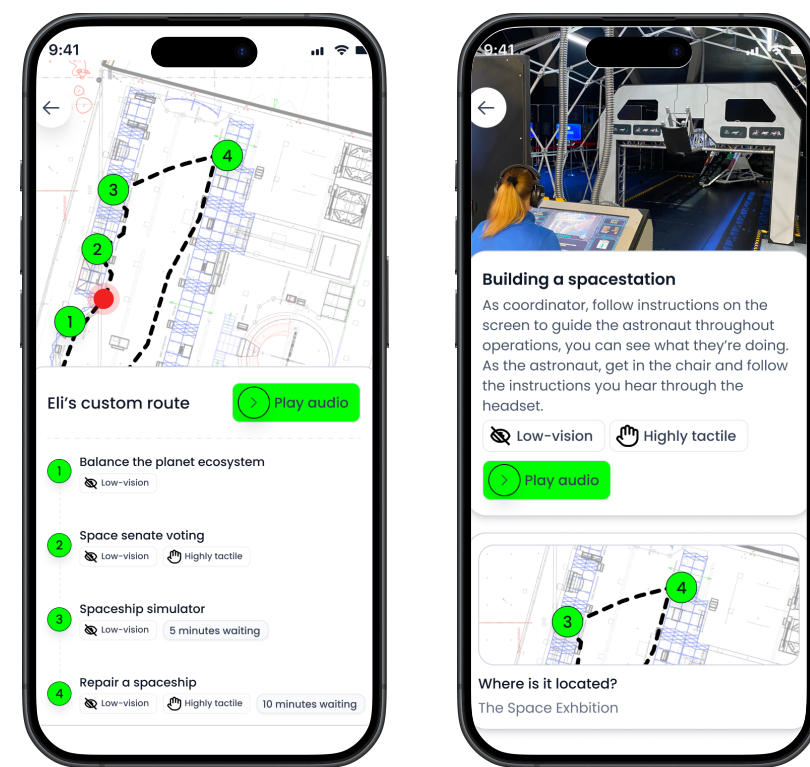


Multisensory Interactions

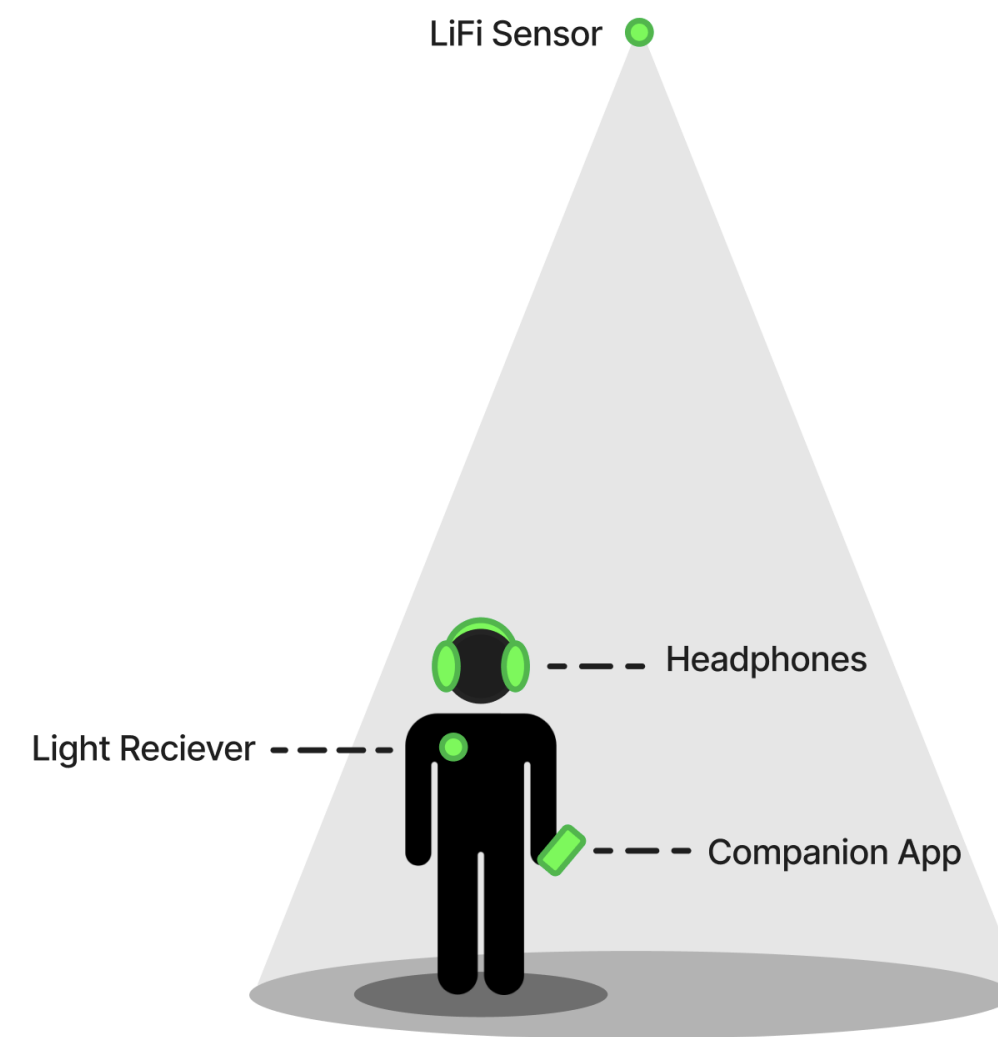
New ecosystem for innovation



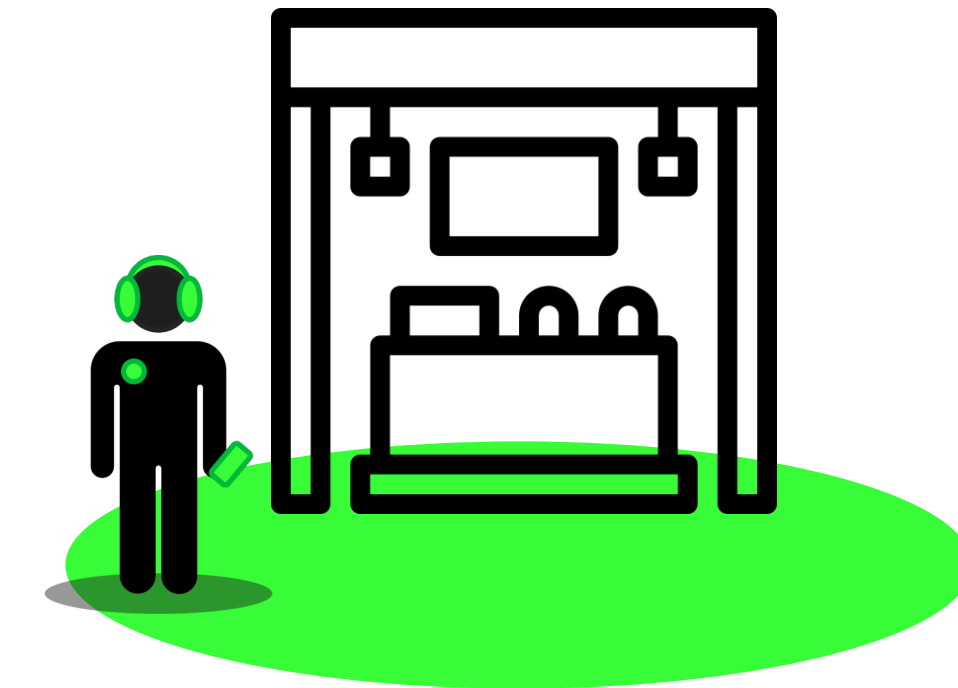
Roadmap to autonomy



**1. App + Map + Audio
2025**



**2. LiFi system + navigation
2027**

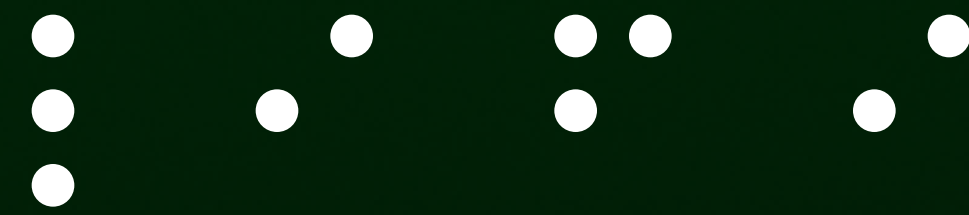


**3. Proximity triggers
2027+**

No human guide needed



Let's make the
science centre
experience truly
memorable for
everyone



Planning
Navigating
Guiding
Interacting