Public Works and Gang Reduction Committee
City of Los Angeles
Attn: Committee Council Members
c/o Michael Espinosa, Legislative Assistant

Dear Council Members,

We are submitting this letter with respect to LA DOT's proposed dockless bike and e-scooter pilot project that is coming before committee. CLEVR Mobility is not an operator but a provider of intelligent solutions designed for fleet operation of Light Electric Vehicles (LEVs). As such, we are passionate about the future of intelligent LEVs as part of the solution to first/last mile transportation, as an extension of public transit, and as an alternative to automobiles. However, we strongly believe that it should be done intelligently with the least disruption to municipalities and their residents.

While the proposed Los Angeles pilot dockless rules and mobility data specification are a good start, we are advocating that operators use technology to make regulatory compliance proactive rather than a public enforcement issue. Specifically, enhanced GPS with accuracy inside of 3 ft enables capabilities like geofencing of designated areas in real time by network communication with devices, limiting top speeds or entirely disabling devices on sidewalks or other restricted areas, accurately managing designated parking zones, and more. The city should refrain from allowing operators to deploy devices with mediocre GPS tracking capabilities on the order of 30-100 ft accuracy and no ability to manage devices remotely – unenforceable parking, discarded vehicles, and right of way issues are inevitable with that approach.

The technology is available but it is apparent that operators are not deploying their fleets in an efficient and conscientious manner, forcing cities to adapt to less than ideal circumstances while also incurring the additional management, staffing and enforcement burdens. We want the City of LA and Public Works committee to be aware that it can hold dockless mobility operators to a higher, more intelligent and safer standard that that to which they currently hold themselves.

Respectfully yours,

Alex Nesic
COO
CLEVR Mobility, Inc


CLEVR
Intelligent Light Electric Vehicle Solutions | 2018

OVERVIEW

Dockless Light Electric Vehicles (LEVs)* - scooters & e-bikes - are quickly becoming the principal transportation mode used by mobility-on-demand operators. Users love them but cities are not impressed – from San Francisco and Santa Monica, to Nashville and Miami, cities are kicking operators out and formulating regulations to enforce compliance.

OUR MISSION IS TO ENABLE OPERATORS OF LEV FLEETS WITH A MORE ACCURATE GPS TRACKING AND FLEET READY LEVs SUPPORTED BY SWAPPABLE BATTERIES AND ENHANCED MANAGEMENT TOOLS.

*LEVs = kick scooters, ebikes, sit down scooters, golf carts, micro cars, etc..

THE CLEVR TEAM

CHRISTIAN SCHEDER
Co-Founder & CEO

Former CMO of Immotor, focused on development of innovative batteries and personal electric vehicles.

Founder and President of XPAL Power, focused on designing and developing lithium battery technology for brands like Tumi, Belkin, Energizer and Philips.

Degree in International Business from Colgate University

Focused on day-to day, corporate, and business development.

ALEX NESIC
Co-Founder & COO

Former COO of Immotor, focused on development of innovative batteries and personal electric vehicles.

Previously partner and VP of DryWired, a market leader in nanotechnology based surface treatments and chemistries focused on sustainability.

BA from Santa Clara University - Spanish Literature and European History

Responsible for operations and partnerships.

DR KIRILL MOSTOV
CTO

Founder & CEO of Kirsen Technologies and principal architect of the company's precise navigational solutions.

PhD in Electrical Engineering and Computer Sciences, and a Master's in Math, from UC Berkeley with emphasis on location based services using GPS & other sensor combinations.

Technology lead for first autonomous vehicle on a US Highway (vehicle in Smithsonian).

Exclusive provider of tracking and security solutions to the Trans-Siberian Railway.

Author of multiple US and International Patents.

RED SMITH
CFO

12 years as CEO of ContainerTrac (seaport container tracking solutions).

6 years of senior executive management in the computer and networking industries.

Started Callisma in 2000 as a founding executive reporting to the CEO. Led multiple rounds of strategic investment with Sequoia Capital, Cisco Systems, and Brocade Communications - company was acquired by AT&T in 2002.

MBA from UC Berkeley; BS in Finance from the University of Southern California.

INTRODUCING CLEVR MOBILITY

The turnkey, intelligent LEV mobility platform built for fleet use and exceeding the highest regulatory standards.

CLEVR Power Battery as a Service

Safe, globally certified, smart modular battery designed to seamlessly operate multiple LEVs

CLEVR Nav Location Services

Precise real time GPS tracking within **3 ft accuracy** including dense urban areas and indoors where satellite service is unreliable

CLEVR App & Backend Platform

App that allows users to interact with the LEVs and cloud connected ERP that enables operators to manage their batteries & devices in real time

Multi-Modal LEVs

Operators can flexibly deploy e-scooters, e-bikes, and other LEVs and service them with the same battery

Standard GPS

- GPS accuracy of 30 ft – 100 ft
- Cannot locate devices reliably
- Tracking information not accurate
- No network control over device

CLEVR GPS

Solves the location accuracy issue for operators.

- Device GPS location accuracy within 3 Ft
- Enhanced GPS that works when regular GPS doesn't – big cities, parking garages, indoors
- Real time geofencing control of devices
- Network controlled top speed – sidewalks, pedestrian areas vs streets or bike lanes
- Designated virtual parking areas – app and device notify user when parked correctly or incorrectly

Standard Power & Charging

- Batteries don’t last long
- Must collect devices to recharge
- Expensive to pay others to collect and recharge
- Devices spend less time available to users

CLEVR POWER

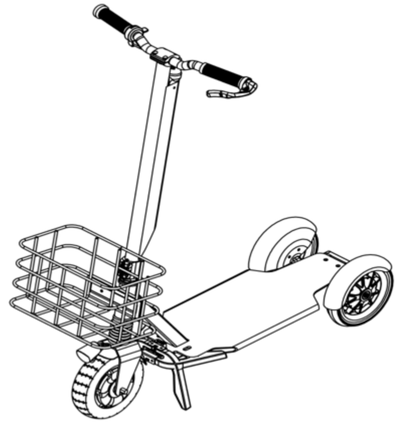
Solves the charging issue for fleet operators.

- Uses latest 21700 Lithium Ion technology – like the Tesla 3
- 450 Wh capacity
- 30 Km range for e-scooter
- 80 Km range for pedal assist e-bike
- Easy to switch when battery is depleted
- Cheaper operational costs to keep fleet charged
- Eliminate the time for recharging– devices operational 24/7/365
- 1 battery works for both e-scooter and e-bike
- Safe and fully certified batteries, globally

Standard Devices

- Cheap consumer grade devices
- Easy to break
- Easily stolen
- High maintenance costs
- Require frequent replacement

CLEVR Devices

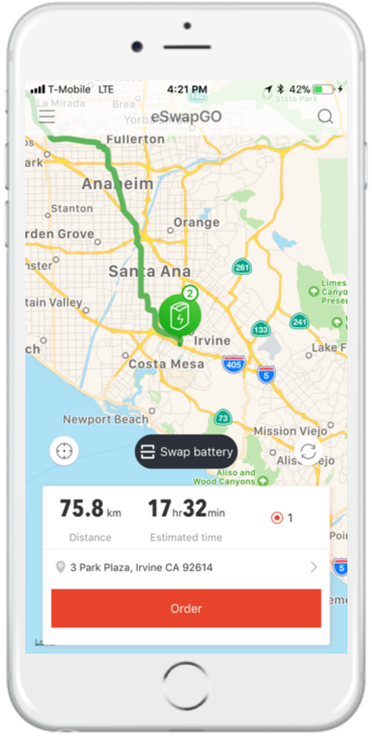


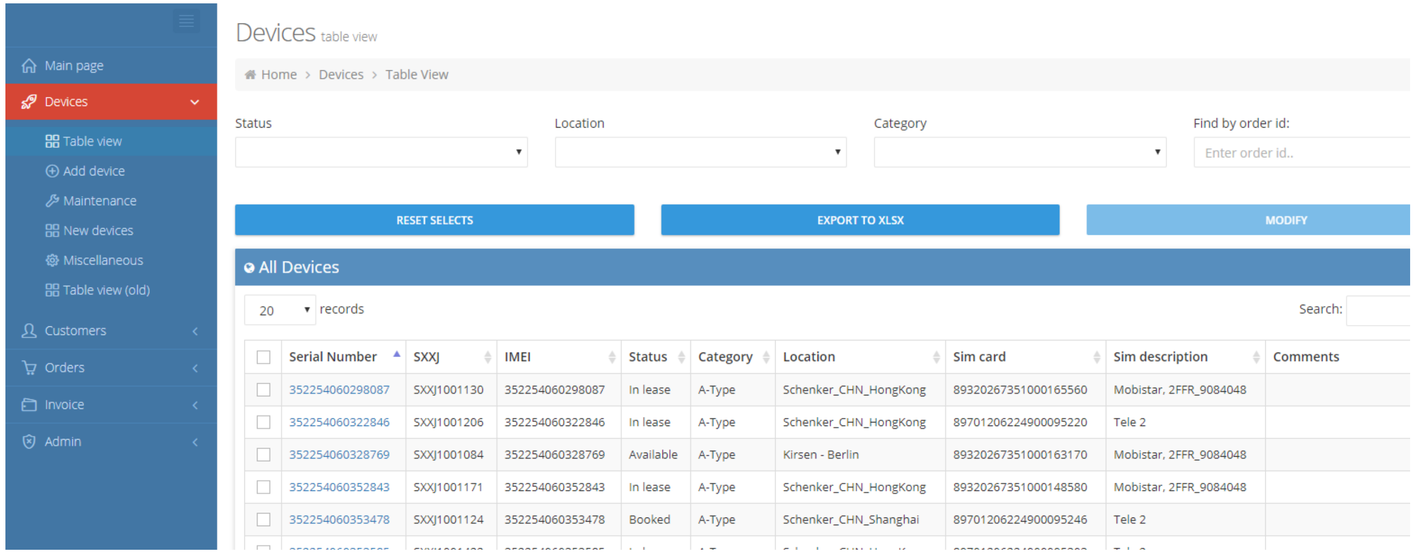
Made specifically for fleet and shared mobility use.

- Rugged construction – durable materials & components
- No cables exposed
- Locking hub motor
- Anti-theft features – optional integrated lock, wheel speed counter equipped, secured battery compartment,
- Smart Bluetooth connection
- RFID enabled for use without smartphone
- All connected to cloud for easy management on backend ERP

CLEVR IS EASY TO USE

Our customer facing app and backend ERP can be white labeled by operators or curated access can be provided via API.





Turnkey Mobile App

for both iOS and Android allowing for seamless user interface with all CLEVR enabled LEVs as part of a shared mobility program.

Enterprise Partners

with fleets can use our robust ERP to manage their operations, track their fleet of vehicles, and collect data from the field that can be shared with municipalities or other stakeholders and partners.

WHAT ARE THE BENEFITS OF CLEVR?

CLEVR Mobility is focused on implementing a solution that empowers operators to manage evolving regulatory expectations proactively and accurately in real time. Cities are concerned about the costs of managing and enforcing the emerging dockless programs. Our platform removes undue burden from the cities and citizens and shifts from reactive enforcement to intelligent compliance.

OPERATOR BENEFITS

- Swappable smart batteries
- **Accurate GPS within <3 ft**
- Location tracking that works in urban canyons, indoors and underground make fleet management better
- Users cannot ‘game the system’ due to poor location tracking
- 2 or 3-wheel units that are designed for fleet use
- Lower risk of users violating regulations resulting in fines
- Lower cost of operations
- Robust ERP and software tools to manage data

CITY BENEFITS

- Less enforcement costs and responsibilities
- Reduced risks and liabilities
- More universal equity and access to all users
- Less cluttered streets and sidewalks
- Real time control of the regulatory enforcement
- Less nuisance to non participants
- Operator tools enable data mining and analysis

USER BENEFITS

- Safer user experience
- More intuitive user experience with multiple ways to interact with scooter
- User is less likely to be in violation of regulations resulting in fines
- IoT gamification makes the experience more fun and enjoyable
- Peer to peer reporting that helps improve the service

REGULATORY CONSIDERATIONS & CAPABILITIES

Regulatory Issue	Software/Hardware	Implemented Solution
Riding on sidewalks	Both	With accurate GPS, geofencing and remote speed management for designated areas is possible – for example, crosswalks and sidewalks speed is limited to 3-4 MPH automatically.
Parking in designated areas - Furnishing & Landscape zone	Software	Ability to enable virtual parking zones indicated within the app to make it easier for users to comply with properly parking in designated areas (even indoors or in parking garages). Ride will not be over until unit is properly parked.
Geofencing in real time	Software	Ability to update geofenced restricted areas in real time and also limit top speed or even disable function if user is in violation of restrictions – events, pedestrian areas, emergencies, etc…
Social & Economic Equity	Both	3-wheel device makes it more approachable to all users and rideable at low speeds. RFID capability allows for use without smartphone with use of a Metro card or other subsidized card or EBT payments.
Compliance of regulations	Both	Integrated lock, integrated basket where helmet can be secured, accurate location for parking and monitoring that scooters stay out of the right of way.
Charging concerns and fleet hours of operation	Hardware	Thanks to swappable smart batteries, the fleet can be kept charged 24/7 if need be simply by swapping out used batteries for new ones – less manpower and vehicles required and greater availability of charged fleet devices throughout operating hours.
Removal of scooters and curbing ‘litter’	Software	BLE sensors in vehicles can ping app users if any corrective action is required in return for a reward – right a fallen vehicle, remove from right of way, rebalance, etc…
Vehicle compliance and ease of use	Hardware	Forza is compliant with CA Vehicle Code 21220 – 21235 without requiring retrofits. 3-wheel design also makes it more stable and easy to park even without a kickstand.
Limiting vandalism, theft and ‘gaming the system’	Both	Forza is not a retrofitted consumer device that can be stolen and repurposed with ease; rather, it is specifically designed for fleet use. Wheel counter that detects speed and motion or lack thereof.


CLEVR
Intelligent Light Electric Vehicle Solutions
THANK YOU
CONTACT: alex@clevrmobility.com