Gyroscopic Vehicle



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Description

*Electric vehicle with telescopic legs that would operate above congested traffic and move around using monorails placed in median strips. Two gyroscopes in each pod would be responsible for stabilising the structure.

Gyroscopic vehicles use monorail in the middle of the road and elevated vehicles to rise above traffic. They are primarily intended to be used for mass transportation, carrying more than 80 passengers in a single pod and able to negotiate traffic easily. Vehicles could also be adapted for emergency services such as firetrucks and ambulances, as luxury vehicles, or even for long-distance journeys.

Feasibility needs to be confirmed as telescopic stilt technology required for change height of vehicle is still at concept stage.

1. Expected impact

- High passenger capacity and low roadspace footprint
- Reduced traffic congestion as the vehicle is elevated
- Environment-friendly as the vehicle uses electricity for propulsion
- Limited accessibility given the need for dedicated infrastructure and to free up vertical space on roads (redesign of bridges required)
- Potential safety risk as vehicle is elevated
- Cannot be implemented in space-constrained urban plans

2. Technology requirements

Telescopic stilt technology still needs to be developed and tested. Other technology elements are available, but infrastructure development will be a challenge.

3. Regulatory requirements

- Regulatory requirement for management of mixed traffic of gyroscopic vehicles and ground vehicles
- Safety regulations for passengers, pedestrians and cargo as vehicles would be over 10 meters high

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- 4. Investment requirements
 - High initial investment for both vehicles and infrastructure
 - Mode is at concept phase investment amount not yet known

Tags

Future mobility Gyroscopic vehicle

STEEP

Technological

Links

TRENDS

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Rating criterion	04.06.2020
Importance	

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