

# Researchers help make silent electric vehicles safer but UFO reports could rise...

September 20 2010

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(PhysOrg.com) -- A little green van called ELVIN is whizzing around the University of Warwick as part of a major research project aimed at tackling the safety issues linked to the lack of sound from electric vehicles. However ELVIN (Electric Vehicle with Interactive Noise) faces a risk of being perceived as a little green man rather than as a little green van.

ELVIN will be able to emit many different sounds aimed at alerting pedestrians and other road users that he is nearby. One of the range of sounds being tested is said to invoke memories of early science fiction movies and the researchers will have to be sure it really does alert pedestrians and other road users to oncoming [electric vehicles](#) rather than causing them to look skyward for more unearthly vehicles.

People who hear ELVIN's sounds will be asked to give their opinions on a range of issues including whether they are suitable as a warning or whether they are just annoying.

Professor Paul Jennings from WMG at the University of Warwick, the lead researcher on the project, said:

“Electric Vehicles are very quiet externally and internally, which makes them a potential low-speed safety risk to [pedestrians](#). [Sound](#) not only alerts people to the presence and direction of a vehicle, it also indicates the type of vehicle - for instance a bus - and whether it is stopping or accelerating.”

“The lack of sound can also make the vehicles unattractive to customers who expect, and even enjoy, aural feedback whilst driving.”

“The obvious solution is to artificially add appropriate sounds, but which sounds? At the same time, we don’t wish to lose the potential benefits of reduced annoyance from [traffic noise](#).”

WMG is carrying out the research with vehicle sound experts NoViSim of Hertfordshire, and Danish company EC Tunes.

Roger Williams, Technical Director of NoViSim , said:

“The fundamental questions are, which sounds should be used for which vehicle, and how should they vary according to what those vehicles are doing.”

As word spreads about Elvin, the team intends that different community groups, representing for instance people who have limited sight, will come and listen to him and give their views.

The University of Warwick has already built up considerable experience in researching and advising on how to enhance the sound quality experience for customers of prestige vehicles in an age when technology is actually making almost every aspect of such cars quieter than ever.

NoViSim has developed some of the leading software tools for designing, evaluating and delivering appropriate sounds for cars.

The research fits well with the University of Warwick’s wish to expand its own campus electric vehicle fleet and a desire to learn as much from their use as possible, including which sounds are most suitable.

Following this pilot study there will be a broader and longer-term period

of study and research using this vehicle alongside a range of other vehicles, and WMG's existing interactive simulation facilities for vehicle and environmental sound evaluation.

**More information:** [www.warwick.ac.uk/go/elvin](http://www.warwick.ac.uk/go/elvin)

Provided by University of Warwick

Citation: Researchers help make silent electric vehicles safer but UFO reports could rise... (2010, September 20) retrieved 9 April 2024 from <https://phys.org/news/2010-09-silent-electric-vehicles-safer-ufo.html>

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