World Blind Union
Union Mondiale Des Aveugles
Unión Mundial de Ciegos

September 16, 2010

Mr. Kenneth Feith
U.S. EPA Headquarters
1200 Pennsylvania Avenue NW
Ariel Rios Building - Mail Code 6103A
Washington, DC 20460

RE: Japanese Guidelines

Dear Mr. Feith:

I am writing regarding the current deliberations of the United Nations Group of Experts on Noise, Subcommittee on Quiet Road Transport Vehicles (QRTV), to propose automobile sound standards that will alert pedestrians, especially those who are blind, to their presence, speed, and direction. As you are aware, new silent vehicle technologies, such as those used in hybrid and electric vehicles, pose an unintentional danger to blind pedestrians, who rely on the sound of traffic in order to travel safely and independently. Other pedestrians, cyclists, runners, and small children also depend on the sound of vehicle traffic. It is critically important that a worldwide minimum vehicle sound standard be established so that the world's blind population remains safe and has the freedom of movement that is necessary to maintain full participation in society.

It is our understanding that the QRTV is considering adoption of the current Japanese guidelines at its meeting later this month. While we understand that this adoption is intended primarily as a temporary measure, there are three major problems with the Japanese guidelines.

First, they require that a sound only needs to be used when a hybrid or electric vehicle is traveling under 20 kilometers per hour. This requirement is based on the Ministry of Land, Infrastructure, Transport and Tourism's study, which indicates that at 20 kilometers per hour, hybrid and electric vehicles approach the same noise level as internal combustion

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vehicles. Therefore, what the Japanese guidelines presuppose is that cars make a safe level of sound at 20 kilometers per hour; however, this is not supported by any scientific evidence. Research needs to be done to determine the optimal level of vehicle sound to ensure the safety of all pedestrians.

The second problem with the Japanese guidelines is that they do not set any minimum volume or sound requirement. The problem with this approach, of course, is that the danger facing blind pedestrians is that some vehicles are too quiet to hear. The immediate problem is the establishment of a minimum sound that blind pedestrians can hear. That sound, in turn, can be the baseline for determining the decibel range that vehicles should emit. The World Blind Union (WBU) strongly believes that any standards mandating vehicle sound must be based on scientific study of the volume and characteristics of the sound needed to alert pedestrians to the presence, location, speed, and direction of vehicles.

Finally, the guidelines do not require that the vehicle emit any sound when it is operating but stationary. This is unacceptable, because blind pedestrians listen for the sound of stationary vehicles in order to help them determine patterns of traffic at an intersection. Idling internal combustion engines tell blind pedestrians when vehicles are waiting for a traffic signal to change. When a stationary vehicle begins to move forward, this indicates to a blind pedestrian that the signal has just changed, thereby allowing the pedestrian to enter the crosswalk quickly and cross the intersection with time to spare. In addition, when crossing many lanes of traffic, the sound from stationary vehicles provides the information needed to walk straight across the street.

A similar sound needs to be emitted by hybrid and electric vehicles to serve this purpose. A sound indicating that a vehicle is operational but stationary will also protect blind pedestrians in parking lots or when crossing driveways. If a vehicle makes no sound in a driveway or parking lot, a blind pedestrian (even if he or she detects the vehicle) may assume that it is parked and not in operation. If the blind person then proceeds in front of the vehicle and it suddenly accelerates, he or she may not have time to take evasive action.

It is estimated that there are more than 300 million people with significant vision loss worldwide. The WBU was formed in 1984; however, it represents over a century of global co-operation on blindness issues, dating back to the first international conference on the subject in 1873 in Vienna. Our membership now totals more than 170 countries—very close to the total United Nations membership. The WBU provides a forum where blind and low-vision people can speak for themselves. On behalf of the WBU, and the

millions of blind individuals we represent, I urge you to take these remarks into account.

Please do not hesitate to contact me if you have any questions. We look forward to working together to make the streets of the world safer for all pedestrians.

Sincerely,

M Diamond

Maryanne Diamond
President
World Blind Union

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