LVE System

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LVE System: how does it work?

The LOGES-VET-EVOLUTION (LVE) is a tactile paving system that allows obtaining accurate voice directions and messages about the surrounding spaces in any language through the use of:

• Integrated tactile path Radio Frequency Ground tags
• A Bluetooth Smart Stick
• A Smartphone and App (available on App Store and Play Store) containing a database with detailed and tested maps

Once on the place, the user can download the map on his smartphone and walking safely on LVE using the Bluetooth stick and receiving the feedbacks on the exact point of contact of the stick, a peculiarity which is the strength point of this technology.
**User**
The user listens to messages by phone in speakerphone or by earphone Bluetooth.

**Trasponder**
The transponder are passive RFG.

**Electronic stick**
The stick has an antenna that:
- reads the tags (installed under the tactile paving)
- communicates via Bluetooth with phone

**Smartphone**
The phone must be equipped with the appropriate app LVEsystem available on playstore and appstore.
LVE System: hardware and software

LVE System is produced by JKJ Srl, an Italian company that specializes in the production of PVC tactile paving integrated with RFG Tags.

The material in question is a high resiliency and high performance fireproof M-PVC-P techno-polymer suitable for indoor and outdoor use and for any kind of project, from train stations, to museums, to airport, to hospitals. LVE System takes into account only the applicable technical standards of international and European tactile paths, ISO/TC 59/SC 16 n°140 and CEN/TS 15209. However, the Radio Frequency Tags can be also integrated in tiles made from cement, grès and other materials.

The researches carried out over the years have led JKJ Srl to develop the LVE System Smartphone App and the Bluetooth stick. Both are periodically updated.
The Impact

LVE System can be easily installed using a bicomponent glue or specific tapes. Today it is available into about 250 public spaces, from the most modern train and metro stations to airports, city centers and shopping malls.

It was compared to other similar systems on the market obtaining the greater degree of end-user satisfaction on a sample of 600 blind and visually impaired people thanks to the accurate vocalization of messages in the exact point of contact.
Accessible Cities: Cosenza and Naples High Speed Train Station

Cosenza is situated in the south of Italy and today it has become the most accessible city in Italy for visually impaired people thanks to its 5 kilometers of LVE System tactile paving providing practical, cultural and touristic information. Cosenza has gained a nomination at Access City Awards 2018.

Naples-Afragola is a brand new Italian high-speed railway station, a logistic hub between north and south Italy. JKJ srl has passed rigid performance tests and system functions in order to meet design needs of the careful architectural studio Zaha Hadid and to make the station completely accessible.
The next step

JKJ Srl aims to spread LVE System all over the world in order to create accessible cities allowing visually impaired people to be totally independent in their everyday lives.

The staff of JKJ Srl commits themselves day by day in updating our software systems and creating new wearable hardware solutions, like the Anklet in the image, that can be applied to the ankle of the users in order to improve comfort levels while walking and daily tasks.