LVE System

A NEW SYSTEM TO ORIENTATE AND INFORM BLIND PEOPLE

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Parallel Session: Orientation systems for the blind
ASSOCIAZIONE DISABILI VISIVI ONLUS:

ADV is a non profit organization established in 1970.

MISSION: to help the Blind to be autonomous, efficient and fully integrated in their social environment thanks to new technologies.

• We created the standards for tactile paving for blind people in Italy more than 30 years ago.
• Thanks to new technologies we have evolved this system adding vocal information integrated in the tiles.
• According to the Italian law they have to be installed in “all public areas and buildings, and in any private building that is open to public”.

Where there are tactile pavements Blind people can move autonomously in:

- Pavements and Footpaths
- Train and underground stations, Bus Stops
- Airports, Ports
- Public Offices, Hospitals
- Shopping areas, Supermarkets
- Sport centres, Theatres
- Post Offices
- Museums, etc.

**BUT**

They can’t know exactly **WHERE** they are and **WHAT** there is **around** them.
VOCAL SYSTEM: HOW TO KNOW WHAT SURROUNDS THE BLIND:

Now, with LVE blind people will get relevant information such as:
“ You are going to cross Oxford Street heading to Piccadilly Circus“
“ You are on Platform 5, exit on the right
“ On your left, Bus Stop n.4 heading to …
“ Information desk straight on
“ This office is open form 9 to 12 am
“ Electronic shop on the right and Pizza on the left
“ Athlete lockers on the right, the public after the stairs, turn left
“ On you right you can touch the statue of Venus, created by Canova .in….her left arm … on the bottom the dress…”
In case of emergency (i.e. fire), a blind person has the right to **find the escape by himself**.

Blind people cannot **follow the written signs** and an alarm does not help to orientate.

A blind person cannot be **left alone waiting** for someone to help him or have the time to read a braille map or find an emergency button.

With the **integrated vocal and tactile path**, the blind will know exactly where they have to go and how to behave in case of an emergency situation.
LVE: HOW IT WORKS

LOGES-VET-EVOLUTION (LVE) is a tactile paving system having integrated accurate voice directions and messages in a chosen language.

It works thanks to:
1. **Radio Frequency Ground** tags (RFG) integrated in the tactile path
2. An antenna placed on the **white stick** or on an ankle bracelet
3. An accessible **App** that interfaces with a Database
4. An **European Database** with all the vocal messages and information.
**User**
The User listens to messages, with his Smartphone

**Smartphone**
The phone must be equipped with the appropriate app LVEsystem available on playstore and appstore. The App is free of charge for blind people

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

**Trasponder**
The Tag RFG is a passive Transponder

**LVE**
LVE: HOW IT WORKS

With LVE a blind person has only to follow the tactile path with his own white stick and he will receive vocal messages, directions, information, descriptions etc. exactly where and when they are needed!

The blind person can decide the depth of information needed from just directions to more detailed information up to even a touristic guidance.
LVE: ALREADY IN PLACE

It has been already installed in many sites in Italy:

- Train stations
- Airports
- Theatres and Expo
- Parks
- Hospitals
- Sport Centres
- Forum Centres, Auditorium
- Many streets and squares