

D4.2 - Innovative 3D tours describing the accessibility and inclusion of pilot sites according to the IG-VAE methodology



What is it about?

The SuCoLo project wants to make mobility, shopping and delivery in urban outskirts easier and more sustainable.

Sustainable means:

We do something in a way that is good for the future.

We do not use too many resources (for example too much energy)

We do not hurt the planet.

And that is:

Good for people

Good for nature

Good for a long time

To reach this goal our project sets out to accessibility and inclusion: everyone should be able to participate and use the places – including people with disabilities, elderly people and families with small children and strollers.



What has been done?

To describe the accessibility of the pilot sites and places, we have created a virtual tour.

A **virtual tour** is a way to look at a place on a computer, tablet or phone:

You can see pictures of the place.

And you can click to move around and see different parts.

It feels like you are walking through the place, but you are not really there.

Our virtual tours show the accessibility and usability of the 2 pilot areas:

- **MIND - Merano Innovation District** (Merano, Italy)
- **Lützschena tram stop** (Leipzig, Germany)

All the important places and access routes are shown digitally to describe the accessibility and usability of the SuCoLo places in detail.

The pictures allow everyone to decide for themselves whether the place shown is accessible, reachable and usable for them.

Technology

The virtual tour is created using special pictures. The pictures required for this are **3-dimensional**.

3-dimensional means spatial: the pictures for the virtual tour are not just flat but show shape and depth.

So, you can see the front, the sides and the back

This is like the things you see in real life.

To take these special 3-dimensional pictures, you need a special 360° camera:

A 360° camera can take a picture or video of everything around it.

It sees the front, the back, the left, and the right — all at the same time.

It shows the whole view, like you are standing in the middle.

You can look in all directions in the picture or video.

In addition to the special camera, you also must take the pictures according to certain rules. For example, you have to

- take a picture every 25 meters.
- edit and combine the pictures afterwards into a virtual tour.
- add in the virtual tour explanations in different languages (German, English, Italian)

Virtual tour of the pilot sites

Merano (Maia Bassa district):

The virtual tour for Merano shows the route from Maia Bassa railway station to the SuCoLo pick-up station at the MIND Centre.

9 important places are integrated in the virtual tour, for example:

the train stop, bus stop, parking spaces for people with disabilities, horse racecourse, café and the MIND Centre.

Leipzig (Lützschena district):

The virtual tour for Leipzig shows the route from the tram stop “Freirodaer Weg” to the SuCoLo micro-hub station at the Town Hall.

12 important places are integrated in the virtual tour, for example:

the kindergarten, bus stop, dog salon, playground, town hall, local heritage association, fountain and the SuCoLo micro-hub station.

Why is this important?

We decided to create these virtual tours to guarantee that everyone can participate in the project and use its facilities.

Using the virtual tours:

- People can explore the areas online before visiting.
- People can check the accessibility of the places
- Cities can improve barrier-free access for people with disabilities.
- SuCoLo can be a model for other European cities.

Conclusion

The virtual tours show that new technology can help make cities more accessible, inclusive, and sustainable.

By **combining 3-dimensional pictures with clear information**, the tours allow everyone to explore important routes and places online.

This supports **better planning** for families, people with disabilities, and elderly people. This approach can be **used in other European cities** to improve barrier-free mobility and promote greener urban logistics.

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