

Press release, 20 September 2019

Underground data centres for the urban spaces of the future

Flums, 20 September 2109 – For the first time, the prototype of a modular data centre developed for underground placement was presented this week in the Hagerbach Test Gallery. The project, led by the Swiss Center of Applied Underground Technologies (SCAUT), aims to use underground rooms for Edge Data Centres in order to save the limited and expensive space on the surface. The "Edge Computing - Underground" concept was developed in collaboration with Datwyler Cabling Solutions and Amberg Engineering as a cost-effective, space-saving and secure solution for the challenges of smart cities.

A pilot project for the smart cities of the future

Automation, 5G, robotics, Internet of Things and artificial intelligence enable many new applications and business models, but already produce a large amount of data today. To ensure that these data can be processed efficiently and quickly on site, mini and micro data centres, so-called Edge Data Centres, are already increasingly being used.

Cities and the urban areas of the future will have limited surface space. In order to overcome this problem, the Swiss Center of Applied Underground Technologies (SCAUT) has developed the "Edge Computing - Underground" concept in a pilot project.

The underground – the unseen dimension

The concept is to place a large number of data centres underground. This environment offers protection against the forces of nature and, thanks to the stable climate, high energy efficiency. The decisive factor for the urban development of the future is the fact that no surface space is required in urban areas, which is usually scarce and expensive.

Amberg Engineering as specialist for underground engineering and Datwyler as specialist for data centres as well as Edge Computing are industrial partners of SCAUT for this pilot project. During the pilot phase, the project team continuously evaluates and optimizes the test results of the prototype.

Quote Johannes Müller, CEO of Dätwyler Cabling Solutions AG:

"Even though we live in a dynamic world full of uncertainties, one thing is clear: the amount of data resulting from new technologies such as IoT will to a large extent have to be processed decentrally and partly underground."

Quote Felix Amberg, President of the Amberg Group:

"In the future, the vast majority of people will live in urban areas. The use of the third dimension not only upwards but also underground will be an essential part of the urban development of smart cities."

For further information, please visit our website or contact us:

<https://edge-computing-underground.com/>

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The Swiss Centre of Applied Underground Technologies (SCAUT) is the world's leading competency centre for the use of the underground space. It relies on high-end engineering, innovative solutions and most advanced ITC to make a substantial contribution to the creation of under-ground spaces for the future and to provide relief for metropolises and highly populated urban areas.

The SCAUT consortium working on the 'Underground Green Farming' project consists of the following industry partners: Dätwyler Cabling Solutions Ltd. and Amberg Engineering Ltd.

Images:

Image 1:

On September 18, 49 guests attended the opening presentation of the Edge Computing prototype.



Image 2:

After the presentation of the prototype the guests could visit the installation and ask the experts their questions.



Images: Amberg Engineering Ltd. / Dätwyler Cabling Solutions Ltd.