

Translated content of the relevant part of the News broadcast on RTVS – Radio and Television Slovakia, Sept 17, 2013, from 42:11 to 44:11 min

<https://www.rtvs.sk/televizia/archiv/9936/22514>

(RTVS, 2013 / translated by Ales Janota, DCIS)

Text (opening credits) from 42:11 min:

A special scanner will help road-makers

[42:11 min]

(Moderator in studio):

The Faculty of Electrical Engineering at the University of Zilina works over development of a special instrument. It will be able to record and process image and data from multiple sensors in 3D quality. The scanner could be used mainly in road transport. Today the researchers exclusively presented it to us.

(Female reporter's voice):

You are just watching the instrument which is exceptional from the viewpoint of space measurement. Its main part consists of two special scanners. The professionals were developing it for more than two years. The exceptionality also results from its scan accuracy.

(Marian Hrubos, co-author):

The instrument is exceptional in combining all data into one complex module. With that we are able to create a 3D-model. Accuracy of the 360° scanner is ± 0.5 cm at the distance 250 m.

(Female reporter's voice):

The instrument is able to record for example the status of building facades, moving objects and people. To do that it uses special sensors, laser scanners and top localization systems. It could also be used inside the buildings and create background models for navigation.

(Project manager Ales Janota):

We are able for example to assess how many pot-holes are on the road – not only their exact positions and sizes but we additionally could also compute how much material is needed for maintenance to fill-in them, and so on. We can imagine applications in the railway transport.

(Female reporter's voice):

Today the instrument has also been admired by visitors from the Texas University.

(Richard T. Schoephoerster, University of Texas, USA)

It is very exciting invention. It offers important information and I think it could be applied not only in Slovakia but also for example in Texas and the whole America.

(Female reporter's voice):

The data measured and collected by the instrument could also be an import part of traffic planning and management or urban development.

(Milan Dado, dean of the Faculty):

I think that globally this problem domain is very interesting, also for international projects either in European research area but also in another area – I mean transatlantic cooperation.

(Female reporter's voice):

According to the Transport Research Institute in Zilina the instrument could be used for making road maintenance more effective.

Lucia Duracova, RTVS

[44:11 min]