



## **Short Term Scientific Missions as opportunities for research networking - COST Action TU1208 experience**

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Networking is one of the main purposes of COST Actions and Short Term Scientific Missions (STSMs) represent an important tool for this purpose. During the Action TU1208, 35 STSMs were undertaken with success. A resume of the STSMs carried out in the framework of TU1208 is presented in this contribution.

Three case studies are then described more in detail, namely the experiences of two STSMs performed by COST Action Members from National Laboratory for Civil Engineering (LNEC) - a researcher and a PhD Student - plus a STSM performed by a Spanish Early-Career Investigator and hosted at LNEC.

The first STSM was entitled “Non-destructive tests for railway evaluation: Detection of fouling and joint interpretation of GPR and track geometric parameters” and was performed at LNEC by an Early-Career Investigator from the University of Vigo, Spain. The experimental part of the mission consisted of tests performed with different Ground Penetrating Radar (GPR) antennas, aiming mainly at obtaining layer thickness information of railways, without coring.

The second STSM was entitled “Calibration methods for air coupled antennas.” It was performed by a PhD Student from LNEC who visited the above-mentioned Early-Career Investigator in the University of Vigo. During this mission, different approaches for calibrating air coupled GPR antennas were tested and compared: Coring, Surface Reflection Method (SRM) and Common Mid Point (CMP). GPR data gathered over a test site, including three road sections with different pavement solutions, were analyzed.

The third STSM was entitled “Development of a guideline for the detection of buried utilities and voids in urban areas, using Ground Penetrating Radar” and was jointly performed in Rome by a researcher from LNEC and a researcher from IFSTTAR, France. During this mission, the visiting and host scientists brought forward the development of guidelines.

The dissemination strategy for spreading the results of the STSM activities is also presented in this abstract.

The vast experience of COST Action TU1208 in promoting the STSM networking tool as a useful mean for achieving the Action objectives can represent an important knowhow for other COST Actions.

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