Marek Sumiła, Krzysztof Tchórzewski: Polish Railways Facing the Implementation of **New Radio Communication Network**

The article outlines problems of implementing the GSM-R system in Poland. Firstly, the reasons that

affect the common implementation of the GSM-R system in Europe have been pointed out. Then the

difference of the GSM-R system on the background of mobile public network was explained and

challenges resulting from the transition from the existing VHF 150 MHz network to the GSM-R system

were presented. The final part of the article sums up the potential of the Signalling and

Telecommunication Laboratory in the area of tests carried out within EU verification processes for

such solutions.

Keywords: GSM-R, network migration, radio measurements