

NATO SCIENCE FOR PEACE AND SECURITY (SPS) PROGRAMME:

“G5014 - Holographic and Impulse Subsurface Radar for Landmine and IED Detection”



A brief report about the meeting at University of Florence on 19th – 23th March 2018

In March 2018 a project progress meeting has been organized at University of Florence with the USA and Ukraine partners. This meeting has been focused on the experimental phase of the project for hardware set-up, compatibility and interoperability testing and robotic platform demonstration using both Holographic (HSR) and impulse (GPR) radar. Tests have been carried out on an artificial test-bed with two types of soil (sand and Donbass soil) and three targets: mine simulant PMN- 4, mine simulant PMN-1 and metal tin. Data have been acquired with both HSR and GPR radar and with a 3D time-of-flight optical camera, necessary to estimate distances and soil profile from the robotic platform. Outdoor detection experiments have been carried out successfully moving the robotic platform on the gravel surface.

