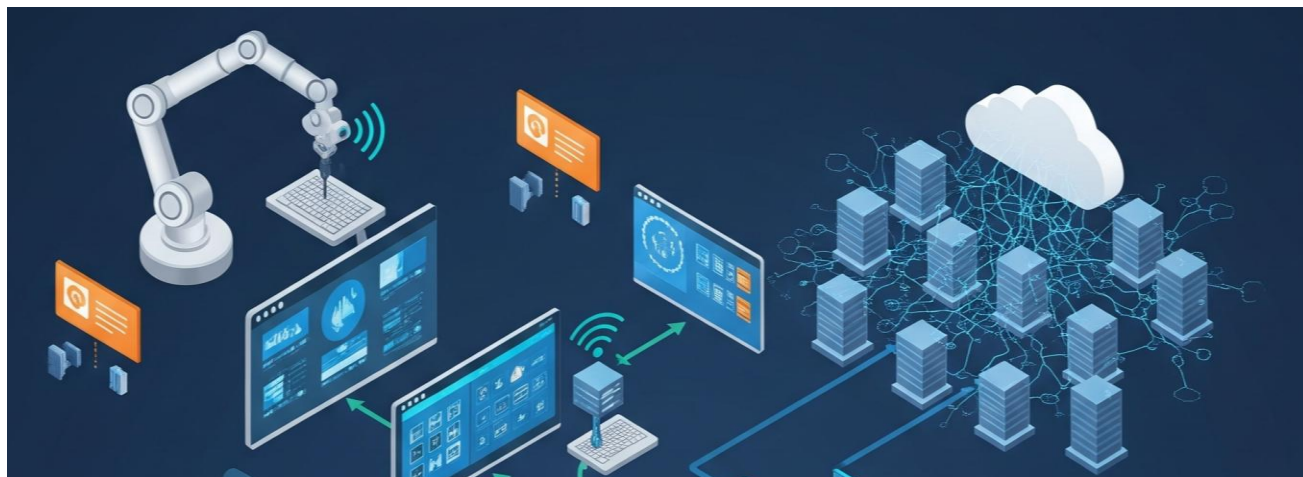# Testbed Automation for 5G-Advanced Edge/Cloud Project Environments

RESTART Dissemination Workshop
July 8, 2025, 10:00, Aula A6, DIIES, University Mediterranea of Reggio Calabria

Abstract – This workshop presents a comprehensive overview of a flexible Testbed architecture, inspired by the implementation at the Smart and Secure Networks (S2N) CNIT National Laboratory in Genoa. Successfully operational for over five years, the Testbed has supported a wide range of national and European research projects. In the <u>theoretical</u> session, we will explore the underlying technologies and methodologies that enable dynamic resource allocation tailored to the specific needs of each project. We will also introduce the management tools that ensure the efficient Testbed's operation, which will be demonstrated live during the <u>experimental</u> session. The workshop will conclude with practical use cases, illustrating how experimenters can leverage the Testbed to design, execute and validate their own testing activities.

Speakers
Paolo Bono
Researcher at CNIT, specializing in Testbed automation and cloud resource management. His work focuses on the automatic configuration of network and 5G devices, as well as the automatic deployment of services on general-purpose hardware. Since early 2023, he has been part of the S2N Lab at the Faculty of Engineering in Genoa, contributing to national and European research initiatives.

Sergio Mangialardi
Senior Software Engineer with more than 10 years of experience in developing high-performance network applications, Software Defined Network architectures and Network Function Virtualization. He has been working since 2007 in the S2N laboratory at the Faculty of Engineering in Genoa.