The main goal of this paper is to describe an innovative learning system and approach aimed to support professional training in using complex and last generation electric apparatus through distance laboratory reproducing real conditions and technical instruments. The paper describes a comprehensive solution based on a distance learning environment to distribute theoretical and practical learning activities to control and manage remote real instrumentations via Internet and web solutions. This specific solution derives from the project IN.TRA.NET (Innovation Transfer Network), a Leonardo da Vinci transfer of innovation project funded under the 2008 call of Life Long Learning. The paper briefly presents the general framework for distance experimental learning environments, IN.TRA.NET goals and features and the first project evidences arising from preliminary need analysis.

The project aims to design a multilanguage international distributed learning environment that uses technological solutions to develop innovative ICT-based contents, services and didactic methodology for lifelong learning.

IN.TRA.NET is characterized by the use of distance and remote learning technologies to deliver innovative information concerning the electronic and control apparatus branch to improve the qualification and competitiveness of the workers.

Basic and high instructions, as well as adult training, have been recognized to be at the center of the growth, innovation, and integration processes in democratic societies.