

Safety is at the heart of the railway infrastructure's occupations. It's a major issue that guarantees the network's quality and the traffic's fluidity. Rail signalling is one of its major components. Because it's a complex and difficult topic to understand, the SNCF Engineering University (l'Université de l'Ingénierie)

created with rail safety experts a digital training module to achieve and facilitate the learning. This pedagogical module, which is a true digital railway mock-up, targets three clear actors :

- \* Signage experts at the beginning of the training, to give meaning and a systemic vision of railway signalling. This is an introductory module to a longer formation.

- \* The awareness of the new hires, novice in this field, to give them the bases of the perception about this major concern. The trainees discover signage through the mock-up, they work in small groups on tablets, the correction and additional corrections are provided on a digital board.

- \* To every employee, actors of railway projects. Module of a railway culture fully-fledged, therefore the mock-up is aimed at everyone in a context of awareness of all the engineering projects' members' safety, the mock-up is reachable on SNCF Engineering University's website.

This distinctly pedagogical approach is very clear and its use is integrated in 3 different approaches whether it's face-to-face or remotely.

The mock-up's environment matches with the willingness to create a playful and well-known environment, the one of "railway mock-ups".

The principle is simple : users have to make a train run by setting traffic signage. There are five reachable levels (each one with a different environment and different landscapes), round 4 main themes (adjustment, confinement, needles and squares, slowing down). A final level enables the reviewing of the whole knowledge. Before each level, a small introduction reminds the important elements to know, the goal is to make the train run. In order to do so, the trainee can rely on windows that come up to gradually give him a different teaching content (videos, drawings, texts or diagrams, such as a video that compares the breaking of a car or a train) to give sense to the asked signage. Once the train arrived at the station, the trainee answers to an evaluation questionnaire that gives him some points. The trainee can then use them to customize the mock-up by picking a type of train. There exists an expert mode for the more experienced people ; professionals can use the mock-up without the instructions, which enables an evaluation for a better homogenization of the groups to form.

This innovative and playful mock-up uses every technological resources to finally make the bases of rail signalling within everyone's reach, in a progressive dimension. It contributes to

give some meaning to rail safety while adding value to this universe to the ones that make it work.