Disinfection assistance in rescue services by sensor-based AI – DesiRe

The objective of the requested project is the development of innovative methods aiming for AI- and sensor-based decision assistance concerning the disinfection status and cleaning requirements of contact and usage surfaces in rescue vehicles including the patient equipment. By means of fitting sensor technology – hyperspectral cameras, thermographic systems and possibly further sensor technology such as temperature or humidity sensors – and associated AI-based signal evaluation and information processing, this intelligent assistance system is to be developed in collaboration with the rescue service of the Saarland regional association of the German Red Cross (DRK). The project is motivated, on the one hand, by the requirement for increased efficiency of the regular cleaning of rescue vehicles and, on the other hand, by the requirement for handling reduced necessary downtimes (duration of the vehicle “log off”) by the routine cleaning after rescue missions or patient transports more flexibly and faster (at present 2.5 hours in average). The DRK rescue service is a practice partner in the project application with expertise in the rescue and emergency sector.