

TOKEN EXCHANGE USING RANDOM NUMBERS FOR INITIAL HAZARD ANALYSIS

The report contains the results of an initial hazard analysis of a system based on Token Exchange Using Random Numbers (TERN). The system can verify the transfer of authority in possessions and can control train movements on lightly used lines.

The aim of the hazard analysis is to identify hazardous events that could occur when the system is used and, in particular, to identify events that cannot be prevented.

The hazard analysis has identified several hazardous events that could occur; however methods have been identified to prevent their occurrence. No single event or group of events has been identified that might prevent the proposed TERN system from being safe.