

Abstract

The present invention is directed to a system arrangement which generates substitute data which can be used if transmitted data is negatively verified, i.e. if it is recognised as erroneous. According to the invention, separate physical channels are provided and data is replicated at a particularly suitable location, transmitted redundantly and coded accordingly. In the special combination of features, various security mechanisms are integrated and synergistically linked in such a way that particularly secure data transmission in the automobile is guaranteed. The present invention specifically addresses the security requirements and hardware conditions in the vehicle, which is not the case with packet-switched communication, for example. Separate physical channels make it possible for data to be transmitted redundantly according to the scheme proposed by the invention, whereby interactions between the transmission media are prevented. The coding makes it possible for the receiver to recognise that there may be an error with regard to data integrity or that data has been transmitted incorrectly or not at all. If this is recognised, the redundantly transmitted data can be used on the receiver side and the data transmission as a whole is not impaired. The present invention is also directed to an appropriately configured method which enables the system arrangement to be provided or operated. In addition, a computer program product is proposed with control commands that execute the method or provide or operate the system arrangement.

Fig. 1