

Abstract.

Provided is a method and system for determining a separation distance between a first object and a second object. It is envisaged that at least one of the objects is a movable vehicle such as a train. The method comprises using a search module associated with a first object where said search module comprises a first transponder having a unique address. The method includes using a reply module associated with a second object where said reply module comprises a second transponder having a different, unique address. The method includes the search module transmitting a search signal on a first frequency, said search signal including the address of the first transponder and the address of the second transponder. The reply module receives the search signal and locally validates the address included in said received search signal for the second transponder, whereby, if the validation is positive; the reply module transmits a reply signal on a second, different frequency, said reply signal including the address of the second transponder and the address of the first transponder. The search module receives the reply signal and locally validates the address included in said received reply signal for at least the second transponder whereby, if the validation is positive, the search module determines a separation distance between the first object and the second object based on a time taken from transmission of the search signal to receipt of the reply signal at said search module. The local validation of the address of the second transponder at the reply module and then at the search module improves reliability of processing of reply signals and allows the method to be implemented in a stand-alone configuration not reliant on signals from external systems.