

ABSTRACT

A method, apparatus, device, system, and medium for safety protection of trains in a cooperative formation. The method includes: obtaining (110) running state information and distance information of a first train and a second train, and an allowable collision speed of a formation corresponding to the first train and the second train, in which the first train and the second train are two adjacent trains in the formation; establishing (120), under a condition that the first train is in an emergency braking phase, a safety protection model according to a travelling phase of the second train, the running state information, the distance information, and the allowable collision speed; and determining (130) a safety protection speed for the second train according to the safety protection model, in which the safety protection speed causes that the second train does not collide with the first train or that the second train collides with the first train at a speed not greater than the allowable collision speed.

Fig. 1