

AALS Safety Committee Consultation process on braking.
 Draft replacement AALS Interoperability Code of Practice (2019) section 4 on braking requirements.
 Draft dated 23/11/2018 for voting on at 2019 AGM

4. MINIMUM BRAKING REQUIREMENTS FOR MINIATURE PASSENGER CARRYING RAILWAYS

4.1. A Society shall have a braking policy in accordance with the AALS Code of Practice "OPERATION OF MINIATURE RAILWAYS, ROAD VEHICLES AND PLANT" 2013 clause 5.1.1.2.

4.2. A light engine shall be fitted with a braking system capable of stopping the engine in compliance with the Society's braking policy.

4.3. All trains running on a track open for public passenger carrying shall be fitted with a braking system capable of stopping the train in compliance with the Society's braking policy.

4.4. A train must be able to be secured indefinitely on the ruling grade of a track, in the tare condition. If chocks or other devices are required, these must be readily available.

4.5. Minimum requirements for a train are specified in the table below.

| Train category | Small | Small-Medium | Medium | Heavy |
|-------------------------------------------------------------|---------------------------------------|-----------------------|------------------------|-----------------|
| Typical loco | non ride-on. 2.5", 3.5" and small 5"g | 5"g and small 7.25"g | Large 5"g, most 7.25"g | Large 7.25"g |
| Typical loco mass (excl tender) (5) | Up to 35 kg approx. | Over 35kg up to 150kg | Over 150kg up to 400kg | Over 400 kg |
| Typical max passenger capacity | Up to 4 | Up to 12 | Up to 35 | Over 35 |
| Typical max train mass (excl loco+tender) | 400 kg | 1100 kg | 3000 kg | Over 3000 kg |
| Loco mechanical parking brake (retentive) | Not required(1) | Recommended(1) | Recommended(1) | Mandatory |
| Loco brake, power-operated | Not required | Recommended | Recommended | Mandatory |
| Driver's vehicle brake (2) | Mandatory | Mandatory | | |
| Train brake control automatically applies loco brake | Not required | Not required | Recommended (7) | Recommended (7) |
| Proportion of braked wheelsets on train(3) | 33% minimum (6) | 33% minimum | 50% minimum | 50% minimum |
| Guard able to apply braking (4) | Not required | Not required | Recommended | Mandatory |

Notes to table:

1. Parked locomotives and trains to be secured, e.g. by retentive brake or spragging wheels.
2. Includes ride-in locomotive, ride-on locomotive tender, driver's truck or passenger car used for driving. For a ride-on tender or driver's truck this requirement is deemed fulfilled if the locomotive brake is used.
3. Percentage calculation based on payload carriages only. Train brakes are optional if the locomotive is braked and its mass exceeds the gross mass of the trailing load.
4. Requirement for a guard is specified in the Operations Code of Practice section 5.
5. With multiple locomotive units the masses should be summed to establish the train category.
6. In the Small category the driver's truck can be counted as payload.
7. A failsafe train brake system requires energy to hold the brakes off. If the train brake is not failsafe, an independent brake should also be provided (e.g. locomotive, tender, guard).