#### SCHEDULE 1

### PART 2

## INSTRUMENT SPECIFIC REQUIREMENTS

#### Part D

### **Automatic Weighing Instruments**

# **Automatic Rail-weighbridges**

- **50.**—(1) In addition to the requirements set out in paragraphs 44 and 45, the following specific requirements shall apply in relation to automatic rail-weighbridges.
  - (2) Accuracy classes

Automatic rail-weighbridges are divided into four accuracy classes as follows:

- (i) 0.2;
- (ii) 0.5;
- (iii) 1; and
- (iv) 2.
- (3) MPE
  - (a) The MPEs for weighing-in-motion of a single wagon or a total train are shown in Table 15.

Table 15

Accuracy class	MPE	
0.2	± 0.1 %	
0.5	± 0.25 %	
1	± 0.5 %	
2	± 1.0 %	

- (b) The MPEs for the weight of coupled or uncoupled wagons weighing-in-motion shall be one of the following values, whichever is the greatest:
  - (i) the value calculated according to Table 15, rounded to the nearest scale interval;
  - (ii) the value calculated according to Table 15, rounded to the nearest scale interval for a weight equal to 35% of the maximum wagon weight (as inscribed on the descriptive markings);
  - (iii) one scale interval (d).
- (c) The MPEs for the weight of train weighing-in-motion shall be one of the following values, whichever is the greatest:
  - (i) the value calculated according to Table 15, rounded to the nearest scale interval;
  - (ii) the value calculated according to Table 15, for the weight of a single wagon equal to 35% of the maximum wagon weight (as inscribed on the descriptive markings) multiplied by the number of reference wagons (not exceeding 10) in the train, and rounded to the nearest scale interval;
  - (iii) one scale interval (d) for each wagon in the train, but not exceeding 10 d.

- (d) When weighing coupled wagons; the errors of not more than 10% of the weighing results taken from one or more passes of the train may exceed the appropriate MPE given in paragraph 3(b), but shall not exceed twice the MPE.
- (4) Scale interval (d)

The relationship between the accuracy class and the scale interval shall be as specified in Table 16.

Table 16

Accuracy class	Scale interval (d)	
0.2	$d \le 50 \text{ kg}$	
0.5	$d \le 100 \text{ kg}$	
1	$d \le 200 \text{ kg}$	
5	$d \le 500 \text{ kg}$	

- (5) Measurement range
  - (a) The minimum capacity shall not be less than 1 t, and not greater than the value of the result of the minimum wagon weight divided by the number of partial weighings.
  - (b) The minimum wagon weight shall not be less than 50 d.
- (6) Performance under influence factor and electromagnetic disturbance
  - (a) The MPE due to an influence factor shall be as specified in Table 17.

Table 17

Load (m) in verification scale intervals (d)	MPE	
$0 \le m \le 500$	$\pm 0.5 d$	
$500 < m \le 2000$	$\pm 1.0 d$	
$2\ 000 < m \le 10\ 000$	$\pm 1.5 d$	

(b) The critical change value due to a disturbance is one scale interval.