

## SCHEDULE 1

(Annex I of the Directive)

### Commencement Information

**II** Sch. 1 in force at 3.8.2017, see [reg. 1](#)

### C. Essential requirements for noise emissions

#### 1. NOISE EMISSION LEVELS

1.1. Recreational craft with inboard or stern drive engines without integral exhaust, personal watercraft and outboard engines and stern drive engines with integral exhaust shall be designed, constructed and assembled so that noise emissions shall not exceed the limit values in the following table:

Rated Engine Power(single engine)In kW	Maximum Sound Pressure Level = $L_{pASmax}$ In dB
$P_N \leq 10$	67
$10 < P_N \leq 40$	72
$P_N > 40$	75

where  $P_N$  = rated engine power in kW of a single engine at rated speed and  $L_{pASmax}$  = maximum sound pressure level in dB.

For twin-engine and multiple-engine units of all engine types an allowance of 3 dB may be applied.

1.2. As an alternative to sound measurement tests, recreational craft with inboard engine configuration or stern drive engine configuration, without integral exhaust, shall be deemed to comply with the noise requirements set out in point 1.1 if they have a Froude number of  $\leq 1,1$  and a Power to Displacement ratio of  $\leq 40$  and where the engine and exhaust system are installed in accordance with the engine manufacturer's specifications.

1.3. 'Froude number'  $F_n$  shall be calculated by dividing the maximum recreational craft speed  $V$  (m/s) by the square root of the waterline length  $lwl$  (m) multiplied by a given gravitational acceleration constant,  $g$ , of  $9,8 \text{ m/s}^2$ .

$$F_n = \frac{V}{\sqrt{(g \cdot lwl)}}$$

'Power to Displacement ratio' shall be calculated by dividing the rated engine power  $P_N$  (in kW) by the recreational craft's displacement  $D$  (in tonnes)

$$\text{Power to Displacement ratio} = \frac{P_N}{D}$$

**Changes to legislation:**

There are currently no known outstanding effects for the The Recreational Craft Regulations 2017, Division 1..