

Informative

Transponder performance in relation to COUNCIL REGULATION (EC) No 21/2004

of 17 December 2003

Identification and registration of ovine and caprine animals

For ovine and caprine animals from the user group perspective a reading distance performance was defined (COUNCIL REGULATION (EC) No 21/2004 Annex A point 6c):

The reading distance must be:

- (i) a minimum of 12 cm for eartags and marks on the pastern when read by a portable reader;
- (ii) a minimum of 20 cm for ruminal boluses and injectable transponders when read by a portable reader;
- (iii) a minimum of 50 cm for all types when read with a stationary reader.

The reading distance of transponders not only depends on the performance of the transponder but is also related to the performance of transceivers.

Specifically a transponder is expected to be read by a stationary transceiver at a distance of 50 cm in optimal orientation when:

- It activates at a field strength value: $< 1.2 \text{ A/m}$
(Maximum tolerance: $\pm 0.3 \text{ A/m}$)
- At field strength of 1.2 A/m the modulation amplitude shall be: $> 10 \text{ mV}$

These values are tentative and subject to change.