

# DIN EN ISO 17201-3:2019-06 (E)

## Acoustics - Noise from shooting ranges - Part 3: Sound propagation calculations (ISO 17201-3:2019)

---

<b>Contents</b>	<b>Page</b>
European foreword.....	3
Foreword.....	4
Introduction .....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions .....	6
4 Source modelling.....	7
4.1 General.....	7
4.2 Muzzle blast.....	7
4.2.1 Background .....	7
4.2.2 Free-field situation .....	8
4.2.3 Non-free-field situation .....	8
4.3 Projectile sound.....	11
5 Propagation calculation.....	11
5.1 General.....	11
5.2 Application of ISO 9613-2 for free-field situations.....	11
5.3 Application of ISO 9613-2 for non-free-field situations.....	13
5.4 Sophisticated models.....	13
6 Conversion of sound exposure levels .....	14
7 Uncertainties .....	15
Annex A (normative) Benchmark cases for shooting sheds with baffles.....	16
Annex B (informative) Sophisticated modelling approaches .....	32
Annex C (informative) Modelling of shooting scenarios — Examples of shooting ranges.....	41
Annex D (informative) Uncertainty .....	59
Bibliography.....	63