

# ISO 19586:2019-12 (E)

## Heavy commercial vehicles and buses - Vehicle dynamics simulation and validation - Lateral dynamic stability of vehicle combinations

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Principle .....	2
5	Variables .....	2
6	Minimum vehicle model parameters and requirements .....	3
6.1	General .....	3
6.2	Basic vehicle parameters .....	3
6.3	Estimated vehicle parameters .....	3
7	Physical tests .....	4
7.1	General .....	4
7.2	Test methods .....	4
7.2.1	General .....	4
7.2.2	Pseudo random steer input .....	4
7.2.3	Single sine wave input .....	4
8	Simulation .....	5
8.1	General .....	5
8.2	Data recording .....	5
8.3	Documentation .....	5
9	Comparison of simulation and physical tests .....	5
9.1	General .....	5
9.2	Characteristic values .....	5
9.2.1	Rearward amplification (RA) .....	5
9.2.2	Yaw damping and zero damping speed .....	7
10	Validation process .....	8
Annex A (informative) Principle of comparing simulation and test results .....		10
Bibliography .....		11