

# ISO/TR 19358:2002-10 (E)

## Ergonomics - Construction and application of tests for speech technology

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		iv
1	Scope .....	1
2	Terms and definitions .....	1
3	Description of speech technologies .....	3
3.1	Introduction .....	3
3.2	Available technologies .....	3
4	Description of relevant variables related to speech technology .....	4
4.1	Introduction .....	4
4.2	Speech type .....	5
4.3	Speaker (specification of speaker-dependent aspects) .....	5
4.4	Task (application-specific description of relevant recognition parameters) .....	5
4.5	Training (task-related training aspects) .....	6
4.6	Environment (specification of the speech quality in a specific environment, for both input and output) .....	6
4.7	Input (specification of the transmission of the speech signal from the microphone to a recognizer input) .....	6
4.8	Specification of speech technology modules .....	6
5	Assessment methods .....	7
5.1	General .....	7
5.2	Field vs. laboratory evaluation .....	8
5.3	System transparency .....	8
5.4	Subjective vs. objective methods .....	9
5.5	Speech recognition systems .....	9
5.6	Speech synthesis systems .....	9
5.7	Speaker identification and verification .....	9
5.8	Corpora .....	10
5.9	Related sources of information .....	10
Annex A (informative)	Example of assessment .....	11
Annex B (informative)	Performance measures .....	14
Bibliography .....		15