

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and abbreviated terms	5
5	Basic concepts	6
5.1	Outline	6
5.2	Measurement uncertainty	9
5.3	Correction for systematic effects	10
5.4	Provision of input data	11
6	Problem specification	13
6.1	Objectives	13
6.2	Measurement	13
6.3	Uncertainty parameters	15
6.4	Input data	15
6.4.1	General	15
6.4.2	Assessment of representativeness	16
6.5	Effects not described by series of observations	17
7	Statistical analysis	18
7.1	Objectives	18
7.2	Indirect approach	19
7.3	Direct approach	21
7.4	Statistical validity	22
8	Estimation of variances and covariances	23
8.1	General	23
8.2	Variance estimates of Type A	23
8.3	Variance estimates of Type B	23
8.4	Estimation of covariances	24
9	Evaluation of uncertainty parameters	25
9.1	Objective	25
9.2	Combined standard uncertainty	25
9.3	Expanded uncertainty	26
9.3.1	General	26
9.3.2	Expanded uncertainty of results exhibiting a Gaussian distribution	27
10	Reporting	28
Annex A (informative)	Testing a coverage probability	30
Annex B (informative)	Type A evaluation methods for experimental designs A1 to A8	34
Annex C (informative)	Examples	49
Bibliography		81