

Contents

Page

European foreword	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 General.....	12
4.1 General remarks.....	12
4.2 Exposure assessment approaches	12
4.3 Characterization of the field source.....	12
4.4 Static and low frequency fields	13
4.5 High frequency range	13
4.6 Multiple frequency fields and multiple sources	13
5 Assessment of human exposure by measurement.....	13
5.1 General remarks.....	13
5.2 Electromagnetic field measurement.....	14
5.2.1 Measurement instrumentation	14
5.2.2 Measurement protocol	15
5.3 Body current measurement	17
5.4 Contact current measurement.....	17
5.5 SAR measurement.....	17
5.6 Uncertainty of measurement	18
5.7 Calibration	19
5.7.1 Low frequency range.....	19
5.7.2 High frequency range	19
6 Assessment of exposure by calculation	19
6.1 Low frequency.....	19
6.2 High frequency	19
6.3 Uncertainty of calculation	20
7 Assessment report	20
7.1 General.....	20
7.2 Items to be recorded in the assessment report.....	20
7.2.1 Assessment method.....	20
7.2.2 Presentation of the measurement results	20
7.2.3 Presentation of the calculation results	21
Annex A (informative) Uncertainty assessment for the measurement of EMF	22
A.1 Steps in establishing an uncertainty budget	22
A.1.1 Selection of uncertainty contributions	22
A.1.2 Classes of uncertainty contributions	22
A.1.3 Probability distribution and standard uncertainty of each contribution	23
A.1.3.1 General.....	23
A.1.3.2 Normal.....	23
A.1.3.3 Rectangular	23
A.1.3.4 U-shaped.....	23
A.1.3.5 Triangular	24

POLSKI KOMITET NORMALIZACYJNY 2023

Combined standard uncertainty	24
1 Sensitivity coefficients	24
2 Correlated input quantities	24
3 Combined standard uncertainty	25
Expanded uncertainty	25
Examples for uncertainty budgets	25
General	25
Example of an uncertainty budget for field strength measurement using a system with antenna and spectrum analyser	25
Example of an uncertainty budget for field strength measurement using a broadband measurement system	26
ography	27