

| Contents | Page |
|---|-------------|
| Summary | 2 |
| Souhm | 3 |
| Keywords | 4 |
| 1 INTRODUCTION | 6 |
| 2 BASIC TERMINOLOGY | 8 |
| 3 GENERAL PROCEDURE FOR STRUCTURAL ASSESSMENT | 8 |
| 3.1 General aspects | 9 |
| 3.2 Basic steps of assessment | 9 |
| 4 RELIABILITY VERIFICATION OF EXISTING STRUCTURES | 10 |
| 4.1 Methods for structural verification | 10 |
| 4.2 Partial factor method | 10 |
| 4.3 Probabilistic methods | 11 |
| 5 PARTIAL FACTORS FOR REQUIRED RELIABILITY LEVEL | 12 |
| 5.1 General | 12 |
| 5.2 Partial factors for resistance | 13 |
| 5.3 Partial factors for actions | 14 |
| 6 UPDATING OF RELIABILITY ESTIMATES | 17 |
| 6.1 Procedures for updating | 17 |
| 6.2 Updating of failure probability | 18 |
| 6.3 Updating of characteristic and design values | 18 |
| 6.4 Estimation of structural condition based on new information | 19 |
| 7 EXAMPLES OF RELIABILITY ASSESSMENT | 19 |
| 7.1 Reliability assessment of a primary school | 20 |
| 7.2 Reliability assessment of existing balconies | 22 |
| 8 CONCLUSIONS | 26 |
| Annex A General flowchart for the assessment of existing structures | 27 |
| REFERENCES | 28 |
| CURRICULUM VITAE | 30 |