

Table of Contents

FOREWORD	4
1 INTRODUCTION.....	5
1.1 Definition	5
1.2 Requirements.....	5
1.3 Scope of the document	6
1.4 Local tie survey stages	6
2 SPACE GEODESY TECHNIQUES & INSTRUMENTS	7
2.1 GNSS	7
2.2 DORIS.....	10
2.3 SLR	12
2.4 VLBI	13
2.5 Other points of interest.....	14
3 METHODOLOGY & GUIDELINES	16
3.1 Conventional survey.....	16
3.2 Levelling	18
3.3 GNSS determination	19
3.4 Example of instrument characteristics.....	21
4 LOCAL TIE SURVEY	22
4.1 Preparation (before field work)	22
4.2 Field work	23
5 ADJUSTMENT AND REPORT.....	31
5.1 Adjustment software	31
5.2 GNSS data post-processing.....	31
5.3 Orientation of the tie vectors	33
5.4 Report and Results – SINEX file	34
REFERENCES.....	35
APPENDICES.....	37
Appendix 1: Reference documents.....	37
Appendix 2: Site description	38
Appendix 3: Co-located points description	39
Appendix 4: Map or sketch of points	40
Appendix 5: Example of instrument characteristics	41
Appendix 6: Centering equations and perpendicularity projection	42
Appendix 7: Axis and offset determination.....	44