

ISO 37175:2024-08 (E)

Smart community infrastructures - Operation and maintenance of utility tunnels

| Contents | | Page |
|--|--|-------------|
| Foreword | | iv |
| Introduction | | v |
| 1 Scope | | 1 |
| 2 Normative references | | 1 |
| 3 Terms and definitions | | 1 |
| 4 Benefits to stakeholders | | 3 |
| 4.1 General..... | | 3 |
| 4.2 Authorities..... | | 4 |
| 4.3 Investors..... | | 4 |
| 4.4 Developers..... | | 4 |
| 4.5 Operation providers..... | | 4 |
| 4.6 Maintenance providers..... | | 5 |
| 4.7 Pipeline operators..... | | 5 |
| 4.8 Citizens..... | | 5 |
| 5 Basic elements and overall requirements | | 5 |
| 5.1 General..... | | 5 |
| 5.2 Utility tunnel body..... | | 6 |
| 5.3 Ancillary facilities..... | | 6 |
| 5.4 Pipelines..... | | 6 |
| 5.5 Operation and maintenance management platform (OMMP)..... | | 7 |
| 6 Operations and maintenance | | 8 |
| 6.1 General..... | | 8 |
| 6.2 Operations..... | | 8 |
| 6.2.1 General..... | | 8 |
| 6.2.2 Duty..... | | 8 |
| 6.2.3 Detection and monitoring..... | | 9 |
| 6.2.4 Routine inspection..... | | 9 |
| 6.2.5 Safety operations..... | | 10 |
| 6.2.6 Financial management..... | | 11 |
| 6.3 Maintenance..... | | 12 |
| 6.3.1 General..... | | 12 |
| 6.3.2 Requirements..... | | 12 |
| 6.4 Management..... | | 12 |
| 6.4.1 Emergency management..... | | 12 |
| 6.4.2 Data management..... | | 13 |
| 6.4.3 Space management..... | | 13 |
| 6.4.4 Energy savings and emissions reduction..... | | 14 |
| 7 Evaluation and continuous improvement | | 14 |
| 7.1 General..... | | 14 |
| 7.2 Sustainability evaluation..... | | 15 |
| 7.2.1 Evaluation principles..... | | 15 |
| 7.2.2 Evaluation elements..... | | 15 |
| 7.3 Continuous improvement..... | | 15 |
| 7.3.1 General..... | | 15 |
| 7.3.2 Technology improvement..... | | 16 |
| 7.3.3 Management improvement..... | | 16 |
| 7.3.4 Improvement methods..... | | 16 |
| Annex A (informative) Evaluation elements | | 17 |
| Annex B (informative) Application of BIM, GIS and CIM in OMMP | | 20 |
| Bibliography | | 21 |