

ISO 37106:2021-10 (E)

Sustainable cities and communities - Guidance on establishing smart city operating models for sustainable communities

Contents		Page
Foreword		vi
Introduction		vii
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Overview of this document	2
4.1	Transforming the traditional operating model for cities	2
4.2	Structure of this document	5
4.3	Summary of recommendations	6
5	Component A -- Delivery principles	10
5.1	Context	10
5.2	The need	10
5.3	Recommendations	12
5.4	Linkages	12
6	Component B -- Key cross-city delivery processes	12
6.1	General	12
6.2	Strategy management	12
6.3	Subcomponent [B1] -- City vision	13
6.3.1	Context	13
6.3.2	The need	13
6.3.3	Recommendations	14
6.3.4	Linkages	14
6.4	Subcomponent [B2] -- Leadership and governance	14
6.4.1	Context	14
6.4.2	The need	15
6.4.3	Recommendations	16
6.4.4	Linkages	16
6.5	Subcomponent [B3] -- Collaborative engagement	16
6.5.1	Context	16
6.5.2	Rationale	16
6.5.3	Recommendation	17
6.5.4	Linkages	17
6.6	Subcomponent [B4] -- Procurement and supplier management	18
6.6.1	Context	18
6.6.2	Rationale	18
6.6.3	Recommendations	19
6.6.4	Linkages	20
6.7	Subcomponent [B5] -- Mapping the city's interoperability needs	20
6.7.1	Context	20
6.7.2	The need	20
6.7.3	Recommendation	21
6.7.4	Linkages	21
6.8	Subcomponent [B6] -- Establishing a common terminology and reference model	21
6.8.1	Context	21

6.8.2	The need	22
6.8.3	Recommendations	22
6.8.4	Linkages	22
6.9	Subcomponent [B7] - Smart city roadmap	22
6.9.1	Context	22
6.9.2	The need	22
6.9.3	Recommendations	23
6.9.4	Linkages	24
6.10	Citizen-centric service management	24
6.11	Subcomponent [B8] -- Empowering the city community through city data	24
6.11.1	Context	24
6.11.2	The need	24
6.11.3	Recommendation	27
6.11.4	Linkages	27
6.12	Subcomponent [B9] -- Delivering integrated citizen-centric services	27
6.12.1	Context	27
6.12.2	The need	27
6.12.3	Recommendation	28
6.12.4	Linkages	28
6.13	Subcomponent [B10] -- Identity and privacy management	29
6.13.1	Context	29
6.13.2	The need	29
6.13.3	Recommendation	30
6.13.4	Linkages	30
6.14	Subcomponent [B11] -- Digital inclusion and channel management	31
6.14.1	Context	31
6.14.2	The need	31
6.14.3	Recommendation	31
6.14.4	Linkages	32
6.15	Digital and physical resource management	32
6.16	Subcomponent [B12] -- Managing smart city developments and infrastructures	32
6.16.1	Context	32
6.16.2	The need	32
6.16.3	Recommendation	34
6.16.4	Linkages	34
6.17	Subcomponent [B13] -- IT and data resource mapping and management	35
6.17.1	Context	35
6.17.2	The need	35
6.17.3	Recommendation	36
6.17.4	Linkages	36
6.18	Subcomponent [B14] -- Open, service-oriented, city-wide IT architecture	36
6.18.1	Context	36
6.18.2	The need	36
6.18.3	Recommendation	37
6.18.4	Linkages	37
7	ComponentC--Benefitrealizationframework	38
7.1	General	38
7.2	Subcomponent [C1] -- Benefit mapping	39
7.2.1	Context	39
7.2.2	The need	39
7.2.3	Recommendations	41
7.2.4	Linkages	41
7.3	Subcomponent [C2] -- Benefit tracking	41
7.3.1	Context	41
7.3.2	The need	41
7.3.3	Recommendations	43
7.3.4	Linkages	43
7.4	Subcomponent [C3] -- Benefit delivery	43
7.4.1	Context	43
7.4.2	The need	43

7.4.3	Recommendation	44
7.4.4	Linkages	44
8	ComponentD--Keyrisks	44
8.1	Context	44
8.2	The need	44
8.3	Recommendation	45
8.4	Linkages	45
Annex A (informative) IllustrativeBenefitMapforatypicalsmartcity		46
Annex B (informative) ISO 37106 delivery principles		51
Annex C (informative) Mitigatingthekeyrisks:checklist		54
Bibliography		57