

Survey questionnaire for smart cities

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From (e.g. organization/company)	Sony Corporation
Representing (e.g. IEC national committee) (If none, please fill N/A)	N/A
Representing (IEC TC) (If none, please fill N/A)	IEC TC 100
Date of submission (MM/DD/YYYY)	2014-07-xx

1 Current challenges (**drivers/problems to be addressed**) for building smart cities (choose by ticking the box(es))

Category	Simple description, if necessary
<input type="checkbox"/> Population	e.g.(managing growth? aging population? ...)
<input type="checkbox"/> Resources	e.g.(water shortage? Managing energy?...)
<input type="checkbox"/> Economy	e.g. (economic slow down?...)
<input checked="" type="checkbox"/> Environment	Energy efficiency, HEMS in Smart Home
<input checked="" type="checkbox"/> Safety and Security	Content protection, Data privacy
<input checked="" type="checkbox"/> Health and well-being	AAL (Health monitoring system, Health support system) and Accessibility
<input checked="" type="checkbox"/> Entertainment	Multimedia quality, User interface, Home servers
<input checked="" type="checkbox"/> Communication	Internet connectivity, network speed, Easy network set up
<input type="checkbox"/> Other (this can be changed and added)	

2 Stakeholders' involvement with smart cities in your country / organization (name, roles and URL)

Category	Please specify, if necessary
<input type="checkbox"/> Government authorities	(Level and their roles, URL)
<input checked="" type="checkbox"/> Non-government organizations	European Blind Union
<input type="checkbox"/> Public utilities	
<input checked="" type="checkbox"/> Manufacturers	Independent companies, DLNA, ECHONET, etc.
<input type="checkbox"/> Service providers	

<input type="checkbox"/> Other (this can be changed and added)	
<input type="checkbox"/> Other (this can be changed and added)	
<input type="checkbox"/> Other (this can be changed and added)	

3 Definition, concept, or description of “Smart Cities” or similar terminologies used in your country

Example:

Smart city:

Source:

N/A (No definition discussed in IEC TC 100.)

3.1 Elements related to the definition, concept, or description provided above (choose by ticking the box(es))

Factors (level 1)	Sub factors (level 2), if any	Sub factors (level 3), if any
From the viewpoint of “who benefit”:		
<input type="checkbox"/> People	<input type="checkbox"/> (e.g. City services)	<input type="checkbox"/> (e.g. Liveability)
<input type="checkbox"/> Government	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other (this can be changed and added)	<input type="checkbox"/>	<input type="checkbox"/>
From the viewpoint of “by what”:		
ICT layer		
<input type="checkbox"/> (this can be changed and added)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> (this can be changed and added)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> (this can be changed and added)	<input type="checkbox"/>	<input type="checkbox"/>
City infrastructure layer		
<input type="checkbox"/> Building	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Transportation	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Resources	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other (this can be changed and added)	<input type="checkbox"/>	<input type="checkbox"/>
From the viewpoint of “for what”		

<input type="checkbox"/> Safety and security	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Environmental sustainability	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Efficiency and Flexibility	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other (this can be changed and added)	<input type="checkbox"/>	<input type="checkbox"/>

4 Standard(s) or standard project(s) for Smart Cities

4.1 Standard(s) or standard project(s) to be developed over the next 3 to 5 years for Smart Cities at the system of systems (city) level

Example:

No.	National standard reference No.	Title	Standard/approved project	Target date for publication	Reference to international / regional standards
1	N/A				
2					
3					

4.2 Standard(s) or standard project(s) to be developed over the next 3 to 5 years for Smart Cities at an individual city system level (please specify the city system above the list of standards being developed for that system)

Example:

No.	National standard reference No.	Title	Standard/approved project	Target date for publication	Reference to international / regional standards
Smart home					
1	IEC 61925	Multimedia systems and equipment - Multimedia home server systems - The vocabulary of home server	IEC International Standard	Published	IEC 61925 (TC 100)
2	IEC TR 61998	Model and framework for standardization	IEC TR under revision	2014-12	IEC TR 61998 (TC 100)

		in multimedia equipment and systems			
3	IEC 62224	Multimedia home server systems - Conceptual model for digital rights management	IEC Technical Specification	Published	IEC TS 62224 (TC 100)
4	IEC 62227	Multimedia home server systems - Digital rights permission code	IEC International Standard	Published	IEC 62227 (TC 100)
5	IEC TS 62318	Multimedia systems and equipment - Multimedia home server systems - Home server conceptual model	IEC Technical Specification	Published	IEC TS 62318 (TC 100)
6	IEC 62394	Service diagnostic interface for consumer electronics products and networks - Implementation for ECHONET	IEC International Standard	Published	IEC 62394 (TC 100)
7	IEC TS 62436	Guideline for implementation of copy controlled multimedia interface	IEC Technical Specification	Published	IEC TS 62436 (TC 100)
8	IEC TS 62579	Multimedia home server systems – Conceptual model for domain management	IEC Technical Specification	Published	IEC TS 62579 (TC 100)
9	IEC TS 62654	Energy Saving System (ESS): Network-Based Energy Consumption Measurement of AV Multimedia Equipment and Systems	IEC Technical Specification	Published	IEC TS 62654 (TC 100)
10	IEC 62665	Texture map for auditory presentation of printed content	IEC International Standard	Published	IEC 62665 (TC 100)
11	IEC 62684	Interoperability specifications of common external power supply (EPS) for use with data-enabled mobile telephones	IEC International Standard	Published	IEC 62684 (TC 100)
12	IEC 62698	Multimedia home server systems - Rights Information Interoperability for IPTV	IEC International Standard	Published	IEC 62698 (TC 100)
13	IEC TS 62700	DC Power Supply for Portable Personal Computer	IEC Technical Specification under revision	2016	IEC TS 62700 (TC 100)
14	IEC 62731	Text-to-Speech Functionality for Television - General requirements	IEC International Standard	Published	IEC 62731 (TC 100)
15	IEC PAS 62883	The universal AAL Framework for User Interaction in Multimedia Ambient Assisted Living (AAL) Spaces	IEC PAS	Published	IEC PAS 62883 (TC 100)
16	IEC 62943	Visible light beacon system for multimedia	PT 62943	2016-03	TC 100

		applications			
17	IEC 62944	Digital Television Accessibility – Functional Specifications	PT 62944	2016-12	TC 100
18	IEC 62045-1	Multimedia Security - Guideline for privacy protection of equipment and systems in use and disused - Part 1: General	IEC International Standard	Published	IEC 62045-1 (TC 100)
19	IEC 62481-1	DLNA Home networkd device interoperability guidelines - Part 1: Architecture and Protocols	IEC International Standard	Published	IEC 62481-1 (TC 100)
20	IEC 62481-2	DLNA Home networkd device interoperability guidelines - Part 2: Media Formats	IEC International Standard	Published	IEC 62481-2 (TC 100)
21	IEC 62481-3	DLNA Home networkd device interoperability guidelines - Part 3: Link protection	IEC International Standard	Published	IEC 62481-3 (TC 100)
22	IEC 62481-4	DLNA Home networkd device interoperability guidelines - Part 4: DRM interoperability solutions	IEC International Standard	Published	IEC 62481-4 (TC 100)
23	IEC 62481-5-1	DLNA Home networkd device interoperability guidelines - Part 5: DLNA Device Profile guidelines	IEC International Standard	Published	IEC 62481-5 (TC 100)
24	IEC 62608-1	Multimedia home network configuration - Basic reference model - Part 1: System model	IEC International Standard	Published	IEC 62608-1 (TC 100)
25	IEC TR 62678	Audio, video and multimedia systems and equipment activities and considerations related to accessibility and usability	IEC Technical Report	Published	IEC TR 62678 (TC 100)
26	IEC 62680-1	Universal Serial Bus interfaces for data and power Part 1: Universal Serial Bus Specification, Revision 2.0	IEC International Standard	Published	IEC 62680-1 (TC 100)
27	IEC 62680-2	Universal Serial Bus interfaces for data and power Part 2: USB Micro-USB Cables and Connectors Specification, Revision 1.01	IEC International Standard	Published	IEC 62680-2 (TC 100)

28	IEC 62680-3	Universal Serial Bus interfaces for data and power Part 3: USB Battery Charging Specification, Revision 1.2	IEC International Standard	Published	IEC 62680-3 (TC 100)
29	IEC 62680-4	Universal Serial Bus interfaces for data and power Part 4: Universal Serial Bus Cables and Connectors Class Document Rev. 2.0	IEC International Standard	Published	IEC 62680-4 (TC 100)
30	IEC 62702-1	Audio archive systems - Part 1: DVD disk and data migration for long term audio data storage	PT 62702-1	2015-06	TC 100
31	IEC 62702-2	Audio archive systems - Part 2: Audio data preservation	PT 62702-2	2015-06	TC 100
32	IEC 62767-1	Air Interface Protocol for local multilingual broadcasting	PT 62767-1	2015-09	TC 100
33	IEC 62827-1	Wireless Power Transfer – Management – Part 1: Common components	PT 62827-1	2015-06	TC 100
34	IEC 62827-2	Wireless Power Transfer – Management – Part 2: Multiple devices control management	PT 62827-2	2015-06	TC 100
35	IEC 62827-3	Wireless Power Transfer – Management – Part 3: Multiple sources control management	PT 62827-3	2015-06	TC 100
36	PT 100-6	Stage 0 project on smart television	PT 100-6		TC 100
37	IEC TR 62907	Use cases related to Ambient Assisted Living (AAL) in the field of audio, video and multimedia systems and equipment	PT 100-7	2014-10	TC 100
38	PT 100-9	Stage 0 project on multimedia car systems and equipment	PT 100-9		TC 100
Smart Education					
1	IEC TS 62229	Multimedia systems and equipment - Multimedia e-publishing and e-books - Conceptual model for multimedia e-publishing	IEC Technical Specification	Published	IEC TS 62229 (TC 100)
2	IEC 62448	Multimedia systems and equipment -	IEC International Standard	Published	IEC 62448 (TC 100)

		Multimedia e-publishing and e-books - Generic format for e-publishing			
3	IEC 62524	Multimedia systems and equipment - Multimedia e-publishing and e-books - Reader's format for e-publishing	IEC International Standard	Published	IEC 62524 (TC 100)
4	IEC 62571	Digital Audiobook File Format and Player Requirements	IEC International Standard	Published	IEC 62571 (TC 100)

5 Evaluation and metrics to be applied for Smart Cities

5.1 Standard(s)/project(s) related to evaluation and metrics

Example:

No.	Title	Standard/approved project	Target date for publication	Reference (Relevance with other international/regional standards)
1	Multimedia systems and equipment - Quality assessment - Audio-video communication systems	IEC Technical Report	Published	IEC TR 62251 (TC 100)
2	Multimedia quality – Method of assessment of synchronization of audio and video	IEC International Standard	Published	IEC 62503 (TC 100)
3	Desktop and notebook computers – Measurement of energy consumption	IEC International Standard under revision	2016-02	IEC 62623 (TC 100)
4	Quality evaluation method for the sound field of directional speaker array system	PT 62777	2015-06	TC 100
5	Quantification methodology for greenhouse gas emissions for computers and monitors	PT 62921 (Technical Report)		TC 100
6	Sound system equipment - Part 13: Listening tests on loudspeakers	IEC Technical Report	Published	IEC TR 60268-13 (TC 100)
7	Sound system equipment - Part 16: Objective rating of speech intelligibility by speech transmission index	IEC International Standard	Published	IEC 60268-16 (TC 100)
8	Household high-fidelity audio equipment and systems - Methods of measuring and specifying the performance - Part 1: General	IEC International Standard	Published	IEC 61305-1 (TC 100)
9	Audio, video, and related equipment - Determination of power consumption - Part 1: General	IEC International Standard under revision	2015-03	IEC 62087-1 (TC 100)
10	Audio, video, and related equipment - Determination of	IEC International Standard	2015-03	IEC 62087-2 (TC 100)

	power consumption - Part 2: Media	under revision		
11	Audio, video, and related equipment - Determination of power consumption - Part 3: Television sets	IEC International Standard under revision	2015-03	IEC 62087-3 (TC 100)
12	Audio, video, and related equipment - Determination of power consumption - Part 4: STBs	IEC International Standard under revision	2015-03	IEC 62087-4 (TC 100)
13	Audio, video, and related equipment - Determination of power consumption - Part 5: Video recording equipment	IEC International Standard under revision	2015-03	IEC 62087-5 (TC 100)
14	Audio, video, and related equipment - Determination of power consumption - Part 6: Audio equipment	IEC International Standard under revision	2015-03	IEC 62087-6 (TC 100)
15	Audio, video, and related equipment - Determination of power consumption - Part 7: Computer Monitors	PT 62087-7	2016-03	TC 100
16	Guideline for synchronization of audio and video - Part 1-1: Measurement methods for synchronization of audio and video equipment - General	IEC Technical Specification	Published	IEC TS 62312-1-1 (TC 100)
17	Guideline for synchronization of audio and video - Part 1-2: Measurement methods for synchronization of audio and video equipment - Display device	PT 62312-1-2		TC 100
18	Guideline for synchronization of audio and video - Part 1: Measurement methods for synchronization of audio and video equipment - Video recording device	PT 62312-1-3		TC 100
19	Guideline for synchronization of audio and video - Part 2: Methods for synchronization of audio and video systems	IEC Technical Specification	Published	IEC TS 62312-2 (TC 100)

Note: Same project to the No.3 under 3 of this survey.

5.2 Simple description of the evaluation and metrics to be applied (how to evaluate? what to evaluate?)

6 City systems

6.1 Please List work going on regarding key city systems (**current situation or future plans**) within the smart city programmes in your country

N/A

6.2 Information about work going on within your county related to making individual City Systems smarter

Category	1-2 A good example of city working on that issue	Key issues	Key subsystems, if any	URLs for relevant solutions, if any	Figures for architecture or framework of the system, if any.
<input type="checkbox"/> Smart Education	N/A				
<input type="checkbox"/> Smart Home	N/A				
<input type="checkbox"/> Smart Water	N/A				
<input type="checkbox"/> City Governance	N/A				
<input type="checkbox"/> Smart Transportation	N/A				
<input type="checkbox"/> Smart Logistics	N/A				
<input type="checkbox"/> Other (this can be changed and added)					
<input type="checkbox"/> Other (this can be changed and added)					