

# ISO/IEC 23007-1:2010-11 (E)

## Information technology - Rich media user interfaces - Part 1: Widgets

---

<b>Contents</b>		<b>Page</b>
Foreword .....		v
Introduction .....		vi
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Abbreviations and symbols .....	3
5	Conventions .....	3
6	Architectures .....	3
6.1	Widget manager architecture .....	3
6.2	Widget architecture .....	4
7	Widget management .....	5
7.1	Widget composition .....	5
7.2	Widget life cycle .....	5
7.3	Widget communication .....	7
7.4	Widget context .....	8
8	Widget packaging and delivery .....	9
8.1	Overview .....	9
8.2	Unpackaged delivery .....	9
8.3	Packaged delivery using the ISOFF .....	9
9	Widget API .....	10
9.1	Overview .....	10
9.2	The MPEGwidget interface .....	10
9.3	The InterfaceHandler interface .....	11
10	Widget manifest syntax .....	13
10.1	Overview .....	13
10.2	The <widget> element .....	13
10.3	The <name> element .....	13
10.4	The <description> element .....	13
10.5	The <author> element .....	14
10.6	The <license> element .....	14
10.7	The <icon> element .....	14
10.8	The <feature> element .....	14
10.9	The <param> element .....	14
10.10	The <preference> element .....	14
10.11	The <content> element .....	14
10.12	The <mw:contextConfiguration> element .....	15
10.13	The <mw:preferenceConnect> element .....	16
10.14	The <mw:interfaces> element .....	16
10.15	The <mw:interface> element .....	17
10.16	The <mw:messageIn> element .....	18
10.17	The <mw:messageOut> element .....	20

10.18	The <mw:input> element .....	22
10.19	The <mw:output> element .....	22
10.20	The <mw:component> element .....	23
10.21	The <mw:requiredInterface> element .....	24
10.22	Predefined interfaces and communications .....	25
10.23	Connection between scene and interface constructs .....	27
11	Widget context information syntax .....	28
11.1	Overview .....	28
11.2	The <ci:contextInformation> element .....	28
12	Security considerations .....	29
12.1	Widget security .....	29
12.2	Communication security .....	29
Annex A (normative) MIME type registration for application/mw-manifest+xml .....		30
Annex B (normative) MIME type registration for application/mw-context+xml .....		32
Annex C (informative) Widget manifest example .....		34
Annex D (informative) MPEG-U Use Cases and Implementation .....		36
Annex E (informative) Relationship with W3C .....		40
Bibliography .....		41