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BSI Standards Publication

Smart television

Part 1: Conceptual model for smart television



National foreword

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CONTENTS

| FOREWORD4 | | | | | |
|--|----------------|--|----------|--|--|
| INTRODUCTION | | | | | |
| 1 | Scop | e | 7 | | |
| 2 | Norm | ative references | 7 | | |
| 3 | Term | s and definitions | 7 | | |
| 4 | Gene | ral features | 8 | | |
| • | 4 1 | Framework of smart television system | 8 | | |
| | 4 2 | Smart television terminal | 10 | | |
| | 4.2.1 | Hardware | . 10 | | |
| | 4.2.2 | Software | 10 | | |
| | 4.3 | Characteristics | 11 | | |
| | 4.3.1 | Human-machine interaction | 11 | | |
| | 4.3.2 | Multi-screen interaction | 12 | | |
| | 4.3.3 | Security mechanism | 12 | | |
| 5 | Appli | cation scenarios of smart television | 14 | | |
| | 5.1 | Digital TV broadcast | 14 | | |
| | 5.1.1 | Digital TV | 14 | | |
| | 5.1.2 | EPG | 14 | | |
| | 5.1.3 | HbbTV | 14 | | |
| | 5.2 | Internet-based application | 14 | | |
| | 5.2.1 | General | . 14 | | |
| | 5.2.2 | Daily life information | . 14 | | |
| | 5.2.3 | Online audio/video service | 15 | | |
| | 5.2.4 | E-commerce | . 15 | | |
| | 5.2.5 | Social application | . 15 | | |
| | 5.2.6 | Video communications service | 15 | | |
| | 5.2.7 | Online information search | 15 | | |
| | 5.2.8 | Online education | . 15 | | |
| | 5.2.9 | Cloud storage | . 15 | | |
| | 5.2.1 | Community living service | 15 | | |
| | 5.2.1 | 1 Health service | . 15 | | |
| | 5.2.1 | 2 Smart home service | 16 | | |
| | 5.2.1 | 3 Games | 16 | | |
| | 5.3 | | . 16 | | |
| | 5.4 | Application store | 16 | | |
| | 5.4.1 | Function description | 16 | | |
| | 5.4.Z | Cloud application-management system | . 10 | | |
| 5.4.3 Terminal application management software | | | | | |
| An | | informative) Comparative study on existing smart television technologies | . 10 | | |
| Annex B (informative) Essential features | | | | | |
| | B.1 | General | 20 | | |
| | ы.2 в о | | | | |
| | 0.J | N-screen technology | | | |
| | D.3.1 R 2 0 | | ∠U 21 | | |
| | D.J.Z | ULINA | ∠I ე1 | | |
| | J.+ | numan-machine interaction technology | . 21 | | |

| Annex C (| (informative) Smart television platforms and solutions | . 22 | | | |
|---|--|------|--|--|--|
| C.1 | HbbTV | . 22 | | | |
| C.2 | Android TV | . 23 | | | |
| C.3 | tvOS | .23 | | | |
| C.4 | Open webOS | . 24 | | | |
| C.5 | Tizen | . 24 | | | |
| C.6 | Linux (embedded operation system) | .24 | | | |
| C.7 | Apple TV | . 25 | | | |
| Annex D (informative) Media profile | | | | | |
| Bibliography27 | | | | | |
| Figure 1 – Block diagram of smart television system9 | | | | | |
| Figure 2 – Block diagram of smart television terminal11 | | | | | |

- 4 -

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SMART TELEVISION -

Part 1: Conceptual model for smart television

FOREWORD

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IEC TR 63122-1, which is a technical report, has been prepared by subcommittee TA 1: terminals for audio, video and data services and contents, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

The text of this technical report is based on the following documents:

| Enquiry draft | Report on voting |
|---------------|------------------|
| 100/2903/DTR | 100/3053/RVC |

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

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A list of all parts in the IEC 63122 series, published under the general title *Smart television*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

This part of IEC 63122 discusses the background of cloud computing, the Internet, the mobile Internet industry, the principle of open innovation, the vertical integration of the industry chain, technology and encourages the digital TV (television) industry to seize the opportunity to upgrade and strengthen innovation in smart television technology. The innovations of business models and institutional mechanisms will be explored, and we will explain how acceleration is needed to broaden the application market and put forward the concept of smart television models and standardization needs.

The reception of digital TV and high-definition broadcasting in the home has recently been well established for various areas. Internet TV and delivery of multimedia content to the user at home, via the Internet, are also becoming increasingly common.

Smart television systems are intended to extend the reach of multimedia content to the TV set in a seamless, viewer-friendly manner. The viewer can more conveniently access both broadcast digital content and Internet multimedia content on a TV set using a single user-interface device and a single on-screen interface.

There are three major key factors leading smart television development. Lifestyle changes from the user side, the building of network infrastructure according to the rapid development of wired and wireless networks, and the emergence of TV alternatives.

An individualized lifestyle accelerates personalization and customization of contents, and the experience from other smart electronic devices drives the user to long for the smart television as the core of entertainment at home.

The rapid development of high-speed Internet access and the emergence of home network techniques assigning an IP address to electronic devices will make TV smarter.

In addition, the market requires a change from TV to smart television because of the emergence of TV alternatives, such as the tablet, the smartphone and the media player.

SMART TELEVISION -

Part 1: Conceptual model for smart television

1 Scope

The focus of this part of IEC 63122 is the conceptual definition of smart television, basic features, use cases and current technologies based on applications and requirements. They make it clear where further existing standards can be used and highlight where work on standards is needed.

In addition, this document was developed taking into account ISO/IEC Guide 71. The objective of this document is to highlight potential areas for standardisation for smart televisions.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1

smart television system

television system consisting of a smart television service platform, transmission network and smart television terminal

3.2

smart television service platform

service platform that is capable of providing smart television terminal with such applications or services as digital TV broadcast or Internet service

Note 1 to entry: The services could be VOD, catch-up, games, web searches, interactive advertising, personalization, voting, social networking, etc.

3.3

transmission network

network for interactive data transmission in smart television systems, which includes the home network (family local network), radio and television broadcasting network, the Internet, and other networks (i.e. accident or secure private network)

3.4

smart television terminal

digital television set (TV set and set-top box) with integrated Internet capability and an operating system, which can use a variety of contents through services by using a convenient user interface/experience

Note 1 to entry: Usually, smart televisions allow the user to install and run more advanced applications or plug-ins/add-ons based on a specific platform.