



ISO/IEC JTC 1 SC 35

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ISO/IEC JTC1 SC 35 Chair

ITU Webinar

ISO/IEC JTC 1 SC 35

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SC35 Scope

Standardization in the field of **user-system interfaces in information and communication technology (ICT) environments** and support for these interfaces to serve all users, including people having **accessibility** or other specific needs, with a priority of meeting the JTC 1 requirements for **cultural and linguistic adaptability**.

- Stable membership: 17 P and 17 O, 40 to 50 participants /meeting
- Nine Active Working Groups



Key issues on accessibility

- Accessibility considerations for people with disabilities
 - **Part 1: User needs summary**
 - ISO/IEC 29138-1:2018, Information technology — User interface accessibility — Part 1: User accessibility needs
- Development of user interface accessibility
 - **Part 1: A code of practice for creating accessible ICT products and services**
(IS 2019, ISO/IEC 30071 series)
- *The possibility of adopting EN 17161 "Design-for-All" as a part of the ISO/IEC 30071 series is currently under investigation*



Modus Operandi

- Develops IT accessibility guidance consistent with
 - ISO/IEC Guide 71 **Guide for addressing accessibility in standards**

- Deals with a wide range of IT accessibility guidance
 - from **general guidance** in the ISO/IEC 29138 and 30071 series
 - to **detailed guidance** in the ISO/IEC 13066 and 20071 series

- Deals with a range of contexts of use of IT
 - **from traditional office and home environments**
 - **through public and mobile environments**
 - **to emerging environments, such as immersive environments**

Highlights SC35 work

- From traditional user interfaces to Wearable haptics
- Information technology – User interfaces – Universal Interface for human language selection”
- New important projects:
 - "Affective Computing" within a new WG,
 - Conversational speech interactions
 - Guidance on making content Easy To Read
 - Immersive technologies
 - Sign languages use in videos
- Guidance on audio descriptions and Visual presentation of audio information (including captions and subtitles) but also conversion of modalities (speech, text, images)

Gesture based interfaces

Voice assistant 

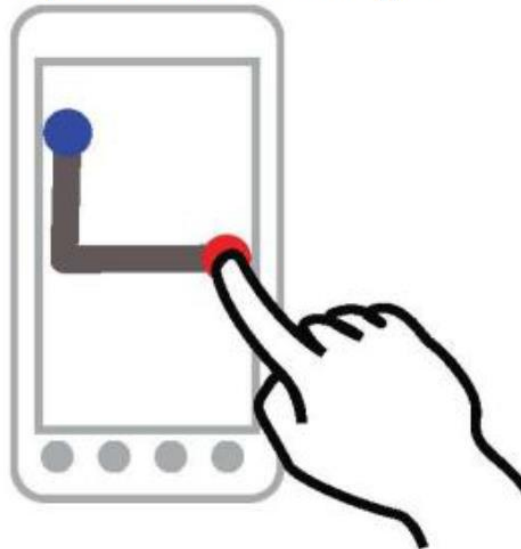
Swipe left/right with 3 fingers



- Settings
- Media volume
- Speech rate
- Punctuation
- Dark screen
- Large cursor
- Notification

Talkback 

Swipe down then right



Voiceover  iOS

Rotate with 2 fingers



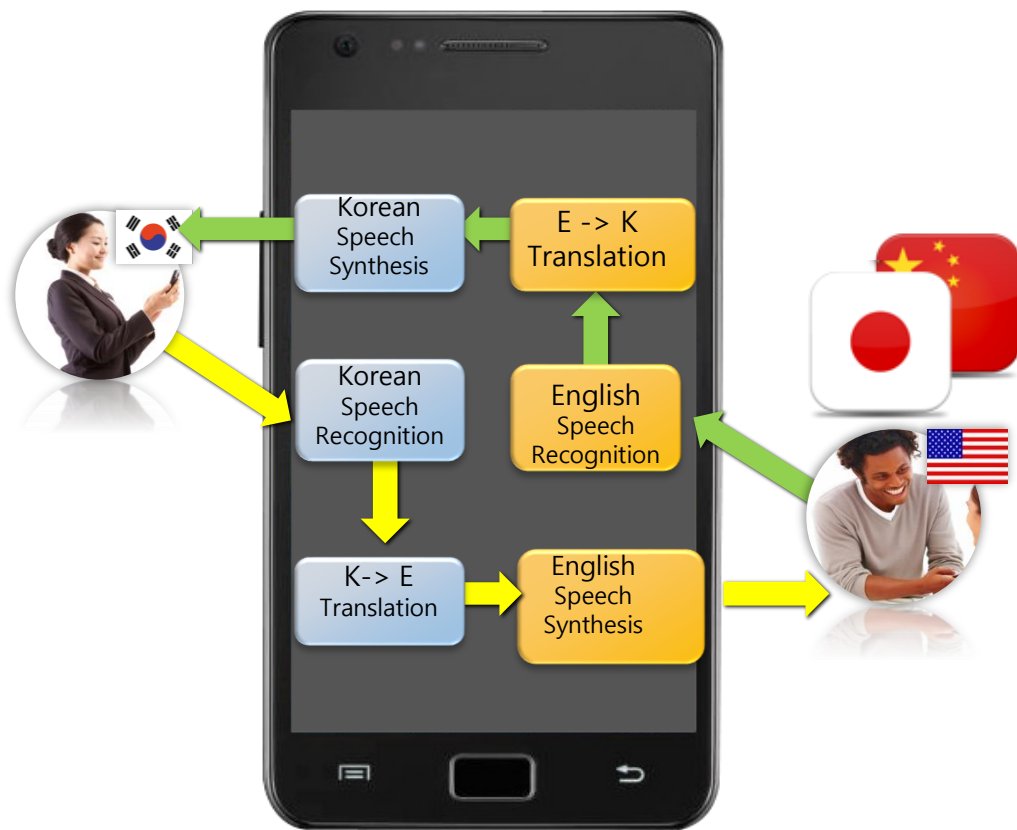
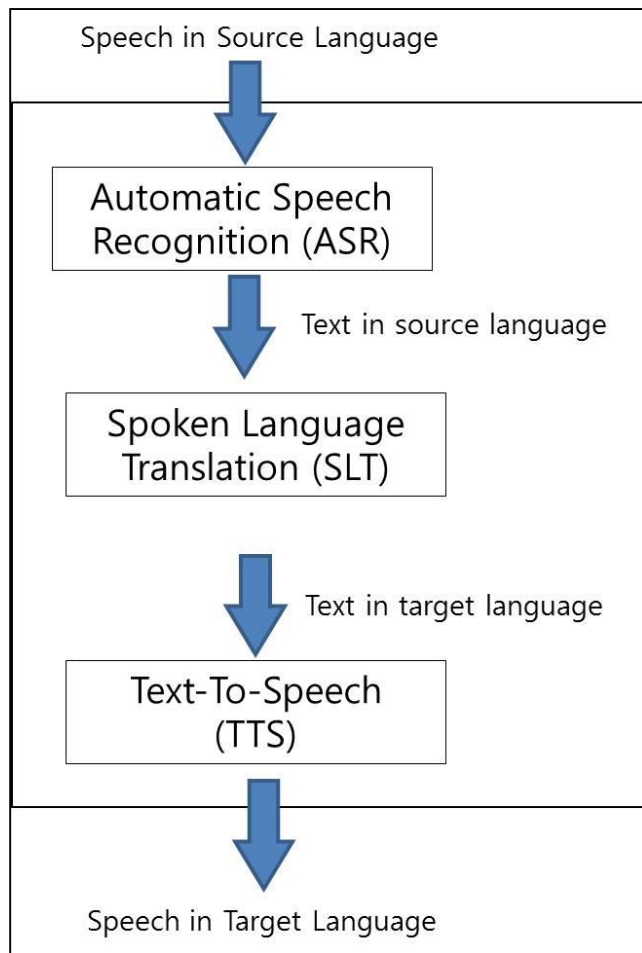


		1 Finger		2 Fingers		3 Fingers		4 Fingers	
	Tap	Speak the item under your finger		Pause / resume speech		Read from top	Speak page number or rows	(near top of Screen) Move to first element (near bottom of Screen) Move to the last element	
	Double tap	Activate the selected item Active edit mode (focus on editable text)		Start / stop current action		Read from next item	Toggle Speech on and off	Start voiceover help	
	Triple tap	Google Zoom function		Information center	Item Chooser	Spell last utterance (copy)	Toggle screen curtain on and off		
		Double tap the selected item							
	Quadruple tap					Copy last spoken text to the clipboard			
	Double tap & hold	Move or drag an icon, view more options for selected items		Selection mode		Label control			
	Left swipe	Move to previous / next item		Change pages and screens	Cut		Context menu: settings	Move to previous/next pages/screens	
	Right swipe				Paste				
	Up swipe	Move using selected option of context menu	Select previous/next selected rotor option	Scroll lists and pages	Copy	Read pages starting at the top	Context menu: granularities	Move or scroll up/down	
	Down swipe				Select all	Read pages at the selected item			
	Left return swipe	Scroll up / down (page)		Scroll lists and pages					
	Right return swipe								
	Up return swipe	Move to first / last item on screen Move cursor to beginning / end (edit & selection mode)		Scroll lists and pages					
	Down return swipe								

2 finger scroll will not function in selection mode

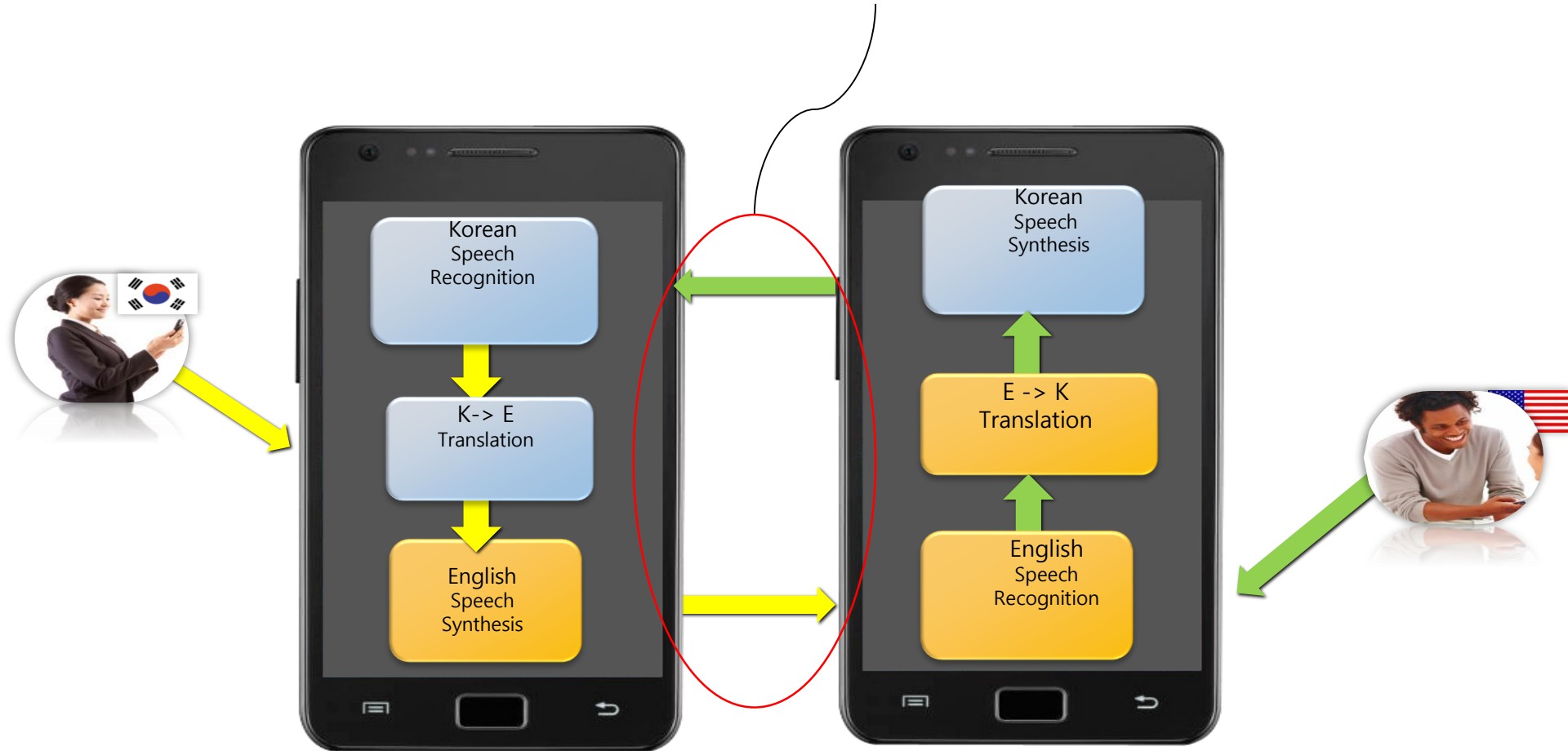
Speech to Speech Translation

“Technology that enables speakers of different languages to communicate”



Speech to Speech Translation

Should be standardized





Highlights SC35 work

Affective Computing user interfaces

Targeting consideration of emotions, sentiments, moods, and other affective concepts when designing interfaces and interactions.

Highlights SC35 work

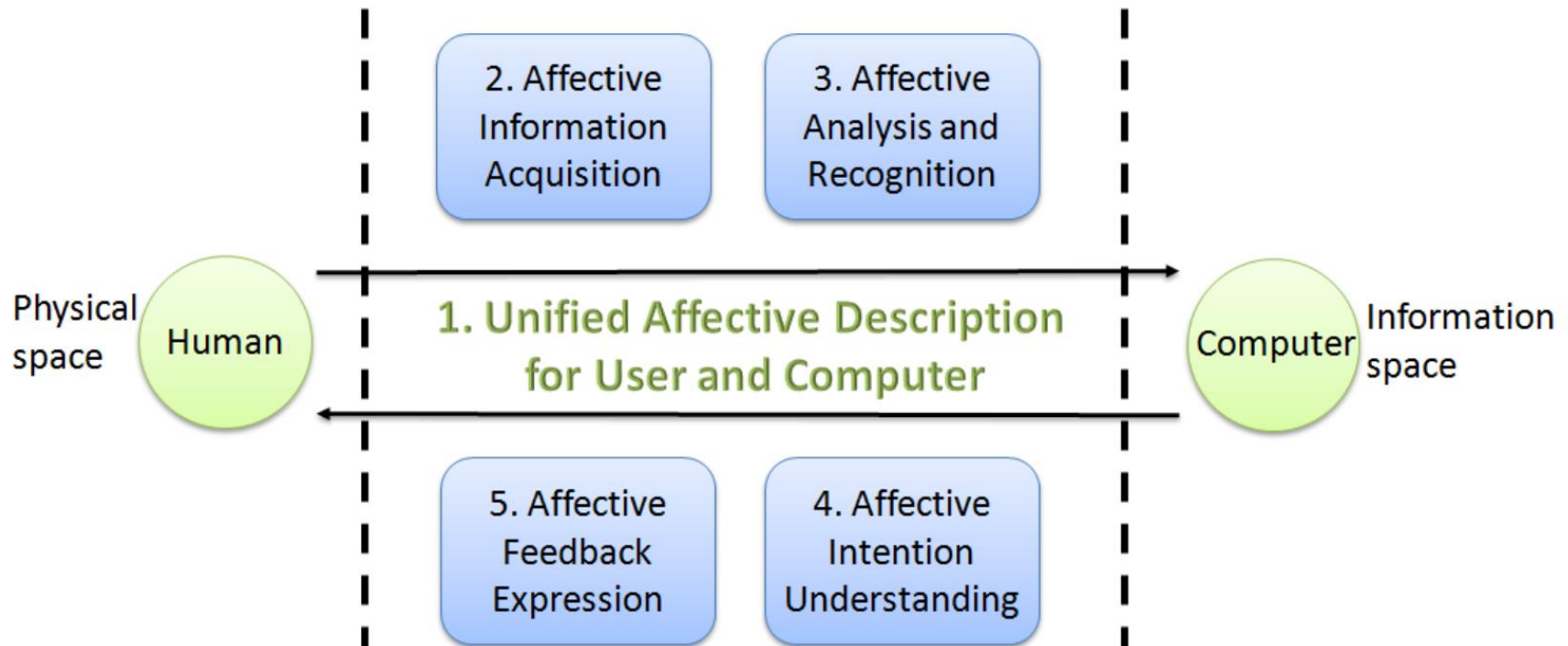


Figure 1 – AUI technical framework



What is new ...

EASY READING

- From interfaces point of view (Character fonts, Contrast, etc.)
- Linguistic and Cultural aspects



Highlights SC35 work

- Creation of a Study Group on Accessibility within immersive environments
- Review state of the art for "Software for playing media content" wrt accessibility
- Enhance Cooperation with ITU (e.g. ISO/IEC 20382-xx "Face-to-face speech translation", and 23773-1 "Simultaneous interpretation system")
- Better cooperation with other ISO bodies e.g. TC37 on the use of "3-letter codes for language identification", Easy to read, etc.



Conclusions ... Accessibility within ISO/IEC JTC 1/SC 35

- Very actively fulfilling its mandate within JTC1 to promote the standardization of ICT accessibility.
- Active participation from 10 countries: Canada, China, France, Germany, Japan, Korea, Netherlands, Spain, Sweden, and United Kingdom.
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- SC35 continues to promote “the Guide 71” within its own activities across its various Working Groups.
- And also proactively promoting its adoption within other ISO committees.
- Strong partnership with other bodies e.g. ITU



Thank you very much for your attention

Organization of SC 35

JTC 1/SC 35 is subdivided in Working Groups

- **WG1 : Keyboards and Input Interfaces** – Mr Alain LABONTÉ
- **WG2 : Graphical User Interface and Interaction** – Dr Yoshikazu YAMAMOTO
- **WG4 : User Interfaces for Mobile Devices** – Dr Yoshikazu YAMAMOTO
- **WG5 : Cultural and Linguistic Adaptability** – Mr Thibault GROUAS
- **WG6 : User Interface Accessibility** – Pr. Jim CARTER
- **WG7 : User Interfaces Object, Actions and Attributes** – Pr Jim CARTER
- ~~WG8 : User Interfaces for Remote Interactions~~ – Pr Gottfried ZIMMERMANN (work done)
- **WG9 : Gesture-based interfaces across devices and methods** – Pr. Jee-In Kim
- **WG 10 : Affective Computing (to start soon)**

Example of activities ; 20071 series

- **IT—User interface component accessibility**

- Parts currently under development or redevelopment in italics
- Dates published after title

Part 5: Accessible user interface for accessibility settings on information devices (to replace ISO/IEC 24786)

Part 11: Guidance on text alternatives for images (IS 2019)

Part 15: Guidance on scanning visual information for presentation as text in various modalities (TS 2017)

Part 21: Guidance on audio descriptions (TS 2015)

Part 23: Guidance on the visual presentation of audio information (including captions and subtitles) (2018)

Part 25: Guidance on the audio presentation of text in videos (including captions, subtitles, and other on-screen text) (TS 2015)



Examples from WG2/4/5/9

- More Examples