

## ITU Regional Workshop for the CIS countries "Organizational and Technical Development of the ICT"

23-25 September 2015 ONAT, Odessa, Ukraine



## GARI

# Global Accessibility Reporting Initiative

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Mobile Manufacturers Forum





#### **About MMF**

International non-profit association with scientific purpose of telecommunications equipment manufacturers with an interest in the safety of mobile or wireless communications, focusing on:









**MMF Members:** Alcatel Mobile Phones, Apple, Cisco, Ericsson, Intel, LG, Microsoft, Motorola Mobility, Motorola Solutions, Samsung, Sony (+ companies participating in one or more of MMF's initiatives)



#### **GARI** stands for ....

- Global Accessibility Reporting Initiative
- 1,100+ models and all world regions
- centralised source of information
- ~ 200 accessibility related apps
- consumer guidance & producer reporting tool
- 14 written languages + 1 sign language (ASL)



#### **UNCRPD**

UN Convention on Rights for Persons with Disabilities, Article 9 – Accessibility:

- ... enable persons with disabilities to live independently and participate fully in all aspects of life.
- ... to promote access for persons with disabilities to new information and communications technologies and systems, including the Internet.

(Ukraine: Signature: 2008, Ratification/Accession: 2010)



## Why GARI?

Many say technologies make things easier, for people with disabilities technologies make things possible.

Knut Ellingsen, Vice-President of the European Federation of Hard of Hearing (EFHOH), Zero Project Conference, 27-28 February 2014, Vienna, Austria



## Why GARI?

The next billion to get mobile could be the global community of persons with disabilities.

Mobile World Congress 2015

# GARI's purpose

help consumers
finding devices
with the accessibility features
that work best for them



#### Find Accessible Devices & Apps

#### Learn about Mobile Accessibility

We help consumers to find a device with the accessibility features that work best for them

#### What do you want to find?







Compare the accessibility features you need.



#### Mobile Apps

Which devices support the accessibility apps you love?

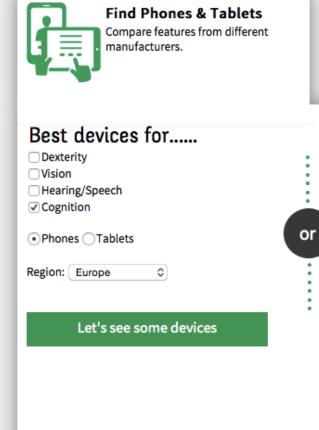


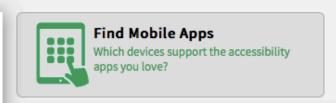
#### Find Accessible Devices & Apps

#### Learn about Mobile Accessibility

Home > Find Accessible Devices and Apps: Phones & Tablets

#### Find Accessible Devices and Apps: Phones & Tablets





Dhone / Tablet Leakun

Priorie / Tablet Lookup	
Already know what you're after? Find phones and tablets in the database.	
Region: North America	G
Manufacturer	
All ≎	
Model	
<ul><li>●Phones ○Tablets</li></ul>	

**Lookup Devices** 

#### Advanced Feature Search

Let us help you find the right device for your needs. Select on a feature-by-feature basis.

Start advanced search



Find Accessible Devices & Apps

Learn about Mobile Accessibility

Home > Find Accessible Devices and Apps: Phones & Tablets > Phone/Tablet Search Results

#### Phone/Tablet Search Results





189 Results (Region: Europe)

Modify Search Criteria

Choose up to three devices to compare their features

Compare Phones

| Page1 | Page2 | Page3 | Page4 | Page5 | Page6 | Page7 | .... | Page10 |







#### Moto E



Product Details

Manufacturer: Motorola Mobility

Product Brand(s): Motorola

Model: Moto E

Website and/or contact www.motorola.com

Date Completed: Dec-8-2014

Compatible Apps See Compatible Apps

Operating System: Android KitKat 4.4.0

HARDWARE & SYSTEM INFORMATION	Detail	Description
Display Characteristics - Main Display Size	4.3 inches	Size of the main display (diagonal in inches)
External keyboard support	Yes	You can connect an external keyboard to the device
Supports ability to install third party applications or apps.	Yes	You can install third party applications for example from an approved application store.
Internet Capability	Yes	You can use the phone to browse websites and use other internet-based services.
Display Characteristics - Screen Flicker	Yes	The main display does not flicker at a rate that could cause problems for people with photo-epilepsy (between 2 Hz and 60 Hz)
Display Characteristics - Main Display Resolution	960 x 540 pixels	The number of dots (called pixels) used to display text and images on the main display. More dots means more detail.
Display Characteristics - Main Display Size	x mm	Size of the main display (dimensions in millimetres)

Print F

## **Device Comparison**

Compare Devices See how the devices you picked stack up against each other			
HADDIWADE A			







**HARDWARE &** SYSTEM

Apple iPhone 5c

Information Not Available

Yes

Yes

Yes

Yes

1136 x 640 pixels

85 x 50 mm

Yes

Samsung SM-G925F (Galaxy S6 Edge)



Information Not

**Available** 

Yes

Yes

Yes

No

1280 x 768 pixels

97 x 58 mm

Yes

INFORMATION Display Characteristics -Main Display Size

support

apps.

External keyboard

Internet Capability

Screen Flicker

Display Characteristics -

Display Characteristics -

Main Display Resolution

Display Characteristics -

Differentiation of Function

Main Display Size

Backlight for Keypad

Supports ability to install third party applications or





Yes

Yes

Yes

2560 x 1440 pixels

112.6 x 63.5 mm

Yes



## Mobile accessibility is about ...

 hardware: 2-way camera, Adapt Sound, increased max volume, ...

• **software:** screen readers, loop function, captioning, ...

 3<sup>rd</sup> party apps: sign language dictionary, speech-to-text, crowed sourced help ...



## Mobile accessibility is about ...

• hardware: 2-way camera, Adapt Sound, increased max volume, ...

• **software:** screen readers, loop function, captioning, ...

• 3<sup>rd</sup> party apps: sign language dictionary, speech-to-text, crowed sourced help ...



## **Apps: Accessible? Assistive?**

#### Accessible:

designed according to accessibility guidelines for user interfaces so that people with a range of physical or mental capabilities can operate the software successfully

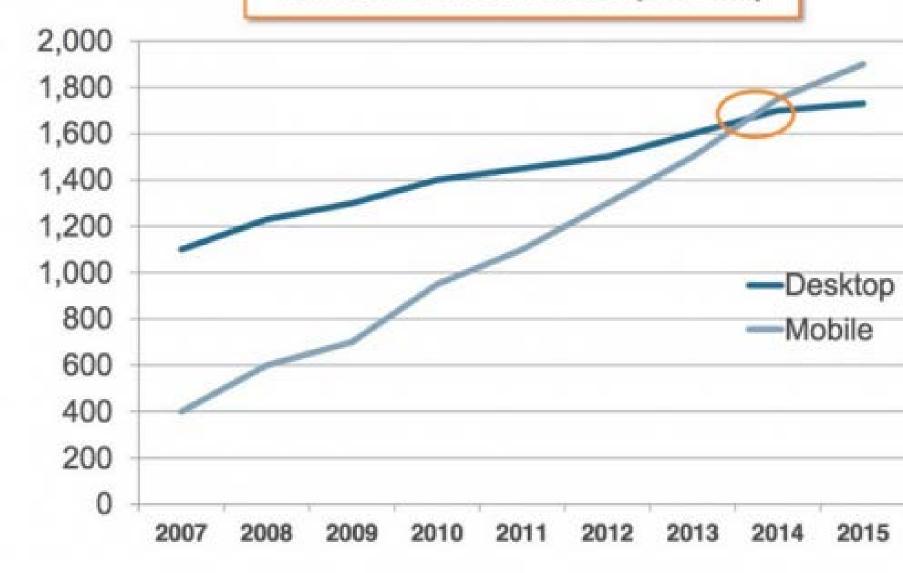
#### Assistive:

helps people with particular impairments overcome limiting consequences of a disability (e.g., identifying paper currency to a blind person, facilitating direct sign language communication for a deaf person, inputting text from dictation by someone with a dexterity impairment, or giving reminders to someone

https://www.fwighvalogophileecesabilityand-employment-people-disabilities

# Why are apps so important?

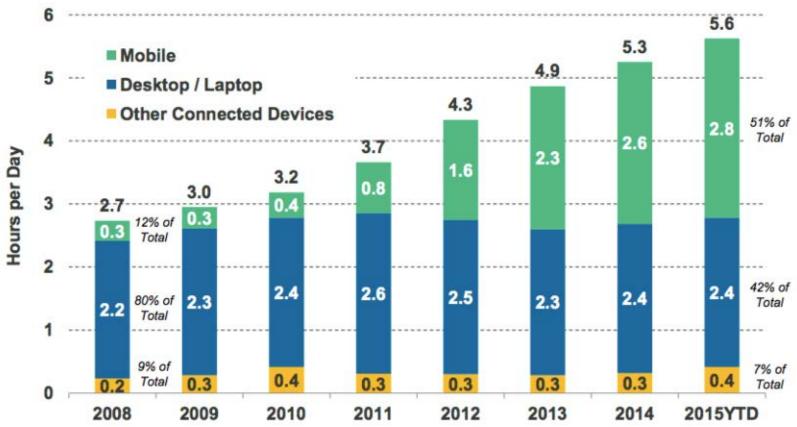
#### Number of Global Users (Millions)





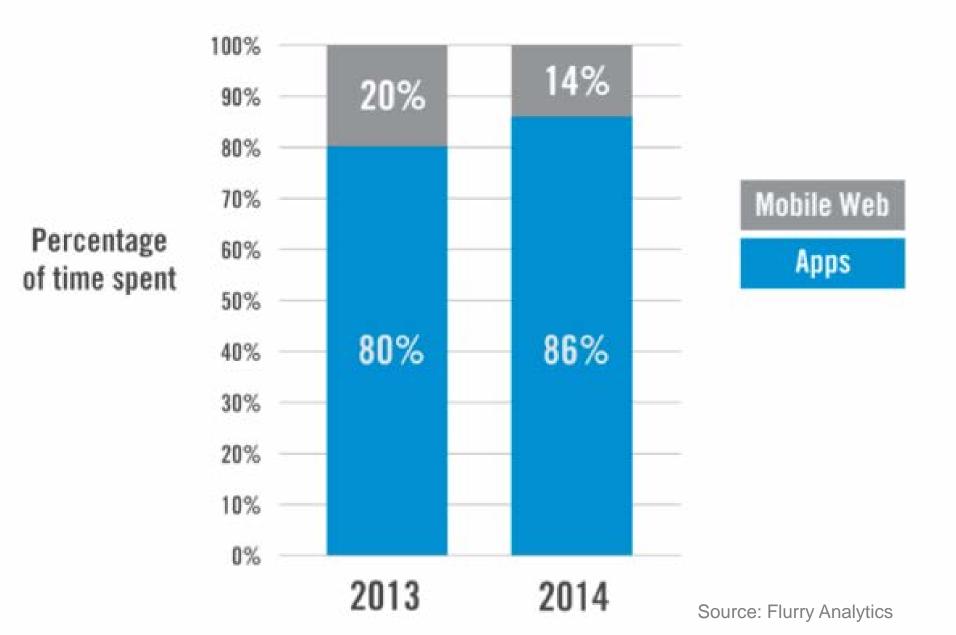
#### Internet *Usage* (Engagement) Growth Solid +11% Y/Y = Mobile @ 3 Hours / Day per User vs. <1 Five Years Ago, USA

## Time Spent per Adult User per Day with Digital Media, USA, 2008 – 2015YTD



http://www.smartinsights.com/internet-marketing-statistics/insights-from-kpcb-us-and-global-internet-trends-2015-report/attachment/mobile-internet-trends-mary-meeker-2015-1/

## Apps Continue to Dominate the Mobile Web





#### Find Accessible Devices & Apps

#### Learn about Mobile Accessibility

We help consumers to find a device with the accessibility features that work best for them

#### What do you want to find?



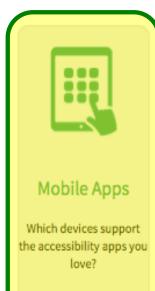
#### **Phones**

Narrow down and compare options from different manufacturers.



#### **Tablets**

Compare the accessibility features you need.





#### Find Accessible Devices & Apps

#### Learn about Mobile Accessibility

Home > Find Accessible Devices and Apps: Mobile Apps > Mobile App Search Results

#### Mobile App Search Results



#### Find Phones & Tablets

Compare features from different manufacturers.



#### **Find Mobile Apps**

Which devices support the accessibility apps you love?

#### 199 apps found

| Page1 | Page2 | Page3 | Page4 | Page5 | Page6 | Page7 | .... | Page50 |



#### **@Voice Aloud Reader**

Available on: Android 2.1 and up Supports: Vision, Hearing/Speech

@Voice Aloud Reader reads aloud the text displayed in Android apps, e.g. web pages, news articles, long emails, TXT, PDF, DOC, DOCX, RTF, OpenOffice document files and more. IMPORTANT: You need....

#### Search Again

Search

Filter Results

#### Apps for

- Dexterity
- Vision
- Hearing/Speech
- Cognition



ABA Flash Cards & Games - Emotions

Available on: iOS 3 and up

View Details >>

View Details >>

Available on



#### Find Accessible Devices & Apps

#### Learn about Mobile Accessibility

Home > Find Accessible Devices and Apps: Mobile Apps > @Voice Aloud Reader by Hyperionics Technology, LLC

#### @Voice Aloud Reader by Hyperionics Technology, LLC





#### **Find Mobile Apps**

Which devices support the accessibility apps vou love?

#### @Voice Aloud Reader by Hyperionics Technology, LLC

Back to search results Print friendly page



#### App Details

Available on	Android 2.1 and up					
App Website	http://www.hyperionics.com/?Page=atVoice/index.asp					
Developer	Hyperionics Technology, LLC					
Available on Google Play	See it					
Compatible Devices	See Compatible Phones See Compatible Tablets					

#### Description

@Voice Aloud Reader reads aloud the text displayed in Android apps, e.g. web pages, news articles, long emails, TXT, PDF, DOC, DOCX, RTF, OpenOffice document files and more.

IMPORTANT: You need Text-To-Speech engine and voices installed on your device to use this app. If you don't have it yet, pickup from Play Store Acapela, Ivona or SVOX TTS package. You may use more than one if you want.



#### App Details

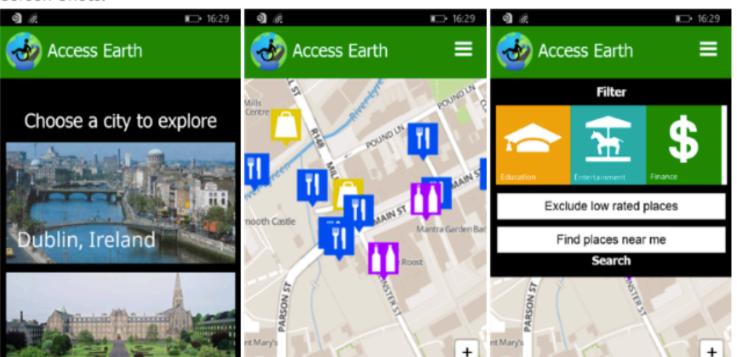
Available on	Windows 8 and up, Windows Phone 8 and up				
App Website	http://accessearth.azurewebsites.net				
Developer	Access Earth				
Available on Windows Store	See it				
Compatible Devices	See Compatible Phones See Compatible Tablets				

#### Description

Access Earth is a service allowing you to find reliable and up-to-date accessibility information about a place or business. Our volunteer network has collected data from a number cities around the globe, and we are constantly adding new data to our database.

Updated tile icons and minor bug fixes

#### Screen Shots:





#### App Details

Available on	iOS 7 and up			
App Website	http://www.bemyeyes.org/			
Developer	Be My Eyes			
Available on iTunes App Store	See it			
Compatible Devices	See Compatible Phones See Compatible Tablets			

#### Description

Be the eyes for a blind person in need of help remotely through a live video connection if you are sighted or be assisted by the network of sighted users if you are blind.

Be My Eyes is all about contributing to and benefiting from small acts of kindness, so hop on board and get involved!

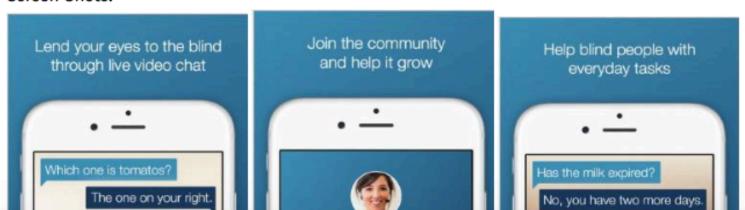
Blind users can request help from a sighted person and the sighted users will then be called for help. As soon as the first sighted user accepts the request for help a live audio-video connection will be set up between the two and the sighted user can tell the blind person what she sees when the blind user points his phone at something using the rear-facing camera.

As a sighted user you don't need to worry about missing a call and 'leave a blind person hanging' - you are a part of the bigger Be My Eyes helper-network and we will find the next available sighted person in the network. The challenges that the blind person needs help with can be anything from knowing the expiry date on the milk to navigating new surroundings.

Note: We encourage blind users to be patient when requesting help because we rely on real people to help you.

- Live audio-video connection between blind and sighted users
- · Add the languages you know under settings
- . An easy way you can make a difference for blind people

#### Screen Shots:



Closed Capp by Live Caption

Back to search results Print friendly page



#### App Details

Available on	Android 2.1 and up
App Website	http://www.livecaptionapp.com/
Developer	Live Caption
Available on Google Play	See it
Compatible Devices	See Compatible Phones See Compatible Tablets

#### Description

Speak with the deaf using live captioning. Don't know sign language? Need to get your message across clearly? Using voice recognition software, speak into your phone and the words are transcribed live on the screen of the device. Talk to anyone face-to-face with Live Captions.

Not for transcribing phone calls.

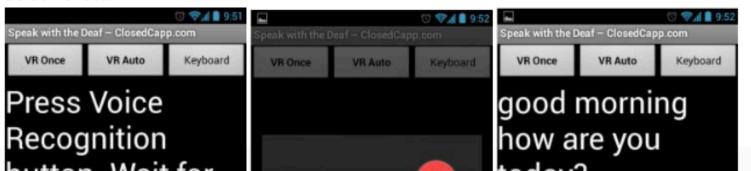
#### Instructions:

- Push "VR Once" and the Voice Recognition will activate once, and will not auto prompt. The text result will appear on screen.
- Push "VR Auto", and the Voice Recognition captures a segment of speech, then it must stop to process what was said.
- After returning the text of what was said, the VR prompt will initiate again after 4 seconds.
- To stop this cycle, just hit cancel on the Voice Recognition prompt.
- To respond with typed text, tap the "Keyboard Entry" button to toggle back and forth between modes.

#### Tips:

- . The most current voice results are delivered at the top and scroll down, similar to a Twitter feed.
- Once VR is stopped you can scroll down to previous voice results.
- Once VR is restarted, the previous results are deleted and can not be retrieved. No data is recorded or saved.
- . If you change the language on your phone, it will return results in that language.

#### Screen Shots:





## **GARI long-term objective**

- MMF offers and requests cooperation in order to establish:
- one global database for accessibility requirements in all markets
- centralised platform on mobile accessibility
  - promotion of mobile accessibility
  - consumer guidance & reporting tool
  - platform for exchange of information between stakeholders



Communications and Multimedia Consumer Forum of Malaysia



















media access australia





**#telcel**u









NFORMATIONSZENTRUM











Associação Brasileira da Indústria Elétrica e Eletrônica









MOBILFUNK

















## We don't stop here!





# New GARI section: Accessible SmartTVs

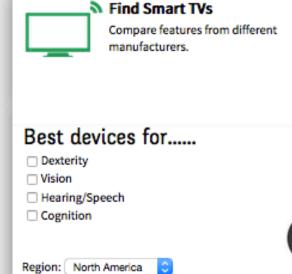
or



#### Learn about Mobile Accessibility

Home > Find Smart TVs

#### Find Smart TVs



Let's see some devices

#### Smart TV Lookup

Already know what you're after? Find smart TVs in the database.

Region:	
North America	0

Ma	nu	fac	tu	rer	

or

All	0

lodel			

**Lookup Devices** 

#### Advanced Feature Search

Let us help you find the right device for your needs. Select on a feature-by-feature basis.

Start advanced search



## **Accessibility features of Smart TVs**

- 57 accessibility features
- New GARI features:
  - voice control for accessing features
  - remote control learning mode
  - independent volume control for speaker & headset
  - supports audio description for broadcast video
- Status:
  - database is ready
  - first models have been uploaded
  - Nov 2015: available in EN, FR, DE; more to follow



#### **GARI** benefits

#### Consumers:

a comprehensive searchable database of devices and features in multiple languages

#### Governments:

accessibility feature set that is far more extensive than any countries' existing list of requirements

#### Manufacturers:

report it once – have it accepted everywhere



### **Benefits for manufacturers**

- reporting tool (Australia, USA, ...)
- community consultation
- stakeholder consultation record
- operators accept GARI product reports
- statistics & targeted marketing
- social media announcements
- regulators, OPW\*, caregivers, occupational therapists, etc use GARI



## Participate in GARI

- product by product basis
  - 1 product displayed for 2 years
- full participation in GARI + AWG
  - unlimited number of devices in the database
  - yearly feature review
  - participation in regulatory work and research activities
  - standards and research updates
  - communication and promotion
  - stakeholder relationships



#### Get in touch with us

- Twitter: @GARIupdates
- Facebook:

https://www.facebook.com/MobileAccessibility

• GARI blog: <a href="http://blog.mobileaccessibility.info">http://blog.mobileaccessibility.info</a>

Michael Milligan, Secretary General michael.milligan@mmfai.info

Thomas Barmüller, Director EMEA <a href="mailto:thomas.barmueller@mmfai.info">thomas.barmueller@mmfai.info</a>

Sabine Lobnig, Communication & Regulatory Officer sabine.lobnig@mmfai.info



# Thank you. Further Information needed?



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Since December 2006: MMF's Director for Europe, Middle East and Africa and responsible for the co-ordination of the association's activities in the region.

2000 – 2006: Forum Mobilkommunikation (Austrian national trade organisation, Managing Director)

1990 – 1999: Member of the Austrian Parliament, focused on infrastructure issues, telecommunication and environment He graduated as Master of Laws at the University of Graz, Austria.