

Helping people find devices that best suit their needs



GARI^{10th}
ANNIVERSARY

.....
Annual Report
2018



GARI | The Global Accessibility
Reporting Initiative



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GARI's mission – as relevant today as it was 10 years ago

GARI's mission is to inform consumers about existing accessibility solutions in the market today and help them identify devices with features that best help their individual needs. This includes mobile phones with built-in screen readers, 'simple access' for persons who find today's user interfaces overwhelming, Wearables with haptic feedback, Smart TVs that allow voice recognition for accessing features, or mobile apps that have been developed specifically to help overcome a barrier in daily life like finding accessible locations.

Throughout 2018 and across many meetings and events related to accessibility across the globe, the need for better information on available solutions as well as education of users and digital capacity building among persons with disabilities and older users, was a recurring theme and reconfirmed that having one central source of information on accessible devices is very much needed.

80%
of phones in GARI
have a screen reader.

110
phones in GARI
support emergency
services and location
feature.

565
phones in GARI
support voice
recognition for
dialling or accessing
features.



GARI

Fulfilling obligations under Article 9 of the UNCRPD

Finding the device that best supports the individual

Understanding today's technological possibilities

International harmonization

Mainstreaming accessibility

Empowering ALL citizens

Serving a global user base

Information

Education

Events participated in during the year

mEnabling Summit Washington

Zero Project Conference

EKTG's eHealth Symposium London

AAATE Workshop Linz

A-Tag Vienna

Symposium on Celebrating Human Rights of Older Persons

ITU Accessible Americas

EDF Side Event on Artificial Intelligence

mEnabling Forum Germany

EDF Conference on Statistics and Data Collection on Disability

ITU Accessible Europe

Events around the European Accessibility Act

International Expert-Conference on Human Rights of older Persons

Open event of the Disability Intergroup in the European Parliament



Over 100 accessibility features – how to know where to look first?

Following onto this clearly expressed need for more information and education on accessibility features – both among the users who need these features as well as among the people who support and work with them – we tried to simplify the information on accessibility features in mobile devices by creating a GARI Feature Guide¹, explaining in a succinct way what kind of features exist in today's devices and what situation they might be helpful in, as well as a table with GARI Accessibility Features at a Glance.²

Footnote 1 <http://www.mwfai.org/docs/eng/MWF%5FGARI%5FFeatureGuide2%2Epdf>

Footnote 2 <http://www.mwfai.org/docs/eng/MWF%5FGARI%5FFeaturesAtaGlance%2Epdf>



One project, one source – many uses

Governments and regulators around the world use GARI to:

- Provide their citizens with information on mobile accessibility solutions.
- Fulfil their obligations under Article 9 of the UNCRPD.
- Integrate accessibility into public procurement.

Organizations of persons with disabilities use GARI to:

- Inform their members about existing solutions in the market.
- Encourage larger uptake of accessibility in mainstream devices.
- Tap into a global source of information on accessible devices.

Device manufacturers use GARI to:

- Inform a larger audience on built-in accessibility functions.
- Show compliance against international accessibility standards.
- Have one centralised database for reporting in this area.

Telecom providers use GARI to:

- Better serve their customers with accessibility needs.
- Select an accessible portfolio of devices.
- Provide their staff with an always available source of information on mobile accessibility.

Universities use GARI to:

- Find solutions for students with accessibility needs.
- Promote awareness about accessibility in mainstream devices.

Occupational therapists use GARI to:

- Get orientation on available solutions in mainstream devices.
- Identify devices best suited to their clients' needs.

The broad public uses GARI to:

- Learn about mobile accessibility.
- Get an understanding of today's technological possibilities.

We use GARI to:

- Better inform consumers and help find devices best suited for their needs.
- Promote international harmonization in device accessibility.
- Connect with stakeholders, learn, exchange and build alliances to advance accessibility.



25 international companies

In 2018, three new manufacturers joined the ranks of companies displaying their devices in the GARI database - either on a per-model basis or as full members, to provide detailed information on the built-in accessibility features, increasing the number of currently participating companies to 25.



Reporting against international standards

The accessibility features listed in the GARI database have been developed in collaboration with accessibility experts, organizations of persons with disabilities, consumer groups, telecom regulators and industry through regular feature reviews (the 4th GARI feature review having been completed in 2017 and the 5th GARI feature review underway for 2019).

The MWF also took care to match the features in the database against international standards such as Section 508 in the US and EN 301 549 in Europe, as well as Australia's Telephone Equipment Industry Code C625 in order to support companies in reporting on the compliance of their devices.

By the end of 2018, the GARI database is being actively used by governments, regulators, civil society, universities and industry bodies in 26 countries around the world.

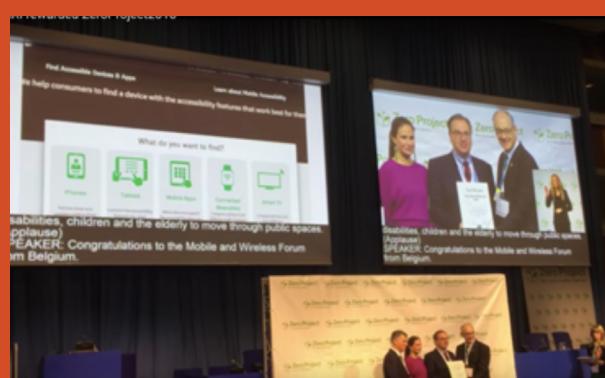


Innovative Practice for Accessible ICT 2018 – GARI rewarded by Zero Project

In 2018, the GARI project was awarded for being an 'Innovative Practice for Accessible ICT' at the Essl Foundation's Zero Project Conference in Vienna, Austria.

The Innovative Practices of the Zero Project are projects, programmes, products and services, but also social enterprises or business strategies. They employ a comprehensible method that can be transferred or copied

to other countries, regions, or contexts, and have a proven and measurable impact. Most importantly they speed up the process of implementing the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD). In this context, we were very pleased to see our work on GARI recognized and are looking forward to further expand GARI's reach and uptake in even more countries.



Furthermore, GARI was featured throughout 2018 on the Zero Project website with a dedicated factsheet:

Zero Project

Innovative Practice 2018 on Accessibility

COMPREHENSIVE DATABASE OF ACCESSIBILITY FEATURES IN MOBILE DEVICES AND SMART TVs

The Mobile & Wireless Forum (MWF) is an international association of companies with an interest in mobile and wireless communications based in Brussels, Belgium. The MWF's "Global Accessibility Reporting Initiative" (GARI) is a free online database that lists the accessibility features of mobile phones, tablets, apps, Smart TVs, and wearables. GARI provides information on more than 110 accessibility features of approximately 1,100 mobile phone models worldwide and receives approximately 500,000 views per month.

PROBLEMS TARGETED

Persons with disabilities and the elderly may not have access to information on what accessibility features are available in electronic devices and what devices support these features.

"We welcome this initiative from ICT industry players to raise awareness about e-accessibility and encourage consumers with disabilities to use the devices that better meet their needs and expectations. We also welcome their regular consultation with users organisations: nothing about us, without us."

Humberto Insolera
European Disability Forum (EDF) Executive Committee member

SOLUTION, INNOVATION, AND IMPACT

In 2008 the MWF created GARI (www.gari.info), a large searchable online database that lists the accessibility features of various electronic devices. Customers can access the database to see what accessibility information is available for each device. This information is displayed for free and in 17 languages.

The GARI project was also included in the Zero Project Report 2018 on Accessibility:

Comprehensive database of accessibility features in mobile devices and Smart TVs

BELGIUM / MOBILE & WIRELESS FORUM – GARI

The Mobile & Wireless Forum (MWF) is an international association of companies with an interest in mobile and wireless communications based in Brussels, Belgium. The MWF's "Global Accessibility Reporting Initiative" (GARI) is a free online database that lists the accessibility features of mobile phones, tablets, apps, Smart TVs, and wearables. GARI provides information on more than 110 accessibility features of approximately 1,100 mobile phone models and receives 500,000 views per month.

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"We welcome this initiative from ICT industry players to raise awareness about e-accessibility and encourage consumers with disabilities to use the devices that better meet their needs and expectations."

Humberto Insolera, European Disability Forum, Executive Committee member

GARI lists more than 110 accessibility features covering approximately 1,100 mobile phone models from around the world. While mobile phones remain the focus, the database also includes information on tablets, accessibility features for tablets, 57 for Smart TVs, and 62 for wearables. Participating manufacturers are responsible for updating the information on devices themselves, and the MWF's secretariat monitors the system and information is updated by the MWF team.

As of mid 2017 into regulatory bodies or governments have integrated GARI into their own websites or provided links to GARI.

FACTS & FIGURES

- Information is provided in 17 languages.
- Since 2008 1,100 mobile phone models are listed.

Humberto Insolera, Executive Committee member of the European Disability Forum (EDF) said this about the GARI project:

'We welcome this initiative from ICT industry players to raise awareness about e-accessibility and encourage consumers with disabilities to use the devices that better meet their needs and expectations. We also welcome their regular consultation with users organizations: nothing about us, without us.'

Over 300 accessibility features

The GARI database currently provides accessibility information on:

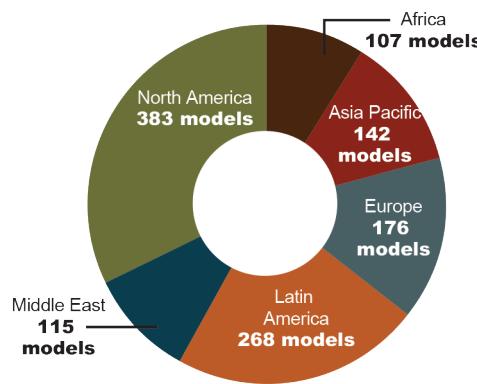
- 121 features for mobile phones;
- 67 features for tablets;
- 61 features for Smart TVs; and
- 52 features for Wearables.

These features have been developed in collaboration with the disability community, accessibility experts, industry and national regulators.

The MWF has furthermore committed to regular reviews of the features that GARI reports on, in light of changes in the technology and customer needs.

Every two years, stakeholders with an interest in mobile accessibility are invited to provide comments or suggestions on the features that they would like to see reported on by manufacturers.

In 2017, we carried out the 4th GARI Feature Review involving more than 80 stakeholder organizations from around the world, finalized the implementation to the database and website in 2018 and are preparing to launch the 5th GARI Feature Review for 2019.



Five product groups and 1,500+ accessible devices

GARI started out as a simple spreadsheet listing accessibility features available in mainstream mobile phones. Since then, the database has grown to provide information on the accessibility of over 1,500 devices, including mobile phones, tablets, Smart TVs, Wearables and almost 500 accessibility related apps.

The GARI database is populated with new devices coming to the market. By the end of 2018, the database listed information on the number of mobile phone models shown in the graph.





Making the most of GARI

The GARI website provides just one way of viewing the accessibility features of different devices. However there are other ways, and perhaps even better ways that have not yet been considered. So in order to promote greater awareness of these features, the Mobile & Wireless Forum provides the raw GARI data available to organizations that wish to integrate GARI within their own websites. The data is released under a Creative Commons license and is provided via a daily XML feed.

XML is an acronym for Extensible Markup Language. XML code looks like HTML, but whereas HTML is designed to indicate how data should be displayed, XML describes the data itself. What this means is that XML will tell you what data is being provided and HTML will tell you how it is to be displayed. The GARI XML feed therefore only provides all the information about the features that each model has and organizations can utilise HTML to decide how that information is to be displayed.

Because the GARI XML files are quite large, we have segmented the information into different languages and by continent/country of supported devices. For example, there are XML files containing the details for devices supported in Canada. One file has the information in English. Another file has the information in French.

If an organization is interested in integrating GARI into their website, please contact the MWF to discuss your ideas so we can work out how we can help.



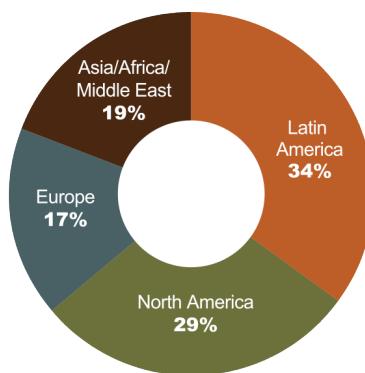
How many people are using GARI?

In 2018, the GARI website attracted on average over 59,000 unique visits (up from 42,000 unique visits in 2017) and over 600,000 page views per month (up from 500,000 page views in 2017).

This data only covers the main project site and does not include information on usage from the many organizations that also use the underlying data via direct XML feed.

Where do GARI users come from?

In 2018, Latin America remained the region using the GARI database the most intensively with 34.09% of searches via the web interface, followed by North America with 29.50% and Europe with 17.37% of searches. The remaining visitors to the site came from Asia, Africa and the Middle East.



Accessibility information in 18 national languages

As important as it is to provide information on the accessibility features in devices, it is equally important to provide the information in an accessible format. For this reason, the GARI website was designed to be usable with screen-readers and includes a collection of American sign-language videos that explain how to use the site. In addition, the GARI site has been translated into 18 languages allowing consumers to search the database in their preferred language irrespective of where they reside.

Languages currently supported on the site include English, Arabic, Danish, German, Spanish, Swedish, Finnish, French, Hungarian, Italian, Korean, Dutch, Norwegian, Polish, Portuguese, Romanian, Japanese and Chinese.

The MWF is committed to expanding the range of languages that GARI is provided in and is happy to work with partner organizations to help bring this about.

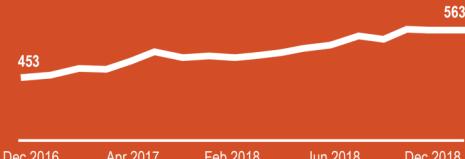


Screen Readers

A screen reader is one of the essential features for the blind but also can be useful for the visually impaired or even those that are illiterate. Screen readers exist on many platforms and operating systems, but they have traditionally been available as a separate stand-alone applications on mobile phones and often only available at considerable expense. Today though, the feature is a core feature of the main operating systems across platforms and users can fully benefit from their inclusion with a simple swipe to activate. The chart below shows how we have seen a steady increase in the number of phone models supporting screen readers. In December 2016 when we started our tracking, the number of models supporting the feature was about 60% of the available models whereas today that percentage has increased by 24% to 563 models or around 80% of available models.

24%

increase in phones
with screen readers
over the period
2016-2018.



Mobile & Wireless Forum (MWF)

41 followers

3w

Spike in interest in Latin America, regional changes impact Top 10 of accessibility features and we have doubled the number of visitors to the GARI website - the GARI 2017 Annual Report gives a compact overview of ...see more



Regional changes impact Top 10 of accessibility features - GARI Annual Report 2017
blog.mobileaccessibility.info

Like Comment Share

The top 10 most searched for features in 2018

As in the two previous years, the list of the top 10 features searched for (via the 'Advanced Search' function) was dominated by hearing features:

- Hearing Aid or 'HAC' Setting;
- Hearing Aid T-coil Coupling;
- Internet Capability;
- Supports ability to install third party applications or apps;
- Adjustable Maximum Volume Control;
- Ringer Volume Adjustable;
- Easy to Press Keys;
- Touch Screen; and
- Improved Call Quality.

The GARI database provides for several different ways of searching for accessible devices - either in general or by specific accessibility features:

- Users can look up a list of all accessible devices listed in the database for a specific region;
- Users can look up specific accessibility features and which devices they can be found on ('advanced search'); and
- Users can choose one or several of the search filters that relate to an area of impairment including 'dexterity' 'vision' 'hearing/speech' and 'cognition'.

'Telefónica believes that technology should be open to everyone. Our partnership with GARI helps us bring relevant information to our customers, enabling them to make the right technology choices for their specific needs'.

David Johnson, Director of Hardware, Innovation & Eco-systems, Global Devices Unit, Telefónica.

What type of apps are listed in GARI?

At the end of 2018, just over 500 accessibility related apps are listed in GARI. These are apps that have been specifically designed to help overcome barriers people face due to disability, injury, illness, old age or disabling environments. The apps include maps for accessible locations, crowd-sourced help via the device camera for people who are blind, speech to text functions for people who are deaf or hard-of-hearing, alternative and augmented communication and much more.

GARI also provides the opportunity to select an app that might be of particular importance or relevance to a user and to search for devices that the app will work on.



New feature: emergency services and location

In April 2018 we started tracking the availability of 'emergency services & location' which is a feature that allows anybody in an emergency situation to be able to rapidly send a message to the emergency services with their location. The feature also can be configured to send a SMS message to an identified person either family or friend indicating that you need help. As we see from the data, this feature is rapidly being incorporated across manufacturers and one that is really useful to everyone in the community.

110
phones support
emergency services
and location

702
available
phones

110
phones
with
feature

May 2018

Aug 2018

Dec 2018

Working with 80+ organizations around the world

GARI's mission is to raise awareness about existing accessibility features and to help consumers find a device that best suits their needs. A number of organizations around the world have joined this effort by either facilitating access to the GARI database via their own websites or by spreading the word about mobile accessibility in general and GARI in particular among their members, stakeholders and constituency. Many of these organizations also actively contribute to improving GARI by participating in the regular feature reviews and providing us with user feedback.

The links to many of the organizations already using GARI can be found on the 'Examples of GARI in use' page: <http://gari.info/examples-of-gari-in-use.cfm>

The Mobile & Wireless Forum also makes the GARI dataset available for organizations wishing to feature GARI within their own sites. The dataset is available as an XML file that is updated on a daily basis. The dataset is licensed under a Creative Commons License (See <http://www.gari.info/download-gari-db.cfm> for more information and the terms of the Creative Commons License).

Raising awareness and reaching out to ever more stakeholders

In view of GARI's mission to inform consumers about existing accessibility solutions in the market, the MWF has published 14 articles on the GARI blog (<http://blog.gari.info>):

- Milestones in Mobile Accessibility: the Tenth Anniversary of GARI.
- How does GARI fit into mHealth?
- GARI awarded as Innovative Practice 2018 on Accessible ICT.
- #ZeroCon18: Advancing ICT Accessibility - some policy updates on where we are and where we are headed.
- Accessibility of information - online and offline.
- ITU Forum: ICT Accessibility a Requisite Towards an Inclusive Digital Society.
- Over 100 accessibility features in my phone – how do I know what helps me?
- Trends in mobile accessibility: artificial intelligence and smart cities.
- 5G – the miracle solution for accessibility?
- Regional changes impact Top 10 of accessibility features - GARI Annual Report 2017.
- Crowd-sourcing information on accessible products and services.
- What do CSS, standards and 'easy' sign language have in common?
- 'Don't take technology too seriously - it is people who are using the technology and need to make sense out of it.'
- Another year in mobile accessibility – what has changed and what is the same?

We shared updates to the database and news related to mobile accessibility via GARI's social media channels (namely Twitter, Facebook and LinkedIn), live tweeted from accessibility events and exchanged knowledge and expertise with the online community dedicated to these topics.

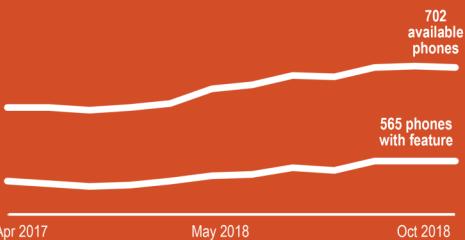


Voice recognition for dialling or accessing features

From getting the phone to dial a number or a contact while in the car, or still being able to call and access features with limited hand to no hand movement, this feature is used by many people each and every day. The data below shows that 565 current phone models in the GARI database support the feature which equates to just over 80% of the available models.

80%

of phones support
voice recognition for
dialing or accessing
features



Get in touch

We would welcome the opportunity to discuss how we could further promote awareness of the accessibility features in devices or about the GARI project itself. Our contact details are as follows:

Mobile & Wireless Forum

Email accessibility@mwfai.org

Web www.mwfai.org

Twitter @GARIupdates

