



World Health
Organization

Global Research, Innovation and Education in Assistive Technology

GREAT Summit 2017 Report



#BridgeTheGap

The **GATE** Initiative

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Global Research, Innovation and Education in Assistive Technology

GREAT Summit 2017 Report



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Note to the reader

This meeting was held under Chatham House rules; open comments are not attributed.

This report summarizes the themes of each session – including the interventions from the floor – rather than attempting to provide a chronological summary of the dialogue.



Definitions

Assistive technology is the application of organized knowledge and skills related to assistive products, including systems and services. Assistive technology is a subset of health technology.

Assistive products refers to any external product (including devices, equipment, instruments or software), especially produced or generally available, the primary purpose of which is to maintain or improve an individual's functioning and independence, and thereby promote their well-being. Assistive products are also used to prevent impairments and secondary health conditions.

Disruptive technology displaces an established technology and shakes up the industry, or it is a ground-breaking product that creates a completely new industry.

Universal design is the design of products, services and environments that can be used to the greatest extent possible by all people regardless of their age, size, ability or disability.

The Fourth Industrial Revolution (4IR) builds on the Digital and Technological Revolution and is characterized by a range of new technologies that are fusing the physical, digital and biological worlds, impacting all disciplines, economies and industries, and even challenging ideas about what it means to be human.



Executive summary

The World Health Organization (WHO) hosted the Global Research, Innovation and Education in Assistive Technology (GREAT) Summit on the 3–4 August 2017 at its headquarters in Geneva. With more than one billion people in need of assistive products globally but only one in 10 having access to provision,¹ the Summit participants pledged to work together to [#BridgeTheGap](#).

Coordinated by WHO's Global Cooperation on Assistive Technology (GATE), the Summit brought together nearly 200 users, researchers, practitioners, innovators and educators from the global assistive technology (AT) community. The Programme was organized with the perspectives of AT users at its core and reinforcing WHO's people-centred care approach.²

The goal was to debate and galvanize action on GATE's global priority research agenda to improve access to high-quality, affordable assistive products worldwide, and to look more closely at the critical areas of innovation and education. For two days, participants debated and shared knowledge and experiences through plenary sessions, breakout group discussions, digital poster presentations and networking.

Assistive products, delivered with appropriate services, can optimize functioning for older people, people with disabilities and others in need; AT is empowering, cost-effective and vital to meet the growing needs of 21st century populations. AT is recognized as a key enabler in achieving the Sustainable Development Goals.³

*"Assistive technology is not a wish to make things easier.
It is a must to make things possible."*

Yet significant unmet need for AT and inequality in access to resources and services, was reported across global regions throughout the Summit, with participants drawing attention to the untapped potential of those living with limitations in functioning and the denial of equal rights.

The dynamic AT landscape includes rapidly developing technologies, the diverse nature of impairments and functional abilities, as well as the individualized needs and preferences of AT users. Need also changes as people get older. A special session on innovation shared some of the exciting opportunities and challenges, with calls for the AT sector to develop better partnerships with other technology sectors such as medical technology, information and communication technology and robotics and artificial intelligence, in order to make itself more visible and effective. Discussions focused on the important role that AT users can play in innovating design; on the development of policies, standards and regulations as facilitators of the AT market; and on proprietary versus open source product development.

Participants shared ideas about innovations and how to build collaborations beyond the Summit. Regional networks and centres involving AT users, providers, product developers, researchers and civil society were envisioned as a means of identifying and selecting appropriate AT and other supports. Multicentre applied research ideas were proposed.

Competency for the AT workforce was a key discussion point with special sessions on training and certification, recognizing the difficulty of measuring the specialist skill and knowledge of many expert users, experienced technicians and professionals. Participants agreed that ensuring standards of competence and quality assistive products in local health/social service provision everywhere must be addressed. Outcome measures of the effectiveness of assistive products and services are essential goals to improve user satisfaction and hence, return on investment. Finding and replicating existing successful education and training initiatives in context-sensitive ways is a key strategy to deliver these goals.

The GATE priority research themes were presented in Preliminary Position Papers for participants to review and develop, drawing on first-hand experience and knowledge. The five topics of People, Products, Policy, Personnel and Provision (5P) were discussed in small breakout sessions. There was unanimous recognition of the interlinking nature of all topics, with calls for the user always to be placed at the centre. Summit participants also called for the addition one extra topic – “Place” (inclusive environment) – as a key context.

The position papers will be finalized and published by groups of Summit participants, involving further work on all topics particularly relating to the rapid development of technologies and the needs of an emerging ageing population. They will outline current scenarios together with the actions needed to guide and galvanize the collective efforts of all AT stakeholders to realize GATE’s key goal: Access to assistive technology for everyone, everywhere.

Awareness, profile and leadership

The two-day meeting ended with calls on the global AT community to develop the GATE community as a global AT network, and to find ways to collaborate and advocate for greater AT awareness. Summit participants called on all AT stakeholders to work together collectively to:

- Raise the profile of AT globally.
- Ensure engagement beyond the disability arena and associated stakeholders; for example with health, ageing, design, urban planning and environment.
- Advocate that a ‘universal design approach’ for new services, buildings and products is more cost-effective and beneficial for all.
- Ensure that disruptive technologies and developments in universal design are used as facilitators to access and inclusion for all. This includes promotion of the scaling and leverage of successful innovations, particularly where led by users and done in culturally-sensitive ways.

Participants specifically called on WHO to:

- Publish a world status report on AT
- Organize a follow-up meeting after two years.



Research and practice

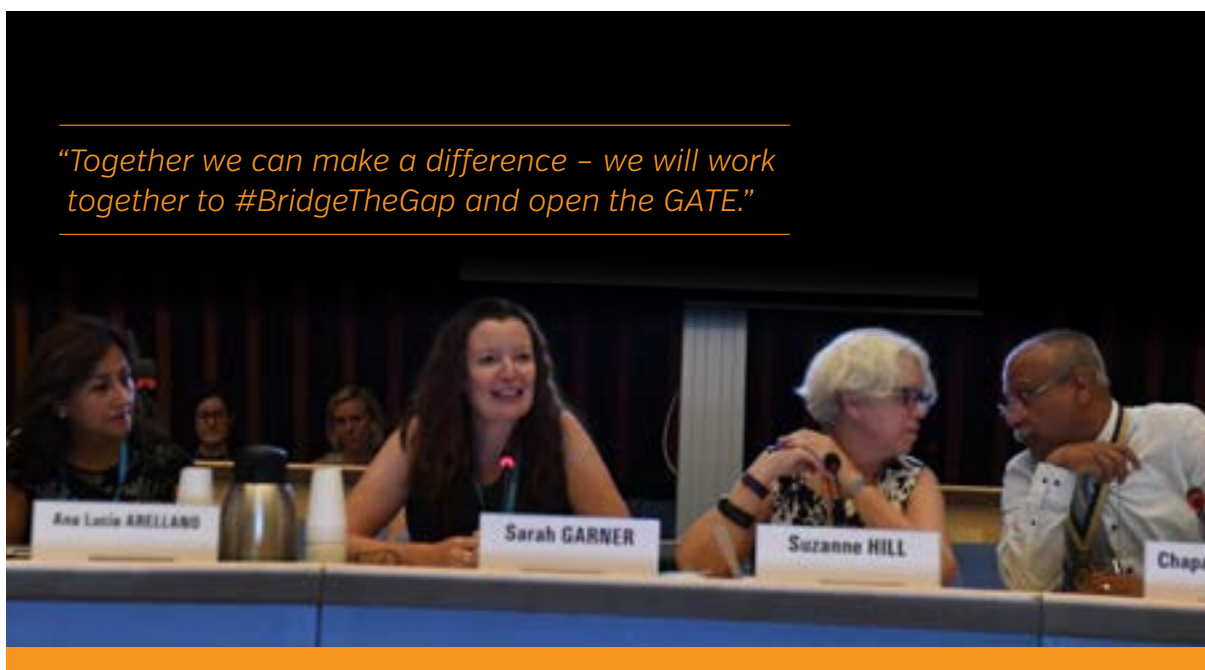
The five global AT priority research themes⁴ were endorsed:

1. Effects, costs and economic impact
2. Policies, systems, service provision models and best practices
3. Quality and affordability
4. Appropriate human resources
5. Standards and methodologies for the assessment of need and unmet need.

GREAT Summit participants called for a progressive realization of these research goals through collaboration. This may include regional collaborating centres involving and serving AT users, international research and education institutions, and civil society partners. Desirable outcomes include:

- Facilitation of applied research through grants and networking among users, providers, academia and industry.
- Support to demonstrate the return on investment for AT; the costing of AT services including ineffective services that lead to abandonment of assistive products.
- An audit or review of training methods and strategies, disseminated through the GATE community, to identify appropriate training and education for all stakeholders.
- Recognizing that the cost of products alone is not the only barrier to access; identify AT services costs and access issues; availability of trained/skilled personnel; and champion good practice in AT service provision.
- A focus on standards and development of product specifications to ensure high-quality, safe and affordable assistive products.

"Together we can make a difference – we will work together to #BridgeTheGap and open the GATE."



The GREAT Summit Report

Background

The World Health Organization (WHO) estimates that more than one billion people are in need of one or more assistive products. The majority of these are older people and people with disabilities. With populations ageing and a rise in noncommunicable diseases, the number of people needing assistive products is projected to increase to beyond two billion by 2050.¹ However, only one in 10 people in need currently has access to assistive technology. Without access, people are often excluded and may be locked into poverty and isolation; increasing the impact of disease and disability on the person, their family and on society as a whole.

The United Nations (UN) recognizes and acknowledges that poor access to AT is a critical problem that needs to be addressed. The UN Convention on the Rights of Persons with Disabilities (CRPD), adopted in 2006, entitles all people to have access to available and affordable AT, and stipulates that States should take effective measures to enable access to such technology.⁵

WHO's work on improving access to assistive technology

To address the substantial gap between need, and access to AT, WHO established the Global Cooperation on Assistive Health Technology (GATE) initiative in 2014. The acronym GATE also serves as a reminder that access to AT can 'open the gate' – enabling those who need it to leave their home and participate in society.

The GATE initiative aims to improve access to high-quality, affordable assistive technology for everyone, everywhere. It is a concrete step towards realizing the goals of key international strategies including the CRPD and Sustainable Development Goals (Goal 3 in particular – *Ensure healthy lives and promote wellbeing for all at all ages*).⁶

In 2016 GATE released the Priority Assistive Products List (APL),⁷ which outlines a minimum list of 50 assistive products that are most widely needed, and that national governments should ensure are available to all citizens.

GATE has prioritized research and innovation as a key focus area. Towards this, WHO co-hosted a research group meeting in Budapest in September 2015 with the aim of identifying strategic research priorities. The Global priority research agenda for improving access to high-quality affordable assistive technology was published as an outcome of this meeting.⁴



The GREAT Summit

The GREAT Summit built on the Budapest meeting; to further advance the global AT priority research agenda; and to look more closely at the critical areas of education and innovation. By bringing together nearly 200 AT users, educators, innovators, researchers, practitioners and partner agencies, GATE sought to build connections and facilitate coordinated action.

The GREAT Summit Committee, drawn from the global AT community, worked with WHO for over one year to organize the event. The Programme featured practitioners, researchers and individuals with a lived experience of disability, ageing and AT. Speakers were drawn from low-, middle- and high-income countries and represented civil society, donor agencies, international advocacy groups and innovators from outside the usual AT community.

Plenary sessions and breakout groups focused on:

- WHO's global priority research agenda areas of People, Products, Provision, Personnel and Policy;
- innovation;
- AT education and certification;
- AT service provision.

Ground-breaking examples of research and education were showcased, and a global selection of in-country AT policies, systems and service provision models presented. Participants discussed best practices for the delivery of high-quality and affordable AT; current standards and methodologies; the effects, costs and economic impact of AT; and human resources for the sector.

GREAT Summit deliverables included Preliminary Position Papers, electronic poster snapshots, a participant directory and thematic research group work. These will foster collaborations towards the identification of new research funding opportunities, acceleration of innovative education and certification, and work towards a common impact assessment tool.



Voices from around the globe



With nearly 200 participants from a wide range of AT backgrounds, the Summit offered an important environment for sharing information and experiences from across the world. Many powerful points were made – here are some that resonated strongly with those present.

The vision is one of realization of rights, and fulfilment of capability. Assistive products and services are essential and not optional.

“For people with disability, technology is not a wish to make things easier. It is a must to make things possible.”

AT – products and services are empowering, enabling and assist people to live with dignity.

“...this wheelchair is not my weakness but my strength.”

–SANA HAFEEZ



“Accessibility, availability and affordability: that is the goal and that will Bridge The Gap [#BridgeTheGap] between need and access in the future.”

The untapped potentials of older people, people with disabilities and others in need of AT is substantial.

“Assistive technology is such a key piece in enabling that talent to be matched to the opportunities we can all create.”

AT and accessible environments are powerful change agents – everyone will benefit.

“Consider individuals not just as users of technology but individuals as makers of technology and leaders in that industry.”





“I believe that assistive technology in the future will enable me [to have an] even better standard of living and I want to help develop assistive technology as a user, to improve the technology-readiness level and improve the drivers to bring the cost down and improve general access to technology.”

— THOMAS NABARRO

Yet globally, access is inequitable with substantial under-met and unmet needs.

“Why should a person with disability cut down on food to have access to an assistive device which is so essential to his or her life... We have to... to make sure products reach people with disabilities and they can use them to attain their rights.”

Major contradictions exist where health interventions such as amputations take place, yet preventive foot care or provision of prostheses and wheelchairs are not.

“If we can provide medicine right at the community level, we should provide assistive technology at the community level.”

Contrary to the goals of the CRPD, many citizens go without necessary assistive products. The GREAT Summit heard testimony that the failure to invest in AT, to realize this human potential, leads to costs in health, individual and community well-being.

“...premature deaths because of lack of assistive technology are very common.”

Stark contrasts exist between high-income and low- and middle-income countries in terms of resourcing and the range of AT available.



“When I travel in Europe and the United States, you see these beautiful technologies which if only people in the rest of the continents are aware of. I have also seen situations where people with disability in Ghana are having the opportunity to express their

democratic rights through elections; by being included, not only by friendly voting booths, but being able to participate despite the intellectual disability.”

— THOMAS ONGOLO

“A plane brought me from Fiji, a little island in the Pacific, and it brought me here and I saw what assistive technology means and what it is about, and how it enables and supports persons with disabilities... To



tell you the truth it is like I woke up in a preferred future... I can go back and tell people with disabilities that help is coming. Assistive technology is real and WHO is doing all it can with development partners so that way we can actually get to make the strategy a reality.”

— JOSHCO WAKANYIASI

Against this background, Sana Hafeez spoke for many participants from low- and middle-income countries when she raised the following concerns:

“How will research be undertaken in a country with a backdrop of limited resources? How can financial resources be mobilized when assistive technology is not on the priority agenda of governments? How can we ensure information is widely disseminated and used? How will the impact of research conducted here reach the people living in the rural areas of developing countries? How will this information help the user improve their lives? How can the outcomes of international meetings or publications be translated into improving the life of users and their family?”

Participants also shared perspectives on assistive products and services across different countries and settings. These included examples of successful service provision models and others that were inequitable. Civil society, donor agencies and the private sector can be effective partners in service provision. The opportunities to scale up new and innovative technologies, and to mainstream inclusive designs, represent great opportunities for change.

“We have an obligation to scale proven solutions but [they must be] standardized and systemized and integrated into broader systems.”

These voices raise many issues that relate to the basic human right to have equal access to social and economic opportunity and participation. GATE’s five thematic research areas expand on these and they formed a major part of discussions on the Summit’s first day.

The GATE thematic research areas

The GATE global priority research agenda for improving access to high-quality affordable AT⁴ identified five priority themes:

1. Effects, costs and economic impact
2. Policies, systems, service provision models and best practices
3. Quality and affordability
4. Appropriate human resources
5. Standards and methodologies for the assessment of need and unmet need.

These themes have been framed within five key topics (5P): **P**eople, **P**roducts, **P**rovision, **P**ersonnel and **P**olicy (Figure 1).

Lead authors were identified to write Preliminary Position Papers on each of these 5 key topics to stimulate debate and discussion. Moderators chaired one-hour breakout discussion groups and two rapporteurs captured key outcomes. These included unanimous agreement on the interlinking nature of assistive products and services, the personnel required for AT services, the importance of provision systems, the critical impact of policy, and the central role that users should play at all levels.

Preliminary Position Papers were discussed in more detail and input gathered for further revisions. Additional Summit participants volunteered to join the authorship groups, with a plan to publish finalized documents on each theme in the first 2018 edition of the journal *Disability and Rehabilitation: Assistive Technology*. The published position papers will outline the current scenarios together with recommended actions that are needed to guide and galvanize the collective efforts of all AT stakeholders.

Universal agreement was reached that *People*, that is AT users with their families and communities, must be placed at the core of everything.

Figure 1. The five P



Addition of “Place”

An additional “P” concerns “Place”. This term refers to the often inaccessible built environments in which assistive products are used, as well as sociocultural contexts of use. Attention to Place is a critical part of appropriate provision:

“In many cultures, sitting on the floor, kneeling, squatting, walking barefoot, etc. are essential activities of daily living and community engagement... products need to be developed for users taking into account their functional needs, which may be heavily dependent on the physical and cultural environment they live in.”

Place also frames the value placed on the management of AT systems and infrastructures within each country, determined by historical development and understandings within specific contexts.⁸ It is often the lack of understanding of place and the user’s needs that leads to the prescription of costly inappropriate products and subsequent high rates of abandonment.

A further theme emerging from breakout discussion groups related to time or **Pace**. Individuals require different products and services depending on their health and ageing trajectory. For example, living with a new impairment is not the same as coping with a long-standing one in later life. People vary in how ready they are to use assistive products and services, and at what pace. However, providers may be embedded in primary, secondary or tertiary health contexts, which limits their capacity to provide support across the lifespan.

“Pace” has been used as a term to identify the bottlenecks affecting the flow of the AT system, which make it difficult to maintain the appropriate provision in a sustainable way.⁸ For example, access to services, waiting times, funding and poor follow-up and repair services, all affect the pace and quality of service provision.

This in turn impacts on the fundamental freedoms of people who use the services and the working conditions of personnel, particularly at the grassroots level. Communities and national governments are also developing and implementing AT services and systems at a varying pace.

Figure 2. From five to six P





New collaborations to progress the research agenda

A range of models can transform individual and system capabilities. The WHO/World Bank *World Report on Disability* advocates moving from a focus on basic access and usability of facilities, products and services to a universal design approach that enables independence and social participation for all.⁹

Building global research infrastructure is a priority to progress the research agenda and must include users, industry and services, and be guided by the 6P. Options to take this forward include setting up GATE collaborating centres, multisite research centres, regional hubs and forums; together with a commitment to open access publishing to increase information-sharing and collaboration between countries.

Innovation

Innovations include partnering inside as well as outside the ageing, disability, health and social welfare sectors to build common understandings. Universal Design offers an approach that designs environments, services and products to ensure inclusion. Other examples of fields where collaborations could be encouraged include art and design, computer engineering, robotics and artificial intelligence, sport, telecommunications, architecture and environment. Sustainable microfinance can support local AT innovation and supply. Hackathons and design competitions in civil society can raise awareness and can lead to unique design solutions.

“If you could wipe the slate clean in your countries for assistive technology services, would any one of you end up with a system that looks like the one you have got now?”

We are in the foothills of the Fourth Industrial Revolution characterized by a range of new technologies that are fusing the physical, digital and biological worlds. Technology is everywhere and can minimize the experience of disability if it is designed inclusively. Harnessing these potentials will require foresight and the development of partnerships with industry. Developments such as big data, where our technologies become the unit of data collection, can enable us to conduct research in new and innovative ways, with AT users as research collaborators.

“We have a great opportunity – many products we think are costly today can be... affordable tomorrow if we can create the right environment and market.”

Many mainstream options may not fully suit AT requirements, for example, an online supplier may sell assistive products but cannot deliver the necessary training to use them. Similarly, the presence of international or national product standards can be experienced as a barrier to innovation and affordable production. Work is needed to champion good practice principles and minimum standards to assure quality.

Using the language of industry makes the AT sector more visible and viable. Within the context of a rights-based approach, this means using supporting economic arguments especially in terms of market share, productivity and return on investment.



AT education and certification

“There was a huge gap in the knowledge, skills and especially attitudes of professionals, [who were] mostly inadequate to work at the community level with people [in need] and their family members.”

A range of pathways exist globally for AT users, practitioners, education bodies and indeed AT service professionals to become skilled, to enhance their skills and to have them evaluated and recognized. These include:

- formal qualification pathways and continuing professional development (CPD), including interprofessional education;
- non-formal pathways including user’s knowledge and expertise;
- certification, credentialing and competency-recognition frameworks.

Formal qualification pathways and CPD are key to improving service provision, but further research is required regarding effective education approaches globally. Additional pathways are urgently needed to enable access to CPD and interprofessional education for all. Good education models that currently exist include AT foundation programmes with specialist options; focus on adapting from global to local contexts; and on utilizing existing resources.

Non-formal pathways such as making use of user’s knowledge and expertise were seen as an important recognition of grassroots expertise and “parallel” skills. A mapping exercise is urgently required to capture community-based and public health or welfare models of expertise so that examples of good practice can be replicated. Raising awareness of AT generally will also raise interest in education for communities. It is the responsibility of all stakeholders to achieve and maintain skills and knowledge, across formal or non-formal education pathways, based on what is appropriate and what is available. Summit participants called for an audit of current global training opportunities as a starting point.

Current options for certification, credentialing and competency-recognition also need mapping to identify what is available and where there are gaps. Participants noted the priority to “do no harm” yet stressed it was important not to set the education bar too high, being mindful of the adverse impacts of unmet needs where no trained personnel are available. Development of support systems beyond training, which enable personnel to build their competencies on the job, are also critical. It is essential for users to be directly involved in training, and for a flexible approach to be taken in measuring capability when promising levels of competence are evident. Finally, engaging with professional standards’ bodies that set benchmarks for AT professional education is necessary.

In conclusion, education and training must be fit for purpose, tailored to the learner and environment, responsive to change and context, and regularly refreshed.

AT service provision systems

AT service provision was discussed in two breakout sessions.

Assessment and service provision: Efforts are needed to raise awareness of the importance of comprehensive service provision, and the inclusion of the user at the centre of the assessment and service provision process. Evidence shows that user involvement is a high predictor of successful AT use. User needs, preferences and predisposition to AT use, are all essential factors to take into account during assessment, together with consideration of the local environment and matching technology features to user skills.

Effective outcome measures should also be included in the service provision system. There is a need for internationally-applicable, simple guidelines; minimum requirements; legal frameworks for provision; and AT information systems. Strategies could include building stakeholder networks based on existing models and the development of private and public partnerships.

Procurement and the supply chain: it is essential to have internationally-applicable standards for assistive products and to understand the context of service provision in different countries. Participants felt there was significant untapped potential for engagement with the private sector, including local businesses. Exploring the qualifications or official registration status of suppliers can help to ensure they have the necessary skills.



What is WHO doing?

People: Involving users, their families in all interventions is crucial to fully realize the vision and mission of WHO's GATE initiative. A user-centred approach is critical to make sure that users' needs are addressed when developing policies and provision services. Services should not just be physically accessible but also culturally appropriate and tailored to users' needs. WHO not only promotes a user-centred approach, but also works closely with users and user groups.

Policy: WHO is developing tools to support countries in developing national policy and programmes to ensure everyone, everywhere can access assistive products. The toolkit will include an assistive technology assessment toolkit and guidance on financing mechanisms, such as health and welfare insurance programmes, to ensure sustainability of service provision and universal access. It will also include guidance on implementation of the *Priority Assistive Products List*, minimum standards, appropriate training and service provision.

Products: In May 2016, WHO launched the *Priority Assistive Products List*, which includes a list of minimum 50 products selected on the basis of widespread need and impact on people's lives. The *Priority Assistive Products List* encourages countries to develop a list of national priority products, and is a guide to enhance production, procurement and service provision, to develop reimbursement policies and to shape markets. Future work will also relate to standards and procurement for priority assistive products.

Provision: WHO is developing guidance on innovative models of service provision, including good-practice examples from across the globe. Fundamental components include the integration of assistive products service provision into the health system, and a network of specialist referral centres connected to the primary health care infrastructure. This would enable most people to access assistive products for all their functional needs from a single point and would support universal access and early intervention.

Personnel: WHO is developing an *Assistive Products Training Package* on provision of a range of simple assistive products; including assessment and prescription, fitting and user training, follow-up, maintenance and repairs. The package will support countries in building the capacity of their community-level workforce.

More information on WHO's work on assistive technology can be found on the WHO website:

http://who.int/phi/implementation/assistive_technology/en/



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Appendix A – GREAT Summit Programme

Thursday, 3 August 2017, WHO Headquarters, Geneva

Session 1: The global context

Moderator: Rory Cooper, University of Pittsburgh

09:00–09:20	Welcome address	Sue Hill , Director, Department of Essential Medicines and Health Products, WHO
	WHO and Assistive Technology [AT]	Sarah Garner , Coordinator: Unit of Innovation, Access and Use
	The GATE initiative and the GREAT Summit	Chapal Khasnabis , Programme Manager, Global Cooperation on Assistive Technology [GATE]
09:20–10:30	What AT means to us and what we need from the GREAT Summit	Gopal Mitra , UNICEF Sana Hafeez , Fauji Foundation Hospital Thomas Ongolo , African Union Commission Thomas Nabarro , Intel Corporation Arnt Holte , International Disability Alliance Joshco Wakaniyasi , Fiji Disabled Persons Federation Diana Hiscock , HelpAge International Chris Holmes , UK All-Party Parliamentary Group on Assistive Technology

10:30–11:00 Tea/coffee

Session 2: Research – group work on GATE thematic research areas

Summit Facilitators: Marcia Scherer and Mac MacLachlan

11:00–11:10	Rapid overview GATE thematic research areas	Marcia Scherer , University of Rochester and Mac MacLachlan , Maynooth University
11:10–11:20	The global AT Research Agenda	Luc de Witte , Sheffield University
11:20–11:30	Group formation	
11:30–12:30	BREAK OUT SESSIONS What is needed for research to be able to answer the key questions? What's the next step?	Group 1: People Group 2: Products Group 3: Provision Group 4: Personnel Group 5: Policy

Thursday, 3 August 2017, WHO Headquarters, Geneva CONTINUED

12:30–13:30 Lunch

Session 3: Research – group feedback

Moderator: Gubela Mji, University of Stellenbosch

13:30–14:20 Feedback from the five groups **Rapporteurs**

14:20–14:50 Discussion **Moderator**

14:50–15:00 Need for and benefit of an AT research infrastructure **Mac MacLachlan**

15:00–15:30 Tea/coffee

Session 4: Innovation – comparative perspectives

Moderator: Alex Mihailidis, AGE-WELL Network of Centres of Excellence

15:30–17:30 Demand and supply **Hala Sakr, Adham Moneim and Malek Qutteina, WHO Eastern Mediterranean Region**

Partnerships **Vicki Austin and Catherine Holloway, Global Disability Innovation Hub**

Market shaping **Emma Hannay, Acasus**

Good practice example: Zero Project **Michael Fembek, The Zero Project**

QUESTION AND ANSWER SESSION

WHO AT assessment toolkit **Johan Borg, WHO Consultant**

Operationalization of AT assessment toolkit (example from Bangladesh) **Liem Nguyen, University of Melbourne**

International standards and the APL **Karl-Erik Westman and Joakim Falk, International Organization for Standardization (ISO)**

Advanced assistive technology **Michelle Johnson, University of Pennsylvania**

QUESTION AND ANSWER SESSION

Conclusions Moderator

18:00–19:30 Informal networking over refreshments: Winter garden, WHO

GREAT Summit Friday, 4 August 2017

09:00–09:10 Review and preview **Marcia Scherer and Mac MacLachlan**

Session 5: AT education and certification – current and future perspectives

Moderator: Jeanne Kagwiza, University of Rwanda

09:10–10:30 AT education and certification in North America **Roger Smith**, Rehabilitation, Engineering and Assistive Technology Society of North America [RESNA]

Education and certification in less resourced settings – mobility example **Ritu Ghosh**, Mobility India

Education and certification in less resourced settings – vision example **Liz Smith**, EYElliance

Non-formal education in Norway **Jytte Jepsen**, Norwegian Labour and Welfare Administration

AT education at the community level in Papua New Guinea **Almah Kuambu**, PNG National Orthotic and Prosthetic Services

AT education at the community level in Argentina **Silvana Contepomi**, Argentine Association of Assistive Technologies

Summary **Chapal Khasnabis**, GATE

10:30–11:00 Tea/coffee

Session 6: AT service provision – country perspectives

Moderator: Linamara Battistella, University of Sao Paulo

11:00–12:00 Malawi **Peter Ngomwa**, Malawi Council of the Handicapped

Ecuador **Ana Lucia Arellano**, Latin American Network of Non-Governmental Organizations of Persons with Disabilities and their families [RIADIS]

China **Xiangyang Hu**, China Disabled Persons Federation

Qatar **David Banes**, Consultant

Norway **Terje Sund**, Norwegian Labour and Welfare Administration

Summary **Chapal Khasnabis** [GATE]

12:00–13:00 Lunch



Session 7: AT service delivery systems

13:00–13:10	BREAK OUT SESSIONS Form into five groups	Mac MacLachlan and Marcia Scherer
13:10–14:30	AT education: what next? [three groups]	Education 1: Formal qualification pathways and continuing professional development CPD Education 2: Non-formal pathways including user’s knowledge and expertise Education 3: Certification, credentialing and competencies
	AT service delivery [two groups]	AT service delivery 1: Assessment and service delivery AT service delivery 2: Procurement and supply chain

14:30–15:00 Tea/coffee

Session 8: Group feedback and next steps

Moderators: Marcia Scherer and Mac MacLachlan

15:00–15:50	Feedback from the five groups	Rapporteurs
15:50–16:00	Summary of Innovation Snapshots	Natasha Layton
16:00–16:30	Next steps	Summit Facilitators
16:30–17:00	Summary, key messages, conclusion and closing	Summit Facilitators and WHO team



Appendix B – List of participants, GREAT Summit

3–4 August 2017, WHO Headquarters,
Executive Boardroom, Geneva, Switzerland

Michael	ALLEN	Sunil	DEEPAK
Najla	ALMISSALATI	Max	DENEU
Liliana	ALVAREZ	Deon	DE VILLIERS
Renzo	ANDRICH	Luc	DE WITTE
Wei Tech	ANG	Deirdre	DESMOND
Ana Lucia	ARELLANO	Bishnu Maya	DHUNGANA
Vicki	AUSTIN	David	DIKTER
David	BANES	Mohamed	DIOURI
Linamara Rizzo	BATTISTELLA	Brian	DONNELLY
Stephen	BAUER	EA	DRAFFAN
Jacob	BENTLEY	Arne	EIDE
Jerome	BICKENBACH	Fardous	ELGABALY
Avi	BLAU	Linda-Jeanne	ELSAESSER
Richard	BODEN	Liezel	ENNION (WEGNER)
Fleur Heleen	BOOT	John	ETIDAU
Johan	BORG	Joakim	FALK
Aase	BRANDT	Michael	FEMBEK
Michael	BROGIOLI	Priska	FLEISCHLIN
Ayesha	BUTT	Pamela	GALLAGHER
Jerome	CANICAVE	Yasmin	GARCIA MENDEZ
Dianne	CHAMBERS	Pierre	GAUTHIER
Robyn	CHAPMAN	Ritu	GHOSH
Tsitsi	CHATAIKA	Lynn	GITLOW
Nachiappan	CHOCKALINGAM	Mary R	GOLDBERG
Dechen	CHOIPHEL	Rosie	GOWRAN
Firoz Shalauddin	CHOWDHURY	Nora	GROCE
David	CONSTANTINE	Sana	HAFEEZ
Sharmini	CONSTANTINESCU	Abderrazak	HAJJIOUI
Silvana	CONTEPOMI	Takashi	HANDA
Rory	COOPER	Emma	HANNAY
Gerald M	CRADDOCK	Mark	HARNISS
Esther	DAKIN	Izhar Ul Haq	HASHMI
Guilherme	DE AZAMBUJA LIRA	Khaled	HASSINE

Yan	HE	Peter MG	NGOMWA
Aoife	HEALY	Liem	NGUYEN
Yvonne	HEERKENS	Thomas	ONGOLO
Luc	HENDRICKX	Jon	PEARLMAN
Diana	HISCOCK	Silvia	PEREL-LEVIN
Philip	HOARE	Katherine	PERRY
David	HOBBS	Cecilia	PETTERSSON
Catherine	HOLLOWAY	Jutamat	PINITLERTSAKUN
Chris	HOLMES	Thais	POUSADA
Arnt	HOLTE	Rajendra	PRASAD
Evert-Jan	HOOGERWERF	Malek	QUTTEINA
Tracey	HOWE	Mohammad Golam	RABBANI
Syed Muhammad	ILYAS	Vinicius Delgado	RAMOS
Takenobu	INOUE	Moran	RAN
Alice	INMAN	Robert	RANSOM
Yih-Kuen	JAN	PVM	RAO
Jytte	JEPSEN	Aijaz	RATHER
Michelle	JOHNSON	Michael	RECHSTEINER
Philip	JORDAN	Thierry	REGENASS
N Jeanne	KAGWIZA	Karen	REYES
Keoke	KING	Hanne	ROHDE
Friedbert	KOHLER	Elsje	SCHEFFLER
Jonathon	KRUGER	Marcia	SCHERER
Almah	KUAMBU	Christian	SCHLIERF
Natasha	LAYTON	Nicky	SEYMOUR
Ritchard	LEDGERD	Sam	SIMPSON
Kong	LEI	Dusan	SIMSIK
Liliana	LEVINTON	Emma	SMITH
Siobhan	LONG	Elizabeth	SMITH
Jose Augusto	LOPES	Roger	SMITH
Maurice	MABANZA	Sujatha	SRINIVASAN
Malcolm	MACLACHLAN	Andre Tadeu	SUGAWARA
Hasheem	MANNAN	Terje	SUND
Katerina	MAVROU	Kiu	TAY- TEO
Rachael	MCDONALD	Kristien	VAN ACKER
Trish	MACKEOGH	Joshco	WAKANIYASI
Alex	MIHAILIDIS	Karl-Erik	WESTMAN
William C	MILLER	Sam	WU
Ray	MINES	Meng	XIAO
Gopal	MITRA	Hu	XIANGYANG
Gubela	MJI	Juanjuan	YU
Inn-Hyuk	MOON	Susan	ZAPF
Jan	MONSBAKKEN		
Jorge Letechipia	MORENO		
Thomas	NABARRO		
Said	NAFAI		



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#BridgeTheGap

The **GATE** Initiative