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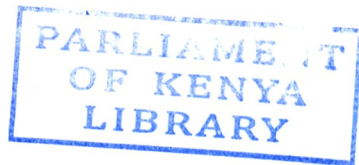


PARLIAMENT OF KENYA



12<sup>TH</sup> PARLIAMENT- SECOND SESSION- 2018

paper laid by the  
Chair, Parliamentary  
Board Casting & Library  
Committee  
mrf  
Tuesday, August 9, 2018



THE NATIONAL ASSEMBLY

JOINT DELEGATION OF THE COMMITTEES  
ON PARLIAMENTARY BROADCASTING AND LIBRARY  
AND  
THE DEPARTMENTAL COMMITTEE ON INNOVATION, COMMUNICATION  
TECHNOLOGY

REPORT OF THE 2<sup>ND</sup> ARTIFICIAL INTELLIGENCE FOR GOOD GLOBAL  
SUMMIT OF THE COMMITTEE ON PARLIAMENTARY BROADCASTING AND  
LIBRARY HELD AT ITU HEADQUARTERS IN GENEVA, SWITZERLAND FROM  
15<sup>TH</sup>-17<sup>TH</sup> MAY 2018.

CLERK'S CHAMBERS  
DIRECTORATE OF COMMITTEE SERVICES  
NATIONAL ASSEMBLY PARLIAMENT BUILDINGS  
NAIROBI

AUGUST, 2018

**ANNEXES**

**A. Adoption list**

**B. Committee Minutes**

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## ABBREVIATIONS

- AI Artificial intelligence
- AGI Artificial general intelligence
- SDG sustainable Development goals
- HON Honorable Member
- MP Member of Parliament
- NGO Non Governmental Organization

**CHAIRPERSON'S FORWARD**

Artificial Intelligence (AI) is advancing dramatically. It is already transforming our world, socially, economically and politically. We face a new frontier, with advances moving at warp speed. Artificial Intelligence can help analyze enormous volumes of data, which in turn can improve predictions, prevent crimes and help government's better serve people. But there are also serious challenges, and ethical issues at stake. There are real concerns about cyber security, human rights and privacy, not to mention the obvious and significant impact on the labour markets. The implications for development are enormous.

Developing countries can gain from the benefits of AI, but they also face the highest risk of being left behind. This Summit ensured that AI charts a course that benefits humanity and bolsters shared values. Kenya stands ready to be a universal platform for discussion. The delegation from the committee on parliamentary broadcasting and library of the National Assembly will make sure that Artificial Intelligence will be used to enhance human dignity and serve public good.

The National Assembly delegation to the 2018 Artificial Intelligence Summit thanks the Office of the Speaker and the Clerk of the Senate for the facilitation; planning and organization so as to attend the conference. The delegation also appreciates the Ministry of Foreign Affairs and the Permanent Mission of the Republic of Kenya to the United Nations Office in Geneva, Switzerland for their reception, hospitality, organizing, coordinating the Conference logistics.

It is my pleasant duty therefore to present the report of The Departmental Committee on Communication, Information and Innovation on the proceedings of the 2018 AI for Good Global Summit

**HON. JOASHNYAMOKO, NYAMACHE MP**

**EXECUTIVE SUMMARY**

The 2018 Artificial Intelligence forum was held from 15th – 17th May, 2018 in Geneva Switzerland and brought together participants from all over the world having been a global open public forum. Kenya was represented at the Summit by four Members of Parliament. The *AI for Good Series* is the leading United Nations platform for dialogue on AI. The action-oriented 2018 Summit identified practical applications of AI and supporting strategies to improve the quality and sustainability of life on our planet. The summit continued to formulate strategies to ensure trusted, safe and inclusive development of AI technologies and equitable access to their benefits.

While the 2017 summit sparked the first ever inclusive global dialogue on beneficial AI, the action-oriented 2018 summit focused on impactful AI solutions able to yield long-term benefits and helps achieve the Sustainable Development Goals. 'Breakthrough teams' demonstrated the potential of AI to map poverty and aid with natural disasters using satellite imagery, how AI could assist the delivery of citizen-centric services in smart cities, and new opportunities for AI to help achieve Universal Health Coverage, and finally to help achieve transparency and explain ability in AI algorithms.

Teams proposed impactful AI strategies able to be enacted in the near term, guided by an expert audience of mentors representing government, industry, academia and civil society. Strategies were evaluated by the mentors according to their feasibility and scalability, potential to address truly global challenges, degree of supporting advocacy, and applicability to market failures beyond the scope of government and industry. The exercise connected AI innovators with public and private-sector decision-makers, building collaboration to take promising strategies forward.

The report gives a detailed background of AI, its functions and the achievements and setbacks realized to date towards achieving the SDGs. It further highlights the participation, engagement and the way forward for Kenya in the AI world.

The breakaway teams engaged the participants through presentations and discussions on the following topics;

- AI and satellite imagery- Team lead: Stuart Russell, University of California at Berkeley
- AI and health- Team leads: Marcel Salathé, EPFL; Ramesh Krishnamurthy, World Health Organization (WHO); Sameer Pujari, World Health Organization (WHO); "AI for health - A Primer"
- AI and smart cities & communities- Team lead: Renato de Castro, Smart City Expert; Alexandre Cadain, ANIMA and Ecole normalesupérieure
- Trust in AI- Team leads: Huw Price, University of Cambridge; Francesca Rossi, University of Padova and IBM Research; Stephen Cave, Leverhulme Centre for the Future of Intelligence at the University of Cambridge.

On the last day in plenary, findings of each team were summarized and presented.

Consequently, from the discussions and presentations, participants made their contribution at plenary sessions and made recommendations that the AI should adopt in order to make it universal.

### **ESTABLISHMENT AND MANDATE OF COMMITTEE**

The Select Committee on Parliamentary Broadcasting and Library is established in accordance with the provisions of the new Standing Order 212 D of the National Assembly. Its mandate, as provided for in S.O. 212 D (3) is to inter-alia:-

- a. Consider and report on all matters relating to broadcasting of the proceedings of the House;
- b. Advise the House on matters related to public participation;
- c. Make reports and recommendations to the House, including proposed legislation on matters relating to broadcasting of House proceedings;
- d. Recommend to and advise the House on matters related to the provision of library, publications and research services in Parliament, including improvement of the library and research services; and
- e. Assist Members in utilizing the facilities provided by the library and research services, including use of information and communication technology.



## **COMMITTEE MEMBERSHIP**

1. Hon. Nyamoko, Joash Nyamache MP –**CHAIRPERSON**
2. Hon. Liza, Chelule, Chepkorir, MP- **VICE-CHAIRPERSON**
3. Hon. Kipkosgei, Tonui Joseph, MP
4. Hon. Gure, Anab Mohamed, MP
5. Hon, Lekumontare, LentoiJoni Jackson, MP
6. Hon. Mwaniki, Ruth Wangari , MP
7. Hon. Mwangi, James Gichuhi., MP
8. Hon. Mwangi, Jonah Mburu, MP
9. Hon. Njiru, Eric Muchangi, MP
10. Hon. Ntwiga, Patrick Munene, MP
11. Hon. Gakuya, James Mwangi, MP
12. Hon. Gakuya, Mercy Wanjiku, MP
13. Hon. Nanok, Daniel Epuyo., MP
14. Hon. Kiti, Richard Ken Chonga., MP
15. Hon. Kasalu, Irene Muthoni, MP
16. Hon. Ochieng, Pamela Awuor (Dr.), MP
17. Hon. Hassan, Zuleikha Juma, MP
18. Hon. Mwanyanje, Gertrude Mbeyu, MP
19. Hon. Gogo, Lilian Achieng (Dr.), MP
20. Hon. Makokha, Justus Murunga, MP
21. Hon. Nzengu, Paul Musyimi, MP
22. Hon. Hiribae Said Buya, MP.
23. Hon., Lilian Cheptoo Tomitom , MP

**COMMITTEE SECRETARIAT**

1. Mr. Johnston Kioko, Clerk Assistant II (Lead Clerk)
2. Mr. Hassan Abdullahi Arale, Clerk Assistant III
3. Ms. Marlene Ayiro, Legal Counsel
4. Ms. Lorna Okatch, Research Officer
5. Mr. Ndemo Atunga, Serjeant at Arms

## **COMPOSITION OF DELEGATION**

The delegation comprised of the following Members and Parliamentary officers:-

1. Hon. Nanok, Daniel Epuyo., MP— **Leader of delegation ( parliamentary broadcasting and library**
2. Hon. John Kiarie Waweru, Mp – **Leader of delegation( ICT)**
3. Hon. Alfah Ondieki Miruka, Mp– Member
4. Hon. Gakuya, Mercy Wanjiku, MP-- Member
5. Hon. Hassan, Zuleikha Juma, MP-- Member
6. Hon. Makokha, Justus Murunga, MP-- Member
7. Hon. Liza Chepkorir Chelule, Mp– Member
8. Hon. Erastus Kivasu Nzioka, Mp– Member
9. Mr. Nicolas Lonyuko Emejen – Deputy Director Committees
10. Ms. Lorna Atieno Okatch–**Secretary to the Delegation**
11. Mr. Hassan Abdullahi Arale- **Secretary to the Delegation**

## **1.0 INTRODUCTION**

The Summit comes at a critical time and should help increase policymakers' awareness of the possibilities and challenges associated with AI. The downside is that it may encourage undue optimism, by giving short shrift to the significant risks that AI poses to international security.

Although many policymakers and citizens are unaware of it, narrow forms of AI are already here. Software programs have long been able to defeat the world's best chess players, and newer ones are succeeding at less-defined tasks, such as composing music, writing news articles, and diagnosing medical conditions. The rate of progress is surprising even tech leaders, and future developments could bring massive increases in economic growth and human well-being, as well as cause widespread socioeconomic upheaval.

The forum provided a much-needed opportunity to discuss how AI should be governed at the global level—a topic that has garnered little attention from multilateral institutions like the United Nations. The draft program promises to educate policymakers on multiple AI issues, from sessions on “moonshots” to ethics, sustainable living, and poverty reduction, among other topics. Participants included prominent individuals drawn from multilateral institutions, nongovernmental organizations (NGOs), the private sector, and academia.

## 2. O BACKGROUND

The *AI for Good Series* is the leading United Nations platform for dialogue on AI. The action-oriented Summit which identifies practical applications of AI and supporting strategies to improve the quality and sustainability of life on our planet. The summit continued to formulate strategies to ensure trusted, safe and inclusive development of AI technologies and equitable access to their benefits.

This inclusivity is typical of the complex governance models that increasingly define and shape global policymaking—with internet governance being a case in point. Increasingly, NGOs, public-private partnerships, industry codes of conduct, and other flexible arrangements have assumed many of the global governance functions once reserved for intergovernmental organizations. The new partnership between ITU and the XPRIZE Foundation suggests that global governance of AI, although in its infancy, is poised to follow this same model.

For all its strengths, however, this “multi-stakeholder” approach could afford private sector organizers excessive agenda-setting power. The XPRIZE Foundation, founded by outspoken techno-optimist Peter Diamandis, promotes technological innovation as a means of creating a more abundant future. The summit’s mission and agenda hews to this attitude, placing disproportionate emphasis on how AI technologies can overcome problems and too little attention on the question of mitigating risks from those same technologies.

This is worrisome, since the risks of AI are numerous and non-trivial. Unrestrained AI innovation could threaten international stability, global security, and possibly even humanity’s survival. And, because many of the pertinent technologies have yet to reach maturity, the risks associated with them have received scant attention on the international stage.

One area in which the risk of AI is obvious is electioneering. Since the epochal June 2016 Brexit referendum, state and non-state actors with varying motivations have used AI to create and/or distribute propaganda via the internet. An Oxford study found that during the recent French presidential election, the proportion of traffic originating from highly automated Twitter accounts doubled between the first and second rounds of voting. Some even attribute Donald J. Trump’s victory over Hillary Clinton in the U.S. presidential election to weaponized artificial intelligence spreading misinformation. Automated propaganda may well call the integrity of future elections into question.

Another major AI risk lies in the development and use of lethal autonomous weapons systems (LAWS). After the release of a 2012 Human Rights Watch report, *Losing Humanity: The Case Against Killer Robots*, the United Nations began considering including restrictions on LAWS in the Convention on Certain Conventional Weapons (CCW). Meanwhile, both China and the United States have made significant headway with their autonomous weapons programs, in what is quickly escalating into an

international arms race. Since autonomous weapons might lower the political cost of conflict, they could make war more commonplace and increase death tolls.

A more distant but possibly greater risk is that of artificial general intelligence (AGI). While current AI programs are designed for specific, narrow purposes, future programs may be able to apply their intelligence to a far broader range of applications, much as humans do. An AGI-capable entity, through recursive self-improvement, could give rise to a super intelligence more capable than any human—one that might prove impossible to control and pose an existential threat to humanity, regardless of the intent of its initial programming. Although the AI doomsday scenario is a common science fiction trope, experts consider it to be a legitimate concern.

Given rapid recent advances in AI and the magnitude of potential risks, the time to begin multilateral discussions on international rules is now. AGI may seem far off, but many experts believe that it could become a reality by 2050. This makes the timeline for AGI similar to that of climate change. The stakes, though, could be much higher. Waiting until a crisis has occurred to act could preclude the possibility of action altogether.

Rather than allocating their limited resources to summits promoting AI innovation (a task for which national governments and the private sector are better suited), multilateral institutions should recognize AI's risks and work to mitigate them. Finalizing the inclusion of LAWS in the CCW would constitute an important milestone in this regard. So too would the formal adoption of AI safety principles such as those established at the Beneficial AI 2017 conference, one of the many artificial intelligence summits occurring outside of traditional global governance channels.

Multilateral institutions should also continue working with non-traditional actors to ensure that AI's benefits outweigh its costs. Complex governance arrangements can provide much-needed resources and serve as stopgaps when necessary. But intergovernmental organizations, as well as the national governments that govern them, should be careful in ceding too much agenda-setting power to private organizations. The primary danger of the AI for Good Global Summit is not that it distorts perceptions of AI risk; it is that Silicon Valley will wield greater influence over AI governance with each successive summit. Since technologists often prioritize innovation over risk mitigation, this could undermine global security.

### 3.0 SUMMARY OF THE SUMMIT PROCEEDINGS

The breakaway teams engaged the participants through presentations and discussions on the following topics;

#### 3.1.1 Team 1 : AI + Satellite Imagery

The team was led by Stuart Russel, discussed how satellite imagery together with artificial intelligence and machine learning can help meet the Sustainable Development Goals (SDGs). They identified challenges to large-scale automated analyses of satellite imagery libraries that served to create partnerships among the artificial intelligence community, satellite imagery providers, research labs, and analysts, sustainable development implementers in Member States and the United Nations system, and others.

As implementing the SDGs presents enormous policy challenges this group was ambitious in its scope, it discussed artificial intelligence methods for rapid and accurate analysis of satellite imagery that can feed into decision-making processes at national levels. Informing national decision-making for sustainable development requires effective knowledge systems, linking data and information to policy across almost all sectors. Satellite imagery is particularly potent for such purposes as it can potentially measure multiple indicators repeatedly over time and across large areas. Such information allows analysis of underlying issues affecting multiple SDGs and can inform knowledge systems addressing key policy issues. Operational and digital knowledge systems of this type may be relatively far off but the elements involving satellite imagery can already be actively explored by the global research and policy communities. The team discussed how to create a framework for ‘challenges’ whereby specific satellite imagery analytical tasks are posed to the machine learning community to solve. To help focus discussions three crosscutting themes were chosen:

**Poverty: Goal 1 of the SDGs** is to “End poverty in all its forms everywhere”, and the team discussed ways to concisely map relative poverty for input into relevant models and activities. While most developed countries have rich data collection schemes for tracking wealth much of the world does not. Creating datasets depicting wealth and poverty in many developing countries is difficult and oftentimes haphazard at best. In many of the poorest areas, data is rare, and gathering such data is often time-consuming, expensive and even dangerous. Some countries have not taken a census in decades, birth rates are not recorded, and income is not well understood. Some interesting developments have occurred mapping poverty from satellite imagery and other inputs using AI. However, much more needs to be done to rapidly and accurately map wealth and poverty across all types of environments and biomes around the world, and likewise much needs to be done to better quantify relative concepts like poverty and wealth from such analytical outputs.

**Deforestation and reforestation: Goal 15 of the SDGs** is to “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.” Deforestation is a critical

problem because forests can provide about one third of the solution to climate change and are critical for species diversity. While clear cutting is the most obvious form of deforestation, forest degradation is an equal or more important threat since as forests slowly lose their density and understory, they become more vulnerable to fire and other threats and much less vibrant in terms of species diversity. Today, we cannot effectively measure the extent of the threat posed by degradation or accurately assess the effectiveness of concessions or payments made to countries or enterprises charged with protecting forests. Similarly, for restoration efforts, until the forest reaches a fairly mature state, current methods of remotely measuring tree cover are not very accurate which makes it difficult to measure the effectiveness of restoration efforts. Satellite imagery, along with aerial imagery, and AI can be used for detecting and measuring thinning of upper-story trees, detecting and measuring loss of understory trees and other vegetation, measuring changes in overall water levels, and measuring the growth of new trees in areas being restored.

**Agriculture: Goal 2 of the SDGs is to** “End hunger, achieve food security and improved nutrition and promote sustainable agriculture.” In many developing countries, local agriculture is the main source of food for rural communities as well as a vital source of income. More than 2 billion people depend on smallholder farms for their livelihoods, and disruptions to local agricultural production can have major adverse impacts on health and livelihoods. The vagaries of the weather are one risk factor, and a growing number of unusual weather events make agriculture even riskier. AI can be used to assess and understand agricultural production to avert famine, maximize market returns for smallholders, and develop tailored insurance policies to mitigate the impacts of crop failures.



### **3.1.2 Team 2: AI + Health: Artificial Intelligence – a game changer for Universal Health Coverage?**

The team leads were Marcel Salathé (EPFL); Ramesh Krishnamurthy, Senior Advisor, Department of Information, Evidence and Research, World Health Organization (WHO); Sameer Pujari, “Be Healthy, Be Mobile” Project Manager, World Health Organization (WHO)

The meeting was informed that Universal Health Coverage (UHC) was one of the SDG targets that aims at ensuring that all people can access quality health services, to safeguard all people from public health risks, and to protect all people from impoverishment due to illness, whether from out-of-pocket payments for health care or loss of income when a household member falls sick.

Artificial Intelligence applications can be a game changer to achieve Universal Health Coverage goals by empowering frontline health workers to enable early stages of diagnostic like Malaria or Cervical Cancer detection or to identify population at risk of developing non-communicable diseases like detecting diabetes/cardiac-risk from the iris, etc. Currently much of this work is done manually, limiting the frequency and scale of coverage. AI can be used also during health and natural disaster emergencies that can significantly increase the efficiency of disaster response and save more lives.

The team was tasked to:

- Identify quick-wins areas and types of AI applications that hold high-potential impact on health outcomes and that are feasible and relatively simple to deploy
- Identify bottlenecks and challenges that prevent society from taking full advantage of AI quick-wins in areas such as diagnostic, treatment, prevention or emergency response and how to possibly address those.
- Mobilize community to support a number of proof-of-concepts projects that could demonstrate impact in the short and medium term.
- Make commitment and seek feedback from health community of a global XPrize Challenge to ‘Transform Community Health through AI’ (tbc)

## **3.2 POTENTIAL DOMAINS FOR AI QUICK-WINS FOR PUBLIC HEALTH (WORKSTREAMS)**

### **3.2.1 AI for primary care and service delivery**

Artificial Intelligence can help make certain types of diagnostics almost ubiquitous, sometimes in combination with off-the-shelf cameras or smart phones. Similar tools can help guide primary-care workers through treatments that they might otherwise not have been able to offer.

*Examples:*

Diagnosis and Management of Chronic Cardiovascular, Diabetes, and Respiratory diseases  
Prediction and identification of populations at risk of non-communicable diseases, Services for high risk pregnancy and early childhood development disorders e.g., detection of hearing impairments or autism.

Cervical Cancer screening (Cervicography) and skin cancer detection, Malaria and Tuberculosis diagnosis, Snake-bite detection, Pre-diagnostics, self-assessment and remote screening (ear, nose and throat, mental health, dermatology etc.), AI-powered health consultations / telemedicine, Outbreaks, Emergency Response and Risk Reduction  
Increasingly, the earliest signs of an epidemic are digital, be it through search queries on Google, or through social media, or through patterns of movement, as can be approximated by things such as movements of mobile phones. Artificial Intelligence can help monitor the vast amounts of data that need to be examined in order to pick up the earliest possible signs.

Examples:

Analyzing satellite and drones imageries to identify measures for Disaster Risk Reduction or to assess affected areas, level of damage and efforts required.

Mining social media data for early detection of outbreaks and assessing population needs during emergencies

Better manage dispatcher centers during emergencies by filtering out redundant or less urgent calls, interacting with callers naturally, instantly transcribe and translate languages and analyze the tone of voice for urgency.

Automated responses to public health related queries for nearest care center for example particularly during epidemics and humanitarian assistance.

### **2.2.2 Health promotion, prevention, and education**

As more information about the health status of individuals becomes digital in a systematic manner, it becomes possible to monitor for conditions at a greater frequency and lower cost. Physiologically, heart rate monitors, etc. can be combined with running times. Additionally, through the use of Natural Language Processing (NLP), chat bots can help people with identifying conditions, as well as with identifying mental conditions.

Examples:

Monitor movement and activities to make recommendations to maintain mental and physical health.

In-home health monitoring and health information access to detect changes in mood or behaviour and alert caregivers.

Personalized health management to mitigate the complexities associated with multiple comorbid conditions and/or treatment interactions.

#### ***AI health policy***

Personal medical data is of a highly sensitive nature, as such, the use of artificial intelligence in health applications, which is currently still in its infancy, gives rise to a number of ethical questions, such as those relating to data privacy.

Examples:

Ethics, Equity, Privacy and data protection

New WHO Resolution on Digital Health to recognise the potential of digital technology including health, health and emerging tech such as AI - opportunities, challenges, gaps.

### **3.2.2 TEAM 3: AI AND SMART CITIES & COMMUNITIES**

Team lead: Renato de Castro, Smart City Expert; Alexandre Cadain, ANIMA and Ecole normale supérieure

The idea of a 'tailored smart city' is a very important one. We can, through AI, enhance the cultural heritage of each city to make sure that there are as many different definitions of a smart city as there are cities in the world.

The smart cities breakthrough team pitched seven projects to the summit, projects that aim to support linguistic diversity within cities, combat gender violence, enable block chain-based decision-making, and provide virtual test beds for the simulation of smart city projects.

These projects include a 'Project Zero' targeting the establishment of an 'Internet of Cities', a global network able to share the data, knowledge and expertise required to replicate successful smart city projects elsewhere in the world.

Smart Cities must place citizen needs first, earn trust. It focuses on the idea that people, citizens, can actually be the first source to help us identify problems to be a part of the bottom-up approach.

Project Zero would entail three main elements, the definition of a global repository to share best practices; the development of AI-driven simulations of city environments; and the connection of these best practices and simulations with a more human approach and one enabling 'city builder video games' empowering citizens to identify solutions to local problems.

### **3.2.3 Team 4: Trust in AI**

The team was lead by Huw Price, Francesca Rossi, Zoubin Ghahramani, Claire Craig  
Members: Stephen Cave, Kanta Dihal, Adrian Weller, Seán Ó hÉigearthaigh, Jess Whittlestone, Charlotte Stix, Susan Gowans, Jessica Montgomery  
Theme Managers: Ezinne Nwankwo, Yang Liu, Jess Montgomery

#### **The Importance of artificial intelligence (AI)**

Imagine an app that could enable farmers to achieve the most efficient use of water possible, but farmers don't use the app. It could save money and water, but they don't use it because they are not familiar with the app's developer or how the app will use their data.

Imagine two countries competing for leadership in AI. One country announces breakthroughs. The other fears it is falling behind and redirects resources in a bid to catch up, ceasing investment in ethical AI and 'AI for Good'.

Imagine a medical system able to diagnose a type of skin cancer with 95 per cent accuracy, but it uses an opaque form of machine learning. Doctors can't explain the system's decisions. The doctors one day see the system making a mistake that they never would have made. Confidence in the system collapses.

What these three examples have in common is a breakdown of trust. In each of these cases, real opportunities to use AI for good are lost. The Trust Factory will be an incubator for projects to build trust in AI, a community able to host multidisciplinary collaboration.

The meeting was informed that Artificial intelligence (AI) had the potential to dramatically accelerate the pace at which the United Nations' Sustainable Development Goals (SDGs) can be achieved. Maximising AI's potential for good will strongly depend on building trust in AI, in several dimensions. This track will focus on three dimensions of trust. Developers of AI solutions must earn the trust of communities to which such solutions are offered. AI developers and others working for beneficial AI must trust each other, across cultural, national and corporate boundaries. And AI systems themselves must be demonstrably trustworthy.

Proposed projects aim to build trust in AI's contribution to agriculture and mental health. They investigated strategies for developing countries to maintain social stability as AI-driven automation influences labour markets. They explored how the concept of trust varies across cultures, and studies how policymakers could encourage the development of trustworthy AI systems and datasets free of bias.

#### **Theme A: Building trust for beneficial AI – stakeholder communities**

- Building better care connections: establishing trust networks in AI mental healthcare – Dr. Dina Machuve (Nelson Mandela African Institute of Science and Technology and Technical Committee Member for Data Science Africa)
- Assessing and Building Trust in AI for East African Farmers: A Poultry App for Good – Irakli Beridze (United Nations Interregional Crime and Justice Research Institute, UNICRI)
- Building Trust in AI: Mitigating the Effects of AI-induced Automation on Social Stability in Developing Countries & Transition Economies

#### **Theme B: Building trust for beneficial AI – developer communities**

- Cross-cultural comparisons for trust in AI – Dr. Kanta Dihal (Leverhulme Centre for the Future of Intelligence, Cambridge)
- Global AI Narratives – Prof. David Danks (Carnegie Mellon University, CMU)
- Cross-national comparisons of AI development and regulation strategies: the case of autonomous vehicles

#### **Theme C: Building trust for beneficial AI – trustworthy systems**

- Trust in AI for governmental decision-makers – Dr.Rumman
- Chowdury (Accenture)
- Trustworthy data: creating and curating a repository for diverse datasets. Dr. Krishna Gummadi (Max Planck Institute, Saarbrücken) and Dr Adrian Weller (Leverhulme Centre for the Future of Intelligence, Cambridge and Alan Turing Institute, London)
- Cross-cultural perspectives on the meaning of ‘fairness’ in algorithmic decision making

#### 4. O OBSERVATIONS

Since the risks of AI are numerous and non-trivial. Unrestrained AI innovation could threaten international stability, global security, and possibly even humanity's survival. And, because many of the pertinent technologies have yet to reach maturity, the risks associated with them have received scant attention on the international stage.

One area in which the risk of AI is obvious is electioneering. Since the epochal June 2016 Brexit referendum, state and non-state actors with varying motivations have used AI to create and/or distribute propaganda via the internet. An Oxford study found that during the recent French presidential election, the proportion of traffic originating from highly automated Twitter accounts doubled between the first and second rounds of voting. Some even attribute Donald J. Trump's victory over Hillary Clinton in the U.S. presidential election to weaponized artificial intelligence spreading misinformation. Automated propaganda may well call the integrity of future elections into question.

Another major AI risk lies in the development and use of lethal autonomous weapons systems (LAWS). After the release of a 2012 Human Rights Watch report, *Losing Humanity: The Case Against Killer Robots*, the United Nations began considering including restrictions on LAWS in the Convention on Certain Conventional Weapons (CCW). Meanwhile, both China and the United States have made significant headway with their autonomous weapons programs, in what is quickly escalating into an international arms race. Since autonomous weapons might lower the political cost of conflict, they could make war more commonplace and increase death tolls.

A more distant but possibly greater risk is that of artificial general intelligence (AGI). While current AI programs are designed for specific, narrow purposes, future programs may be able to apply their intelligence to a far broader range of applications, much as humans do. An AGI-capable entity, through recursive self-improvement, could give rise to a super intelligence more capable than any human—one that might prove impossible to control and pose an existential threat to humanity, regardless of the intent of its initial programming. Although the AI doomsday scenario is a common science fiction trope, experts consider it to be a legitimate concern.

Given rapid recent advances in AI and the magnitude of potential risks, the time to begin multilateral discussions on international rules is now. AGI may seem far off, but many experts believe that it could become a reality by 2050. This makes the timeline for AGI similar to that of climate change. The stakes, though, could be much higher. Waiting until a crisis has occurred to act could preclude the possibility of action altogether. Rather than allocating their limited resources to summits promoting AI innovation (a task for which national governments and the private sector are better suited), multilateral institutions should recognize AI's risks and work to mitigate them. Finalizing the inclusion of LAWS in the CCW would constitute an important milestone in this regard.

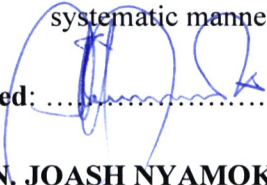
So too would the formal adoption of AI safety principles such as those established at the Beneficial AI 2017 conference, one of the many artificial intelligence summits occurring outside of traditional global governance channels.

Multilateral institutions should also continue working with non-traditional actors to ensure that AI's benefits outweigh its costs. Complex governance arrangements can provide much-needed resources and serve as stopgaps when necessary. But intergovernmental organizations, as well as the national governments that govern them, should be careful in ceding too much agenda-setting power to private organizations. The primary danger of the AI for Good Global Summit is not that it distorts perceptions of AI risk; it is that Silicon Valley will wield greater influence over AI governance with each successive summit. Since technologists often prioritize innovation over risk mitigation, this could undermine global security.

## 5.0 RECOMMENDATIONS

The Committee recommends the following, that

1. Artificial Intelligence can help analyze enormous volumes of data, which in turn can improve predictions, prevent crimes and help government's better serve people. But there are also serious challenges, and ethical issues at stake. There are real concerns about cyber security, human rights and privacy, not to mention the obvious and significant impact on the labour markets. The implications for development are enormous.
2. Kenya stands ready to be a universal platform for discussion. Kenya will have to make sure that Artificial Intelligence will be used to enhance human dignity and serve public good.
3. AI should be used to monitor for conditions at a greater frequency and lower cost as more information about the health status of individuals becomes digital in a systematic manner.

Signed:  ..... Date: 3/7/2018 .....

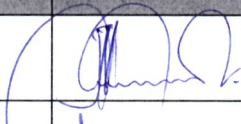


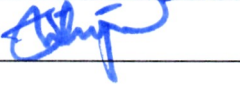
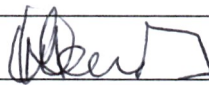
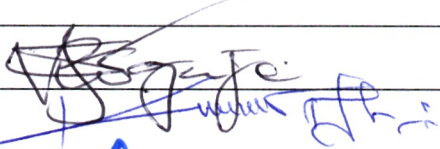
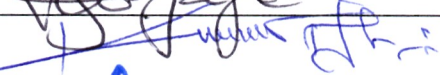
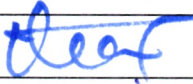

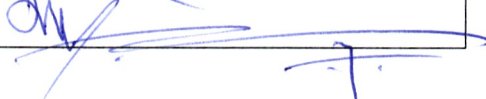
**HON. JOASH NYAMOKO, NYAMACHE MP –CHAIRPERSON  
CHAIRPERSON COMMITTEE ON PARLIAMENTARY BROADCASTING AND  
LIBRARY**

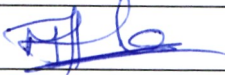
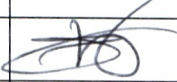


**ANNEXTURE A: ADOPTION LIST**

**COMMITTEE ON PARLIAMENTARY BROADCASTING AND LIBRARY  
ADOPTION LIST FOR THE REPORT OF THE 2<sup>ND</sup> ARTIFICIAL INTELLIGENCE  
FOR GOOD GLOBAL SUMMIT HELD AT ITU HEADQUARTERS IN GENEVA,  
SWITZERLAND FROM 15<sup>TH</sup>-17<sup>TH</sup> MAY 2018.**

**DATE: 3/7/2018      TIME: 10 .00 AM      VENUE: 9<sup>TH</sup> FLOOR HARAMBEE  
COOPERATIVE HOUSE**

	NAME	SIGNATURE
1	Hon, Nyamoko, Joash Nyamache MP, <b>Chairperson</b>	
2	Hon. Liza, Chelule, Chepkorir , MP-Vice <b>Chairperson</b>	
3	Hon. Gakuya, James Mwangi,MP	
4	Hon. Hassan, Zuleikha Juma, MP	
5	Hon. Gure, Anab Mohamed, MP	
6	Hon. Kipkosgei, Tonui Joseph,MP	
7	Hon Lekumontare, LentoiJoni Jackson., MP	
8	Hon. Nanok, Daniel Epuyo, MP	
9	Hon. Wangari, Mwaniki, MP	
10	Hon, Gakuya, Mercy Wanjiku ,MP	
11	Hon, Mwangi, James Gichuhi, MP	
12	Hon. Eric Njiru Muchangi, MP	
13	Hon. Ntwiga, Patrick Munene, MP	
14	Hon. (Dr.), Ochieng, Pamela Awuor, MP	
15	Hon, Mwanyanje, Gertrude Mbeyu MP	
16	Hon. Kiti, Richard Ken Chonga, MP	
17	Hon, Kasalu, Irene Muthoni, MP	
18	Hon, Nzengu, Paul Musyimi, MP	
19	Hon. Hiribae Said Buya, MP	

20	Hon. Makokha, Justus Murunga, MP	
21	Hon. Mwangi, Jonah Mburu MP	
22	Hon. (Dr.),Hon.Gogo, Lilian Achieng, MP	
23	Hon. Hon., Lilian Cheptoo, Tomitom MP	

**JOHNSON KIOKO**

**FOR -CLERK OF THE NATIONAL ASSEMBLY**

**ANNEXTURE B: COMMITTEE MINUTES**

**MINUTES OF THE 27<sup>TH</sup> SITTING OF THE SELECT COMMITTEE ON  
PARLIAMENTARY BROADCASTING AND LIBRARY HELD ON TUESDAY 3<sup>RD</sup>  
JULY, 2018 IN MEDIA CENTRE PARLIAMENT BUILDINGS, AT 10.00 AM.**

**PRESENT**

1. Hon, Nyamoko, Joash Nyamache MP –CHAIRPERSON
2. Hon. Liza, Chelule, Chepkorir, MP- VICE-CHAIRPERSON
3. Hon. Kipkosgei, Tonui Joseph, MP
4. Hon, Lekumontare, LentoiJoni Jackson, MP
5. Hon. Gakuya, Mercy Wanjiku, MP
6. Hon. Mwanyanje, Gertrude Mbeyu, MP
7. Hon. Kiti, Richard Ken Chonga, M.P
8. Hon. Kasalu, Irene Muthoni, MP
9. Hon. Nzengu, Paul Musyimi, MP
10. Hon. Hiribae Said Buya, MP.
11. Hon. Makokha, Justus Murunga, MP
12. Hon. Gogo, Lilian Achieng (Dr.), MP

**ABSENT WITH APOLOGY**

1. Hon. Ntwiga, Patrick Munene, MP
2. Hon. Gakuya, James Mwangi, MP
3. Hon. Hassan, Zuleikha Juma, MP
4. Hon. Njiru, Eric Muchangi, MP
5. Hon. Mwangi, James Gichuhi., MP
6. Hon. Ochieng, Pamela Awuor (Dr.), MP
7. Hon. Nanok, Daniel Epuyo., MP.
8. Hon., Lilian Cheptoo Tomitom , MP
9. Hon. Gure, Anab Mohamed, MP
10. Hon. Mwangi, Jonah Mburu, MP
11. Hon. Wangari Mwaniki, MP

**IN-ATTENDANCE**

**NATIONAL ASSEMBLY**

- |                            |   |                                 |
|----------------------------|---|---------------------------------|
| 1. Mr. Hassan A. Arale     | - | Clerk Assistant III             |
| 2. Ms. Josephine Kerubo    | - | Parliamentary Broadcasting unit |
| 3. Ms. Deborah Mupusi      | - | Media Relation Officer          |
| 4. Mr. Wilson Angatangoria | - | Serjenat at Arms                |

**MIN.NO.0101/2018: PRELIMINARIES**

The meeting was called to order at Thirty Minutes past Ten O'clock pm, after which prayer was said by Hon. Liza, Chelule, Chepkorir, M.P. after which members were all welcomed to the meeting.

**MIN.NO.0102/2018: CONFIRMATION OF MINUTES**

1. The minutes of the 11<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Kasalu, Irene Muthoni , M.P. and seconded by Hon. Kiti, Richard Ken Chonga, MP
2. The minutes of the 12<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Hiribae Said Buya, MP and seconded by Hon. Hon. Liza, Chelule, Chepkorir, M.P.
3. The minutes of the 13<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Kasalu, Irene Muthoni, MP and seconded by Hon. Liza, Chelule, Chepkorir, MP.
4. The minutes of the 14<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Lekumontare, LentoiJoni Jackson, MP and seconded by Hon. Liza, Chelule, Chepkorir, M.P.
5. The minutes of the 15<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Nzengu, Paul Musyimi, M.P. and seconded by Hon. Kasalu, Irene Muthoni , MP.
6. The minutes of the 16<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Kasalu, Irene Muthoni, MP and seconded by Hon. Nzengu, Paul Musyimi, M.P.
7. The minutes of the 17<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Hiribae Said Buya, M.P. and seconded by Hon. Nzengu, Paul Musyimi, M.P.
8. The minutes of the 18<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Nzengu, Paul Musyimi, MP and seconded by Hon. Kasalu, Irene Muthoni , MP.

9. The minutes of the 19<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Kiti, Richard Ken Chonga, M.P. and seconded by Hon. Kipkosgei, Tonui Joseph, MP
10. The minutes of the 20<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Kiti, Richard Ken Chonga, M.P and seconded by Hon. Nzengu, Paul Musyimi, M.P.
11. The minutes of the 21<sup>st</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Kiti, Richard Ken Chonga , MP and seconded by Hon. Liza, Chelule, Chepkorir , MP.
12. The minutes of the 22<sup>nd</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Liza, Chelule, Chepkorir, MP and seconded by Hon. Kipkosgei, Tonui Joseph , M.P.
13. The minutes of the 23<sup>rd</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Nzengu, Paul Musyimi , M.P. and seconded by Hon. . Kiti, Richard Ken Chonga , MP.
14. The minutes of the 24<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Kipkosgei, Tonui Joseph, MP and seconded by Hon. Nzengu, Paul Musyimi , M.P.
15. The minutes of the 25<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Kiti, Richard Ken Chonga, M.P .and seconded by Hon. Nzengu, Paul Musyimi , MP.
16. The minutes of the 26<sup>th</sup> Sitting was confirmed as a true record of the committee proceedings, and was proposed by Hon. Kipkosgei, Tonui Joseph, M.P and seconded by Hon. Nzengu, Paul Musyimi, MP.

#### **MIN.NO.0103/2018: ADOPTION OF REPORTS**

After deliberation, members adopted the report on:-

1. GSMA mobile world congress held on 26<sup>th</sup> February to 1<sup>st</sup> march 2018 in Barcelona, Spain attended by Hon. Joash Nyamoko, MP, Hon. Kasalu Irene Muthoni MP and MP, Gertrude Mbeyu, MP and Hon, Jackson Lekumontare, LentoiJoni .

2. The Visit to the National Broadcasters Show held in Las Vegas, Nevada from 5<sup>th</sup> 12<sup>th</sup> April 2018 by Hon. Joseph Kipkosgei, Tonui, MP, Hon. James Gakuya, MP, Hon Njiru Muchangi, MP and Hon. Dr. Pamela Awuor, MP.
3. On the 2<sup>nd</sup> Artificial Intelligence for Global Summit held at ITU headquarters in Geneva, Switzerland from 15<sup>th</sup>-17<sup>th</sup> May 2018 attended by Hon. Daniel Epuyo Nanok M.P, Zuleikha Hassan Juma M.P, Hon. Gakuya, Mercy Wanjiku MP and Hon. Makokha, Justus Murunga, MP, respectively.

**MIN.NO. 00104/2018: CONSIDERATION OF THE PROPOSED COMMITTEE PROGRAMME**

In line with the Committee's mandate of; Enhancing Public participation, Parliamentary Broadcasting, Library services and Research services, members resolved to carry out the following activities as part of its outreach mandate to enhance public engagement with Parliament:-

**PROPOSED ACTIVITIES**

**i. Public Lecture/Symposium at Local University**

Thematic presentations and discussion conducted by external resource persons and parliamentary personnel.

**ii. Parliamentary Exhibitions**

In a Social hall to be identified in a locality and tents set up to display/depict historical, past and current pictorials of the leadership of Parliament where the general public, including school going children, will be invited to attend and be taught about Parliament. During this event it is expected activities would be carried out including a reading competition and awards be given to the best performing students / pupils, hence encouraging a reading culture.

Public libraries in the area selected will be invited to display their materials and create awareness on the access to parliamentary information.

**iii. Community Sports Event**

A sports event which includes different sports activities to be organized where Hon. Members will play against the general public or selected organized teams on the ground, such as youth groups or local football clubs and trophies to be awarded to the winning teams. This type of interaction will enhance the relationship between Hon. Members and the general public.

It is suggested that Members of the Sports Committee (Bunge FC) to be invited to join in that activity.



#### **iv. Enhancing Parliamentary communications**

It was suggested that when visiting a particular Constituency, Hon. Members can challenge themselves to learn the native language and practice speaking as a way of appreciating different communities in Kenya and how they communicate.

Sign language, the third official language in the COK 2010 can also be publicized to the public in order to empower those that are linguistically challenged to follow House proceedings.

#### **v) Parliamentary events and Items**

##### **a) In the short term**

- i) Coverage of all committee sittings by KBC;
- ii) Participation in the Devolution Conference;
- iii) Participating in the Legislative Summits;
- iv) Participating in relevant National Days.

##### **b) In the long term**

- i. Drafting of Public Participation Bill,
- ii. Re-introduction of the Bill on the Amendment of the Books and Newspaper Act, CAP 111 of the Laws of Kenya;
- iii. Lobbying for the building of a modern Purpose-Built library;
- iv. Establishment of a Parliamentary Museum;
- v. Establishment of a Parliamentary Gift Shop;
- vi. Benchmarking to establish best practices in public participation.

##### **c) Branded Items**

- i. Parliamentary Magazines / audio visual materials
- ii. Frequently Asked Questions
- iii. Selected Fact Sheets
- iv. Parliamentary Branded Pens
- v. Branded Key Holders
- vi. T- Shirts

##### **d) County visits**

The above suggested outreach activities, if implemented, will be done on a rotational basis so as to ensure regional balance across the Country.

##### **e) Stakeholders engagement**

The Committee will involve various stakeholders in its outreach activities, such as Local Communities, Public Libraries, Schools, Universities, Media Stations, County Assemblies, Parliamentarians, Lecturers and other interested parties.

**MIN.NO. 00105/2018: ANY OTHER BUSINESS**

The chairperson read to members the list of proposed delegation for benchmarking to parliaments of United Kingdom, Northern Ireland and Canada as follows,

**UNITED KINGDOM DELEGATION**

1. Hon. Dr. Pamela Ochieng Awuor, M.P- **LEADER OF DELEGATION**
2. Hon. James Mwangi Gakuya, M.P – Member
3. Hon. James Mwangi Gichuhi, M.P- Member
4. Hon. Anab Mohamed Gure, M.P- Member
5. Hon. Said Hiribae Buya, M.P- Member
6. Hon. Justus Murunga Makhoha M.P-Member

**NORTHERN IRELAND DELEGATION**

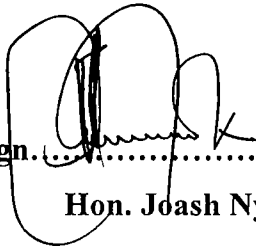
1. Hon. Nyamoko, Joash Nyamache MP –**CHAIRPERSON/HEAD OF DELEGATION**
2. Hon. Nanok, Daniel Epuyo., MP.- Member
3. Hon. Lilian Cheptoo Tomitom, MP- Member
4. Hon. (Dr.), Gogo, Lilian Achieng MP- Member
5. Hon. Mwangi, Jonah Mburu, MP- Member
6. Hon. Ntwiga, Patrick Munene, MP- Member

**CANADA DELEGATION**

1. Hon. Liza, Chelule, Chepkorir, MP- **VICE-CHAIRPERSON/ HEAD OF DELEGATION**
2. Hon. Kiti, Richard Ken Chonga, M.P- Member
3. Hon. Kipkosgei, Tonui Joseph, MP- Member
4. Hon. Lekumontare, Lentoijoni Jackson, MP- Member
5. Hon. Wangari Mwaniki, MP- Member
6. Hon. Kasalu, Irene Muthoni, MP- Member

**MIN.NO. 00106/2018: ADJOURNMENT**

The meeting was adjourned at 12.30 pm. The next meeting to be called on notice.

Sign.  ..... Date. 26/07/2018 .....

**Hon. Joash Nyamoko, Nyamache MP (Chairperson)**

