I. Background: The role of technology in advancing sport for development and peace

As recognized by the United Nations Secretary-General, sport has served as “a pioneer and promoter of inclusive and sustainable development in an unstable and unequal world.” Today, the practice of sport is deeply entwined with the use of technology, which influences how it is carried out, the equipment used, how athletes and fans travel to matches, and how it is covered by the media and enjoyed by sports fans from afar. Similarly, technology, and recently digital technology, play an increasing central role in facilitating the use of sport as a means to advance development and peace. For example, technology allows organizations across the globe to connect and exchange best practices in networks such as StreetFootball World or Laureus Sport for Good. It contributes to the creation of affordable and durable sport equipment, such as the One World Futbol. It can increase access to sport for all, including through the development of assistive technologies, such as those, promoted utilized and provided by Motivation in the UK and Jumping Kids in South Africa.

In 2020, as a result of the COVID19 pandemic, the world had to adapt to a new reality in which the usual means of practicing sports and physical activities with others was no longer possible. Global events such as the Olympic Games and regional events such as the UEFA Euro 2020 were postponed, and many community-based organizations stopped their activities. In the absence of in-person opportunities for sport and physical activity, the use of technology has become even more central in the world of sport, playing a critical role in enabling many to stay active, for example, by participating in remote online classes or utilizing dedicated fitness apps and the wearable devices. Access to such opportunities, however, has been far from universal, as 3.7 billion people, many from poor communities and in developing countries, remain offline. In some cases, other forms of technology, such as radio and television, have been used to encourage physical activity for those who lack online access. However, much work remains to overcome the world’s digital divide.
II. Multi-stakeholder Dialogue

On 15 December 2020, DESA/DISD, which houses the substantive portfolio on sport for development and peace in the UN system, organized a multi-stakeholder dialogue on the role of technology in advancing sport for development and peace. The dialogue, held in the context of the United Nations Decade of Action to deliver the Sustainable Development Goals, brought together stakeholders from different sectors with diverse backgrounds and experiences to share new research and good practices and to identify challenges, opportunities and policy recommendations on this key issue.

The purpose of the dialogue was to:
1. Take stock of contributions of technology, in its many dimensions, to sport for development and peace;
2. Share good practices;
3. Identify gaps or challenges;
4. Propose recommendations and next steps within the context of the UN Decade of Action.

This topic of the dialogue corresponded to General Assembly Resolution on Sport as an enabler of sustainable development, which “invites Member States to work together with the United Nations system and other stakeholders to increase engagement and cooperation with one another to harness digital technology to advance sport as a tool to achieve the Sustainable Development Goals and, in the context of the COVID-19 pandemic and beyond, to support sport and physical activity at home, while broadening access to sport training and physical activity opportunities via online platforms.” The Multi-stakeholder Dialogue also contributed to the 2021 session of the Commission for Social Development, with its focus on Socially just transition towards sustainable development: the role of digital technologies on social development and well-being of all.

The multi-stakeholder dialogue was an online event, consisting of an introductory session in plenary and three thematic break-out sessions on the following themes:
- Intergovernmental dialogue on sustainable and inclusive policies and building networks (Member States)
- Sharing experiences, best practices and sustainable actions during and post-Covid19
- Innovative approaches and strategies to make the world a more inclusive

The breakout sessions were led by pre-selected facilitators and included rapporteurs whose inputs are the basis for the present summary.¹ In the final session, the plenary was reconvened, and the thematic interventions briefly presented followed by open floor discussion. Participants also identified several priority areas to be addressed as part of the UN Decade of Action.

III. Summary of Discussion in Break-out Groups

The present section summarizes the discussion in the three break-out groups, guided by the questions that were posed to each.

Group A - Member State dialogue on sustainable and inclusive policies and building networks and partnerships

¹ The present report is prepared with thanks to rapporteurs Chisom Mbonu, Richard Bailey and Carol Pollack
What examples could be shared of good practices, approaches, and sustainable policies that enhance the practice of sport and physical activities among all members of society as a means to promote physical and mental health and well-being and cultivate a sport culture in society?

- Participants shared views on key approaches, tools and actors to enhance the practice of sport and physical activities among all members of society to promote physical and mental health and well-being and cultivate a sport culture in society, noting:
  - The importance of considering both high- and low-tech technological approaches for enhancing the practice of sport and physical activities.
  - The importance of promoting, at the policy level, physical education using technology to advance the use of sport by kids in every context. This requires creating adapted content for women, girls, persons with disabilities, and other social groups, and could be encapsulated at the policy level through the education system.
  - Technology can also be used to carry out awareness raising campaigns for practice of sport for health. This is a way to use social media to widen the reach of sports. Technology also brings the opportunity to scale up existing programmes. If a successful small project does not get visibility, it will help only, for example, one village. However, if it gets visibility, its reach can be expanded, and it can inspire more support from public and private sectors.
  - The role of media is also significant, as media and broadcasters can change perceptions. For example, the 2020 Women’s World Cup was very widely broadcast and this affected viewership. In France, for example, it was the top event.

- Participants also shared specific examples of good practices. For example:
  - Japan has long used technology to promote health and wellbeing. A good example is radio exercise, which was introduced by a health insurance company in 1928. This is a popular still, and broadcast daily by radio and television. Today, people can also enjoy it together with friends through an online platform that allows them to see one another, or they can meet to follow the exercises in person, in a park, socially distanced.
  - In Monaco, the Association on Peace and Sport promotes types of sport that can be practiced without equipment. They will soon launch an app that is aimed at training the trainers. This seeks to reach the most people possible.

How can the role of productive public-private partnerships for funding sport for development and peace programmes, institutional development and physical and social infrastructures be strengthened?

- Participants discussed the relationship between technology and the Olympic and Paralympic games.
  - The Tokyo games were being carried out with the slogan: “Better together for the planet and the people.” Japan is seeking use of energy savings and enhance renewable energy and considering many innovations in this regard. For example, it will use hydrogen fuel for the Olympic flame and zero emission hydrogen batteries are to be used for the cars that transport participants during the games. Japan is cooperating with the UN, for example, in its close work with the ILO to advance decent work through the Tokyo games. It was also important to work with the private sector in this regard, and Japan is also seeking to organize the games in accordance with the UN Guiding Principles on Business and Human Rights.
  - In hosting the 2026 Olympics, Italy will emphasize, as Japan is doing, equal attention to the Paralympics. In addition to the social element, Italy will emphasize attention to the planet and be very careful in terms of the environmental impact of the games. The goal is zero emission and, if possible, carbon-negative games. There are many challenges on this aspect, such as how
to address transportation and in terms of food waste and recycling. These are elements that need to be planned with attention and require investments in terms of innovation and technology, and in partnerships, as it is important to have all actors on board.

**Group B: Sharing experiences, best practices and actions during and post-Covid19**

*Sport for all people, of all ages and abilities, is a social activity that brings all people together and is a powerfully unifying tool for development and peace. What experiences and best practices can be shared regarding how traditional technologies, ICTs and digital technologies are being used and/or can be used to advance sport for development and peace during and post COVID-19?*

- Participants shared examples of digital technologies being used during the COVID19 period, inter alia:
  - Zoom technology was identified as playing a significant role in communication during pandemic times, as evidenced by its use in the UNDESA Multi-Stakeholder Dialogue with people from across the world.
  - UNICEF designed an effective digital project for exercises and activities with tailored messaging for children to ensure they were included in physical activities during the times of social isolation.
  - Laureus and its partners used E-Sports to run a curriculum targeted at young gamers. The objective was to move them from E-Sports to regular sports programming.
  - National campaign videos were created during the Covid-19 period in parts of Eastern Europe. These sought to spread a message of inclusion successfully. Online sports challenges were also developed for young people and their families.
  - Social media was as a tool for the #BeActive campaign during the pandemic. The campaign demonstrated how social media (Twitter, Instagram Live, Tik Tok, Facebook) could enhance sports for development peace.

- Participants also shared examples of how non-digital technologies were being used to increase access to sport and physical activity. Examples shared included:
  - Different societies and organizations utilized outdoor screens and billboards in parks and various parts of cities to disseminate sports content and information.
  - Television was used as a medium for physical fitness classes and workouts.
  - In Nairobi, people aggregated digital content and shared them through radio because it was a cheaper option for people in under-served communities. Even though it gave no visual privilege, it was a cost-effective way to disseminate sports information.

- In terms of the role of private sector, shared examples included:
  - Nike’s role in educating girls and coaches through technology.
  - Microsoft’s design of game consoles for children with disabilities to enable them play online games.
  - BMW’s efforts to build racing wheelchairs.
  - Samsung’s partnering with swimmers with visual impairments to create swim caps that allow them to know when they are getting to pool edges.
  - Terex’s partnering with persons with disabilities to develop prosthetics that mimic mountain goats for easy hiking.
  - UEFA’s use of descriptive audio commentary at the stadiums for people with visual impairments.
In considering how the world of sport may emerge from the COVID-19 pandemic, what would be key options and sustainable actions digital technology can play to create a new era of sport and physical activities for the well-being of all?

- Participants observed that sport requires a community, and this can be grown through social media. An example is the #BeActive campaign developed by WHO and FIFA. These messages must be adjusted and targeted at the demographic in focus.

- Participants also noted that for digital technology to best contribute to a new era of sport and physical activity, there was a need for increased access to technology for all, including:
  - Ensuring access to the many communities worldwide that lack access to basic technology such as WiFi, cellphones, computers and other tools. This especially includes people in under-served communities across the globe.
  - Ensuring affordability: Current technologies are too expensive, and there should be plans for cheaper and affordable options.
  - Ensuring digital accessibility: A lot is known globally about physical accessibility of sports but not much about digital accessibility. Persons with disabilities should be integrated at the onset of digital-technology development and much effort should be put into educating people on digital accessibility, what it means, and its best practices.

- Participants also emphasized the need for industry experts to develop and pass on knowledge, particularly given the lack of education on new technologies.

**Group C: Innovative approaches and strategies to make the world a more inclusive place**

*Data analytics can enrich the sport and physical activity experience. How can data contribute to finding innovative solutions to make sport more inclusive and accessible leaving no country and no one behind?*

- Participants discussed ‘data’ in terms of evidence. There is a growing but disparate body of evidence related to issues of sport for development, technology, and inclusion. However, information about what constitutes good practice, and what it looks like, is much more difficult to find.

- Participants further discussed data in terms of:
  - Accessibility: A great deal of useful information is locked away in scientific journals; other information remains in specific geographical or professional areas. ‘Unblocking’ these data and making them more accessible would greatly enhance the work of stakeholders, and consequently enrich the lives of people through sport. The group also agreed that it was vitally important for different stakeholders to gather appropriate data; it was also agreed that these data need to be developed with specific goals and strategies in mind.
  - Disaggregation: There is a need for data to be disaggregated to support different groups. At the moment, most data for sport fails to do this, and, therefore, it is of limited practical value as it is too general. Stakeholders working with particular social groups, such as person with disabilities, girls and women, refugees and children, need data that specifically relates to their context.
  - Big data and AI: These are being used in a range of ways in sports. For example, it has been noted that, as everything that can be quantified can be predicted with precision using data analytics and artificial intelligence, there is the potential use of AI and data in sports for
purposes such as more effective scouting and recruitment, training and performance and analysis, maintaining player health and fitness, and broadcasting and advertising.

- Data collection: There are positive examples in terms of collection, which used to be manual and time consuming. Now, for example, at the Tour de France, ICT, such as Internet of Things, predictive analytics, and machine learning enable telling compelling stories with data such as when the main group will catch the breakaway group, average rider speed and changes in pace as sprinters dash for the finish line. These stories are told via data visualizations, available across broadcast, digital and social and enhance viewer experience including for those that cannot attend in person.

- Data to support physical activity: For example, wearable fitness trackers. There is a need to ensure that these and other technologies used in sports are inclusive by design. There have been reports that some, for instance, may not accurately track heart rates in people of color and that some don’t meet the needs of persons with disabilities by relying on incorrect assumptions about how the average person moves and exercises. Key to avoiding such situations and to finding innovative tech solutions to make sport more, not less, inclusive is the question of who is involved in the design, development and testing of technologies and making sure that those teams are diverse and inclusive. Diversity and inclusion are also critical sources of innovation.

- Participants emphasized that, to leave no country and no one behind, among other things, capacity building and partnerships are critically important to spur innovation and more home grown / local solutions and uses of data for sports.

**How does the digital divide impact the sport sector and what can be done to reduce the gap? How can technology make sport more inclusive and facilitate networks and partnerships among the private/public/civil society?**

- In terms of information and communications technologies (ICT), participants noted that:
  - The Internet and other information and communication technologies are either non-existent or very poor in many areas of the world. This digital divide impacts virtually every sector in our increasingly digital world, including sports. Digital divides are both fueled by and contribute to offline inequalities. They also prevent individual and groups from connecting more easily to learn and share from each other.
  - The benefits of innovative ICT for sports are constrained in their impact by the fact that so many don’t have access to them. In relation to access to sport and physical activity, the COVID-19 pandemic has made the impact of the divide clearer than ever. During the crisis, for example, access to ICT has enabled some to continue to safely train, be coached and even compete, as well as to safely watch sports, but others without access are missing out.

- Participants noted that, to reduce the gap, the digital divide must be bridged with:
  - Worldwide universal access. Relevant efforts and examples include:
    - the Broadband Commission for Sustainable Development has issuance of a [Global Goal of Universal Connectivity Manifesto](#), calling on world leaders and heads of industry to put universal connectivity at the very forefront of sustainable development efforts and recognize its central role in achievement of the 2030 Agenda.
    - the UNICEF/ITU initiative Giga, to connect all schools and Connect2Recover, which is helping developing countries to strengthen their digital infrastructures and ecosystems. These could be joined and supported.
o Participants also agreed that sport, as a currently popular policy concern, might be utilised to support widely goals of widescale technological coverage.

- Support to acquire digital skills.
  - Participants emphasized the role of education and the need for teachers, sports coaches, parents, and other stakeholders to be educated to make the best use of the available technology. This was not currently happening, so educational programmes were needed.

- In terms of ways forward, participants emphasized that it was critical to seize the unique momentum brought by the increased attention to the digital divide in the face of COVID-19.

How can technology make sport more inclusive and facilitate networks and partnerships among the private/public/civil society?

- Participants described a number of ways that technology can connect and support people, as well as facilitate networks and partnerships, including through:
  o Accessible and relevant materials and educational programmes. For it to provide this benefit, the digital divide must be overcome and ICTs themselves must be accessible to all, including persons with disabilities. If the ICTs as tools are more inclusive, the outcomes and impacts, including for sports, will be more inclusive.
  o Facilitation of collection and analysis of relevant and disaggregated data to support specific groups and provide quality evidence about what works and why.
  o Facilitation of capacity development related to the SDGs and sport.
  o Major sporting events can provide opportunities to introduce and trial new technologies with a wide audience rather than merely in the lab or in limited scale field tests. For example, the 2018 Winter Olympic Games in the Republic of Korea were an example of how cutting-edge ICTs were used to enhance the sporting experience for a global audience.
  o Participants noted that, in all of these cases, support and guidance from UN agencies, as well as other leaders (EU, IOC, etc.) will be vital. Experience has shown that meaningful, sustainable initiatives are rare in sport. Leadership is needed in establishing new ways of working and collaborating to mutual benefit.

IV. The Role of UNDESA and the UN System in advancing the role of technology in relation to sport for development and peace

Participants in all three break-out groups considered the ways in which UNDESA and other UN entities could support the role of technology as an enabler of sport for development and peace. Recommendations included the following:

- DESA should encourage cooperation and build networks, share practices on sport for development and peace and advocate for the SDP agenda.
  o In this regard, events such as the present multi-stakeholder dialogue could make important contributions.
  o In terms of international cooperation, the UN could help by preparing a compilation of good practices. As of now, such a study does not exist.
DESAshould continueto work with other UN entities, including through the proposed Inter-
Agency Group on Sport for Development and Peace, which could add value in terms of
expertise and feedback on how sport could be used in different contexts.

The UN could also partner with international and local sports organizations and federations for
easy access to communities.

DESA could also work with Member States to enhance activities in the field to scale
development of such efforts and to promote internet access.
The UN could acknowledge organizations that provide innovations to promote sports through
technology and use them as examples for others.

- To strengthen research in the field of sport, particularly in the context of recovering from the pandemic
and future shocks, DESA and the UN system could provide support through research and the
preparation of policy briefs, such as the inter-agency advocacy brief on the role of sport in recovering
better from COVID19. In doing so, UNDESA should involve and engage experts from different aspects of
technology and sports, including persons with disabilities, at the onset, in order to develop tailor-made
solutions.

V. Priority steps that could be taken within the context of the UN Decade of
Action to support the role of technology in advancing sport for
development and peace

Participants in all three break-out groups identified priority steps for action, as follows:

- Addressing the worlds tremendous inequality gap, including the digital divide by increasing access to
technology and the Internet.
- Building capacity on use of digital technology for sports, as well as providing education on digital
literacy.
- Developing of a methodology for inclusive and participatory design, development and testing of
technologies to ensure that those engaged are diverse and inclusive.
- Developing a methodology to measure impact of digital activities in terms of the effectiveness of sport
in advancing for development and peace, and that can be used for gathering and analysis.
- Developing partnerships to support these efforts.
Annex A – Participants

Group A

Moderator: Ms. Daniela Bas, Director, DESA/DISD
Rapporteur: Ms. Carol Pollack, Social Affairs Officer, DESA/DISD
Attendees:
- His Excellency Ambassador KIMURA Tetsuya, Permanent Mission of Japan to the UN
- Mr. Genki Yamaura, Adviser (Human Rights and Humanitarian Affairs), Permanent Mission of Japan to the United Nations
- Representative of the Principality of Monaco, Mr. Florian Botto, Second Secretary, PM of the Principality of Monaco to the UN
- Representative Mr. Lorenzo Morini, First Counsellor, Permanent Mission of Italy to the UN

Group B

Moderator: Mr. Adam Fraser, Chief Executive of Laureus Sport for Good,
Rapporteur: Ms. Chisom Mbonu-Ezeoke, Supersport and founder of Akoni TV
Attendees:
- Mr. Mathias Costa, Austrian Sport Federation of the Disabled
- Mr. Ludovic Dau, Sport and Peace
- Ms. Joanna Deagle, Centre for Access to Football in Europe (CAFE)
- Mr. Salvador de Anda, One World Play Project
- Ms. Georgia Dimitropoulou, UNODC
- Mr. Kim Encel, UNESCO
- Dr. Sarah Hilyer, Tennessee University
- Mr. Paul Hunt, Sport & Dev
- Dr. Marion Keim, Foundation for Sport Development and Peace
- Dr. David Legg, Mount Royal University
- Mr. Gabriel Mayr, consultant with DESA
- Ms. Ana Palla-Kane, University of Maryland
- Mr. Gabriel Real de Azua, International Olympic Committee
- Ms. Katia Rubio, São Paulo University - USP
- Mr. Juan Pablo Salazar, International Paralympic Committee
- Ms. Nevena Vukašinović, BCW Brussels
- Mr. Richard Way, SportWay
- Mr. Eli Wolff, Brown University

Group C

Moderator: Ms. Angela Ruggiero, Sports Innovation Lab
Rapporteur: Mr. Richard Bailey, Researcher
Attendees:
- Alberto S. Bichi, The European Platform for Sport Innovation (EPSI)
• Mr. Joe Blake-Turner, Channel4
• Mr. Victor Calise, Commissioner of the New York City Mayor’s Office for People with Disabilities
• Ms. Catherine Carty, UNESCO Chair IT Tralee
• Ms. Josephine Chau, Macquarie University
• Ms. Alexandra Chalat, Beyond Sport
• Mr. Gabor Deregan, International Fair Play Committee
• Mr. Giovanni di Cola, ILO
• Ms. Amy Farkas, Consultant
• Ms. Annie Horn, NBA
• Mr. Peter Hutton, Facebook
• Mr. Albert Manero, Limbitless Solutions
• Mr. Prince Narkortu Teye, African Sports Centre for Data, Research and Technology
• Mr. Randy Osei, Athlete Tech Group
• Mr. Ben Sanders, Sport & Dev
• Mr. Jon-Paul St. Germain, Special Olympics
• Mr. Matthew Walzer, Design for all advocate
• Ms. Ursula Wynhoven, ITU