



**Message from Mr. Kassym-Jomart Tokayev  
United Nations Under-Secretary-General  
Director-General of the United Nations Office at Geneva**

**Trieste Forum**

**“Impact of Science and Technology  
on Society and Economy”**

**Delivered on the Director-General’s behalf by  
Mr. David A. Chikvaidze, Director of the UNOG Library and  
Chairman of the Cultural Activities Committee**

**Trieste, Italy, 5 March 2013**

It gives me great pleasure to extend my best wishes to the Trieste Forum, dedicated to a most timely analysis of the impact of science and technology on our society and economy.

As it is clearly highlighted in the description of the Forum, humanity is at a crossroads. The Secretary-General of the United Nations, Mr. Ban Ki-moon, has termed the time that we are living in as the “Great Transition”. A time where the old order is changing and new arrangements are taking shape. Our world is being transformed, often at a rapid pace and without a well-defined direction. Our collective responsibility is to ensure that the eventual destination is a more peaceful sustainable and just world. A world where we use our resources responsibly and share them equally in a spirit of solidarity.

The active participation of civil society in shaping these processes of change is indispensable. I commend the World Academy of Art and Science and the partners involved in organizing the Trieste Forum for their leadership in mobilizing NGOs and other civil society actors for reflection and action on our shared challenges.

The value of science and technology in addressing today’s challenges is undisputed. But, all too often the potential remains untapped.

We have the technical knowledge and know-how to overcome food insecurity, to prevent a great number of diseases, to bring basic amenities to all, to change unsustainable production and consumption patterns, to confront the warming of our planet. Yet, still close to one billion people go to bed hungry every night. 1.5 million children die every year from easily preventable diseases. 1.5 billion people do not have access to electricity. 2.5 billion people do not have sanitation, and some 780 million people do not have access to clean water. For each human being affected, these statistics represent an individual tragedy. For us as the human family, the numbers signify a collective failure.

The Secretary-General has made linking science, technology and society a key priority. Science and technology needs to advance within society, and support the progress of society for a better world for all.

As part of a long-term strategy, a Scientific Advisory Board is being established by the Secretary-General. The objective is to bring together experts from different disciplines and regions to promote cooperation on science-related issues between United Nations agencies and with the global scientific community. The Board will help to bridge the gap between scientific knowledge and decision-makers. Political solutions must rest on a sound scientific foundation and be grounded in facts.

Our global sustainable development challenge cannot be underestimated. Less than 1,000 days remain before the 2015-deadline for the Millennium Development Goals expires. The Goals have been instrumental in lifting millions out of poverty. But much remains to be done.

At the Rio+20 Summit last June, Governments agreed to develop a sustainable development framework for generations to come. Together, we need to change the way we produce and consume. We need green economies that bring jobs and progress while protecting the planet. The Sustainable Development Solutions Network, launched by the Secretary-General last year, is one of the vehicles for the scientific community and the private sector to feed into this process for practical solutions.

The continued growth in use and reach of information and communication technologies is a defining feature of our era. It is transforming our world in education, health, Government, banking and business. There are already 6.8 billion mobile phone subscriptions in the world, a figure that is set to grow to over seven billion at the end of this year. 2.7 billion people - or some 39% of the world's population - now use the Internet.

Yet, these figures also tell us that 4.5 billion people - some two-thirds of all human beings - are offline. They remain locked out of the global pool of knowledge, business opportunities and empowerment. The global statistics mask significant regional differences. In the developing world, only 31% of the population is online, compared with 77% in the developed world. And in Africa, only 16% of people are using the Internet. It is an urgent challenge to ensure equitable and affordable access to the Internet and broadband technology.

We cannot lose sight of the importance of science and technology in the ongoing economic crisis. Most importantly, we need to create sustainable employment on a far greater scale. Close to 200 million people are currently unemployed. And of these, over 74 million are young people under the age of 25. The International Labour Organization predicts that if current trends persist, the number of unemployed worldwide will rise by 5.1 million in 2013, and by another three million in 2014. In January, the unemployment rate in the Euro area hit 11.9%.

Science and technology not only generates jobs within its own sector but is also a catalyst for jobs growth in other sectors through innovation and development. But, science and technology must be nurtured. We need to prioritize continued, well-targeted funding for research at all levels, even at a time of crisis.

I believe that education forms the bridge that can help ensure greater integration of technology and science in addressing social and economic challenges. Education of individuals so that they are receptive and able to introduce innovation. Education of societies to ensure that learning benefits all. Education is not only a basic human right; it is the engine for all progress.

Action is urgently needed. 61 million children still remain out of primary school. A similar number of adolescents are not in secondary school. And it is estimated that 1.7 million teachers are needed to achieve universal primary education by the MDG deadline of 2015.

The Secretary-General's "Education First" initiative, launched last year, provides a new United Nations platform for partnership to advance education. I encourage you all to work in support of its aims: to put every child in school, to improve the quality of learning, and to foster global citizenship.

We must ensure that science and technology contributes to the empowerment of women and girls.

The involvement and engagement of women in our information society on an equal footing with men would directly contribute to promoting the social and economic advancement of societies. It is estimated that 1.3 billion women are using the Internet as opposed to 1.5 billion men, representing 37% of all women, compared with 41% of all men. The gender gap is more pronounced in the developing world, where 16% fewer women than men use the Internet. We need supportive environments where women are enabled to be both users and contributors to science and technology.

If we are to reap the full benefits of science and technology, we must combine individual action and responsible political leadership. As individuals, we need to embrace change. Responsible leadership needs to accelerate research that supports a sustainable future, to ensure education for all to tap into knowledge, and to establish domestic and international frameworks that enable all to share the benefits of science and technology.

It is my hope that the Trieste Forum will provide fresh impetus for action at both individual and leadership levels.

I wish you successful and productive discussions.