

- **“International Standards and the Fourth Industrial Revolution”**

The theme for this year’s World Standards Day, which is annually recognized on 14 October, is “International Standards and the Fourth Industrial Revolution”. The International Electrotechnical Commission (IEC), the International Organization for Standardization (ISO), and the International Telecommunication Union (ITU) stand together and celebrate the event with the same motto. This year marks the forty-ninth time that World Standards Day will be celebrated globally. In Eritrea, the day is being commemorated for the twentieth time and through the country’s national agency, the Eritrean Standards Institution (ESI).

Just as standards were crucial during the Industrial Revolution, occurring over 250 years ago, they will also play a critical role in the “Fourth Industrial Revolution”.

The “Fourth Industrial Revolution” refers to the emerging technologies, which are blurring the traditional boundaries between the physical, digital, and biological worlds. This increased connectivity of people and things will impact the way we produce, trade, and communicate, much like steam power transformed production methods and the way of life of many societies during the Industrial Revolution.

In the 18th century, the transition from manual work to machinery and factory work raised the need for standards. For example, to replace machine parts and enable specialized mass production of components.

Today, standards will once more play a key role in the transition to a new era. The speed of change we are witnessing would not be possible without them. Innovators rely on international standards, like those produced by the IEC, ISO, and ITU, to ensure compatibility and interoperability, so that new technologies can be seamlessly adopted. They are also a vehicle to

spread knowledge and innovation globally.

The rapid pace of change being brought about by the Fourth Industrial Revolution has its challenges. Robots and artificial intelligence will take over more and more tasks previously done by humans, additive manufacturing (also known as 3D printing) will change the way we make goods and give us the ability to “print things” at home, and as everything from planes to baby monitors are connected digitally, the vulnerability of data and the consequences of a breach are growing exponentially. These are only some examples of the issues presented by a new generation of smart technologies characterized by big data, increased integration, cloud storage and open communication of devices, to name a few. International standards are a powerful way to ensure safety and minimize risk. For example, security standards can keep our data safe and deter hackers, while safety standards for robots will make it easier to interact with humans.

The Fourth Industrial Revolution has begun, but in order to seize its full potential for the betterment of society, standards are needed.