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Mainstreaming digitalization and the circular economy to achieve the SDGs, particularly responsible consumption and production

***Explanatory memorandum* submitted by the co-Rapporteurs**
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Recent decades have been characterized by an increased demand for natural resources and the associated degradation of the environment. Worldwide material consumption continues to increase rapidly, jeopardizing the overall achievement of the Sustainable Development Goals (SDGs), in particular Goal 12 on sustainable consumption and production patterns. In 2017, worldwide material consumption reached 92.1 billion tonnes compared to 87 billion in 2015. Without urgent political action, global resource extraction is projected to increase seven-fold, amounting to 190 billion tonnes by 2060 compared to 27 billion tonnes in 1970.

Consequently, transformative concepts that improve resource efficiency, reduce waste and mainstream sustainability practices across all sectors of the economy are urgently needed. The circular-economy concept represents such a departure from the dominant "take, make, use and dispose" linear model of production and consumption. It instead encourages the reuse of materials, thus decreasing the demand for new resource and energy inputs and promoting efficient and sustainable management of natural resources throughout their life cycle. In doing so, economic growth is uncoupled from unsustainable resource use and stresses on the environment in terms of extraction, and carbon emissions and waste production are minimized. Initially propagated in urban and industrial waste systems, circular processes have now spread into sectors as diverse as mining and food production.

At the same time, digitalization is progressing rapidly. Already during the World Summit on the Information Society back in 2005, the term "ICT for development" was being used: the concept focused on technology in agriculture for optimizing the use of resources, such as water, and reducing wastage. Digital technologies have the potential to contribute to the reduction of resource consumption by enabling more resource-efficient production methods. They also play a key role in accelerating access to knowledge, services and skills by offering new communication channels and innovative business models which, in turn, enable producers and consumers to make more responsible and sustainable choices and assist them in their sustainability transition from a linear to a circular economic system.

Digital solutions and adequate data management have the potential to accelerate the transition to the circular economy by:

- facilitating access to products and services
- increasing connectivity and the sharing of information
- enhancing value retention by providing information about material specifications and resource usage along the entire product life cycle and value chain
- improving the design, production, reuse, repair, disassembly and durability of products
- incentivizing service-based business models
- improving waste management
- increasing consumers' awareness and enabling them to make sustainable choices.

In an effort to address the digital divide between developed and developing countries, the "digital for development" (D4D) concept aims to utilize information and communication technologies (ICT) as enablers for sustainable development. It also seeks to promote access to affordable and secure broadband connectivity, digital literacy and digital entrepreneurship.

The draft resolution tries to answer the following questions:

- Where are we today with the adoption of circular-economy policies?
- In terms of scaling up, what constitutes an enabling regulatory and legal environment and what are the barriers to it? How can parliaments help create that enabling environment and overcome those barriers?
- How can digitalization accelerate the circular economy's potential? What are the challenges and potential solutions and what role can parliaments play in addressing them?
- What is the potential of the D4D concept in enabling a shift from linear to circular economic models?
- What can parliaments do to ensure that people's needs, with regards to technological capacity development and access to digital information services, as well as people's rights regarding data ownership and privacy, are addressed as part of digitalization?
- How can a successful shift from product-oriented business towards service models be achieved?
- How can all relevant stakeholders be incentivized to use and invest in digitalization and the circular economy? What kind of digital platforms have to be created in order to enable the transition to the circular economy?