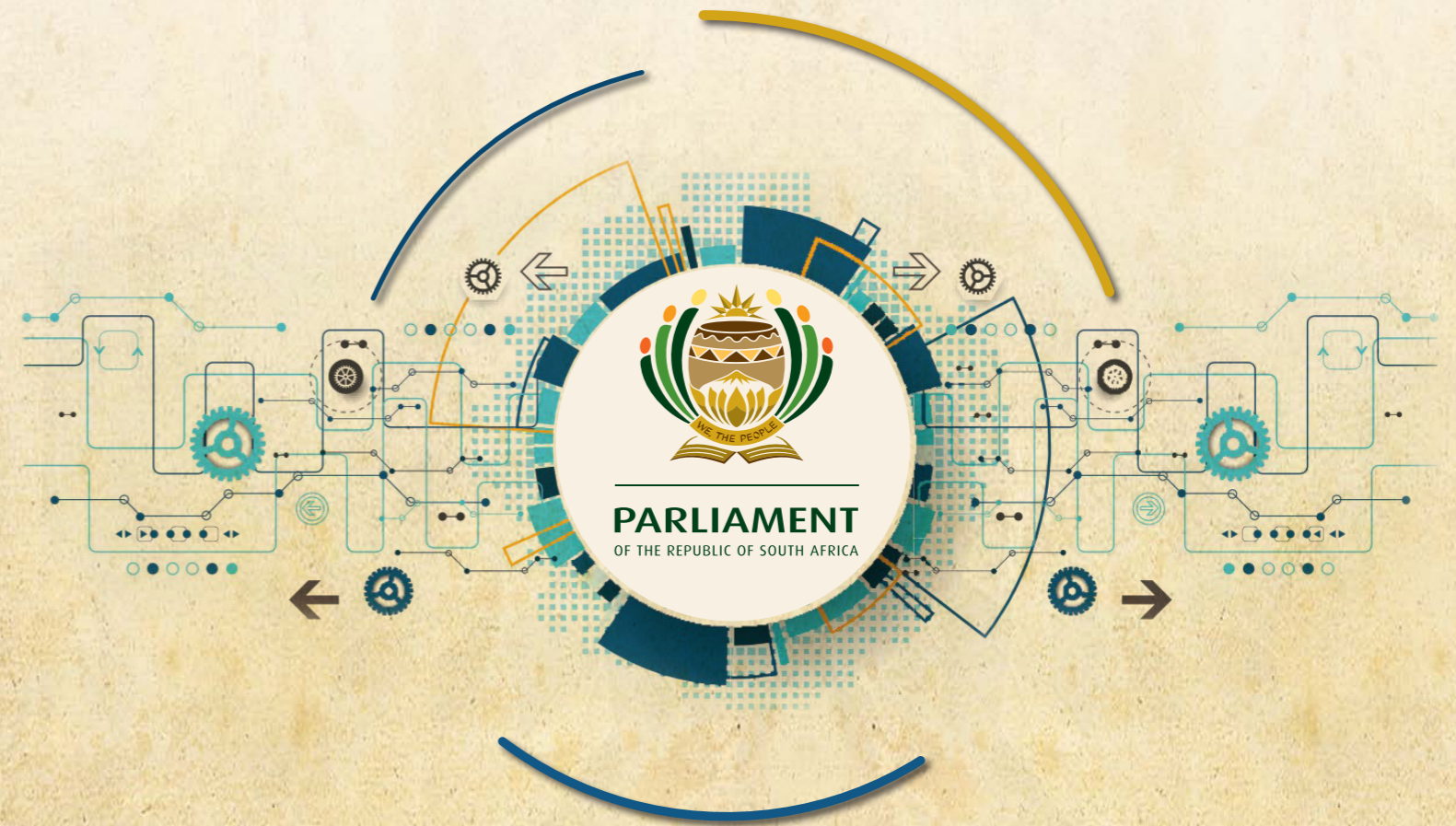## FAST FACTS

- The enhancement of the capacity of Members of Parliament and the parliamentary administration using ICT policy and

- 4th industrial revolution is a world where individuals move between digital domains and offline reality with the use of connected technology to enable and manage their lives.

- The 4th industrial revolution is preceded by the 1st - , 2nd and 3rd revolution.

  This era presents significant opportunities i.e. better access to services, new ways for citizens to connect to each other and also risks i.e. unequal access to benefits, employment displacement etc.

- Parliament has taken up the challenge of keeping the Fourth Industrial Revolution on the national agenda and also to track progress made by every societal player.

- Parliament is currently hosting a series of Round Table discussion with leading agencies and institutions that have a key role to play in gearing South Africa to benefit from it.

- Parliament also want to ascertain how it can position itself to harness opportunities and to offset negative challenges 4th industrial revolution may pose to the development agenda of our country in future.

- The enhancement of the capacity of Members of Parliament using ICT policy and governance to conduct oversight, law-making and public participation.

For more information on the services offered by Parliament, contact:
the Public Education Office on 021 403 3341 or e-mail info@parliament.gov.za

PARLIAMENT
OF THE REPUBLIC OF SOUTH AFRICA

4th
INDUSTRIAL
REVOLUTION

OPPORTUNITIES AND THREATS

WHAT IS 4th INDUSTRIAL REVOLUTION?

The Fourth Industrial Revolution, or 4th IR, is the fourth major industrial era since the initial Industrial Revolution of the 18th century. The term was coined by Klaus Schwab, founder and executive chairman of the World Economic Forum to describe a world where individuals move between digital domains and offline reality with the use of connected technology to enable and manage their lives. It is building on the Third wave, the digital revolution that has been occurring since the middle of the last century. It is characterized by a fusion of technologies that is blending the lines between the physical, digital, and biological spheres. It has brought a shift in the way that technology, communications, data, and analytics affects the way we live, work, and relate to one another.

WHAT IS PARLIAMENT DOING TO SUPPORT THE 4th INDUSTRIAL REVOLUTION?

By means of the effective execution of its oversight, law-making and public participation roles, Parliament will have to grapple with major policy choices in relation to the convergence of technologies to minimise disruption, job losses, labour displacement, as well as maximising and spreading the positive potentials available for improving the material conditions of the poor and most vulnerable in our society. These collective efforts must also ensure more inclusive growth, particularly in sectors such as economic development, trade and industry, labour, science and technology, higher education, basic education, health and communications (as the custodian of ICT within government).

Parliament will be hosting a series of roundtable discussions with the relevant government and industry stakeholders on the Fourth Industrial Revolution, in order to assess the progress made to date and the impact on the work of Parliament, state institutions, the private and business sectors and society at large and also to find ways to harness the opportunities it presents in the development agenda of South Africa in future.
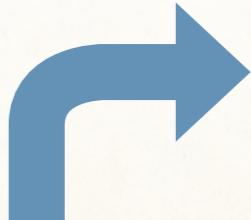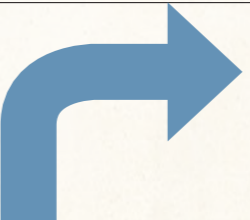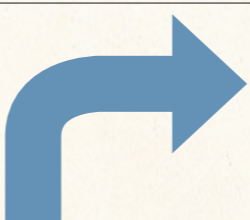
The theme of the Round Tables will be **"The Fourth Industrial Revolution – progress and its impact on the South African economy and society versus the readiness as a state".** The 1st Round Table discussion happened on the 31st May 2018, to mark Workers' Month. Several ministries participated namely, Department of Telecommunications and Postal Services (DTPS), Department of Science and Technology (DST), Department of Trade and Industry (the DTI), Department of Higher Education and Training (DHET), Economic Development Department (EDD), Department of Labour, Technology Innovation Agency (TIA), Industrial Development Corporation (IDC) and Department of Basic Education (DBE) as they are directly affected. Subsequently, a second Round Table is being planned which will be made up of a panel of experts.

These Round Tables will culminate in a National Seminar for the 4th Industrial Revolution, followed by the Provincial Roll out led by the NCOP as part of its agenda, 'Taking Parliament to the People'- Public Engagement program.

- The enhancement of the capacity of Members of Parliament and the parliamentary administration using ICT policy and governance to conduct oversight, law-making and public participation.
- Usage of 'Round Table' discussions as a platform aimed at involving the public, private sector, ICT industry and state institutions;
- Using ICT platform to find ways to build and sustain citizen engagement; and
- To unearth opportunities that will benefit the public in the spirit of embracing the 4th industrial revolution

PHASES OF INDUSTRIAL REVOLUTION FROM 1st TO 4th INDUSTRIAL REVOLUTION

			4th Industrial Revolution • Era-2000 • Focus – Cyber-Physical Production Systems • Mode: Cyber, IT intelligence, Software, Robotics, 3D and 4 D dimension etc
		3rd Industrial • Era-1960-2000 • Focus –Automate Production • Mode- Electronics	
	2nd Industrial • Era- 1900-1960 • Focus –Mass-production based on labour intensive methods. • Mode-Electricity		
1st Industrial Revolution • Era - 1760-1900 • Focus – Mechanical Production • Mode – Water , Steam • Replaced cottage industries and manual labour.			

CONCLUSION

4th IR is encompassed by risks and opportunities. Some of the risks associated with it are joblessness due to decreased demand for workers with less education and lower skills, increase in inequality, infringement of privacy and unequal access which may lead to benefits of the 4th Industrial revolution to be reaped by the wealthy. Speaker of the National Assembly, Ms Baleka Mbethe when opening the round table discussion on the 4th Industrial Revolution, acknowledged that the 4th IR would certainly alter the way we live, work and relate to each. She raised concerns around the fact that there is currently no national blue print on how to tackle the 4th Industrial Revolution.

Professor Tshilidzi Marwala, (University of Johannesburg Vice Chancellor and Principal), also emphasised that Africa cannot afford to be a spectator as with other industrial revolutions. Deputy Speaker Mr Lechesa Tshenoli reiterated that Parliament can provide guidance through best practices to craft legislation that can help to yield better research and socio-economic yields in this area. What the speakers above highlighted, shows that there is a need to strengthen the role of the legislature to be able to deal with the challenges, enact legislation and also find inclusive way to maximize the opportunities the Fourth Industrial Revolution brings and Parliament must be in the forefront to steer the ship.