

**Speech of  
Honourable Deepak Balgobin,  
Minister of Information Technology, Communication  
and Innovation**

**Mauritius Emerging Technologies Council Bill  
(Second reading)**

**National Assembly  
Republic of Mauritius**

**Wednesday, 30<sup>th</sup> June 2021**

**Mr. Speaker, Sir,**

With your permission, I beg to move that the **Mauritius Emerging Technologies Council Bill** No. 8 of 2021 be read a second time.

## 1. INTRO

**Mr. Speaker, Sir,**

It is with much enthusiasm that I wish to share my perspectives on a subject matter of utmost importance for the future of our economy and of our country.

As we would all reckon, in this new era of high Uncertainty, Complexity and Ambiguity, world economies are actively looking for sustainable solutions to socio-economic challenges through the adoption of technology across all spheres.

In that **pursuit** for enhanced economic performance and excellence, Mauritius has **relentlessly** endeavoured to embrace the latest technologies and their applications to the local context, through diverse initiatives over the past decades. These accomplishments have put Mauritius on the world map of Global Innovation and Technology and has made us a reference and a leading player in the world.

With this in mind, this Government is constantly investing in new strategies to take our ICT sector to even new heights.

We are pursuing a journey that started in the early 2000's and it is important to mention here, the visionary role and contribution of late Sir Anerood Jugnauth, who laid the foundation of the ICT sector and gave it the necessary **thrust** on its development path.

After being the driving force behind the creation of the Ebène Cybercity, Sir Anerood Jugnauth created in 2014 a dedicated Ministry where the portfolio of innovation was added to ICT, with the vision that innovation would give the necessary impetus to harness the potential of the ICT sector, for making Mauritius a high-income and inclusive economy.

***Monsieur le Président,***

*Ce n'était pas le fruit d'un hasard, que l'actuel chef du Gouvernement fut le premier ministre responsable du portefeuille de l'Innovation en décembre 2014. Cela démontre l'engagement du Gouvernement de donner à l'innovation sa lettre de noblesse et d'en faire le moyen par excellence pour mettre le pays sur la voie du progrès soutenu. .*

**Mr. Speaker, Sir,**

We are standing at a time where we need the most creative out-of-the-box thinkers, the most inventive agents of change; people with ambition and big ideas to help us disrupt, transform and solve big challenges of our time.

Indeed, the Covid-19 pandemic storming over the world is a stark reminder of the crucial role played by innovative and emerging technologies to ride out the disruption caused in key areas such as education, commerce, health sectors, entertainment, just to mention a few.

**Mr. Speaker, Sir,**

It is against this **back-drop** that I am humbled and privileged today to champion as Minister of Information Technology, Communication and Innovation, the **Mauritius Emerging Technologies Council Bill** in this august Assembly.

Here, I would like to quote the former President of the United States of America, Abraham Lincoln,

***I quote***

***The best way to predict the future is to create it.***

***End quote***

And we are creating **Tomorrow.... Today !**

The future, **Mr. Speaker, Sir**, will, without any doubt, be driven by innovation and technology as we embrace the fourth industrial revolution. A future where we will see the prevalent exploit in every sphere of our life of **dis-rup-tive** and emerging technologies such as:

- **Artificial Intelligence,**
- **Machine Learning,**
- **Big Data,**
- **Augmented and Virtual Reality**
- **Robotics,**

- **Internet of Things**
- **Blockchain,**
- **3-D printing,**
- **Digital currency,**
- **5G,** amongst others.

I am comforted and extremely confident that the forthcoming **Mauritius Emerging Technologies Council** will play a pivotal role in creating the right ecosystem for emerging technologies to become the driver of sustainable socio-economic growth.

**Mr. Speaker, Sir,**

The pressing and urgent need to integrate the use of emerging technologies are more than ever crucial for our economic resilience and upgrading of people's standard of living in the medium to long term.

As a nation, we need to embrace these emerging technologies and tap their potentials to address the challenges as well as to create new areas of gainful economic activities.

Emerging technologies, globally, are evolving at a much faster pace than the industry itself predicted.

Allow me to share some examples, **Mr. Speaker, Sir.**

## Rwanda

Let's take the case of Rwanda. One of the African countries which is really in the forefront in the adoption of emerging technologies.

In Rwanda, there is a major challenge in the delivery of blood from the blood bank to hospitals located in rural areas, due to the mountainous topography of the country and the bad state of the roads outside the capital. On average, a trip for the delivery of blood to rural hospitals by normal routes takes approximately 4 hours. And this time lag poses a life-threatening situation for patients, especially in cases of emergency.

With the adoption of emerging technologies, Rwanda is now delivering blood by drone technology to those hospitals. This is now being done in only 15 minutes.

Here, the House will appreciate how emerging technologies are helping to save lives.

## Singapore

Another example is Singapore. In order to enforce social distancing among the population since the Covid-19 pandemic, the Government has deployed one of the most advanced commercial robots.

It is a robot in the form of a dog named Spot.

“Spot” is shown roaming around in public parks and giving advice to joggers and cyclists to stand one meter apart. It has been created by an

American company as a test to show how machines and artificial intelligence could help reduce human contact in public spaces as some Governments begin to ease social restrictions.

**Mr. Speaker, Sir,**

We are living in the fourth industrial revolution. Industries 4.0 fundamentals and dynamics are very much at play in different countries worldwide, and each one of them has **adopted** and **adapted**, in their own unique and advantageous way, emerging technologies into their everyday workflows.

Automation and Robotics are transforming the manufacturing industry in a more **thriving** manner. The drone technology coupled with Big Data Analytics and AI are bringing unparalleled and unprecedented benefits to Agriculture, Construction and Healthcare sectors around the globe.

Organisations using the Internet of Things (IoT) are instantly capturing valuable data, to improve efficiency across their operations and their respective value chains, thus enhancing the experience and satisfaction for consumers at large.



## 2. IMPORTANCE OF SETTING UP THE COUNCIL

**Mr. Speaker, Sir,**

Our objective of establishing the **Mauritius Emerging Technologies Council**, is not only to harness the full potential of the ever-evolving technologies and platforms or to bridge the gaps of a fully established Industry 4.0 ecosystem, but to lay the foundation for **Industry and Society 5.0** as is the case in countries **such** as Japan, Switzerland and Finland, where digital transformation is combined with creativity and human values to develop a sustainable society.

**Mr. Speaker, Sir,**

We have to both leap-frog and step into the future, much faster than we did before. Time is of the essence if we want to play in the international league of advanced and developed countries. By channelling our serious engagements on emerging technologies through this proposed Council, we are laying the foundations for a brighter and innovative Mauritius, while establishing what will be a proud legacy for generations to come.

This Government, through the vision of our Honourable Prime Minister, firmly believes that Mauritius will continue to shine as a leading **digital** country for decades to come and establish itself as a reference for other countries.

**Our Government** will pursue all efforts in that direction.

We have also noted a visible and an increased interest of organisations getting trained on AI technologies and developing AI based solutions to be used within their respective organisations through the support of the **Mauritius Research and Innovation Council** and **Human Resource Development Council** (HRDC) amongst others.

**Robotic Process Automation**, more commonly known as **RPA**, is becoming a reality in different sectors, especially in the insurance and the Fintech sector.

The emergence of technologies performing routine processes and providing predictive analysis, in collaboration with human experts, for quicker decision-making process, is becoming more and more common in organisations these days.

### **3. THE FINANCIAL SERVICES COMMISSION**

Last week, we saw the issuance of the “**Robotic and Artificial Intelligence Enabled Advisory Services Rules**” by the Financial Services Commission. The rules provide a supportive regulatory framework for the promotion and the adoption of new and emerging technologies in the Financial Services sector in Mauritius. This initiative of the FSC can only be strengthened and supported through an organisation dedicated to emerging technologies.

#### 4. BLOCKCHAIN

**Mr. Speaker, Sir,**

Another commonly adopted and accepted technology these days in various sectors is the Blockchain Technology.

Blockchain Technology is allowing storage and exchange of sensitive data and transactions amongst stakeholders in the most cost-effective, immutable and secure manner. Which means to say, this technology is tamper-proof which gives an added comfort to organisations and individuals transacting online, using Blockchain.

This innovative technology is also making its way into Government services like the **Land Valuation Information and Management System (LAVIMS)**, which is a database of land and properties, including deeds and valuation.

The LAVIMS is currently being revamped and would incorporate Blockchain Technology so as to eliminate any potential frauds in land transactions and preserve the integrity of data.

#### 5. ARTIFICIAL INTELLIGENCE

**Mr. Speaker, Sir,**

Artificial intelligence (AI) is the simulation of human intelligence processes by machines, especially computer systems. Applications of AI include self-

driving cars, chess-playing computers, chatbots, digital assistants, or simply your Google Maps on your smartphones.

In order to prepare our next generation to adopt emerging technologies, My Ministry, through the National Computer Board, will start Robotics initiation classes for our young ones at primary and secondary schools.

We firmly believe in coding at a tender age and exposure to emerging technologies as the basis for a brighter future for our country and for years to come.

These initiatives will also kindle interest in Science, Technology, Engineering and Mathematics (STEM) subjects giving our children a solid base for their future careers in ICT and other related fields and to face the challenges of this brave new post Covid world.

In fact, our tertiary institutions are already offering degree courses in technology-related fields. For example, the *Universite des Mascareignes* is running a Masters Degree in Artificial Intelligence and Robotics, the Open University of Mauritius offers a Bachelor's Degree in Data Science and Artificial Intelligence, the University of Technology, Mauritius has a Masters Degree in Artificial Intelligence with Machine Learning and the University of Mauritius provides a Masters Degree in Artificial Intelligence.

Even students not in the mainstream tertiary education have the opportunity to follow courses on Emerging Technologies at Polytechnics Mauritius Ltd.; for example Diploma in Big Data Analytics and Diploma in Internet of Things among others.

Another application of AI is in gaming. Today, we see our children playing online games such as **Fortnite**, creating new worlds on **Minecraft** and gaming online. According to Gartner, the world's leading research and advisory company, the application of Artificial Intelligence in the gaming industry across the globe, is valued at more than 300 billion US dollars.

Opportunities are wide open for us in Mauritius to exploit the gaming industry with the developments occurring in emerging technologies including AI.

## 6. 5G

***Monsieur le Président,***

*La révolution de la connectivité dans le monde de demain c'est la 5G... C'est la cinquième génération du standard pour la téléphonie mobile, elle succède à la 3G et à la 4G. Comme prévu dans le manifeste électoral de ce Gouvernement, nous sommes à l'aube du déploiement de la 5G à Maurice. L'**Information and Communication Technologies Authority (ICTA)** a récemment octroyé les permis d'opération de la 5G aux opérateurs télécom du pays afin qu'ils puissent exploiter pleinement cette nouvelle technologie, qui nous permettra d'assister à un véritable "boom" technologique.*

*Encore une fois, Monsieur le Président, nous avons démontré que nous ne sommes pas un Gouvernement qui se **can-tonne** à des promesses creuses et vaines, mais nous nous engageons à des actions concrètes avec des objectifs définis, menant à des résultats **probants**.*

**Mr. Speaker, Sir,**

With 5G technology, we again must look at the adoption curve, by being one of the earlier countries to be enabled with 5G, and the full benefits will grow over time, will see the creation of a smarter, safer, and more sustainable, more competitive country.

## **7. WHAT WE HAVE DONE SO FAR**

**Mr. Speaker, Sir,**

Mauritius has achieved major milestones as part of this Government programme in relation to our ICT Strategy.

Last week, in the presence of the Honourable Prime Minister, the first Mauritian nanosatellite MIRSAT1 was deployed in orbit, which is without doubt a historical technological feat and a testimony of the creativity and capability of our local scientists and engineers.

***N'en déplaise à certains, Monsieur le Président, notre petite île se permet de jouer dans la cour des grands !***

**Mr. Speaker, Sir,**

We are joining the league of big nations!

Just a few months ago, in January 2021, the US Secretary of State approved the setting up of a **Bureau of Cyberspace Security and Emerging Technologies**.

With the setting up of this new council, we can say that Mauritius is on the right path and not far behind big countries like the United States.

## **8. THE NEED FOR AN EMERGING TECHNOLOGIES COUNCIL**

**Mr. Speaker, Sir,**

In fact in Budget Speech 2018/19, it had been announced that a Mauritius Artificial Intelligence Council would be set up to spearhead AI related activities and advise Government on the way forward for the development of AI in Mauritius. Whilst the setting up of the Mauritius Artificial Intelligence Council was being discussed, the challenges inherent in the adoption of emerging technologies became apparent. This prompted Government to enlarge the mandate of the Council through this Bill so as to encompass all emerging technologies and remain at the forefront of developments.

The Bill once enacted shall give the Council the mandate to accompany Government in its **digitalization** journey. The Council will be empowered to make recommendations on how to maximise the **societal** benefits of all these technologies as well as **Digital** and data-driven technologies. It will function as a connector between the Government, the technology Industry, and communities across Mauritius.

It will become a key asset in cementing our leading international status and competitiveness.

**Mr. Speaker, Sir,**

Allow me to delve in the salient provisions of the Bill.

Clause 4 of the Bill provides that the objects of the Council shall be to:

- advise the Government on the formulation of national policies and strategies in emerging technologies;
- promote the application of emerging technologies in line with national, economic and social objectives;
- advise the Government on matters related to emerging technologies with respect to their adoption, use, development, harnessing, value and wealth creation, research and innovation and capacity building;
- advise on the establishment and sustainability of an appropriate ecosystem in the field of emerging technologies; and
- facilitate and coordinate the implementation of ready-made emerging technologies solutions in Mauritius to boost the national economy.

**Mr. Speaker, Sir,**

As it can be appreciated, a holistic and inclusive approach is being adopted in the establishment of the Council. Ranging from having an advisory function to promoting and coordinating emerging technologies related activities, the Council will have an all-encompassing role so that there is no operational vacuum to ensure efficiency and effectiveness in the achievement of the stated objects.



In order for the Council to meet its objects, Clause 5 provides for the Council to act as a centre of excellence for emerging technologies, and to be responsible for the rationalisation and coordination of strategies of Government in relation to the adoption of emerging technologies. The Centre of Excellence will provide training schemes and training for professionals to master emerging technologies as well as advisory services to firms and companies on how best to tap into selected emerging technologies for growth and expansion.

It will ensure that we have the required pool of talents to pursue our different macro-economic strategies through the adoption of technology across all key sectors such as Agriculture, Healthcare, Finance, Banking, Manufacturing, Blue Economy, Leisure and recreation, amongst others.

**Mr. Speaker, Sir,**

The Council also caters for the creation of links amongst different stakeholders of the knowledge economy in the country, as well as with other regional and counterpart international institutions. It will also adopt such policies that will facilitate start-ups and support researchers, with the participation of the private sector, towards the development of businesses adopting emerging technologies.

## **9. THE CONSTITUTION OF THE COUNCIL**

**Mr. Speaker, Sir,**

Clause 7 of the Bill specifies the membership of the Council: It has been ensured to have on board people with extensive experience and expertise

in the field of emerging technologies. Thus, membership of the Council comprises representatives of relevant sectors both from private and public sectors. A representative of the Ministry responsible for the subject of industrial development will also form part of the Council to ensure the link with SMEs and the industry. A representative from the Attorney General's Office also forms part of the Council to address novel and complex legal matters related to the new and emerging technologies.

With the introduction of the Digital Rupee cryptocurrency, the Bank of Mauritius will be engaging in emerging technologies and thus become a partner of the Council in the emerging technologies ecosystem. The Bank of Mauritius will eventually be called upon to join the membership of the Council in accordance with Clause 7 (7).

The Bill at Clause 10 provides for the Council to be headed by an Executive Director who will be its Chief Executive Officer.

The permanent staff of the Council will be responsible inter alia for the technology reviews, idea generation, analysis and comparative benefit analysis with respect to the Council's objectives.

Their output will not only be a register and knowledge repository of new and emerging technologies, but for selected technologies, which will provide fully analysed impact assessments for Mauritius, and recommendations for action. The technologies will be ranked based on the Council's objectives allowing sound decisions by Government.

## 10. INDUSTRY ASSOCIATIONS

**Mr. Speaker, Sir,**

The Council will be empowered to establish other specialist committees deemed necessary to assist in fulfilling its objectives. Such committees will consist of a maximum of 4 members each.

I have consulted the industry associations to have their views on the need for the Bill. Both, the **Mauritius IT Industry Association** (MITIA) and the **Outsourcing Association of Mauritius** (OTAM) have commended the Bill and have expressed their full support to this initiative which comes at the right time to give a boost to Mauritius on its recovery path following the Covid-19 pandemic.

## 11. CONCLUSION

**Mr. Speaker, Sir,**

To conclude, I am confident that all Members of this August Assembly will appreciate the importance and the pertinence of this Bill.

The subject which is being debated today is beyond politics.

We are fully aware of the pertinence and importance of embracing the latest and emerging technologies across all sectors of the economy and society, in order to ignite the different growth vectors of our country.

In this era of fast technological evolution and where change is the only constant, Mauritius should not miss this important and historic step into building its sustainable future to enter the league of advanced nations.

Time has come for us to forge our way ahead by constituting a platform to leverage and unleash the potential of emerging technologies for the benefits of our economy and the quality of life of our people.

It is our responsibility for the future.... For the next generation.

I am sure that they will be thankful that we are taking this step today.

With these words, I commend the Bill to the House.

**Thank you, Mr. Speaker, Sir.**