



#### Dear readers,

n just a year, the COVID-19 pandemic has brought about years of change in the way governments around the world operate, calling for an acceleration in the digitalisation of services provided by the public sector. Resiliency, continuity and flexibility are key words in this post-Covid world where we are gradually implementing a shift in a way we work, adapting to new technology and new ways of doing business.

The Government's new web portal is providing essential and up-to-date information. We are using more and more video-conferencing tools such as JITSI Meet across the public sector; we have also seen more mobile apps being developed by ministries or enhanced communication through social media platforms and other digital platforms.

Since the last few months, especially during this second lockdown, we have embraced technology to adapt to our "new normal". We pursue our efforts to develop and deliver yet more digital government services while focussing on improving data privacy & protection, cybersecurity and digital inclusion policies as well as on strengthening the policy and technical capabilities of public institutions.

We hope you have a better insight of our efforts and projects while reading this second edition of our newsletter Techtalk.



Permanent Secretary

Ministry of Information Technology, Communication and Innovation

# EDITO

# TECH TALK

#### **CONTRIBUTORS**

Sandrine Valere, **Permanent Secretary** 

E-NEWSLETTER OF THE MINISTRY OF INFORMATION TECHNOLOGY, COMMUNICATION AND INNOVATION

Rajnish Hawabhay, Chief Technical Officer

Mohammad Zafroullah Noor Mohamed, Programme Manager

Vyankoj Mulloo, Government Online Centre

Poonam Ramjeawon, Mauritius Research and Innovation Council

Havina Mungun-Jhurry,

Jayraj Itoo, Mauritius Post Ltd

The Data Protection Office

Avishka Ferag, Adviser on Information Matters

#### Ministry of Information Technology, Communication and Innovation

Level 7, SICOM Tower, Wall Street, Ebène Cyber City, Ebène, Republic of Mauritius

(230) 401 3500 mtci@govmu.org Website: www.mitci.govmu.org/

#### **INTERVIEW**

#### Hon. Deepak Balgobin, Minister of Information Technology, **Communication and Innovation**

#### In what ways is the **Government accelerating the** growth of a digital economy?

The Digital Government Transformation Strategy 2018-2022 lays the foundations for the development of the digital ecosystem, which will benefit citizens, businesses and the national economy as a whole. Furthermore, capitalizing on emerging technologies will lead to the development of a more efficient and dynamic economy, and improved public service delivery.

The backbone of data sharing within Government agencies, the InfoHighway, is fast becoming a pre-requisite interface for almost every information system. My Ministry is now contemplating to extend the facilities to private institutions like banks and insurance companies for an enhanced KYC (Know-Your-Customer) service based on reliable and authenticated data.

In these troubling times of the COVID-19 pandemic, there is a need for businesses to develop resilience in order to sustain their economic situation. Technologies of the Fourth Industrial As the digital ecosystem evolves, cyberthreats are unfortunately also following at an accelerating pace. In this regard, the Computer Misuse and Cybercrime Act is being reviewed and replaced by the comprehensive and forward-looking National Cybersecurity and Cybercrime Bill to better adder ss security issues in this brave new world. Moreover, adequate security measures are being introduced in our communication infrastructure to better secure our digital ecosystem.

The National Authentication Framework or MauPass was also launched to address challenges encountered by citizens when using online services. They can become the prey of wrong doers who can transact on their behalf. MauPass provides for a better identity and access management thus creating a trusted username and password for each citizen and non-citizen to securely transact with Government.

A new Certificate Authority (CA) is in the process of being set up. The CA will deliver Digital Signatures and Digital Signature Certificates to citizens and businesses for operating more securely in the digital ecosystem.





#### INTERVIEW [CONTINUED]

#### Hon. Deepak Balgobin, Minister of Information Technology, Communication and Innovation

# How e-Government platforms are helping the emergence of a new environment in the technology ecosystem?

The trend in today's digital world is to make citizens interact with Government agencies from the comfort of their homes or rather from anywhere and at any time. In view of this changing paradigm and following the COVID-19 outbreak, mobile phones channel is heavily being harnessed by businesses as the preferred mode of communication. Businesses, large and small ones alike, have understood the importance of transacting securely with their customers through their mobile phones on the Internet for greater resilience.

Presently, the Government portal features more than 130 e-Services for citizens and businesses. Given the COVID-19 pandemic context, the trend is perceived to be upward in the future. The InfoHighway, a Government data sharing platform, will be determinant to dispense even more services between Government agencies for the convenience of our people.

The growth of a digital economy relies on a robust communication infrastructure. To that regard, Mauritius is presently connected to the world through 2 sub-marine cables, namely, the South Africa Far East (SAFE) and the Lower Indian Ocean Network (LION/LION2) sub-marine cables. By 2022, two more cables are expected to be operational. This will stimulate competition even more among ISPs further bringing down costs associated with telecommunication.

The introduction of 5G technology is also in the pipeline. In this endeavour, tests are currently being carried out by telco operators. It is expected that IOT based systems on the roads, in the medical field and in businesses, among others, will mushroom as they will have ultra-fast 5G telecommunication services for transmission of data across systems.

What is Government doing in the area of IT skills development to further the Mauritian digital nation?

The more prevalent IT services become, the more imperative is the need for qualified, talented and experienced IT professionals. One of the major challenges being faced by our IT sector is the lack of qualified local resources to fill in the jobs in the sector, especially those in emerging technologies. It is a fact that the pool of talents in Mauritius is constrained by the small size of our population and the youth need to be sensitised to take up STEM (Science, Technology, Engineering, Mathematics) subjects to orient their career path.

Accordingly, development of IT skills is a priority for Government. We are working with the public Universities for provision of IT courses in different spheres – software engineering, cyber forensics, AI, robotics, Blockchain, to name a few. Polytechnic Mauritius is also offering ICT courses meant for IT technicians and middle management officers.

IBM digital courses on emerging technologies such as Artificial Intelligence, Blockchain, Cloud computing, security and Big Data are currently being offered in public universities to better equip our youth for future jobs.

As regards our youngsters, coding courses are being given to students of grades 4 to 9 to prepare them for the world of tomorrow which will be dominated by programmable objects.



## MoKloud

TECH TALK

**Birth and marriage** certificates now accessible on MoKloud Platform



s announced in the Budget Speech 2017-2018, the Mauricloud platform would be set up for issuance and verification of documents and certificates in a digital way. In Budget Speech 2019-2020, mention was made that "To further reduce costs and avoid long queues for the population and move towards a paperless administration, Government will make available online facilities for the delivery of free copies of birth and marriage certificates".

Subsequently, the Ministry of Information Technology, Communication and Innovation implemented the Mauricloud solution, which has now been rebranded as "MoKloud", and may be accessed on https://mokloud.govmu.org. MoKloud allows citizens to access their own birth and marriage certificates from their digital locker using their computers, tablets and smartphones. The documents can be verified by institutions requesting for same. Public Officers are also able to verify the validity of the digital documents once printed. The verification process for the validity of the documents can be concluded through a link which is generated upon scanning the QR Code affixed within the respective documents.

This endeavour is in line with the digital transformation effort in the Civil Service and the vision of a less paper environment. As the MoKloud platform develops, it is expected to include documents like driving licences, academic and professional certificates, corporate and other statutory documents. A User Guide for the MoKloud platform is available on the website.



Ministry of Information Technology, Communication and Innovation



#### **MAUPASS**

#### A secured digital identity for every citizen

overnment has implemented numerous digital platforms for enhancing delivery of services during the past years. Today citizens as well as businesses can avail of several online Government services remotely from their computers, tablets or smartphones. A challenge often encountered by citizens when using these services is remembering passwords due to the use of multiple usernames and passwords, for instance.

Moreover, their passwords can fall in the hands of ill doers who can transact on their behalf without them being aware. Owing to these inconveniences, there is a need for better identity and access management in order to create a trusted ecosystem where citizens as well as non-citizens can transact securely with Government.

In response to the above challenge, the National Authentication Framework (NAF), branded as MAUPASS, has been implemented since December 2020. MAUPASS provides a timely nationwide strong authentication solution that allows citizens greater assurance when performing online transactions with Government. For sensitive or confidential transactions, this solution provides a two-factor authentication from users for an enhanced protection against online identity theft. A pin code is forwarded to the intended user to confirm his or her identity before proceeding with such transactions.

At a later stage, the MAUPASS solution will be extended to private institutions willing to securely service their customers online.

You can access the website here:

https://maupass.govmu.org/LandingPage





#### **MORENDEZVOUS**

#### Online appointments to end queues at service desks



or many businesses and public services, the public is faced with long lines and wait times. With a view to delivering ever better services to the public, Mauritius has developed its own Queue Management System. Launched this month, "MoRendezVous" has been designed to take the waiting out of the lines at Government services' desks. It blends elegantly in waiting areas and feeds users with real time information to deliver the best possible customer experience. With "MoRendezVous", Government services can take advantage of the users' smartphones with timely alerts about wait times and scheduled appointments. Users can wait anywhere they want to before their appointments.

This new service is part of the Government's commitment to trigger a digital transformation of services in Mauritius. Two online platforms namely "MauPass" and "MoRendezVous" were launched on Monday 1st of March 2021, by the Hon. Deepak Balgobin, Minister of Information Technology, Communication and Innovation, at Sicom Tower, Ebène. "MauPass" will serve as a secured online authentication for citizens to avail of various governmental e-Services. As for "MoRendezVous", it will enable the public to make online appointment at the Passport and Immigration Office and the Work Permit Unit. In addition, a ticketing service is now operational at the Pharmacy of the Dr Bruno Cheong Hospital, Flacq.

Citizens can access the mobile application "MoRendezVous" through Playstore for Android users and will be soon accessible on Appstore for IOS users. They also have the option to visit the website morendezvous.govmu.org to make an appointment at a preferred date and time.

Minister Balgobin underlined that these platforms are in line with Government's objective to facilitate the provision of public services thereby enhancing the quality of life of citizens. The e-Services will lessen administrative hassle and provide easy access to information, thereby saving time, he added.

He pointed out that some 130 governmental e-Services are accessible online, adding that the Ministry is undertaking various innovative projects with a more secured system to ease the everyday lives of the population. The Minister also indicated that more organisations will be identified to provide their services online via "MoRendezVous".

You can access the website here:

https://morendezvous.govmu.org/home

You can view the video here:

www.youtube.com/watch?v=gyq5ZTZQGOo





### **MAURITIUS POST**

#### Pensions delivered door to door during lockdown

E-NEWSLETTER OF THE MINISTRY OF INFORMATION TECHNOLOGY, COMMUNICATION AND INNOVATION

esides frontliners in the healthcare sector, employees of the Mauritius Post Ltd (MPL) have also been at the forefront in ensuring continuity of Government service delivery, within their line of duty. Armed with courage, motivation, compassion and all sanitary precautions, they have been the ones who made sure that all beneficiaries of transfer payments receive their allocations during this second lockdown. This operation, with added difficulties compared to last year's lockdown, was a challenge for the MPL team.

The whole operation was mounted and supervised by the Ministry of Information Technology, Communication and Innovation along with the Ministry of Social Security and National Solidarity. However, the success of the deliveries wouldn't have been possible without the support of the Mauritius Police Force. During the first week of lockdown, pension have been distributed to those beneficiaries who have not been able to collect their pension at the Post Office.



Such beneficiaries were found both in red and green zones alike. It took the MPL team four days to complete the deliveries. For the second phase of the deliveries, only those who live in the red zones received their pension at their door, as those who live in the green zone were able to collect their pension at the post offices following alphabetical order application during lockdown.

The delivery plan, meticulously elaborated, involved staff from the headquarters of the MPL, the Post Masters of all post offices, postmen, administration staff of post offices along with police officers who accompanied the team on the field, door to door, until all deliveries were completed. Gloves, masks and sanitary gel were generously used as per the sanitary protocols. 8,645 beneficiaries in the red zone and 42,694 in the green zone have happily receive their pensions during this second lockdown. Since the 12th April 2021 all post offices have re-opened and are fully operational on the alphabetical order in place.

#### **BESAFEMORIS**

#### "Vaccination program" available on the mobile app

ith the launch of the second dose of the vaccination campaign against COVID-19 announced by the Minister of Health and Welfare, Dr Kailesh Jagutpal on April 08, 2021, the Ministry of Information Technology, Communication and Innovation has proposed new facilities to simplify the process. With the help of Mauritius Telecom, a new functionality has been added to the "BeSafeMoris" mobile application. The "Vaccination program" function allows each citizen, who has already been inoculated with a first dose of vaccine, to obtain all necessary information to proceed with the second dose.

It allows users to enter the date, location and name of their first dose of vaccine in order to schedule an appointment for the second dose. These details can also be found on the vaccination cards. The application will then give the user a new date, time and vaccination centre for the second dose. The "BeSafeMoris" mobile application is accessible via mobile phones and computers. For those who do not have access to these facilities, the Ministry of Health and Welfare has set up a "hotline", number 141, which is operational since Friday April 09,

8:30 am to 4.30 p.m. for information on the second dose and vaccination in general.





# CERTMU Cyberattacks on the rise during lockdown

he Computer Emergency Response Team of Mauritius (CERT-MU) has noted an increase in the number of incidents that are being reported on the Mauritian Cybercrime Online Reporting System (MAUCORS) during the lockdown period, imposed in Mauritius from 10th of March 2021. The trend seen is more towards online harassment, offensive contents, hack accounts, online scams and identity theft. As a result, many people have become victims to these threats and it led to the loss of money including trauma for those who were harassed online.

In this unprecedented situation, the Computer Emergency Response Team of Mauritius has been keeping a vigil on the situation and issued different alerts to public at large on different threats emanating on the Internet since the beginning of the lockdown.

General safety tips to protect from these threats have been published on the CERT-MU website <a href="http://www.cert-mu.org.mu/">http://www.cert-mu.org.mu/</a>

#### The basic tips include as follows:

- Do not respond to calls or texts from unknown numbers, or any others that appear suspicious.
- Never share your personal or financial information via email, text messages, or over the phone.
- Be cautious if you are being pressured to share any information or make a payment immediately.
- Scammers often spoof phone numbers to trick you into answering or responding. Remember that government agencies will never call you to ask for personal information or money.
- Do not click any links in a text message. If a friend sends you a text with a suspicious link that seems out of character, call them to make sure they were not hacked.
- If you are unsure if an email, text or any other communication is genuinely from a legitimate source, do not click on the link or open the attachment. Contact the organisation via their official contact channels and ask.
- Protect your passwords and login credentials, do not enter these into any websites relating to the COVID-19 virus.
- Keep your devices up-to-date.
- Keep your anti-virus up to date and run regular checks.

The incident statistics during the lockdown period (10 March till 15 April 2021) has been presented below for the reader's information.

TYPE OF INCIDENTS	N° OF INCIDENTS REPORTED
HACKING	58
ONLINE HARASSMENT	103
OFFENSIVE CONTENTS	87
SEXTORTION	17
IDENTITY THEFT	22
CYBERBULLYING	23
CYBER STALKING	6
ONLINE SCAMS & FRAUDS	30
PHISHING	3
MALWARE	1
	250

TOTAL 350



#### **MRIC**

#### **Supporting Fast Track Innovation Initiatives** and Boosting Enterprise Innovation

E-NEWSLETTER OF THE MINISTRY OF INFORMATION TECHNOLOGY, COMMUNICATION AND INNOVATION

s a result of the COVID19 pandemic, many countries, including the Republic of Mauritius, are confronted with a slow/fragile economic recovery while also dealing with issues such as food security, sustainability and adoption/development of technologies. Strong emphasis is being laid on the promotion of digital and social entrepreneurship, innovation, research and development. It is strongly believed that economies and societies that are able to strengthen their foundations, adapt to and adopt technology and innovative processes, while giving due consideration to the empowerment and mainstreaming of vulnerable groups, will flourish.

With the above background and to improve and accelerate the response to the current economic and social challenges and build further the country's resilience to unforeseen situations, the Mauritius Research and Innovation Council (MRIC) launched two calls for proposals:

- 1. The Enterprise Innovation Booster Scheme (EIBS) which is targeted at Mauritian companies, allowing them to grow, transform and be better equipped through innovation for the future and for the global market: and
- 2. The Fast-Track Innovation Initiatives (FII) aimed at supporting short-term innovative projects in thematic areas such as Emerging Sectors, Smart Agriculture, Circular Economy and Inclusive Innovation.

Under the EIBS, successful applicants could benefit from financial support amounting to 75% of the project cost and subject to a maximum of MUR 2 Million. Under the FII, successful projects could be awarded a grant of up to Rs 1M for a project duration of nine (9) months.

By the deadline for submission of applications, the MRIC received 150 applications under the FII for a project value of Rs 272 Million and 79 applications under the EIBS for a total project value of MUR 185 Million. The evaluation exercise for both schemes is currently underway and is

expected to be completed by mid-May 2021.

Mrs H. Mungun-Jhurry, Mr K Narrain, **Dr A Peedoly** Mrs P Veer Ramjeawon

Mauritius Research and Innovation Council



Successful applicants could benefit from financial support amounting to 75% of the project cost and subject to a maximum of MUR 2 Million.

MRIC received 150 applications under the FII for a project value of Rs 272 Million and 79 applications under the EIBS for a total project value of MUR 185 Million.

