5G DEMONSTRATION PROJECTS
MAXIS 5G USE CASES, LANGKAWI: FACTSHEET

Maxis eKelas VR Experience 5G Use Case

- Maxis eKelas is conducting Virtual Reality (VR) Biology classes for a focused group of students at Pusat Internet Kg Padang Wahid.
- A curated playlist that lets students virtually immerse into living cells, DNA, human anatomy & organs, all remotely guided by a teacher based in Kuala Lumpur.
- The curriculum is brought to life, by letting students virtually explore for example, the DNA strand or hold the human heart in their hands.
- Each lesson is accompanied with worksheets for students to complete.
- Students are equipped with a Virtual Reality headset complete with a unique student-friendly interface, gesture controls, embedded educational resources and simple-to-use teacher controls.
- This VR experience is designed to raise engagement and increase knowledge retention in Biology.
- Please watch the video here https://www.youtube.com/watch?v=7t37hAU1H6E
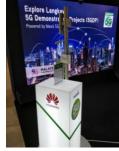

Fixed Wireless Access

- Maxis Fixed Wireless Access (FWA) harnesses the power of 5G to provide a faster Internet experiences for home and business consumers.
- Due to the wireless nature of 5G, consumers can quickly and easily setup a high speed broadband at home or the office by themselves.
- 5G FWA will be able to provide high speed internet and connectivity to areas where there are no fixed High Speed Broadband. The technology will improve productivity and enablement of new use cases such as high definition streaming 4K/8K, VR and faster internet transactions
- FWA uses a 5G Base Station and a 5G CPE (Customer Premises Equipment) to support the next generation network
- The FWA use case is currently stationed at Langkawi International Airport (LIA)

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Smart Agriculture in MARDI Agro Park

- Smart Agriculture or Smart Farming is a farming concept that helps to increase yield, resource efficiency and quality of produce by using advanced technological solutions.
- Maxis NB-IoT network allows farmers to seamlessly scale up the deployment of the solution to wider areas as it has the ability to support millions of connected sensors which consumes very low power and therefore last longer in the farms.
- The technology enables large amounts of data to be collected and advanced data analytics will help businesses make better decisions to achieve cost savings, improve efficiency and create new business opportunities.
- For example, sensors can be implemented to monitor soil moisture levels. Soil moisture analalysis can also be linked to a water irrigation system to create a system to maintain soil moisture.
- Through the use of precision agriculture enabled by Maxis NB-IoT, farmers are now able to remotely monitor their crop conditions through a web application, and receive pre-emptive alerts on the possible detrition of environmental variables, enabling them to take pre-emptive action to maximize yield value attained from the planted crop.
- Maxis is collaborating with MARDI (Malaysian Agricultural Research and Development Institute) to enable precision agriculture for grape crops.
- Please watch the video here https://www.youtube.com/watch?v=6OU1Y2Oarm0

MAXIS 5G JOURNEY

Maxis has long started its 5G journey. Over the last few years, it has been assessing the technology and conducting demo trials in its test lab. We have been upgrading our transport network to support the gigabit speeds and at the same time virtualising its core network elements for flexibility and scalability for the capacity demands of this technology. Technology testing is the first step to understanding the capabilities of 5G and what it can bring.

Major Milestones:
- **February 2019:** Maxis and Huawei signed an MoU to cooperate on full-fledged 5G trials.
- **March 2019:** Maxis commenced the first 5G live trials in the country, where we recorded close to 3Gbps download speeds.
- **April 2019**: Participated in MCMC's #5GMalaysia showcase in Putrajaya, demonstrating how 5G can enable Government and corporations to make informed decisions using the technology.
- **July 2019:** Maxis and Huawei brought its 5G showcase to Kuching at IDECS 2019.
- **October 2019**: Maxis and Huawei signed a landmark agreement for the provisioning of 5G network.
- **November 2019**: Unveiled our first use case demo at aquariaKLCC, showcasing Malaysia's first 5G Augmented Reality (AR) experience with marine life.
- **January 2020:** Demonstrated capabilities of C-band spectrum. Upon approval from MCMC to trial 200MHz of 3.5GHz C-band spectrum, we successfully achieved close to 3Gbps for single user peak speeds, recording a new high at two of its trial sites in Subang Jaya recently. The new record underlines our 5G leadership and a continuation of the many firsts that Maxis has achieved so far.