Miri Smart City Proof of Concept

The Miri Smart City Proof of Concept (POC) initiative was initiated in September 2019, following a first stakeholder workshop on 13th September 2019 between Miri City Council (hereinafter referred to as "MCC") and Sarawak Information Systems Sdn. Bhd. (hereinafter referred to as "SAINS").

The Yang Amat Berhormat Chief Minister of Sarawak in principle has approved the proposal of SAINS to implement the Miri Smart City Proof of Concept, in line with the Digital Economy initiative. In this connection, SAINS has conducted the initial study and identified the current needs of Miri City via the two subsequent workshops:

- Workshop 1: 12th December 2019 (Gathering requirements from Councillors, MCC Officers and Agencies Officers)
- Workshop 2: 6th January 2020 (Proposal presentation and finalizing the solutions).

Based on the outcome of two mentioned workshops, the proposed scope of the project was presented to Miri City Council (hereinafter referred to as "MCC") on 30th January 2020 for approval. Following this, a Memorandum of Agreement (MOA) was signed between MCC and SAINS, marking the official start of the Proof of Concept (PoC) collaboration.

The Smart City concept introduces a modern way of managing urban life and public services by addressing city challenges and promoting sustainability. For Miri, keeping up with rapid changes is essential. The Miri Smart City Proof of Concept (MSCP) includes several key solution components aimed at supporting this transformation and helping Miri achieve its vision of becoming a Green, Smart, and Most Liveable International Resort City by 2030:

1. **Miri CARES:**
   - Miri CARES is a comprehensive digital platform that serves as a single point of interaction for the public with the council. As a comprehensive call-tracking solution, Miri CARES can handle complaints from diverse channels such as phone, email, mobile apps, messaging apps, including WhatsApp. All calls are directed to the Command Centre.
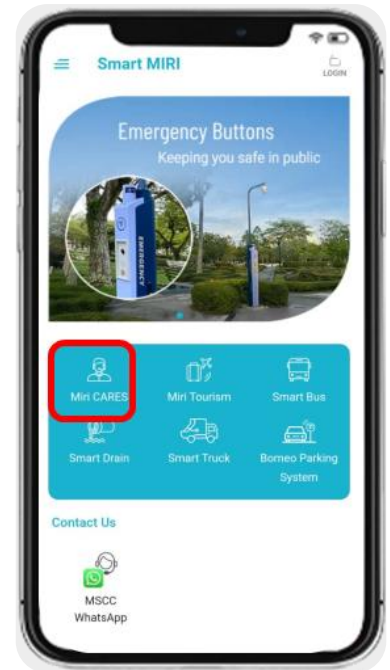

Figure 1: Miri CARES Function in the Sarawak Smart City App

2. **Smart Tourism Initiative:**
   - Miri Tourism App provides tourists with a one-stop information centre for activities and locations of interest as well as ongoing and upcoming local events in Miri, introducing tourists to Miri via a mobile application.
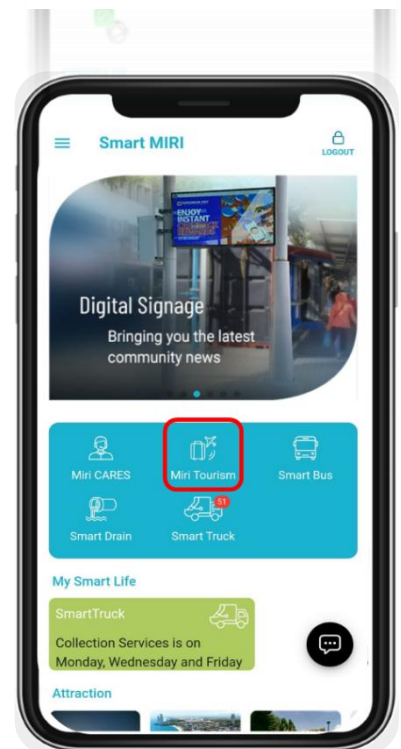

Figure 2: Miri Tourism Function in the Sarawak Smart City App

3. **Smart Truck Initiative:**

    - The Smart Truck initiative allows MCC to collect data on domestic solid waste and waste capacity to improve Miri's waste management service. Onboard cameras monitor collection activities, and a centralized platform collects data for more optimized collection planning.

Figure 3: Smart Trucks Initiative in Miri

4. **Smart Bus Initiative:**

    - The Smart Bus initiative serves to improve the Miri public transportation service through digitalization and the use of the Smart Bus mobile app. The initiative enables the public to more easily plan trips and access the City Bus Service.

Figure 4: Smart Bus Initiative in Miri

5. **Safe City and Safe Parks Initiatives:**

   - The Safe City and Safe Park initiatives combine multiple technologies including visual surveillance, intelligent recognition technology, and public emergency alarm poles to maintain public security, improve emergency service response, and improve traffic conditions in the City Centre and Community Parks.

Figure 5: Smart Poles in Miri Public Areas

6. **Smart Council Initiative:**

   - Smart Council digitizes the council's manual processes for better business processing and more streamlined public service delivery. The initiative focuses on several areas, including digitalization of submission and approval of building plans, digitalization of valuation of rate-able properties, and an executive dashboard for council finances and accounts, human resources, property rates, and licenses.

7. **Smart Drain Initiative:**

   - The Smart Drain initiative makes use of smart sensors to collect water level data and project the underlying cause of any changes. This allows authorities to more efficiently manage the maintenance of drains as well as gather date for earlier flood prevention and warning.
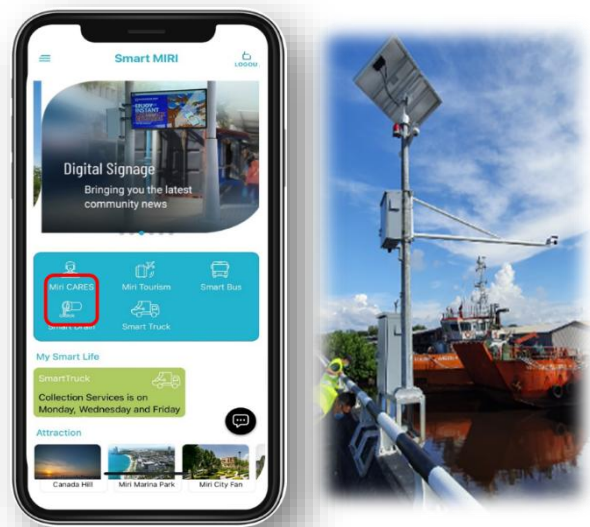

Figure 6: Smart Drain Function in the Sarawak Smart City App

8. **Digital Signage Initiative:**

- The Digital Signage initiative allows prompt, accurate and effective information to be disseminated through online digital multimedia channels to improve public information delivery. All content is centralized and standardized, making it easier and more convenient for the council to manage, while allowing the public to receive up-to-date information.

Figure 7: Digital Signages in Miri

9. **Smart Parking Initiative:**

- The Smart Parking initiative improves the parking experience for motorists, providing them with a streamlined app that allows them to pay for parking on their mobile phone. In addition, it provides the council with in-depth information for better parking planning and enforcement.

10. **Smart Traffic Initiative:**

- The Smart Traffic initiative is an intelligent real time traffic management platform that monitors, controls and optimises the movement of traffic and people in the city. The system manages the dynamic timing of traffic lights, adapting light cycle times to ensure a smooth traffic flow.

11. Miri Command Centre:

- The Miri Command Centre is the overall monitoring centre for all the Miri Smart City Applications. It acts as MCC's first line of contact for the public, receiving and responding to Miri CARES calls and feedback, as well as receiving and responding to emergency calls from emergency poles, Smart Trucks and Smart Buses. In addition, it monitors the surveillance systems for the Smart City and Smart Park initiatives.

Figure 8: Miri Smart City Command Centre (MSCCC) Office

12. Sarawak Smart City App:

- Developed to simplify the daily life of Miri residents, the Sarawak Smart City App seamlessly integrates advanced technology and convenience into a single mobile app, enhancing the overall urban living experience and streamlining day-to-day activities.

- The Sarawak Smart City App serves as a super app, encompassing the collection of Smart City software applications managed by the Miri City Council, making services easily reachable to the public.

- Centralizing these mobile apps boosts service quality, allowing residents to manage everyday tasks such as bill inquiries and payments, obtaining public service information, and making incident reports through one single app. This efficiency improves the public's experience and satisfaction.

Figure 9: Sarawak Smart City App (Available to Download via the Apple AppStore, Google Playstore and Huawei AppGallery)

Towards a Greener, Smarter, and More Liveable Miri by 2030

In line with Sarawak's Post Covid Development Strategy (PCDS2030), Miri City Council (MCC) is taking bold, purposeful steps to transform Miri into a greener, smarter, and more liveable international resort city. This transformation goes beyond the implementation of technology and infrastructure—it is rooted in a sincere commitment to improving the everyday lives of Mirians by creating real, everyday benefits for its people. By embracing innovation through the digitalisation of council services and the rollout of smart city initiatives, MCC aims to address real urban challenges such as safety, mobility, environmental sustainability, and service accessibility.

Every project introduced under this vision is designed to place people at the centre—whether it's making public transport more reliable, enhancing safety in neighbourhoods, or streamlining how residents interact with council services. Initiatives like the Sarawak Smart City App, Miri CARES, Smart Drain, and Smart Truck are already demonstrating tangible improvements in convenience, responsiveness, and efficiency. MCC understands that a truly liveable city is one where all residents feel heard, supported, and empowered in their daily lives. This people-first approach is the foundation for Miri's sustainable development and long-term success.

With continued collaboration from stakeholders and the active involvement of the community, Miri's path toward becoming a vibrant and inclusive city by 2030 is not just an ambition—it is an ongoing reality, building stronger, greener, and more resilient communities for generations to come. **Moving forward, continued investment is needed in digital infrastructure, public awareness, and inclusive access, especially for underserved communities.**