

Annual Report 2022

Cover Rationale



The MTSFB Annual Report 2022 cover is designed to convey professionalism, progress, and trust. The clean and modern look, along with the beautiful waves in shades of purple, blue, and turquoise, are symbolic of the company's ability to adapt to changing circumstances. The color palette represents MTSFB's commitment to growth and innovation. Together, the impactful design elements that are visually appealing and engaging, reflect and communicate MTSFB's vision and values to stakeholders.

Chairma	n's Messo	age
Chief Exe	ecutive (Officer's Address
	01	Our Identity About Us Our Vision & Mission Membership Opportunities Our Registered Members Board of Directors Reference Panel Leadership and Team
	02	2022 Highlights
	03	Standardisation Activities
	04	Industry Promotion and Development Grant

Directors' Report

Statements

Chairman 's Message



I am pleased to present to you the Malaysian Technical Standards Forum Bhd's (MTSFB) Annual Report for the year 2022. As the Chairman of MTSFB, it is my privilege to reflect on our achievements, progress, and commitment to driving technical standards development in Malaysia.

The year 2022 has been a remarkable journey for MTSFB as we continued to uphold our vision of advancing Malaysia's technological landscape through the establishment and implementation of robust technical standards. In an increasingly interconnected world, standards play a crucial role in enhancing interoperability, safety, and efficiency across industries, and MTSFB remains at the forefront of this vital endeavour.

Azni Risa Ramlan

Chairman Board of Directors

Over the past year, MTSFB has actively engaged with various stakeholders, including government aaencies. experts, academia, industry and professional bodies. foster collaboration to and consensus-building in the development of technical standards. We have organised numerous technical working group meetings, workshops, and conferences to facilitate the exchange of knowledge, ideas, and best practices among our members and partners.

One of our key accomplishments in 2022 was the successful launch of several technical standards initiatives addressing emerging technologies and industry challenges. MTSFB has played an instrumental role in shaping standards related to 5G, Internet of Things (IoT), cybersecurity, and sustainable energy, among others. These standards serve as a solid foundation for the adoption of innovative technologies and promote Malaysia's competitiveness in the global arena.

Furthermore, MTSFB's contributions to international standardisation bodies have been noteworthy. We have actively participated in the development of global standards through collaborations with organisations such as the International Telecommunication Union (ITU) and Asia Pacific Telecommunity (APT). Our involvement in these efforts ensures that Malaysia's interests are well represented, and our technical standards align with international best practices.

As part of our commitment to capacity building, MTSFB has continued to prioritise the development and enhancement of technical expertise among our members. We have conducted specialised awareness programmes, seminars, tech talks and webinars, covering a wide range of technical areas. These initiatives have empowered our members with the necessary skills and knowledge to contribute effectively to the standards development process.

Looking ahead, MTSFB remains dedicated to driving the adoption of technical standards across industries in Malaysia. We will continue to collaborate with key stakeholders to identify emerging trends and challenges, proactively develop new standards, and update existing ones to keep pace with evolving technologies. Our focus on inclusivity and diversity will ensure that the standards we develop are representative of our nation's diverse technological landscape.

I would like to express my sincere appreciation to the Board of Directors, our dedicated members, and our valued stakeholders for their unwavering support throughout the year. Together, we have achieved significant milestones, and I am confident that our collective efforts will propel MTSFB to greater heights in the years to come.

In conclusion, I would like to reiterate MTSFB's commitment to fostering a robust standards ecosystem in Malaysia. We firmly believe that standardised technologies will contribute to sustainable development, economic growth, and the well-being of our society. I look forward to another fruitful year ahead as we continue to drive technical excellence and innovation through the power of standards.

Thank you.

Chief Executive Officer's Address

Dear all,

It is with great honour and enthusiasm that I am addressing you today as the newly appointed CEO of MTSFB. As we embark on this exciting journey together, I would like to extend my warmest greetings to our esteemed members, dedicated office bearers and all our stakeholders.

First and foremost, I want to express my deepest gratitude to my predecessor, Puan Zaleha Abu Bakar, for her outstanding leadership and contributions to MTSFB. Under her guidance, our organisation has achieved remarkable success, and I am humbled to follow in her footsteps.

I am truly excited to lead MTSFB into a new era of growth and innovation. We find ourselves at a critical juncture in our industry, with ever-evolving market dynamics and technological advancements shaping the landscape. As the new CEO, I am committed to steer MTSFB towards continued success by embracing these changes and capitalising on the vast opportunities they present.

6

MTSFB has built a strong foundation over the years, with a legacy of excellence, and a commitment to delivering technical codes as required by the industry. As we move forward, I will work closely with our talented team to build upon this foundation and drive our organisation to new heights of achievement.

Looking ahead, we remain optimistic about the future of MTSFB. We will continue to innovate and adapt to evolving market dynamics, leveraging emerging technologies to stay ahead of the curve. Our strategic partnerships and focus on collaborations will enable us to seize new opportunities and drive sustainable growth.

In conclusion, I would like to express my deepest appreciation to the MTSFB Board of Directors and team members for their remarkable contributions. Together, we have achieved significant milestones and positioned our organisation for a prosperous future. I am confident that by staying true to our vision and values, we will continue to create shared values and drive success for MTSFB and all our stakeholders.

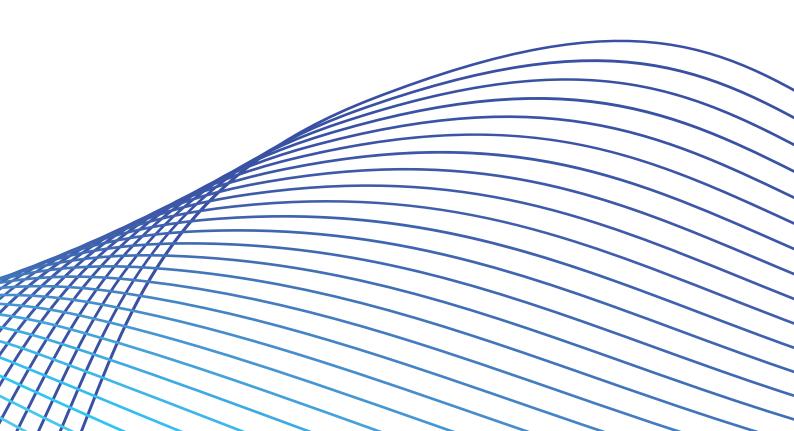
Thank you.



Normarinee Mohd Noor Chief Executive Officer

Our Identity

About Us	9
Our Vision & Mission	9
Membership Opportunities	11
Our Registered Members	
Board of Directors	
Reference Panel	
Leadership and Team	



About Us

The Malaysian Technical Standards Forum Bhd (MTSFB) is the leading standardisation body for Malaysia's Communications and Multimedia Industry. MTSFB was first established on 8 June 2004 as a company limited by guarantee and was later designated as the Technical Standards Forum by the Malaysian Communications and Multimedia Commission (MCMC) on 27 October 2004 pursuant to Section 94 (Chapter 9 of Part V) and Section 185 (Chapter 3 of Part VII) of the Communications and Multimedia Act 1998 (CMA 1998).

The company's roles and responsibilities include:







Lead Body



Our Vision & Mission

Vision

MTSFB envisions to become the leading standardisation organisation and the focal body for communications and multimedia industry standards that fulfil the Malaysian market needs.

Mission

MTSFB's mission is to provide a platform for interested parties to come together and collaborate on the production of standards for the communications and multimedia industry.

MTSFB's Working Groups (WGs)

The roles are executed and carried out by MTSFB's Working Groups (WGs) that consist of expert representatives from across the industry.



Membership Opportunities

MTSFB membership makes you part of the movement that is propelling the country's communications and multimedia industry forward. Your experience, company's capability and wide knowledge will contribute to the Working Groups' primary objective of developing Technical Standards pertaining to ICT, particularly in the development of the communications and multimedia technologies in Malaysia and the region.

As a member, you have the opportunity to influence the decisions that impact your business, and ensure that your interests are safe-guarded by industry members and relevant stakeholders. There are two types of memberships:

ORDINARY MEMBERSHIP (OM) Licensee Profit and Non-Profit Organisation Others FROM RM3,000 PER ANNUM ASSOCIATE MEMBERSHIP (AM) AII FROM RM1,000 PER ANNUM Contribute to global standards and best practices

Opportunities to represent MTSFB in regional and international meetings such as ITU-T, ASTAP and more

Participate or lead

Working Groups on

emerging issues in the

communications and multimedia industry



Be part of the subject matter expert team in sharing industrial experience and networks



/ You can access the Online Application Form at mtsfb.org.my > Be a Member > Join now /

Our Registered **Members**

The members of MTSFB consist of frontrunners who contribute to the development of technical standards and guidelines for the communications and multimedia industry in Malaysia and the region. In 2022, MTSFB welcomed 5 new organisations into its fold, raising the total number of MTSFB members to 82.

Ordinary Members









Telekom Malaysia Berhad

Maxis Broadband Sdn Bhd

CelcomDigi Berhad

TIME dotCom Berhad



U Mobile Sdn Bhd



REDtone Engineering & Network Services Sdn Bhd





Measat Broadcast Network System Sdn Bhd



SIRIM Berhad



Asaascom Engineering Sdn Bhd



Digital Nasional Berhad



FNS (M) Sdn Bhd



Fraunhofer IIS



Harvestnet Sdn Bhd



Orbitage Sdn Bhd



Huawei Technologies (Malaysia) Sdn Bhd



International PT Reach (M) Sdn Bhd



Media Prima Berhad



YTL Communications Sdn Bhd



My6 Initiative Berhad

Associate Members

Telcos



Common Tower Technologies



D'Harmoni Telco Infra Sdn Bhd



EDOTCO Group Sdn Bhd



Nokia Siemens Network



PDC Telecommunication Services Sdn Bhd

Technology Experts





American Malaysian Chamber of Commerce

DOLBY

т

Dolby Singapore

Pte Ltd





Sdn Bhd



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CISCO

CISCO Malaysia

Durianê Professionals **Eastool Solution** Sdn Bhd



LG Electronics (M) Sdn Bhd



Maxvec Sdn Bhd



Kiwitech Sdn Bhd

kiw

Panasonic MOTOROLA

Motorola Technology Sdn Bhd

riger

Riger Corporation (M)

Sdn Bhd

SONY EMCS Malaysia

Sdn Bhd (KL TEC)

Wamata Solutions

Sdn Bhd

Panasonic AVC Networks Kuala Lumpur

SAMSUNG

Samsung Malaysia Electronics (SME) Sdn Bhd



Sophic Automation Sdn Bhd

WIDEMINDS PTE.LTD.

Wideminds Pte Ltd

Provintell Technologies

Technologies

Provintell

Sdn Bhd



Sharp Electronics (Malaysia) Sdn Bhd



Sustainable Energy **Development Authority** (SEDA) Malaysia



XCelcius Consultancy Sdn Bhd

Institutes of Higher Learning (IHL)



E System

Tele System Electronic

Sdn Bhd



Tekmark Sdn Bhd



Heriot-Watt University Malaysia



National Advanced IPv6 Centre (NAv6)



Universiti Teknologi MARA



Universiti Malaysia Pahang



Universiti Malaysia Perlis



Universiti Sains Islam Malaysia



Universiti Tun Hussein Onn Malaysia



International Islamic

University Malaysia

A CLASS ABOVE

Sunway University

College Sdn Bhd

Universiti Kebangsaan

Malaysia

Universiti Malaysia

Terengganu

Universiti

Kebangsaan Malaysia

National University of Malaysia



Multimedia University



UCSI University



Universiti Malaya



Universiti Kuala Lumpur



Universiti Putra Malaysia



Universiti Teknikal Malaysia Melaka



Universiti Utara Malaysia









NAGA

UNIVERSITI SAINS MALAYSIA

Universiti Sains Malaysia



Universiti Teknologi Malaysia

Board of Directors

Under the leadership of the Chairman and Board Members, MTSFB continues to build on its strengths to better support industry development. Their profound knowledge and experience enable MTSFB to fulfil its mandate more effectively and proficiently.



Azni Risa Ramlan Chairman

Currently the Vice President, Business Innovation and Technology at Telekom Malaysia Berhad, Azni Risa Ramlan, was appointed to the Board on 26 May 2017. Azni Risa graduated with a Master of Business Administration from Universiti Teknologi Malaysia.



Norazizan Mohamad Member

Playing the role as the Head of Department, Network Digital Engineering & Industry at Maxis Broadband Sdn Bhd, Norazizan Mohamad was appointed to the Board on 10 March 2014. Norazizan graduated with a Bachelor of Science in Electrical Engineering from Bradley University, Peoria, Illinois, USA.

Fami Abdul Hamid Member

Now serving as the Principal Regulatory at DiGi Telecommunication Sdn Bhd, Fami Abdul Hamid, was appointed to the Board on 8 November 2016. Fami graduated with a Bachelor of Science (Hons) Computer Science (Software Engineering from UITM).

Mohd Mazlan Abd Razak Member

Mohd Mazlan Abd Razak graduated with a Master of Business Administration (Strategic Management) and has been serving at TIME dotCom Berhad since 2020 as Head, Regulatory Affairs. Mohd Mazlan was appointed to the Board on 15 December 2021.

Nivendran Veerappan Member

Nivendran Veerappan, was appointed to the Board on 20 November 2019. Presently the Vice President, Head of Broadcast Technology at Astro, Nivendran graduated with a Bachelor of Engineering (Hons) Electrical & Electronics from Universiti Tenaga Nasional (UNITEN).

Eric Liew Sze Yarn Member

Head of Regulatory at U Mobile Sdn Bhd at present, Eric Liew Sze Yarn, was appointed to the Board on 1 March 2016. Eric Liew graduated with a Bachelor of Science, Business Accounting & Finance, from San Francisco State University in 1993.

Amirah Abdul Majid Member

Amirah Abdul Majid, graduated with an Honours Degree in Accounting from Multimedia University. Having been with REDtone Engineering & Network Services Sdn Bhd since 2010, she is presently the Senior Manager, Regulatory Affairs. Amirah was appointed to the Board on 15 December 2021.

Fauziah Fadzil Member

A graduate with a Master in Radio Communications and High Frequency Engineering (1993) from University of Leeds, United Kingdom, Fauziah Fadzil, was appointed to the Board on 15 December 2021. Fauziah has been serving as the Senior General Manager, Product Certification & Inspection Department at SIRIM QAS International Sdn Bhd since 2020.

Mohd Izni Zuhdi Mohamad Alternate Director

Mohd Izni Zuhdi Mohamed Rawi, graduated with a Master in Engineering Science (Hons) from University of Oxford. He has been serving Telekom Malaysia Berhad since 2000 and currently holds the position of General Manager, Network Architecture & Technology Planning. He was appointed as the Alternate Director to Azni Risa Ramlan on 10 February 2022.

Low Chia Seng

Alternate Director

Low Chia Seng, graduated with a Bachelor of Science (Hons.) in Computing and Information System and has been serving as Head of Network Planning at TIME dotCom Berhad since 2016. Low was appointed to the Board on 15 December 2021.

Mohamad Isa Mohd Razhali Alternate Director

Mohamad Isa Mohd Razhali, graduated with a Bachelor (Hons) in Electrical Engineering (Telecommunication) from Universiti Teknologi Malaysia. Since 2014, he has been serving at ASTRO as Assistant Vice President, Technical Regulatory. Mohamad Isa was appointed to the Board on 20 November 2019.

Mohd Fuad Romeli Alternate Director

Mohd Fuad Romeli, has been serving U Mobile Sdn Bhd as Assistant General Manager, Regulatory since May 2014. He graduated with a Master in Science (Corporate & Communication) from Universiti Putra Malaysia in 2003. Appointed to the Board on 30 June 2016, he is also registered with the Board of Engineers Malaysia (BEM) since 19 September 2001, and is a Graduate Member of the Institution of Engineers, Malaysia (IEM) since 15 July 2002 (Membership No: 22443).

Ong Cheok Seong Alternate Director

Ong Cheok Seong, graduated with a Bachelor of Engineering in Electrical, Electronic & System Engineering (Hons) and has been with **RED**tone Engineering & Network Services Sdn Bhd since 1999 where he now serves as the General Manager, Network & Technology. Ong was appointed to the Board on 15 December 2021.

Reference Panel

The Reference Panel (RP) is responsible for advising the Working Groups on the preparation of MTSFB's work programmes. The members bring to the table their expertise in diverse subject matters to pioneer the growth of new technologies.

The Panel is accountable to the Board and operates under the direction of the Board with the support of and in consultation with the management of MTSFB.



Dr. Gopinath Rao Sinniah Chair

Chair of WG1 - Internet of Things and Smart Sustainable Cities



Thaib Mustafa Vice Chair Chair of WG6 - Security, Trust and Privacy



Rakuram Gandhi Member Chair of WG2 - IMT and Future Networks



Azura Mat Salim Member Chair of WG3 - Numbering and Electronic Addressing



Ts. Mohd Yusairi Abu Hasan Member

Chair of WG4 -Network and Broadcast Infrastructure and Facilities



Ratnam NA

Member Chair of WG5 -Radio Network Facilities



Ahmad Faizan Pardi Member Chair of WG8 - Fixed and Wireless Terminal



Dr. Tan Ching Seong Member Chair of WG9 -

Green ICT, Environment and Climate Change



Dr. Ahmad Zaki Mohd Salleh Member Chair of WG10 -Broadcast Technology

The management sets the wheels in motion for the implementation and execution of MTSFB's roles and responsibilities. With experienced hands at the helm, they get the ball rolling, allowing the Company to scale new heights.

Leadership and Teams

Muhaimin Mat Salleh Senior Engineer

Standardisation Unit

Mohamad Norzamir Mat Taib Senior Engineer Standardisation Unit

> Normarinee Mohd Nor CEO

Ahmad Syazilie Shamsuddin Engineer Standardisation Unit

> Khairul Ekhwan Kamarudin Engineer Standardisation Unit

Syarfina Junaida Bolhan Senior Executive Value Creation Unit

Norazlina Dato' Ghazali Senior Manager Standardisation Unit

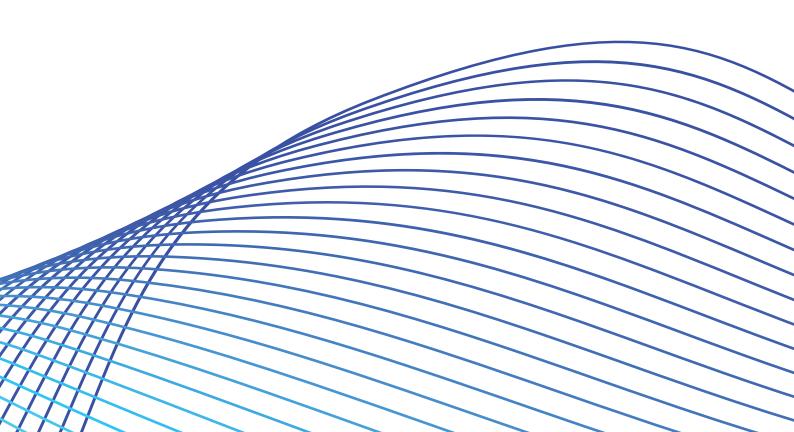
Humairah Ahmad Nasir Manager Business Management & Support Functions Unit, MTSFB Nor Atiqah Ali Norpiah

Executive Business Management & Support Functions Unit, MTSFB

Nurul Amirah Zarifah Norazaruddin Engineer Standardisation Unit

2022 Highlights

Focal Points	23
Newly on Board	24
New Members	24
MTSFB Collaborations	25
Event Highlights 2022	27



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MTSFB's achievements are made up of small but defining successes. We continue to grow by leaps and bounds on the strength of our staff and fruitful cooperation with invaluable stakeholders.

Draft Technical Codes Submitted

Technical Codes Registered

Industry Promotion and Development Grant Projects

Newly on Board: Member of the Board of Directors

At the 18th MTSFB Annual General Meeting on 20 June 2023, Mohd Izni Zuhdi Mohamed Rawi was appointed as a new member to the Board of Directors. He is the Alternate Director for Puan Azni Risa Ramlan, representing TM Technology Services Sdn Bhd.

New Members











MTSFB Collaborations



MTSFB Collaboration Highlights



On 17 May 2022, Malaysian Technical Standards Forum Bhd (MTSFB) doubles national and regional cooperation through the signing of the Memorandum of Understanding (MoU) with Telecommunications Standards Development Society (TSDSI) and Institute of Electrical and Electronics Engineers (IEEE) Malaysia Section, respectively. The MoU signing ceremony was held in conjunction with World Telecommunication and Information Society Day.

Dr. Ahmad Nasruddin 'Atiqullah Fakhrullah, Head of Technology and Standards, Malaysian Communications and Multimedia Commission (MCMC) witnessed the signing ceremonies. Also present were Zaleha Abu Bakar, General Manager of MTSFB, Md Pauzi Abdullah, Chair of the IEEE Malaysia Section and joined virtually by Pamela Kumar, Director-General of TSDSI.



The MoU signed between MTSFB and TSDSI confirms the intention of both parties to cooperate in the fields of Communications and MultimediaIndustry (CMI), to share developments in a broad range of areas appropriate, to work together for mutual benefit, and to share best practices.

An international forum themed "Digital Technologies for Everyone" was organised during the MoU signing ceremony with participation from all three organisations. The IEEE Malaysia Communication Society also celebrated its 30th anniversary and presented three awards to outstanding members to commemorate the anniversary.

The collaboration between MTSFB and the IEEE Malaysia Section is motivated by a mutual interest in knowledge-sharing, the potential development of educational programmes, joint activities, and training, as well as the increasing exposure to the expertise each party brings into the areas of CMI development. Both parties endeavour to set a joint agenda towards fulfilling the goals of the collaboration which includes information exchange, sharing of best practices and identifying possible areas for co-operation, joint participation in industry events and congresses, and participating in each other's publications or marketing materials, as well as facilitate the progress of the CMI. Additionally, the IEEE Malaysia will identify and pursue opportunities for future collaborations between academia and the industries, assist in providing event platforms for events or activities for mutual benefit, facilitate in the promotion of mutual objectives to wider audiences as well as communicate new and updated technologies for the CMI.

In the last quarter, MTSFB and Universiti Malaysia Terengganu (UMT) signed a Letter of Intent (LoI) on 14 October 2022 in conjunction with World Standards Day celebration. The collaboration strengthens the objectives of the MTSFB to mutually share knowledge and expertise in standardisation work and the development of the CMI, and now extending it to the maritime industry based on the aspects of communications requirements. From the perspective of the UMT, the collaboration is an important milestone in its efforts to be closer to the industry, and to provide greater opportunities for UMT to realise its mission to be the leading research and learning hub, particularly in exploring new technologies. The collaboration efforts also align with the objective of strengthening industrial relations and playing a bigger role in the development of social, economic and education through service expansion.



Event Highlights 2022

March **23–25**

Technical Code Development Workshop - Security, Trust & Privacy Venue: Park Inn by Radisson Putrajaya



March **31**

Working Group Leaders Engagement -Security, Trust & Privacy Working Group Venue: Tamarind Square, Cyberjaya



April **7**

Working Group Leaders Engagement - Numbering & Electronic Addressing and Fixed & Wireless Terminals Working Group

Venue: Tamarind Square, Cyberjaya



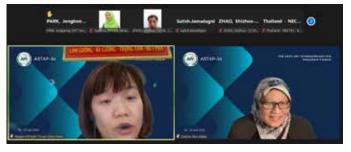
April **13-15**

Technical Code Development Workshop - Radio Network Facilities



April **18**

ASTAP's Standardisation Workshop: Guidelines on Setting Up National ICT Standardisation Regime Virtually via Zoom





World Telecommunication & Information Society Day 2022 (WTISD 2022) and MoU Signing with TSDSI and IEEE Malaysia

Venue: Cyberview Resort and Spa, Cyberjaya



June **30**

#TCMatters - Technical Codes Awareness Programme -Information and Network Security Virtually on Zoom and FBLive



August **16**

#TCMatters - Technical Codes Awareness Programme -5G Base Station and User Equipment Virtually on Zoom and FBLive



July 7

Working Group Leaders Engagement - Network and Broadcast Infrastructure and Facilities Working Group Venue: Tamarind Square, Cyberjaya



July **27**

Working Group Leaders Engagement - Internet of Things and Smart Sustainable Cities Working Group and IMT and Future Networks Working Group Venue: Tamarind Square, Cyberjaya



August
24 - 26

Technical Code Development Workshop - Fixed Network Facilities Sub Working Group Venue: SCAPES Hotel, Genting Highlands





Working Group Leaders Engagement - Green ICT, Environment and Climate Change Working Group Venue: Tamarind Square, Cyberjaya



October **14**

OneM2M Tech Talk in Conjunction with World Standards Day Virtually on Airmeet



October 18

Signing of Letter of Intent (Lol) with Universiti Malaysia Terengganu (UMT)



September **27**

#TCMatters - Technical Codes Awareness Programme - 5G System Architecture & Specifications and Security *Virtually on Zoom and FBLive*



October **17 - 19** Technical Code Development Workshop - Maritime and Aeronautical Communications Equipment Venue: Grand Continental Kuala Terengganu



October **17 - 19**

Network Security Webinar Series in Conjunction with World Standards Day & IEEE Day 2022



October **31**

6th Regional Workshop: Strategic Solutions for Expanding 5G Opportunities – Connectivity, Mobility and Safety (Korea) Virtually on Zoom





November **10**

2022 National Colloquium on Internet of Things (NC IoT 2022) Venue: Multi-Purpose Hall, Multimedia University

November **28**

TC Appreciation Gathering and Tech Talk on 5G Broadcast Venue: Tenera Hotel, Bangi, Selangor



December

Opportunities and Challenges of Critical Technology Standards in the Asia Pacific with Brookings Institution Virtually via Zoom



December 14

#TCMatters - Technical Codes Awareness Programme - EMF *Virtually on Zoom and FBLive*



December

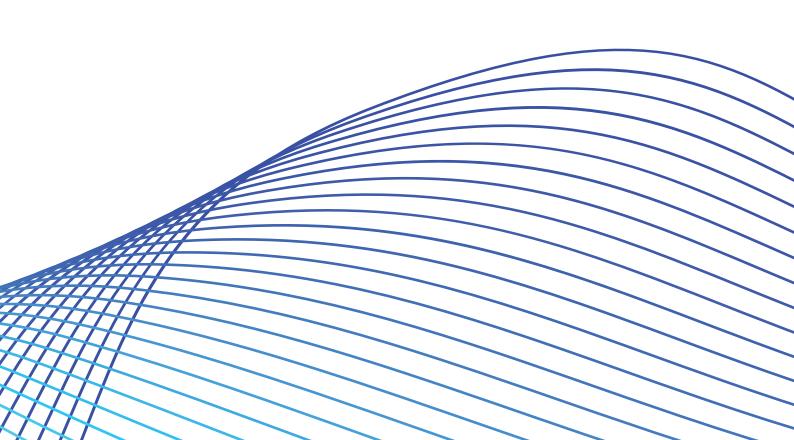


TC Appreciation Gathering Venue: The Everly Putrajaya



Standardisation Activities

Development of Technical Codes	33
Submitted Draft Technical Codes	35
Registered Technical Codes	36
Technical Code Development Workshops	37
Involvement in Standardisation Meetings	
National Level Involvement	



Development of Technical Codes

Draft Technical Codes Submitted

Technical Codes Registered

12

Contribution Papers in ITU & APT

A Technical Code (TC) is a voluntary industry code that deals with any matters provided under the CMA 1998, prepared either on MTSFB's own initiative or upon request by MCMC. Its objective is to ensure the interoperability and safety of network facilities, services and equipment.

TC are developed according to a set of timelines varying from 9-15 months which the Working Groups have to comply with. For the development of new TCs, the maximum timeline for meeting deliberations is 15 months. Each TC development will require an average of 10 meetings in order to complete its deliberation prior to release for public comment.

Public Comment and Public Engagement

The Public Comment (PC) exercise and Public Engagement (PE) sessions are key milestones in the standards development process. The public will be invited by the respective Working Groups to submit comments or opinions on the TCs under development in a given PC exercise. The PE sessions are designed to enhance communications channels and improve our reach and exposure with the respective bodies, agencies and the public at large.



Submitted Draft Technical Codes

Specification for Digital Terrestrial Television (DTT) Broadcast Receiver (Second Revision)

Category
Broadcast/Type Approval

Working Group
Broadcast Technology

Specification for Direct-to-Home (DTH) Broadcast Receiver for Set Top Box (STB) (Second Revision)

Category
Broadcast/Type Approval

Working Group **Broadcast Technology**

Digital Terrestrial Television (DTT) -Active Indoor Antenna (First Revision)

Category
Broadcast/Type Approval

Working Group
Broadcast Technology

End-to-End (E2E) Quality of Service (QoS) and Quality of Experience (QoE) Using Crowdsource Application Approach

Category QOE

Working Group
IMT and Future Networks

Radiocommunications Network Facilities -External Infrastructure Specifications (First Revision)

Category Infrastructure

Working Group Radio Network Facilities

Radiocommunications Network Facilities – Compliance Audit for Radiocommunications Structure

Category Infrastructure

Working Group Radio Network Facilities

Information and Network Security -Security Posture Assessment (First Revision)

Category **Security**

Working Group
Security, Trust and Privacy

Information and Network Security – Malaysian Critical Security Controls (MyCSC)

Category **Security**

Working Group
Security, Trust and Privacy

Smart Sustainable Cities - Architecture in Relations to Information and Communications Aspects

Category IoT/Smart Cities

Working Group Internet of Things and Smart Sustainable Cities

Internet of Things (IoT) - Baseline Security Requirements for Consumer Devices

Category IoT/Smart Cities

Working Group Internet of Things and Smart Sustainable Cities

Registered Technical Codes

Registered Date

Registered Date

5 July 2022

MCMC MTSFB TC T004:2022

Specification for Digital Terrestrial Television (DTT) Broadcast Receiver (Second Revision)

Working Group **Broadcast Technology**

Members Involved

- MyTV Broadcasting Sdn Bhd
- SIRIM Berhad
- _ Fraunhofer IIS
- LG Electronics (M) Sdn Bhd _
- _ Maxis Broadband Sdn Bhd
- _ Measat Broadcast Network System Sdn Bhd
- _ Media Prima Berhad
- _ Multimedia University
- _ Samsung Malaysia Electronics (SME) Sdn Bhd
- _ Sharp Electronics (M) Sdn Bhd
- _ SmarDTV Global S.A.S
- _ Sony EMCS Malaysia Sdn Bhd
- _ Telekom Malaysia Berhad
- _ Wideminds Pte Ltd

MCMC MTSFB TC T015:2022

IMT Advanced (Long Term Evolution) -User Equipment (First Revision)

Working Group Fixed Wireless Terminals 5 July 2022

Members Involved

- SIRIM Berhad
- Telekom Malaysia Berhad
- CelcomDigi Berhad _
- EDOTCO Malaysia Sdn Bhd
- Harvestnet Sdn Bhd
- Huawei Technologies (Malaysia) Sdn Bhd
- Maxis Broadband Sdn Bhd _
- Redsun Engineering Sdn Bhd
- Rohde & Schwarz Technologies Malaysia Sdn Bhd
- Webe Digital Sdn Bhd
- Wideminds Pte I td
- YTL Communications Sdn Bhd

MCMC MTSFB TC G036:2022

Fuel Cell System - General Operational and Safety Requirements

Working Group **Green ICT**

5 July 2022

Registered Date

- Members Involved
- CelcomDigi Berhad Durianê Professionals Sdn Bhd
- _ EDOTCO Malaysia Sdn Bhd
- Shan Poornam Metals (Selangor) Sdn Bhd
- Sustainable Energy Development Authority (SEDA)
- Telekom Malaysia Berhad
- _ UCSI University
- _ Universiti Kebangsaan Malaysia
- Universiti Teknologi MARA
- Universiti Tun Hussein Onn Malaysia

MCMC MTSFB TC T006:2022

Specification for Direct-to-Home (DTH) Broadcast Receiver for Set Top Box (STB) (Second Revision)

Working Group **Broadcast Technology**

Registered Date 5 July 2022

Members Involved

- MyTV Broadcasting Sdn Bhd
- SIRIM Berhad
- Fraunhofer IIS _
- _ LG Electronics (M) Sdn Bhd
- Maxis Broadband Sdn Bhd _
- Measat Broadcast Network System Sdn Bhd Media Prima Berhad
- Multimedia University
- Samsung Malaysia Electronics (SME) Sdn Bhd _ Sharp Electronics (M) Sdn Bhd
- SmarDTV Global S.A.S
- _ _ Sony EMCS Malaysia Sdn Bhd
- _ Telekom Malaysia Berhad
- Wideminds Pte Ltd

MCMC MTSFB TC G034:2022

Internet Protocol version 6 (IPv6) -Deployment Requirements to Complete Transition to IPv6

Working Group

Numbering and **Electronic Addressing**

Members Involved

- Telekom Malaysia Berhad
- Cisco Systems Malaysia
- American Malaysian Chamber of Commerce
- CelcomDigi Berhad
- Maxis Broadband Sdn Bhd
- My6 Initiative Berhad
- SIRIM QAS International Sdn Bhd _

Webe Digital Sdn Bhd

MCMC MTSFB TC G037:2022

Fuel Cell System - Stationary Backup **Power Solution for Telecommunication** Sites

Working Group Green ICT

Registered Date 5 July 2022

Registered Date

5 July 2022

Members Involved

- CelcomDigi Berhad
- Durianê Professionals Sdn Bhd
- EDOTCO Malaysia Sdn Bhd
- Shan Poornam Metals (Selangor) Sdn Bhd Sustainable Energy Development Authority (SEDA)
- Telekom Malaysia Berhad
- _ UCSI University
- Universiti Kebangsaan Malaysia _
- Universiti Teknologi MARA
- Universiti Tun Hussein Onn Malaysia

MCMC MTSFB TC T014:2022

Diaital Terrestrial Television (DTT) - Active Indoor Antenna (First Revision)

Measat Broadcast Network System Sdn Bhd

Samsung Malaysia Electronics (SME) Sdn Bhd

MCMC MTSFB TC G035:2022

Radiocommunications Network Facilities –

Registered Date

Reaistered Date

15 September

2022

Minor Communications Infrastructure

International Islamic University Malaysia

Measat Broadcast Network System Sdn Bhd

MCMC MTSFB TC G038:2022

End-to-End (E2E) Quality of Service (QoS)

IMT and Future Networks 17 August 2022

and Quality of Experience (QoE) Using

Crowdsource Application Approach

Working Group **Broadcast Technology**

Registered Date 5 July 2022

Members Involved

SIRIM Berhad

Fraunhofer IIS

MyTV Broadcasting Sdn Bhd

LG Electronics (M) Sdn Bhd

Maxis Broadband Sdn Bhd

Sharp Electronics (M) Sdn Bhd

Sony EMCS Malaysia Sdn Bhd

Telekom Malaysia Berhad

Media Prima Berhad

Multimedia University

SmarDTV Global S.A.S

Wideminds Pte Ltd

Working Group

Members Involved

CelcomDigi Berhad

EDOTCO Malaysia Sdn Bhd

Maxis Broadband Sdn Bhd

Telekom Malaysia Berhad

YTL Communications Sdn Bhd

TIME dotCom Berhad

Webe Digital Sdn Bhd

U Mobile Sdn Bhd

Working Group

Members Involved

Fraunhofer IIS

Maxis Broadband Sdn Bhd

Rohde & Schwarz Technologies

Xcelcius Consultancy Sdn Bhd YTL Communications Sdn Bhd

Telekom Malaysia Berhad

TIME dotCom Berhad

Multimedia University

CelcomDigi Berhad

Orbitage Sdn Bhd

Malaysia Sdn Bhd

Tekmark Sdn Bhd

U Mobile Sdn Bhd Universiti Putra Malaysia Universiti Teknikal Malaysia Melaka Universiti Teknologi Malaysia Webe Digital Sdn Bhd

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Radio Network Facilities

Technical Code Development Workshops

Working Group: Security, Trust & Privacy

23 - 25 March 2022 Park Inn by Radisson Putrajaya

35 participants

Objective

- 1. To gather the related stakeholders and the STP subject matter experts (SME) to discuss and deliberate the requirements for draft TC.
- 2. To make sure the minimum requirements are mutually agreed by the related stakeholders of the respective draft TC.
- 3. To complete the draft TC for Public Comment exercise which is targeted from 21 March 2022 until 20 April 2022.

TC Discussed

- 1. Information and Network Security Security Posture Assessment (First Revision)
- 2. Information and Network Security Critical Security Controls

Working Group: Radio Network Facilities

13 - 15 April 2022

Putrajaya Marriott Hotel, IOI Resort City, Putrajaya

69 participants

Objective

- 1. To expedite the development of TC to include the safety specifications and audit criteria for the construction of telecommunication towers in Malaysia.
- 2. To gather the related stakeholders and the RNF subject matter experts (SME) to discuss and deliberate the requirements in the draft TC.
- 3. To make sure the minimum requirements are mutually agreed by the related stakeholders of the respective draft TC.
- 4. To complete the draft TC for Public Comment exercise which is targeted from 18 April 2022 until 01 May 2022.

TC Discussed

- 1. Radiocommunications Network Facilities External Infrastructure Specifications (First Revision)
- 2. Radiocommunications Network Facilities Compliance Audit for Radiocommunications Structure

38

Working Group: Fixed Network Facilities Sub Working Group

24 - 26 August 2022 Scapes Hotel, Genting Highlands, Pahang

30 participants

Objective

- 1. To gather the related stakeholders and related subject matter experts (SME) to discuss and deliberate the requirements for each draft TC.
- 2. To make sure the minimum requirements are mutually agreed by the related stakeholders of the respective draft TC.
- 3. Complete the review of requirements related to strata landed development area for the revision of MCMC MTSFB TC G024:2020.

TC Discussed

1. Fixed Network Facilities - In-Building and External

Working Group: Fixed and Wireless Terminal

17 - 20 October 2022 Grand Continental Hotel, Kuala Terengganu

30 participants

Objective

- 1. To gather input from related stakeholder for the development for two draft TC: a) Maritime Radiocommunications Equipment
 - b) Aeronautical Radiocommunications Equipment

2. Sharing sessions by the expert on the following topics:

- a) Certification Process by SIRIM QAS International Sdn Bhd
- b) IR4.0: Expectations in Maritime Sector by Universiti Malaysia Terengganu (UMT)
- c) Introduction to Aeronautical Telecommunications and Regulations by Civil Aviation Authority of Malaysia (CAAM)
- 3. Site Visit to RV Discovery Ship by UMT to observe the actual radiocommunications being used in the ship.
- 4. Letter of Intent signing ceremony between MTSFB and UMT for better collaboration.

TC Discussed

- 1. Maritime Radiocommunications Equipment Specification
- 2. Aeronautical Radiocommunications Equipment Specification

Involvement in Standardisation Meetings

There are no boundaries when it comes to technology. MTSFB participates in various work and expert groups at the national and international level to drive progress in the industry and ensure that the nation's interests are represented in the efforts to develop standards that will shape our country, our world.

International Meetings

ITU-T SG17: Security - e-Plenary

Date: 7 January 2022

Summary

- This special e-plenary meeting will plan future SG17 meetings and take only necessary decisions on 12 items (refer Annex A) identified by last SG17 meeting.

Participants 7 via virtual meeting

Contribution paper

Based on Agenda 6, X.1051-rev2, Information Technology – Information security, cybersecurity and privacy
protection – Code of practice for information security controls based on ISO/IEC 27002 for telecommunications
organisations – in progress

2 World Telecommunication Standardisation Assembly (WTSA-20) and ITU 4th Global Standards Symposium (GSS)

Date:	Summary
18 - 22 April 2022	- Lead Country
	 Resolutions 78 - Information and communication technology applications and standards for improved access to e-health services - revised
Participants 10 4 joined physical meeting 6 via virtual meeting	 Resolution 84 – Studies concerning the protection of users of telecommunication/information and communication technology services –revised
	 Assisting Country Resolutions 2 - ITU Telecommunication Standardisation Sector study group responsibility and mandates - revised Resolution 50 - Cybersecurity - revised Resolution 52 - Countering and combating spam - unchanged Resolution 58 - Encouraging the creation of national computer incident response teams, particularly for developing countries - revised Resolution 64 - IP address allocation and facilitating the transition to and deployment of IPv6 - revised

- Resolution 96 ITU Telecommunication technology devices unchanged
- Resolution 98 Enhancing the standardisation of Internet of things and smart cities and communities for global development)- revision in progress

The 34th APT Standardisation Programme Forum (ASTAP-34)

Date: 18 - 22 April 2022

Participants 7 via virtual meeting

Summary

- The Questionnaire to develop a status report on APT members' status on the deployment of green or environment friendly ICT project under the Expert Group GICT & EMF have been approved by the Plenary. Refer to ASTAP-34/OUT-19
- Discussion on the APT Report on Requirements and Framework of IoT Elderly Care Solution EG IoT encourages other APT member countries to provide information about the existing IoT solutions fo elderly care.

ITU-T Study Group 17 (SG17) Meeting on Security

Date: 10 - 20 May 2022

Summary

 X.1051-rev2, Information Technology – Information security, cybersecurity and privacy protection – Code of practice for information security controls based on ISO/IEC 27002 for telecommunications organisations – in progress

Participants 5 via virtual meeting

ITU-T Study Group 5 (SG5) Meeting on EMF, Environment, Climate Action, Sustainable Digitalisation and Circular Economy

Date: 21 June 2022 – 1 July 2022 Participants 7 via virtual meeting	 Summary L.EWASTE-BASE_STATION, Scheduled waste management for base station (inclusive of e-waste). (Presenter: Dr. Tan Ching Seong) L.Sup.BP_EF "A Guideline on Best Practices and Environment Friendly Policies for Effective ICT Deployment Methods". The contributions C6-R1 and C46 were proposed and presented to revise Supplement 44 to ITU-T L-series Recommendations. Based on the discussion, it was agreed to initiate a new work item for the revision of Supplement 44. The final version of A.13 document can be found in TD227-R1.
6 ITU-T SG5 on E and Circular Ec	MF, Environment, Climate Action, Sustainable Digitalisation, conomy
Date: 17 - 27 October 2022 Venue: Rome, Italy, School of Economics at the University of Rome Tor Vergata Participants 5	 Contribution in Progress L.Suppl.44 (Rev) Guidelines on best practices and environment friendly policies for effective information and communication technology deployment methods. It includes updates on the responses of the questionnaire from various stakeholders. Outcome: The paper was not discussed in the last meeting due to no approval given for submission to ITU-T SG5 to this work item. In the previous SG5 meeting (July 2022), it was agreed to revise ITU-T Supplement 44 to ITU-T L-series Recommendations "Guidelines on Best Practices and Environment Friendly Policies for Effective Information and Communication Technology Deployment Methods" based on the contribution and discussion.
7 ITU-R Working	Party 5D Meeting on IMT Systems

Date: 18 - 24 June 2022

Contribution in Progress

Participants

5 2 joined physical meeting 3 via virtual meeting

ITU-T Study Group 17 (SG17) Meeting on Security

organisations - in progress

Summary

Date: 23 August -20 September 2022

Participants 6 via virtual meeting

9 18th SHARE Meeting

Date: 28 - 30 November 2022

Venue: Extension & Training Office (ETO) Kasetsart University, Bangkok, Thailand

Participants

Summary

- Info sharing on the latest activities by each partner
 - Participated in a series of activities planned and get to know the new Thai partners and its projects
 Visit to Tourism Authority of Thailand (TAT)

X.1051-rev2, Information Technology – Information security, cybersecurity and privacy protection – Code of practice for information security controls based on ISO/IEC 27002 for telecommunications

- Visit and participate in community activities Integrated Agriculture Management at Phichit Province
- Visit Mango Orchard for Export at Ang Thong Province
- Reviewing outcome from the projects
- Discussion on future activities

Background:

The SHARE partnership between Indonesia, Japan, Malaysia, Phlippines, Thailand and Vietnam has always intended to utilise the ICT expertise and solutions to their maximum potential for the benefit of communities and businesses, which would result in sustainable progress for members of SHARE partner countries and the Asian community as a whole.

Four applications over ICT/NGN agreed by the SHARE member to be developed as the solutions against social issues in rural area are:

- e-agriculture
 e-education
 - e-environment · e-healthcare

SHARE members consist of:

- 1. Government office which is a contact to ASTAP
- 2. Standards developing organisation
- 3. Academia who is a partner to implement APT project

National Level Involvement

As the standardisation body for the communications and multimedia industry in Malaysia, MTSFB plays an important role in driving the nation's digital economy aspirations. We take part in multiple standardisation meetings with our stakeholders in government and industry to ensure the smooth deployment and interoperability of new technologies in the country.

Bengkel Pembangunan Malaysian Standards dan Rangka Kerja Strategik

FRAMEWORK (di bawah NSC 27/TC 2)

Date

8 Aug 2022

Venue
Pullman Hotel, Kuching







International Conference on Non Ionising Radiation 2022 (ICNIR 2022)

Date 22 Sep 2022

Venue Bayview Hotel, Penang







Bengkel Pembangunan Standard on Smart City - Vocabulary

Date 27- 28 Oct 2022

Venue Cititel Hotel, Penang



IPDG Workshop

Date 13-15 Nov 2022

Venue Tasik Villa International, Port Dickson, Negeri Sembilan



Sub-Working Committee for Radiofrequency Electromagnetic Field (RF-EMF)

Date 17 Nov 2022

^{Venue} **Ministry of Health Malaysia, Putrajaya**





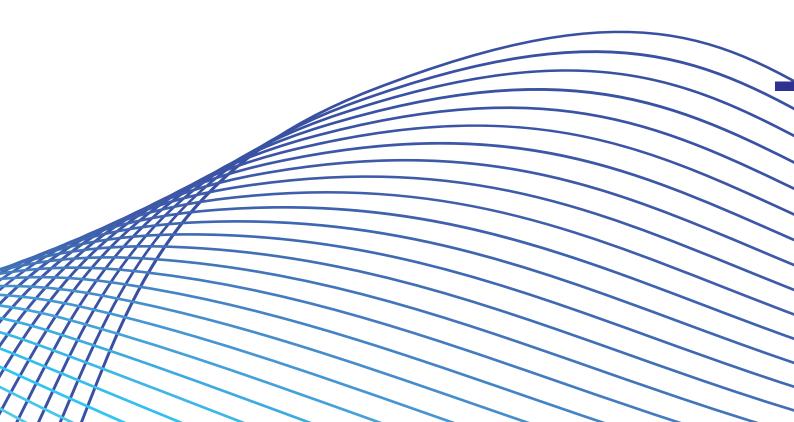






Industry Promotion and Development Grant

The Industry Promotion and Development Grant (IPDG)



45

The Industry Promotion and Development Grant (IPDG)

was aimed to support Proof-of-Concept (PoC) projects that contribute to the communications and multimedia industry.

Mooted by MCMC in 2012, its purpose is to enhance knowledge, encourage research and development (R&D) and establish competitiveness in technology innovation. MTSFB is entrusted by MCMC to manage the IPDG and to supervise the projects implemented by Grant recipients.

> Designing a Green Delivery Network for Medicine and



Al-lot-based Interactive Children's Educational Application CLAIM REWARD - IMAN VOCAB













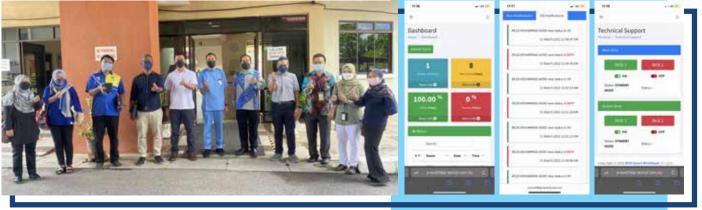








Monitoring System and Localisation of COVID-19 Patients







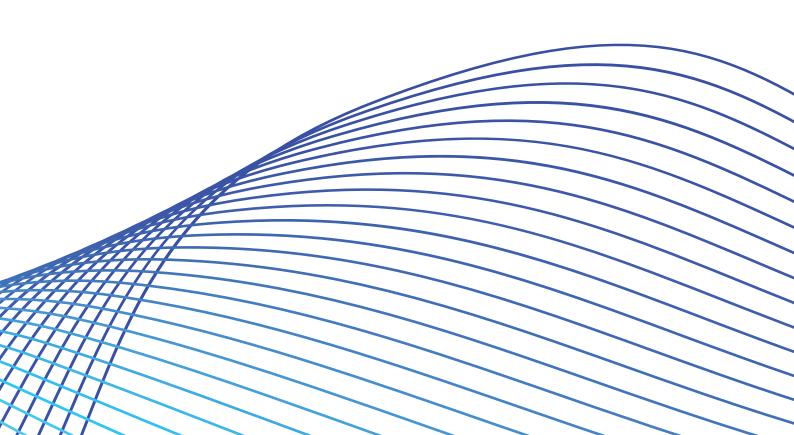
Vision-based Intelligent Traffic Monitoring System (VBITMS)







Directors' Report and Financial Statements



For the Financial Year Ended 31 December 2022

The directors hereby submit their report together with the audited financial statements of the Company for the financial year ended 31 December 2022.

Principal Activities

The Company is principally engaged in promoting the development of standards and safety of network facilities, establishing and maintaining standards, technical codes, network interoperability and operational issues affecting the Malaysian communications and multimedia industry and to develop, recommend, modify, update and seek registration of technical codes from time to time.

There have been no significant changes in the nature of the principal activities during the year.

Results

	RM
Operating surplus after taxation	283,937
Accumulated surplus brought forward	968,446
Accumulated surplus carried forward	1,252,383

Dividends

In accordance with the Memorandum of Association, no dividends are payable to the Members of the Company.

Reserves and Provisions

There were no material transfers to or from reserves and provisions during the financial year.

Directors of the Company

The names of the directors of the Company in office since the date of the last report and at the date of this report are:

Azni Risa binti Ramlan Norazizan bin Mohamad Fami bin Abdul Hamid Nivendran A/L Veerappan

For the Financial Year Ended 31 December 2022

Liew Sze Yarn Mohd Mazlan bin Abd Razak Amirah binti Abd Majid Fauziah binti Fadzil Mohd Izni Zuhdi bin Mohamed Rawi (Alternate Director to Azni Risa binti Ramlan) Mohamad Isa bin Mohd Razhali (Alternate Director to Nivendran A/L Veerappan) Mohd Fuad bin Romeli (Alternate Director to Liew Sze Yarn) Low Chia Seng (Alternate Director to Mohd Mazlan bin Abd Razak) Ong Cheok Seong (Alternate Director to Amirah binti Abd Majid)

Directors' Interest

The Company is a company limited by guarantee and thus has no shares in which the directors could have an interest. The Company has not issued any debentures.

In the event of the Company being wound up, each member of the Company undertakes to contribute a maximum of RM100 to the assets of the Company.

Directors' Benefits

During and at the end of the financial year, no arrangement subsisted to which the Company is a party, with the object or objects of enabling directors of the Company to acquire benefits by means of the acquisition of shares in or debentures of the Company or any other body corporate.

Since the end of the last financial year, no director of the Company has received or become entitled to receive any benefits (other than those shown below) by reason of a contract made by the Company or a related corporation with the director or with a firm which the director is a member or with a company in which the director has a substantial financial interest.

The directors' benefits paid to or receivable by directors in respect of the financial year ended 31 December 2022 are as follows:

	RM
Directors of the Company	6.250
- Meeting allowance	0,230

For the Financial Year Ended 31 December 2022

Other Statutory Information

Before the financial statements of the Company were made out, the directors took reasonable steps:

- (i) to ascertain that proper action had been taken in relation to the writing off of bad debts and the making of provision for bad and doubtful debts and satisfied themselves that no known bad debts had been written off and that adequate provision had been made for bad and doubtful debts; and
- (ii) to ensure that any current assets which were unlikely to realise their value as shown in the accounting records in the ordinary course of business had been written down to an amount which they might be expected so to realise.

At the date of this report, the directors are not aware of any circumstances which would render:

- (i) the amount written off for bad debts or the amount of the provision for bad and doubtful debts inadequate to any substantial extent; and
- (ii) the values attributed to the current assets in the financial statements of the Company misleading.

At the date of this report, the directors are not aware of any circumstances which have arisen which would render adherence to the existing method of valuation of assets or liabilities of the Company misleading or inappropriate.

At the date of this report, the directors are not aware of any circumstances not otherwise dealt with in this report or financial statements of the Company which would render any amount stated in the financial statements misleading.

As at the date of this report, there does not exist:

- (i) any charge on the assets of the Company which has arisen since the end of the financial year which secures the liabilities of any other person; or
- (ii) any contingent liability of the Company which has arisen since the end of the financial year.

In the opinion of the directors:

- no contingent or other liability has become enforceable or is likely to become enforceable within the period of twelve months after the end of the financial year which will or may affect the ability of the Company to meet their obligations when they fall due; and
- (ii) no item, transaction or event of a material and unusual nature has arisen in the interval between the end of the financial year and the date of this report which is likely to affect substantially the results of the operations of the Company for the financial year in which this report is made.

For the Financial Year Ended 31 December 2022

Indemnifying Directors, Officers or Auditors

No indemnities have been given or insurance premiums paid, during or since the end of the year, for any person who is or has been director, officer or auditor of the Company.

Auditors

The auditors, Messrs. Khairuddin Hasyudeen & Razi, retired and have expressed their willingness to accept re-appointment.

The auditors' remuneration of the Company during the year is RM12,000.

Signed on behalf of the Board in accordance with a resolution of the directors,

Ammun

Norazizan bin Mohamad Director

Amirah binti Abd Majid Director

Kuala Lumpur Dated: 23 MAY 2023

Statement by Directors

Pursuant to Section 251(2) of the Companies Act, 2016

We, **Norazizan bin Mohamad** and **Amirah binti Abd Majid**, two of the directors of MALAYSIAN TECHNICAL STANDARDS FORUM BHD., do hereby state that, in the opinion of the directors, the accompanying financial statements set out on pages 58 to 91 are drawn up in accordance with Malaysian Financial Reporting Standards, International Financial Reporting Standards and the provisions of the Companies Act, 2016 in Malaysia so as to give a true and fair view of the financial position of the Company as at 31 December 2022 and of its financial performance and cash flows for the financial year then ended.

Signed on behalf of the Board in accordance with a resolution of the directors,

Summe

Norazizan bin Mohamad Director

Amirah binti Abd Majid Director

Kuala Lumpur Dated: 23 MAY 2023

For the Financial Year Ended 31 December 2022

I, **Humairah binti Ahmad Nasir**, the officer primarily responsible for the accounting records and financial management of MALAYSIAN TECHNICAL STANDARDS FORUM BHD., do solemnly and sincerely declare that the accompanying financial statements set out on pages 58 to 91 are to the best of my knowledge and belief, correct and make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Statutory Declaration Act, 1960.

Subscribed and solemnly declared k	ру)	
Humairah binti Ahmad Nasir)	frand
at Kuala Lumpur in the)	Anne
Federal Territory Kuala Lumpur on	2 3 MAY 2023)	Humairah binti Ahmad Nasir



Independent Auditors' Report

to the Members of Malaysian Technical Standards Forum Bhd.

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of MALAYSIAN TECHNICAL STANDARDS FORUM BHD., which comprise the statement of financial position as at 31 December 2022, and the statement of profit or loss and other comprehensive income, statement of changes in non-distributable fund and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, as set out on pages 58 to 91.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the Company as at 31 December 2022, and of its financial performance and cash flows for the year then ended in accordance with Malaysian Financial Reporting Standards, International Financial Reporting Standards and the requirements of the Companies Act, 2016 in Malaysia.

Basis for Opinion

We conducted our audit in accordance with approved standards on auditing in Malaysia and International Standards on Auditing. Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence and Other Ethical Responsibilities

We are independent of the Company in accordance with the *By-Laws* (on *Professional Ethics, Conduct and Practice*) of the Malaysian Institute of Accountants ("By-Laws") and the International Ethics Standards Board for Accountants' *International Code of Ethics for Professional Accountants* (*including International Independence Standards*) ("IESBA Code"), and we have fulfilled our other ethical responsibilities in accordance with the By-Laws and the IESBA Code.

Information Other than the Financial Statements and Auditors' Report Thereon

The directors of the Company are responsible for the other information. The other information comprises the Directors' Report but does not include the financial statements of the Company and our Auditors' Report thereon.

Our opinion on the financial statements of the Company does not cover the Directors' Report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements of the Company, our responsibility is to read the Directors' Report and, in doing so, consider whether the Directors' Report is materially inconsistent with the financial statements of the Company or our knowledge obtained in the audit or otherwise appears to be materially misstated.

Independent Auditors' Report

to the Members of Malaysian Technical Standards Forum Bhd.

If, based on the work we have performed, we conclude that there is a material misstatement of the Directors' Report, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Directors for the Financial Statements

The directors of the Company are responsible for the preparation of financial statements that give a true and fair view in accordance with Malaysian Financial Reporting Standards, International Financial Reporting Standards and the requirements of the Companies Act, 2016 in Malaysia. The directors are also responsible for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements of the Company, the directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements of the Company as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with approved standards on auditing in Malaysia and International Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with approved standards on auditing in Malaysia and International Standards on Auditing, we exercise professional judgement and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements of the Company, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

Independent Auditors' Report

to the Members of Malaysian Technical Standards Forum Bhd.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based
 on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that
 may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a
 material uncertainty exists, we are required to draw attention in our auditors' report to the related
 disclosures in the financial statements of the Company or, if such disclosures are inadequate, to modify our
 opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report.
 However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements of the Company, including the disclosures, and whether the financial statements of the Company represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Other Matters

This report is made solely to the members of the Company, as a body, in accordance with Section 266 of the Companies Act, 2016 in Malaysia and for no other purpose. We do not assume responsibility to any other person for the content of this report.

Khairuddin Hasyudeen & Razi AF 1161 Chartered Accountants

Kuala Lumpur Dated: 23 May 2023

Ahmad Shahrul bin Mohamed 02138/04/2025 J Partner of the Firm

Statement of Financial Position

as at 31 December 2022

	Note	2022 RM	2021 RM
ASSETS			
Non-Current Assets			
Property, plant and equipment	5	23,266	8,670
Right-of-use assets	6	524,522	-
		547,788	8,670
Current Assets			
Amount due from members	7	45,000	12,518
Other receivables, deposits and prepayments	8	314,106	3,911
Tax recoverable		14,450	15,725
Cash and cash equivalents	9	1,957,384	2,522,108
		2,330,940	2,554,262
TOTAL ASSETS		2,878,728	2,562,932
EQUITY			
Non-distributable fund			
Membership fund	10	168,000	163,000
Accumulated surplus		1,252,383	968,446
Total Equity		1,420,383	1,131,446
LIABILITIES			
Non-Current Liabilities			
Project grants	11	668,088	1,074,329
Lease liabilities	12	463,524	
		1,131,612	1,074,329
Current Liabilities			
Other payables and accruals	13	264,428	357,157
Lease liabilities	12	62,305	_
		326,733	357,157
Total Liabilities		1,458,345	1,431,486
TOTAL EQUITY AND LIABILITIES		2,878,728	2,562,932

The accompanying notes form an integral part of the financial statements.

Statement of Profit or Loss and Other Comprehensive Income

For the Financial Year Ended 31 December 2022

Note	2022 RM	2021 RM
14	365,823	355,515
15	1,696,895	1,370,551
	(1,778,781)	(1,617,977)
16	283,937	108,089
17	-	-
	283,937	108,089
	14 15 16	Note RM 14 365,823 15 1,696,895 (1,778,781) 16 283,937 17 –

Statement of Changes in Non-Distributable Funds

For the Financial Year Ended 31 December 2022

	Membership Fund RM	Accumulated Surplus RM	Total RM
Balance as at 31 December 2020	159,000	860,357	1,019,357
Subscription from new members	4,000	-	4,000
Surplus of income over expenditure for financial year		108,089	108,089
Balance as at 31 December 2021	163,000	968,446	1,131,446
Subscription from new members	5,000	-	5,000
Surplus of income over expenditure for financial year	_	283,937	283,937
Balance as at 31 December 2022	168,000	1,252,383	1,420,383

Statement of Cash Flows

For the Financial Year Ended 31 December 2022

	2022 RM	2021 RM
CASH FLOW FROM OPERATING ACTIVITIES		
Operating surplus before taxation	283,937	108,089
Adjustments for:		
Depreciation of property, plant and equipment		
- property, plant and equipment	10,604	4,565
- right-of-use assets	6,320	-
Impairment losses on amount due from members	-	11,792
Interest expense	2,862	-
Reversal of impairment losses on amount due from members	(2,000)	(2,000)
Utilisation of government grants	(1,693,836)	(1,368,551)
Operating deficit before working capital changes	(1,392,113)	(1,246,105)
Changes in working capital:		
- amount due from members and other receivables	(340,677)	25,238
- other payables	(160,723)	(589,527)
Cash used in operations	(1,893,513)	(1,810,394)
Income taxes paid	(7,225)	(7,225)
Income taxes refunds	8,500	9,760
Net cash used in operating activities	(1,892,238)	(1,807,859)
CASH FLOW FROM INVESTING ACTIVITY		
Purchase of property, plant and equipment	(25,200)	(10,000)
Net cash used in investing activity	(25,200)	(10,000)
CASH FLOW FROM FINANCING ACTIVITIES		
Proceeds from members' initial contribution	5,000	4,000
Payment of lease liabilities	(7,875)	-
Receipts of grants	1,355,589	1,326,219
Net cash provided by financing activities	1,352,714	1,330,219
Net decrease in cash and cash equivalents	(564,724)	(487,640)
Cash and cash equivalents brought forward	2,522,108	3,009,748
Cash and cash equivalents carried forward (Note 9)	1,957,384	2,522,108
The accompanying notes form an integral part of the financial statements		

The accompanying notes form an integral part of the financial statements.

31 December 2022

1. General

(a) The Company is principally engaged in promoting the development of standards and safety of network facilities, establishing and maintaining standards, technical codes, network interoperability and operational issues affecting the Malaysian communications and multimedia industry and to develop, recommend, modify, update and seek registration of technical codes from time to time.

There have been no significant changes in the nature of the principal activities during the year.

- (b) The principal place of business is located at Level 3A, MCMC Tower 2, Jalan Impact, 63000 Cyberjaya, Selangor Darul Ehsan.
- (c) The registered office is located at 12th Floor, Menara Symphony, No. 5, Jalan Prof. Khoo Kay Kim, Seksyen 13, 46200 Petaling Jaya, Selangor Darul Ehsan.

2. Basis of Preparation of the Financial Statements

(a) Statement of compliance

The financial statements of the Group and of the Company have been prepared in accordance with Malaysian Financial Reporting Standards (MFRSs), International Financial Reporting Standards (IFRSs) and the requirement of the Companies Act, 2016 in Malaysia.

The following are accounting standards, amendments and interpretations of the MFRSs Framework that have been issued by the Malaysian Accounting Standards Board (MASB) which are not yet effective and have not been adopted by the Company:

MFRSs, Interpretations and amendments effective for annual periods beginning on or after 1 January 2023:

- MFRS 17, Insurance Contracts
- Amendments to MFRS 17, Insurance Contracts Initial Application of MFRS 17 and MFRS 9 Comparative Information
- Amendments to MFRS 101 Presentation of Financial Statements –Classification of Liabilities as
 Current or Non-current
- Amendments to MFRS 101 Presentation of Financial Statements Disclosure of Accounting Policies
- Amendments to MFRS 108 Accounting Policies, Changes in Accounting Estimates and Errors –
 Definition of Accounting Estimates
- Amendments to MFRS 112 Income Taxes Deferred Tax related to Assets and Liabilities arising from a Single Transaction

31 December 2022

Amendments effective for annual periods beginning on or after 1 January 2024:

- Amendment to MFRS 16, Leases Lease Liability in a Sale and Leaseback
- Amendment to MFRS 101, Presentation of Financial Statements Noncurrent Liabilities with Covenants

MFRSs, Interpretations and Amendments effective for annual periods beginning on or after a date yet to be confirmed:

• Amendments to MFRS 10, Consolidated Financial Statement and MFRS 128, Investment in Associates and Joint Ventures – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture.

The directors believe that the adoption of the above amendments, improvements and MFRS will not have any significant effect on the financial performance and position of the Company upon their initial application.

(b) Basis of measurement

The financial statements have been prepared on the historical cost basis other than as disclosed in Note 4.

(c) Functional and presentation currency

The financial statements are presented in Ringgit Malaysia (RM), which is the Company's functional currency unless otherwise stated.

(d) Use of estimates and judgements

The preparation of the financial statements in conformity with MFRSs requires Directors to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

For the current financial year, there were no significant areas of estimation uncertainty and critical judgements in applying accounting policies that have significant effect on the amounts recognised in the financial statements, other than those disclosed in Note 7 – Impairment of amount due from members.

3. Date of Authorisation of Issue

The financial statements were authorised for issued by the Board of Directors on 23 May 2023.

31 December 2022

4. Significant Accounting Policies

The accounting policies set out below have been applied consistently to the periods presented in the financial statements, and have been consistently by the Company, unless otherwise stated.

(a) Financial instruments

(i) Recognition and initial measurement

A financial asset or a financial liability is recognised in the statement of financial position when, and only when, the Company becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without significant financing component) or a financial liability is initially measured at fair value plus or minus, for an item not at fair value through profit or loss, transaction costs that are directly attributable to its acquisition or issuance. A trade receivable without a significant financing component is initially measured at the transaction price.

(ii) Financial instrument categories and subsequent measurement

Financial assets

Categories of financial assets are determined on initial recognition and are not reclassified subsequent to their initial recognition unless the Company changes its business model for managing financial assets in which case all affected financial assets are reclassified on the first day of the first reporting period following the change of the business model.

(a) Amortised cost

Amortised cost category comprises financial assets that are held within a business model whose objective is to hold assets to collect contractual cash flows and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The financial assets are not designated as fair value through profit or loss. Subsequent to initial recognition, these financial assets are measured at amortised cost using the effective interest method.

The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.

31 December 2022

Interest income is recognised by applying effective interest rate to the gross carrying amount except for credit impaired financial assets (see Note 4(e)(i)) where the effective interest rate is applied to the amortised cost.

(b) Fair value through other comprehensive income

(i) Debt investments

Fair value through other comprehensive income category comprises debt investment where it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the debt investment, and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. The debt investment is not designated as at fair value through profit or loss.

Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in profit or loss. Other net gains and losses are recognised in other comprehensive income.

On derecognition, gains and losses accumulated in other comprehensive income are reclassified to profit or loss.

Interest income is recognised by applying effective interest rate to the gross carrying amount except for credit impaired financial assets (see Note 4(e)(i)) where the effective interest rate is applied to the amortised cost.

(ii) Equity investments

This category comprises investment in equity that is not held for trading, and the Company irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an investment-byinvestment basis. Dividends are recognised as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of investment. Other net gains and losses are recognised in other comprehensive income.

On derecognition, gains and losses accumulated in other comprehensive income are not reclassified to profit or loss.

31 December 2022

(c) Fair value through profit or loss

All financial assets not measured at amortised cost or fair value through other comprehensive income as described above are measured at fair value through profit or loss. This includes derivative financial assets (except for a derivative that is a designated and effective hedging instrument).

On initial recognition, the Company may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at fair value through other comprehensive income as at fair value through profit or loss if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Financial assets categorised as fair value through profit or loss are subsequently measured at their fair value. Net gains or losses, including any interest or dividend income, are recognised in the profit or loss.

All financial assets, except for those measured at fair value through profit or loss and equity investments measured at fair value through other comprehensive income, are subject to impairment assessment (see Note 4(e)(i)).

Financial liabilities

The categories of financial liabilities at initial recognition are as follows:

(a) Fair value through profit or loss

Fair value through profit or loss category comprises financial liabilities that are derivatives (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument), contingent consideration in a business combination and financial liabilities that are specifically designated into this category upon initial recognition.

On initial recognition, the Company may irrevocably designate a financial liability that otherwise meets the requirements to be measured at amortised cost as at fair value through profit or loss:

 (i) if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise;

31 December 2022

- a group of financial liabilities or assets and financial liabilities is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided internally on that basis to the Company's key management personnel; or
- (iii) if a contract contains one or more embedded derivatives and the host is not a financial asset in the scope of MFRS 9, where the embedded derivative significantly modifies the cash flows and separation is not prohibited.

Financial liabilities categorised as fair value through profit or loss are subsequently measured at their fair value with gains or losses, including any interest expense are recognised in the profit or loss.

For financial liabilities where it is designated as fair value through profit or loss upon initial recognition, the Company recognises the amount of change in fair value of the financial liability that is attributable to change in credit risk in the other comprehensive income and remaining amount of the change in fair value in the profit or loss, unless the treatment of the effects of changes in the liability's credit risk would create or enlarge an accounting mismatch.

(b) Amortised cost

Other financial liabilities not categorised as fair value through profit or loss are subsequently measured at amortised cost using the effective interest method.

Interest expense and foreign exchange gains and losses are recognised in the profit or loss. Any gains or losses on derecognition are also recognised in the profit or loss.

(iii) Derecognition

A financial asset or part of it is derecognised when, and only when, the contractual rights to the cash flows from the financial asset expire or transferred, or control of the asset is not retained or substantially all of the risks and rewards of ownership of the financial asset are transferred to another party. On derecognition of a financial asset, the difference between the carrying amount of the financial asset and the sum of consideration received (including any new asset obtained less any new liability assumed) is recognised in profit or loss.

31 December 2022

A financial liability or a part of it is derecognised when, and only when, the obligation specified in the contract is discharged, cancelled or expires. A financial liability is also derecognised when its terms are modified and the cash flows of the modified liability are substantially different, in which case, a new financial liability based on modified terms is recognised at fair value.

On derecognition of a financial liability, the difference between the carrying amount of the financial liability extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss.

(iv) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Company currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and liability simultaneously.

(b) Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are stated at cost less any accumulated depreciation and any accumulated impairment losses.

Cost includes expenditures that are directly attributable to the acquisition of the asset and any other costs directly attributable to bringing the asset to working condition for its intended use, and the costs of dismantling and removing the items and restoring the site on which they are located. The cost of self-constructed assets also includes the cost of materials and direct labour. For qualifying assets, borrowing costs are capitalised in accordance with the accounting policy on borrowing costs.

Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When significant parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

The gain or loss on disposal of an item of property, plant and equipment is determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment and are recognised net within "other income" and "other expenses" respectively in profit or loss.

31 December 2022

(ii) Subsequent costs

The cost of replacing a component of an item or property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the component will flow to the Company and its cost can be measured reliably. The carrying amount of the replaced component is derecognised to profit or loss. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

(iii) Depreciation

Depreciation is based on the cost of an asset less its residual value. Significant components of individual assets are assessed, and if a component has a useful life that is different from the remainder of that asset, then that component is depreciated separately.

Depreciation is recognised in profit or loss on a straight-line basis over the estimated useful lives of each component of an item of property, plant and equipment from the date that they are available for use.

The estimated useful lives are at the following rates:

Computers	33.33%
Furniture and fittings	20%
Office equipment	20%

Depreciation methods, useful lives and residual value are reviewed at end of the reporting period, and adjusted as appropriate.

(c) Leases

(i) Definition of a lease

A contract is, or contains, a lease if the contract conveys a right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use if an identified asset, the Company assesses whether:

- the contract involves the use of an identified asset this may be specified explicitly or implicitly, and should be physically distinct or represent substantially all of the capacity of physically distinct asset. If the supplier has substantive substitution right, then the asset is not identified;
- the customer has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and

31 December 2022

the customer has the right to direct the use of the asset. The customer has this right when it has the decision-making rights that are most relevant to changing how and for what purpose the asset is used.

In rare cases where the decision about how and for what purpose the asset is used is predetermined, the customer has the right to direct the use of the asset if either the customer has the right to operate the asset; or the customer designed the asset in a way that predetermines how and for what purpose it will be used.

At inception or on reassessment of a contract that contains a lease component, the Company allocates the consideration in the contract to each lease and non-lease component on the basis on their relative standalone prices. However, for lease of properties in which the Company is a lessee, it has elected not to separate non-lease components and will instead account for the lease and non-lease components as a single lease component.

(ii) Recognition and initial measurement

(a) As a lessee

The Company recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate.

Lease payments included in the measurement at the present value of the liability comprise the following:

 Fixed payments, including in-substance fixed payments less any incentives receivable;

31 December 2022

- Variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- Amounts expected to be payable under a residual value guarantee;
- The exercise price under a purchase option that the Company is reasonably certain to exercise; and
- Penalties for early termination of lease unless the Company is reasonably certain not to terminate early.

The Company excludes variable lease payments that linked to future performance or usage of the underlying asset from the lease liability. Instead, these payments are recognised in profit or loss in the period in which the performance or use occurs.

The Company has elected not to recognise right-of-use assets and lease liabilities for the short-term leases that have a lease term of 12 months or less and leases of low-value assets. The Company recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

(b) As a lessor

When the Company acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, the Company makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, then the lease is a financial lease; if not, then it is an operating lease.

If an arrangement contains lease and non-lease components, the Company applies MFRS 15 to allocate the consideration in the contract based on the stand-alone selling prices.

When the Company is an intermediate lessor, it accounts for its interests in the head lease and the sublease separately. It assesses the lease classification of a sublease with reference to the right-of-use asset arising from the head lease, not with reference to underlying asset. If a head lease is a short-term lease to which the Company applies the exemption described above, then it classifies the sublease as an operating lease.

31 December 2022

(iii) Subsequent measurement

(a) As a lessee

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of the right-of-use assets are determined on the same basis as those of property, plant and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is revision of in-substance fixed lease payments, or if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Group changes its assessment of whether it will exercise a purchase, extension or termination option.

When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

(b) As a lessor

The Company recognises lease payments received under operation leases as income on a straight-line basis over the lease term as part of "revenue".

(d) Cash and cash equivalents

Cash and cash equivalents consist of cash in hand and bank balances.

(e) Impairment

(i) Financial assets

The Company recognises loss allowances for expected credit losses on financial assets measured at amortised cost, debt investments measured at fair value through other comprehensive income, contract assets and lease receivables. Expected credit losses are a probability-weighted estimate of credit losses.

31 December 2022

The Company measures loss allowances at an amount equal to lifetime expected credit loss, except for debt securities that are determined to have low credit risk at the reporting date, cash and bank balance and other debt securities for which credit risk has not increased significantly since initial recognition, which are measured at 12-month expected credit loss. Loss allowances for trade receivables, contract assets and lease receivables are always measured at an amount equal to lifetime expected credit loss.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating expected credit loss, the Company considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Company's historical experience and informed credit assessment and including forward-looking information, where available.

Lifetime expected credit losses are the expected credit losses that result from all possible default events over the expected life of the asset, while 12-month expected credit losses are the portion of expected credit losses that result from default events that are possible within the 12 months after the reporting date. The maximum period considered when estimating expected credit losses is the maximum contractual period over which the Company is exposed to credit risk.

The Company estimates the expected credit losses on trade receivables using a provision matrix with reference to historical credit loss experience.

An impairment loss in respect of financial assets measured at amortised cost is recognised in profit or loss and the carrying amount of the asset is reduced through the use of an allowance account.

An impairment loss in respect of debt investments measured at fair value through other comprehensive income is recognised in profit or loss and the allowance account is recognised in other comprehensive income.

At each reporting date, the Company assesses whether financial assets carried at amortised cost and debt securities at fair value through other comprehensive income are credit impaired. A financial asset is credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

31 December 2022

The gross carrying amount of a financial asset is written off (either partially or full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Company determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Company's procedures for recovery amounts due.

(ii) Other assets

The carrying amounts on other assets (except for inventories, contract assets, lease receivables, deferred tax asset, asset arising from employee benefits, investment properties measured at fair value and non-current assets (or disposal groups) classified as held for sale) are reviewed at the end of each reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or cash-generating units.

The recoverable amount of an asset or cash-generating unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or cash generatingunit.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount.

Impairment losses are recognised in the profit or loss. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (group of cash-generating units) and then to reduce the carrying amounts of the other assets in the cash-generating unit (groups of cashgenerating units) on a *pro rata* basis.

Impairment losses recognised in prior periods are assessed at the end of each reporting period for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount since the last impairment loss was recognised.

31 December 2022

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognised.

(f) Provisions

A provision is recognised if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pretax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as finance cost.

(g) Revenue

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured. The following specific recognition criteria must also be met before revenue is recognised:

(i) Subscription fees

A fixed quantum of subscription fees is recognised as initial subscription fees in the year the subscription is accepted.

The annual subscription fees received and receivable by the Company is recognised on an accrual basis.

(h) Project grants

Project grants are recognised as non-current liability upon receipt from Malaysian Communications and Multimedia Commission for industry promotion and development purposes. All expenditure related to the grant is shown as disbursement of grant.

(i) Government grants

Government grants are recognised initially as deferred income at fair value when there is reasonable assurance that they will be received and the Company will comply with the conditions associated with the grant and are then recognised in profit or loss as other income on a systematic basis over the useful life of the asset. Grants that compensate the Company for expenses incurred are recognised in profit or loss as other income on a systematic basis in the same periods in which the expenses are recognised.

31 December 2022

(j) Income tax

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognised in profit or loss except to the extent that it relates to a business combination or items recognised directly in equity or other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted by the end of the reporting year, and any adjustment to tax payable in respect of previous financial years.

Deferred tax is recognised using the liability method, providing for temporary differences between the carrying amounts of assets and liabilities in the statement of financial position and their tax bases. Deferred tax is not recognised for the following temporary differences: the initial recognition of goodwill, the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Deferred tax assets are reviewed at the end of each reporting year and are reduced to the extent that is no longer probable that the related tax benefit will be realised.

Unutilised reinvestment allowance and investment tax allowance, being tax incentives that is not a tax base of an asset, is recognised as a deferred tax asset to the extent that it is probable that the future taxable profits will be available against which the unutilised tax incentive can be utilised.

(k) Employee benefits

(i) Short term employee benefits

Short-term employee benefit obligations in respect of salaries, annual bonuses, paid annual leave and sick leave are measured on an undiscounted basis and are expensed as the related service is provided.

31 December 2022

A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(ii) Contribution plans

The Company's contributions to statutory pension funds are charged to profit or loss in the financial year to which they relate. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in future payments is available. As required by law, companies in Malaysia make such contribution to the Employees Provident Fund ("EPF").

(I) Fair value measurement

Fair value of an asset or a liability, except for share-based payment and lease transactions, is determined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The measurement assumes that the transaction to sell the asset or transfer the liability takes place either in the principal market or in the absence of a principal market, in the most advantageous market.

For non-financial asset, the fair value measurement takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

When measuring the fair value of an asset or a liability, the Company uses observable market data as far as possible. Fair value is categorised into different levels in a fair value hierarchy based on the input used in the valuation technique as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company can access at the measurement date.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3: unobservable for the asset or liability, either directly or indirectly.

The Company recognises transfers between levels of the fair value hierarchy as of the date of the event or change in circumstances that caused the transfers.

31 December 2022

5. Property, Plant and Equipment

		COST		
	Balance as at 1.1.2022 RM	Additions RM	Disposals RM	Balance as at 31.12.2022 RM
Computers	126,548	25,200	-	151,748
Furniture and fittings	8,423	-	-	8,423
Office equipment	21,831	-	-	21,831
	156,802	25,200	-	182,002

	ACCUMULATED DEPRECIATION			
	Balance as at 1.1.2022 RM	Additions RM	Disposals RM	Balance as at 31.12.2022 RM
Computers	126,547	7,570	-	134,117
Furniture and fittings	8,422	-	-	8,422
Office equipment	13,163	3,034	-	16,197
	148,132	10,604	-	1 58,736

	CARRYING VALUE		
	2022 RM	2021 RM	Depreciation 2021 RM
Computers	17,631	1	3,232
Furniture and fittings	1	1	-
Office equipment	5,634	8,668	1,333
	23,266	8,670	4,565

The cost of property, plant and equipment which has been fully depreciated but still in use are as follows:

	2022 RM	2021 RM
Computers	121,822	46,069
Furniture and fittings	8,423	8,423
Office equipment	11,831	11,831
	142,076	66,323

31 December 2022

6. Right-of-Use Assets

	2022 RM
Cost	
At 1 January	-
Additions	530,842
At 31 December	530,842
Accumulated depreciation	
At 1 January	-
Charges	6,320
At 31 December	6,320
Carrying amount	
At 31 December	524,522

The Company lease an office space that runs for 7 years.

Set out below the carrying amounts of lease liabilities and the movement during the period:

	2022 RM
At 1 January	-
Additions	530,842
Accretion of interest	2,862
Payments	(7,875)
At 31 December	525,829
Current	62,305
Non-Current	463,524
	525,829

31 December 2022

7. Amount Due from Members

	2022 RM	2021 RM
Amount due from members	139,529	109,047
Less: Accumulated impairment losses	(94,529)	(96,529)
	45,000	12,518

8. Other Receivables, Deposits and Prepayments

	2022 RM	2021 RM
Other receivables	276,547	-
Deposits	33,200	1,500
Prepayments	4,359	2,411
	314,106	3,911

9. Cash and Cash Equivalents

	2022 RM	2021 RM
Cash in hand and at bank	1,957,384	2,522,108

10. Membership Fund

	2022 RM	2021 RM
At 1 January	163,000	159,000
Subscription from members	5,000	4,000
At 31 December	168,000	163,000

The membership fund represents the initial contribution from the members.

31 December 2022

The movement of the members are as follows:

	2022 RM	2021 RM
At 1 January	82	94
Add: New members	5	4
Less: Discontinued memberships	(1)	(16)
At 31 December	86	82

11. Project Grants

	2022 RM	2021 RM
Malaysian Communications and Multimedia Commission (MCMC)		
- Green ICT (GICT)	231,513	415,128
- Internet of Things (IOT)	436,575	659,201
	668,088	1,074,329

The movement of the project grants are as follows:

	2022 RM	2021 RM
At 1 January	1,074,329	1,525,377
Disbursed during the year	(406,241)	(451,048)
At 31 December	668,088	1,074,329

12. Lease Liabilities

	2022 RM
Future lease payments payable	
- not later than 1 year	94,500
- later than 1 year	559,125
	653,625
Future finance charges	(127,796)
Present value of lease payments	525,829

31 December 2022

(continued)	2022 RM
Present value of lease payments	
- not later than 1 year	62,305
- later than 1 year	463,524
	525,829

13. Other Payables and Accruals

	2022 RM	2021 RM
Working group honorarium payable	16,627	16,627
Technical code incentive payable	166,614	192,065
Drafter incentive payable	5,600	8,600
Amount due to members	1,000	3,230
Others	74,587	136,635
	264,428	357,157

14. Revenue

	2022 RM	2021 RM
Subscription fees	365,823	355,515

15. Other Operating Income

	2022 RM	2021 RM
Utilisation of government grants	1,693,836	1,368,551
Reversal of impairment losses on amount due from members	2,000	2,000
Others	1,059	-
	1,696,895	1,370,551

31 December 2022

16. Operating Surplus Before Taxation

Operating surplus before taxation is arrived at after charging the following items:

	2022 RM	2021 RM
Auditors' remuneration	12,000	12,000
Depreciation		
- property, plant and equipment	10,604	4,565
- right-of-use assets	6,320	-
Directors' meeting allowances	6,250	7,250
Impairment losses on amount due from members	-	11,792
Interest on lease liabilities	2,862	-
Rental:		
- equipment	3,420	4,560
- space	9,260	400

17. Taxation

Reconciliation of tax expense with operating surplus before taxation:

	2022 RM	2021 RM
Operating surplus before taxation	283,937	108,089
Tax at the current income tax rate of 24%	68,145	25,941
Tax effect in respect of:		
Non-allowable expenses	426,174	387,835
Disregarded income	(87,798)	(85,324)
Non-taxable income	(406,521)	(328,452)
Tax expense	-	-

18. Staff Costs

	2022 RM	2021 RM
Salaries, bonus and allowances	992,742	1,031,752
EPF contribution	108,694	108,101
SOCSO contribution	8,363	9,043
Other employee benefits	26,147	26,681
	1,135,946	1,175,577

The numbers of employees in the Company at the end of the financial year were 12 (2021: 12).

31 December 2022

19. Financial Instruments

(a) Categories of financial instruments

The table below provides an analysis of financial instruments categorised as amortised cost ("AC").

	Carrying Amount RM	AC RM
2022		
Financial assets		
Amount due from members	45,000	45,000
Other receivables, deposit and prepayments	314,106	314,106
Cash and cash equivalents	1,957,384	1,957,384
	2,316,490	2,316,490
Financial liabilities		
Other payables and accruals	(264,428)	(264,428)
Project grants	(668,088)	(668,088)
	(932,516)	(932,516)
2022		
<u>Financial assets</u>		
Amount due from members	12,518	12,518
Other receivables, deposit and prepayments	3,911	3,911
Cash and cash equivalents	2,522,108	2,522,108
	2,538,537	2,538,537
<u>Financial liabilities</u>		
Other payables and accruals	(357,157)	(357,157)
Project grants	(1,074,329)	(1,074,329)
	(1,431,486)	(1,431,486)

31 December 2022

(b) Financial risk management

The Company has exposure to the following risks from its use of financial instruments:

- Credit risk
- Liquidity risk
- (c) Credit risk

Credit risk is the risk of a financial loss if a member or counterparty to a financial instrument fails to meet its contractual obligations. The Company's exposure to credit risk arises principally from its receivables from members and cash and cash equivalents. There are no significant changes as compared to the prior periods.

(i) Amount due from members

Risk management objectives, policies and processes for managing the risk

Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis. Normally credit evaluations are performed on members requiring credit over a certain amount.

At each reporting date, the Company assesses whether any of the amount due from members are credit impaired.

The gross carrying amounts of credit impaired amount due from members are written off (either partially or full) when there is no realistic prospect of recovery. This is generally the case when the Company determines that the member does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. Nevertheless, amount due from members that are written off could still be subject to enforcement activities.

There are no significant changes as compared to previous year.

Exposure to credit risk, credit quality and collateral

As at the end of the reporting period, the maximum exposure to credit risk arising from amount due from members is represented by the carrying amounts in the statement of financial position.

31 December 2022

Recognition and measurement of impairment loss

In managing credit risk of amount due from members, the Company manages its receivables and takes appropriate actions (including but not limited to legal actions) to recover long overdue balances. Generally, members will pay within 60 days.

The Company's debt recovery process is as follows:

- (a) Above 120 days past due after credit term, the Company will start to initiate a structured debt recovery process which is monitored by the management; and
- (b) If no repayment received from the structured debt recovery process, the Company will commence a legal proceeding against the member.

The Company uses an allowance matrix to measure ECLs of amount due from members. Consistent with the debt recovery process, invoices which are past due 120 days will be considered as credit impaired.

Loss rates are calculated using a 'roll rate' method based on the probability of a receivable progressing through successive stages of delinquency to 120 days past due.

Loss rates are based on actual credit loss experience over the past three years. The Company also considers differences between

- (a) economic conditions during the period over which the historic data has been collected;
- (b) current conditions; and
- (c) the Company's view of economic conditions over the expected lives of the receivables.

Nevertheless, the Company believes that these factors are immaterial for the purpose of impairment calculation for the year.

31 December 2022

The following table provides information about the exposure to credit risk and ECLs for amount due from members.

	Gross-carrying RM	Loss Allowance RM	Net Balance RM
2022			
91-120 days past due	38,000	-	38,000
More than 120 days	7,000	-	7,000
	45,000	-	45,000
Credit impaired			
More than 120 days	94,529	94,529	-
	139,529	94,529	45,000
<u>2021</u>			
91-120 days past due	12,518	-	12,518
	12,518	-	12,518
Credit impaired			
More than 120 days	96,529	96,529	
	109,047	96,529	12,518

Amount due from members that were past due but not impaired relate to members that have a good payment record with the Company. Based on past experience and no adverse information to date, the directors of the Company are of the opinion that no provision for impairment is necessary in respect of those balances as there has not been a significant change in the credit quality and the balances are still considered fully recoverable.

The movements in the allowance for impairment losses of amount due from members during the year are shown below.

	Credit Impaired RM	Total RM
Balance at 1 January 2021	86,737	86,737
Amounts written off	-	-
Amount reversed	(2,000)	(2,000)
Net remeasurement of loss allowance	11,792	11,792
Balance at 31 December 2021/ 1 January 2022	96,529	96,529
Amounts reversed	(2,000)	(2,000)
Balance at 31 December 2022	94,529	94,529

31 December 2022

(ii) Cash and cash equivalents

The cash and cash equivalents are held with banks and financial institutions. As at the end of the reporting period, the maximum exposure to credit risk is represented by their carrying amounts in the statement of financial position.

These banks and financial institutions have low credit risks. In addition, some of the bank balances are insured by government agencies.

Consequently, the Company is of the view that the loss allowance is not material and hence, it is not provided for.

(iii) Other receivables

Credit risks on other receivables are mainly arising from advances and deposits paid. As at the end of the reporting period, the maximum exposure to credit risk is represented by their carrying amounts in the statement of financial position.

(d) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company's exposure to liquidity risk arises principally from its various payables.

The Company maintains a level of cash and cash equivalents deemed adequate by the management to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when they fall due.

It is not expected that the cash flows included in the maturity analysis occur significantly earlier, or at significantly different amounts.

Maturity analysis

The table below summarises the maturity profile of the Company's financial liabilities as at the end of the reporting period based on undiscounted contractual payments:

31 December 2022

	Carrying Amount RM	Contractual Interest Rate	Contractual Cash Flows RM	Under 1 Year RM	2 to 5 Years RM
2022					
<u>Non-derivative financial</u> liabilities					
Other payables and accruals	264,428	-	264,428	264,428	-
Project grants	668,088	-	668,088	6 68,088	-
Lease liabilities	525,829	6.47 %	653,625	94,500	559,125
	1,458,345		1,586,141	1,027,016	559,125
<u>2021</u>					
<u>Non-derivative financial</u> liabilities					
Other payables and accruals	357,157	-	357,157	357,157	-
Project grants	1,074,329	-	1,074,329	1,074,329	-
	1,431,486		1,431,486	1,431,486	_

(e) Fair value of financial instruments

The carrying amounts of cash and cash equivalents, short term receivables and payables approximate their fair values due to the relatively short-term nature of these financial instruments.

20. Capital Management

The Company considers its non-distributable fund as its capital. As at 31 December 2022 the Company is not exposed to any capital risk as there are no outstanding borrowings made with financial institutions.

Detailed Statement of Profit or Loss and Other Comprehensive Income

For the Financial Year Ended 31 December 2022

	2022 RM	202 [.] RM
Revenue		
Subscription fees	365,823	355,515
Add: Other operating income		
Recognition of government grants	1,693,836	1,368,55
Reversal of impairment losses on amount due from members	2,000	2,000
Others	1,059	-
Total income	2,062,718	1,726,066
Less: Administrative expenses		
Accomodation	52,738	-
Air ticket	27,007	-
Appreciation	5,640	9,900
Auditors' remuneration	12,000	12,000
Bank charges	1,411	1,923
Courier and postage	3,802	3,34
Depreciation		
- property, plant and equipment	10,604	4,565
- right-of-use assets	6,320	-
Directors' meeting allowances	6,250	7,250
Emergency assistance	-	1,000
Entertainment	636	
Filing fees	1,200	2,100
Group personal accident	2,991	2,99
Honorarium	115,240	152,060
Impairment losses on amount due from members	-	11,792
Infectious disease medical cost	11,588	
Insurance	1,230	
Interest on lease liabilities	2,862	
Meals allowance	27,480	
Meeting package	169,410	
Membership fees	23,337	21,084
Mover service	5,412	
Office expenses	237	1,113
Petrol, parking and toll	10,551	567
	497,946	231,686

Detailed Statement of Profit or Loss and Other Comprehensive Income

For the Financial Year Ended 31 December 2022

	2022 RM	2021 RM
alance brought forward from previous page	497,946	231,686
Printing and stationeries	4,327	4,297
Promotion	11,599	45,188
Publication	18,571	34,404
Refreshment	21,051	1,284
Rental		
- equipment	3,420	4,560
- space	9,260	400
Staff costs		
- Salary and allowances	875,293	952,574
- EPF contributions	108,694	108,101
- SOCSO contributions	8,363	9,043
– EIS	888	966
- Ex gratia	105,275	79,178
- Dental	320	460
- Handphone allowance	11,538	-
- Insurance	11,600	13,300
- Maternity subsidy	3,000	3,000
- Medical	10,339	8,955
Sales and service tax	1,918	2,064
Secretarial fees	9,457	13,620
Tax agent fees	3,127	2,550
Telephone, fax and internet	8,538	6,935
Training and seminar	7,506	58,074
Travelling	2,475	91
Upkeep of computer and software	44,276	36,427
	1,778,781	1,617,977
perating surplus before taxation	283,937	108,089
ess: Taxation	-	_
let operating surplus after taxation	283,937	108,089



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