

AERONAUTICAL RADIO OF THAILAND

AERONAUTICAL RADIO OF THAILAND



ANNUAL REPORT

2022

CONTENTS

▶ Message from Chairman of the Board	4
▶ Message from President	7
▶ Section 1 Corporate Overall Information	
1. Corporate Information	
Company's Background	10
Vision, Mission and Role and Responsibilities	11
Business Structure	15
Location and Website	16
Summary of Financial Report	17
Factor Impacting Performance,	18
Outlook and Trends in Air Traffic	19
2. Company's Structure	
Organization Chart	22
The Board of Directors and Committees	23
Company's Management	27
Employees	30
3. Shareholders	31
4. Major Plans and Projects	
Plans and Projects Completed in 2022	33
Plans and Projects Being Implemented	33
Important Role in the Global, Regional Forum, and Others	34
5. Company Operating Performance	
Air Traffic Service	40
Human Resource Management	48
Performance on Investment Expenditure	57
Company's Credit Rating	58
Highlight of Activities	58
6. Organizational Management	
Risk Management and Internal Control	61

Section 2 Good Governance Information

1. The Board of Directors and Responsibilities	
The Board of Directors in the Fiscal Year 2022	63
Roles and Responsibilities of the Board of Directors	72
Remuneration for Senior Executives	85
Internal Audit	86
2. Financial Report	
Report of the Board of Directors' Responsibility to the Financial Statements	88
Financial Trend	92
3. Operation Reports	
The Audit Committee's Performance Report	94
4. Sustainability Report	125

“

During 74 years of its establishment,
AEROTHAI has adhered to management
guidelines under the framework of
good corporate governance

”



Mr. Rapee Phongbupakicha
Chairman of the Board





Message from Chairman of the Board

Year 2022 is another challenging year for Aeronautical Radio of Thailand Limited (AEROTHAI) in confronting rapidly changing situations due to many factors that were continually approaching, especially the outbreak of Coronavirus Disease 2019 (COVID-19) and the conflict situation between The Russian Federation and Ukraine, which have widely affected the aviation business in the country and around the world.

AEROTHAI has devoted its effort to overcome many obstacles and challenges while driving corporate vision and strategy that focus on its mission of being the national air navigation service provider with “sustainable highest quality” while creating values that meet the expectations of aviation community and customers.

In 2022, the number of flights was increased and has tended to be continuously improved after the government announced the relaxation of measures to prevent the outbreak of COVID-19 and measures of country entry, AEROTHAI has prepared everything to accommodate the volume of flights, including system, equipment, availability of air traffic controllers, with the emphasis on the compliance with measures to support air traffic management based on service standards stipulated by the Civil Aviation Authority of Thailand (CAAT). All of our employees also cooperate in health care and strictly follow preventive measures against COVID-19.

Since the financial crisis caused by COVID-19 situation, all executives and employees have been continuously united in action and spirit to implement the financial crisis response plan so that the costs and expenses are managed as needed for safety and in line with the situations to alleviate AEROTHAI’s financial impact and financial liquidity.

To operate major tasks to achieve its vision of being “A Sustainable Quality Excellent Air Navigation Service Provider” in a concrete way, AEROTHAI has focused on its development by applying technology and innovation along with personnel development so that it can expand its capabilities of air navigation services to support the recovery and competition of air transport business after the outbreak of COVID-19, and to strengthen the corporate sustainability.





In terms of competitiveness and value creation for the national aviation industry, AEROTHAI has formulated its strategy to cooperate with stakeholder entities in developing the infrastructure of the national air navigation service to meet international standards and operate its business based on the task assigned by the government to be an air navigation service agency at U-Tapao International Airport under the U-Tapao International Airport and Eastern Airport City Development Project.

Furthermore, to drive the country's economic growth in the future, AEROTHAI has collaborated with regulators, government security agencies, and airport operators to develop the use of airspace for Unmanned Aircraft Systems Traffic Management or UTM, one of the new S-Curves in New Normal Era after COVID-19 situation, AEROTHAI is able to develop it as alternative business opportunities for reducing future financial risks.

During 74 years of its establishment, AEROTHAI has adhered to management guidelines under the framework of good corporate governance by conducting its businesses that thoroughly pay attention to the needs and expectations of all groups of stakeholders, both in its main business aiming to develop and adjust new styles and methods in line with the resulting situation, and to create new business opportunities that build on its core competencies.

On behalf of the Board of Directors, we would like to express our gratitude to all shareholders, customers, stakeholders, including the management and employees in giving cooperation with AEROTHAI in all aspects, and we believe that the power of our cooperation, commitment, and dedication to perform our duties and sacrifice will enable AEROTHAI to overcome this crisis together, and further create valuable works contributing to the sustainable growth of aviation business of the country and region.

(Mr. Rapee Phongbupakicha)
Chairman of the Board of Directors





“ AEROTHAI has expanded opportunities to new businesses by participating in driving the development of the Unmanned Aircraft System Ecosystem (UAS Ecosystem) ”

A handwritten signature in black ink, appearing to read 'nopsit' followed by a checkmark-like flourish.

(Mr. Nopasit Chakpitak)

President

(Office from April 1, 2022 – Present)



Message from President

Since the situation of Covid-19 outbreak has been gradually relieved, the number of flights inside the Bangkok Flight Information Region (Bangkok FIR) has increased to 0.45 million flights, or increasing 47% compared to 2021, but it is still lower than in 2019, which was 57%. In 2023, it is expected to be continuously better due to many policies accelerated by the government and the increasing demand for passengers traveling. Therefore, it is expected that if there is none of any negative factors affecting the number of flights, the flight volumes will be resumed to be at the same or similar level as the pre-Covid period from the year 2024 onwards.

The operations based on the tasks of air navigation service and related services, including the development to create important and new business opportunities in 2022, have progressed, respectively, with the following operational results:

1. AEROTHAI has implemented international Air Traffic Flow Management: ATFM (ATFM), become a member of the ICAO Air Traffic Management Operations Panel to develop international standards of ATFM, and participated in revising / improving the Asia/Pacific Framework for Collaborative ATFM, Version 4.0, the latest edition, to be used ATFM framework and guideline for Asia/Pacific.
2. AEROTHAI has prepared to provide air navigation services at Betong International Airport in all aspects, whether it be a system, equipment for air navigation services, route design, and aviation practices, and manpower availability, the first commercial flight arrived Betong Airport on 29 January 2022.
3. AEROTHAI has improved the Surveillance Radar system to support air traffic control services along air routes and adjacent areas to airports by replacing some equipment and improving the Secondary Surveillance Radar (SSR) system at SSR stations of Phuket, Surat Thani and Ubon Ratchathani airports.
4. AEROTHAI has developed digital technology by focusing on adding value to its tasks, supporting the Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) system, developing an information system for Back Office works, setting digital policy and making a digital action plan to lead the implementation in a concrete way in response to government's policies and practices.
5. AEROTHAI has been certified as an Air Traffic Control Training Organization by the CAAT and was audited on the quality assurance of the Regional Aviation Control Center, resulting in enabling AEROTHAI to efficiently develop its operational personnel based on standards.
6. In cooperation with the aviation community, AEROTHAI has entered into a memorandum of understanding with the Air Traffic Management Bureau, Civil Aviation Administration of China (ATMB/CAAC), People's Republic of China, to develop air traffic services in line with standards and vision of the International Civil Aviation Organization, and collaborated in research and development of innovations, knowledge and experience exchange, personnel training and development.





7. AEROTHAI hosted the 9th Mekong Air Traffic Management Coordination Group Meeting to discuss and exchange opinions, and to cooperate in air traffic management in the Greater Mekong Sub-region, especially the discussion on the development of airway infrastructure to enhance the smoothness of air traffic management, ATM automation linkage through ATS Inter-facility Data Communications (AIDC), Cross-Border ATFM, and issue on the compliance of ATM Contingency Plan in sub-region to meet the expectations of ICAO Asia/Pacific Regional ATM Contingency Plan.
8. Regarding related services, AEROTHAI has renewed the Airlines Operational Communication Service Agreement with Collins Aerospace to provide Data Link services covering all routes in Thailand and countries in Asia Pacific, and also expanded FOMAX (Flight Operation Maintenance Exchanger) services to transmit and receive data among new aircraft models such as Airbus A320, Airbus A330 and terrestrial system.
9. AEROTHAI has collaborated with International College of Digital Innovation, Chiang Mai University to implement the “AEROTHAI Innovator’s Potential Development Project” by designing a curriculum to reskill and upskill to create high-performance manpower for the New Growth Engine industry based on Thailand 4.0 policy.
10. AEROTHAI has expanded opportunities to new businesses by participating in driving the development of the Unmanned Aircraft System Ecosystem (UAS Ecosystem) to promote the drive of new industries and connect the transportation system infrastructure in the Eastern Special Development Zone. This is in line with the resolution in the meeting of the Eastern Special Development Zone Sub-Committee. The UAS Traffic Management (UTM) project has been initiated in the pilot area of the Bangkok Control Zone within a radius of 35 miles around Bangkok (or approximately 65 kilometers from Don Mueang Airport) with the Application “OpenSky”, which allows the operators of unmanned aircraft or drones to try the Application to request the permission before flying drone.
11. AEROTHAI has established policies and Guidelines on Governance Risk Compliance (GRC) so that AEROTHAI can manage the overall picture of corporate governance, operate according to strategies, and achieve targets.
12. AEROTHAI’s credit rating at “AAA” has been maintained by TRIS Rating Co., Ltd. (TRIS Rating), reflecting AEROTHAI’s status as a government-related organization with the highest level of relations with the government. AEROTHAI is highly possible to be granted special support from the government in a sufficient and timely manner. If AEROTHAI encounters financial problems and its credit rating outlook is set at “Stable” level, this reflects that TRIS Rating expects that AEROTHAI will maintain its status as a government-related organization with the highest level of relations with the government and play an important role in the government as the main air navigation service provider in Thailand.

On behalf of the management and all employees, we would like to thank all shareholders and corporate customers for trusting and supporting AEROTHAI’s operations very well at all times and would like to commit to further creating sustainable benefits for the national aviation business, all clients and all groups of stakeholders

(Mr. Nopasit Chakpitak)
President



Company's Background



After the First World War, the Post and Telegraph Department was assigned by the Royal Thai Government to assume responsibility for providing Air Traffic Control and Aeronautical Communications to international aircraft passing over and landing in Thailand. These ceased with the expansion of the Second World War to Asia, which prevented commercial aircraft from taking to the sky. When the Second World War ended, international civil aviation resumed. On 15 April 1948, Aeronautical Radio Inc. (ARINC) of the United States of America, International Aeradio Ltd. (IAL) of the United Kingdom and various airlines operating services to Thailand jointly founded Aeronautical Radio of Siam Limited (AEROSIAM), with the consent of the Royal Thai Government to provide Air Traffic Control services and Aeronautical Communications services in accordance with ICAO's standards and recommended practices. Later the Thai Government recognized its capability and the importance of the Company's responsibility concerning national security and aviation development. Therefore, the Government acquired a majority of the share capital from the founding airlines and changed its name to Aeronautical Radio of Thailand Limited (AEROTHAI) on 1 November 1963. International airlines operating services to Thailand were also welcomed as shareholders. The Company's status has since become a state enterprise under the Ministry of Transport, operating as a limited company. The Company operates its business on behalf of the Government as a non-profit organization to provide safety services which are Air Traffic Control and Aeronautical Telecommunications services in the Bangkok Flight Information Region (FIR) with the network linking with other countries. In addition, there is a business sector which provides aviation related services, both domestic and overseas.

The Company has operated its business with a commitment to maintaining the quality of air navigation services to be efficient based on international standards, developed technologies, and developed human resources, as well as closely cooperated with domestic and international aviation organizations to further expand its capabilities and develop the country's aviation.



Vision

“A Sustainable Quality Excellent Air Navigation Service Provider”

(Vision for AEROTHAI development and operation in the strategic framework 2022-2026.)

Mission

“To be the national air navigation service provider that meets users’ requirements in safety, standards, and efficiency while realizing the responsibilities to all stakeholders and national interests.”

Role and Responsibilities

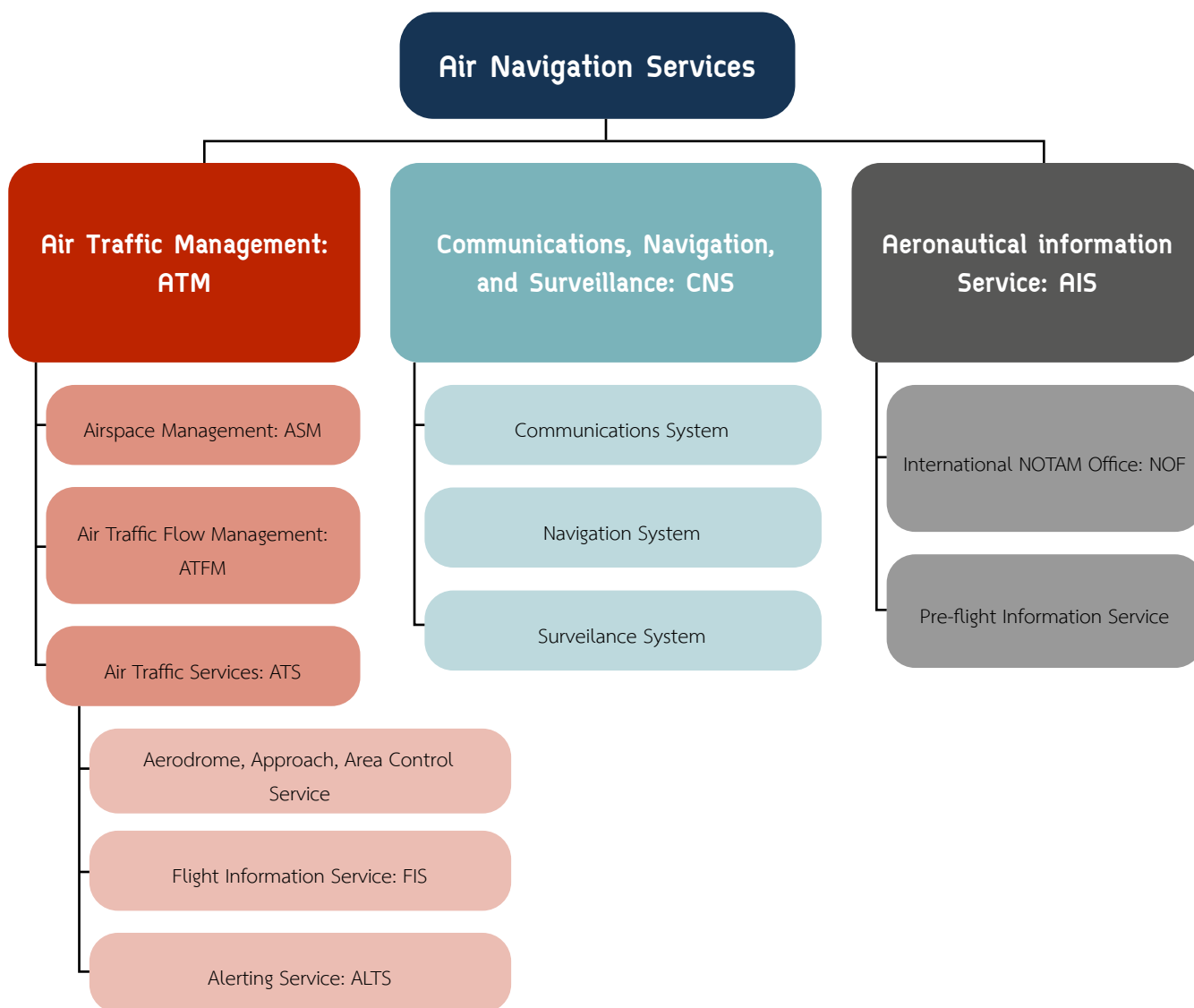
Generally, the scope of Air Navigation Services

consists of 5 sections as follows:

- ✈ Air Traffic Management (ATM);
- ✈ Communications, Navigation, and Surveillance (CNS);
- ✈ Aeronautical Information Service (AIS);
- ✈ Meteorological Service (MET); and
- ✈ Search and Rescue (SAR)

AEROTHAI is responsible for providing services for domestic flight operations in Thailand, which are divided into 3 parts: 1) Air Traffic Management (ATM); 2) Communications, Navigation, and Surveillance (CNS); and 3) Some parts of Aeronautical Information Services (AIS), and services of Instrument Flight Procedure Design (IFPD). In terms of Meteorological Service (MET), at present, Meteorological Department under Ministry of Digital Economy and Society is the main responsible agency, while Search and Rescue (SAR) is directly under the supervision of Ministry of Transport.

Air Navigation Services under AEROTHAI's Responsibility.



Airspace Usage Proportion between Civil Sector and Military Sector (shown in red) within Bangkok FIR.

Air Traffic Management (ATM)

To support flight operations within Thailand's area of responsibility, AEROTHAI provides the following three Air Traffic Management (ATM) services.

a. Airspace Management (ASM)

Considering the current circumstance where airspace within Bangkok Flight Information Region (Bangkok FIR) is divided for the use of civil and military at around 50% each, AEROTHAI puts Airspace Management (ASM) service in its operation with the objective to utilize airspace, a limited resource, to the greatest extent possible, so that the missions of both civil airspace users and the military sector can be efficiently achieved. In this regard, the classification of airspace specified for military missions, which may pose potential hazards to other flight operations, is also adopted for safety reasons.

b. Air Traffic Flow Management (ATFM)

Apart from Airspace Management (ASM), AEROTHAI also provides Air Traffic Flow Management (ATFM) service by balancing the demand for airspace/airport utilization and the amount of air traffic that can be handled in the case where airspace and/or Bangkok FIR is constrained. It has been observed that, with ATFM in place, not only the level of flight safety is enhanced, but also the operational efficiency, especially predictability, is increased.

c. Air Traffic Services (ATS)

With the ultimate goal to ensure the safe operations of aircraft and expedite as well as maintain an orderly flow of air traffic within Bangkok FIR, AEROTHAI has been offering Air Traffic Services (ATS), our major services, for decades, with the scope as follows.

(1) Air Traffic Control Service (ATCS)

ATCS, which is provided by AEROTHAI and covers the whole Bangkok FIR, is divided by service scopes into three parts, namely,

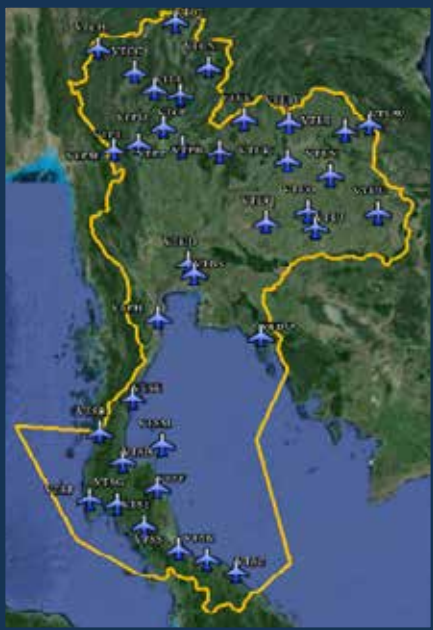
- Aerodrome Control Service: an ATCS provided to flights arriving to/departing from the aerodrome and operating within about 5 NM around the aerodrome;
- Approach Control Service: an ATCS provided to flights approaching to/departing from the aerodrome and operating within about 50 NM around the aerodrome; and
- Area Control Service: an ATCS provided to flights operating in controlled areas and on ATS routes within Bangkok FIR.

(2) Flight Information Service (FIS)

(3) Alerting Services (ALTS)

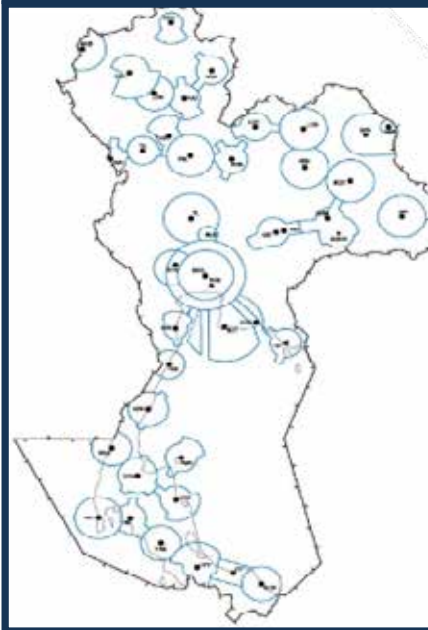
Aerodrome Control Service

- Airport: 35 Airports



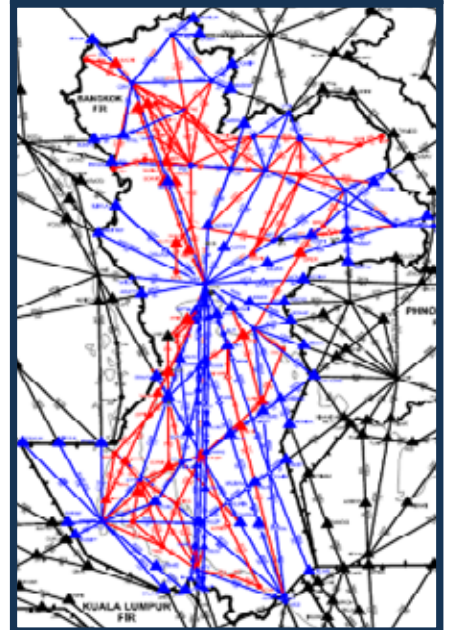
Approach Control Service

- Terminal Control Area: 35 TMA



Area Control Service

- International Routes: ~23,000 km
- Domestic Routes: ~30,000 km



ภาพแสดงขอบเขตการให้บริการควบคุมจราจรทางอากาศของ บวท.

Communications, Navigation, and Surveillance (CNS)

To enable safe and efficient ATM service provision, AEROTHAI delivers CNS technologies within Bangkok FIR as well. Particularly, the capabilities for air traffic controllers to communicate with airspace users and for both parties to determine the position and direction of the aircraft under control are provided. The brief summary of CNS services provided is as follows.

a. Communications System

A system providing the air traffic controllers with communication services with related parties. Presently, the Company's communications system can be divided into 2 parts as follows:

1. Ground-Ground Communication

It is the communication between air traffic controllers and domestic and overseas related parties.

2. Air - Ground Communication

It is the communication between air traffic controllers and airspace users.

The communication services provided by AEROTHAI covers all airport area, approach area, and ATS routes inside Bangkok FIR.

Since the establishment of the company, communications services have been provided by AEROTHAI to allow real-time communications between air traffic controllers and related parties. Currently, our communications systems cover both ground-ground and air-ground communications, ensuring timely communication between our air traffic controllers and the adjacent ATS units as well as airspace users in all of our air traffic control areas.

b. Navigation system

Presently, AEROTHAI has provided navigation assistance services to navigate aircraft for flight operations on flight routes and guide for landing/departing from airports so that airspace users accurately and precisely know their positions as appropriate upon the services provided in each area.

c. Surveillance System

Looking from the perspective of air traffic controllers, similar to navigation systems in the view of airspace users, various surveillance systems have been deployed by AEROTHAI to provide the capability for air traffic controllers to track the aircraft under control. Taking into account the different operational requirements of the different service areas, AEROTHAI currently offers surveillance services using various surveillance technologies, including (i) Primary Surveillance Radar (PSR), (ii) Secondary Surveillance Radar (SSR), (iii) Multilateration (MLAT), and (iv) Surface Movement Radar (SMR).

Furthermore, with the continuous traffic growth requiring a more sophisticated ATM support system, AEROTHAI has put the state-of-the-art ATM automation system into operation not only to ensure but also to improve the level of safety and efficiency. Examples of ATM support tools implemented are Flight Data Processing System to support the user in making decisions, etc.

Instrument Flight Procedure Design Service (IFPD)

AEROTHAI provides Instrument Flight Procedure Design Service, which includes designing, documenting, validating, and maintaining Instrument Flight Procedures (IFPs) within the Terminal Control Area of Thai main commercial airports, as well as conducting safety activities and ensuring that the service is provided in accordance with CAAT regulations and standards.

Aeronautical Information Service (AIS)

As introduced earlier, AEROTHAI is responsible for some parts of the Aeronautical Information Service (AIS). Particularly, AEROTHAI is acting as the International Notice to Airmen (NOTAM) Office (NOF) for Thailand, providing timely aeronautical information to airspace users and related parties to ensure safe and efficient flight operations. In addition to being NOF, upon request, AEROTHAI also offers Pre-flight Information Services to airspace users to help them in their flight preparation.

Moreover, AEROTHAI is assigned by ICAO to be the Regional OPMET Center (ROC) and the Regional OPMET Data Bank (RODB) for Asia/Pacific.



Business Structure

AEROTHAI has operated navigation services, and non-profit related services, including carrying out the Mission as assigned by the government because AEROTHAI is a state enterprise under the Ministry of Transport, its main income is from service fee charged to customers, including Thai and foreign airlines operating their flights inside Bangkok FIR. AEROTHAI's income will be circulated back to the development of services and investment in equipment and technology related to navigation so that AEROTHAI can sustainably provide services with the highest quality.

In 1996, AEROTHAI established the Office of Business Development to support and provide services to the aviation sector to manage resources or capacity by applying experience, knowledge, competency, and continuous self-improvement until earning proficiency in professional work for benefits. AEROTHAI's policy is to expand its services to external agencies, generating additional income to offset the costs of air traffic services, and to be its important strategic tool to support the improvement of air traffic control efficiency of countries so that it could support the growth in the number of flights in this region, with following objectives:

1. To produce equipment that meets international air traffic standards for use in AEROTHAI's internal affairs.
2. To distribute equipment for air traffic management to domestic and international agencies.
3. To research and develop aviation systems and equipment to be modern and progressive at all times.
4. To cooperate with partners which are the world's leading aviation companies to provide information communication services to international airlines.
5. To cooperate with government agencies and domestic organizations to jointly research and develop projects to support the country's communication, transportation and logistics system.

Vision and Strategy of Enterprise Plan

Under the vision "A Sustainable Quality Excellent Air Navigation Service Provider," which focus on maintaining standard and improving the quality of services to be comparable to the best in class., AEROTHAI's strategic issue and objective in the period from 2022-2026 are as follows:

Strategic Issue	Strategic Objective
1. Safe and Efficient Air Navigation Services	<ol style="list-style-type: none">1. To provide safe and secure services in all phases of flights.2. To increase capacity and efficiency in air navigation services.
2. Human Resource Development	<ol style="list-style-type: none">3. To improve employee competency and human resource management in order to achieve the company's vision and sustainable growth.4. To improve the workplace environment and increase employee engagement.
3. Becoming High-Performance Organization (HPO)	<ol style="list-style-type: none">5. To improve corporate performance through Total Quality Management (TQM) along with change management and increase customers and stakeholders' satisfaction.6. To enhance Good Corporate Governance and Corporate Social and Environmental Responsibility according to international standards.7. To be an organization of innovation with the foundation of knowledge management and digital technology.8. To maintain air navigation charges that are fair, transparent, and competitive for sustainability through efficient management of organizational budget and finance.
4. Improving National Competitiveness and Creating Value for the Aviation Industry	<ol style="list-style-type: none">9. To increase value creation for the aviation industry.10. To improve air navigation services infrastructure in order to support the growth of the Thai aviation industry.



Type of Business and Nature of Business

AEROTHAI is a state enterprise under the supervision of the Ministry of Transport, Thai Government, founded in 1948 under the cooperation among Aeronautical Radio Inc. (ARINC) of the United States of America, International Aeradio Ltd. (IAL) of the United Kingdom, and various airlines operating services to Thailand to operate air traffic control services and aviation communication services, with the consent of the Royal Thai Government. Later in 1963, the Royal Thai Government accepted the transfer of AEROTHAI and operated it as a government organization, and airlines were allowed to be shareholders with the government, AEROTHAI became a state enterprise under the Ministry of Transport.

At present, AEROTHAI provides air navigation services with the highest efficiency and safety according to the standards set by the International Civil Aviation Organization (ICAO) as required in the Standards and Recommended Practices (SARPs) and other relevant documents. In addition, AEROTHAI has also operated non-profit businesses with fair and transparent service rates under contracts with the Ministry of Transport.

Location and Website

Head Office

Address: 102 Soi Ngamduplee, Thung Maha Mek Sub-district, Sathon District, Bangkok 10120
Telephone : 0 2287 3531-41
Fax: 0 2287 3131
Website: www.aerothai.co.th

Hat Yai Air Traffic Control Centre

Address: 100 Moo 3, Sanambin Road, Khlong La Sub-district, Khlong Hoi Khong District, Songkhla Province 90115
Telephone : 0 7425 1051-60
Fax: 0 7425 1339

Phuket Air Traffic Control Centre

Address: 200 Khlo Bo Sai, Mai Khao Sub-district, Thalang District, Phuket Province 83110
Telephone : 0 7632 7251-5
Fax: 0 7632 7258-9

Surat Thani Air Traffic Control Centre

Address: Hua Toei Sub-district, Phunphin District, Surat Thani Province 84130
Telephone : 0 7744 1132
Fax: 0 7744 1133

Chiang Mai Air Traffic Control Centre

Address: 60 Sanambin Road, Suthep Sub-district, Mueang District, Chiang Mai Province 50200
Telephone : 0 5327 0624-32
Fax: 0 5327 7600

Pitsanulok Air Traffic Control Centre

Address: Sanambin Road, Aranyik Sub-district, Mueang District, Phitsanulok Province 65000
Telephone : 0 5530 1422
Fax: 0 5530 1450

Nakhon Ratchasima Air Traffic Services Engineering and Operating Centre

Address: Ban Phiman, Tha Chang Sub-district, Chaloem Phra Kiat District, Nakhon Ratchasima Province 30230
Telephone : 0 4425 7670
Fax: 0 4425 6576

Udon Thani Air Traffic Control Centre

Address: Mak Khaeng Sub-district, Mueang District, Udon Thani Province 41000
Telephone : 0 4224 6803
Fax: 0 4224 9734

Ubon Ratchathani Air Traffic Control Centre

Address: Thepyothi Road, Nai Mueang Sub-district, Mueang District, Ubon Ratchathani Province 34000
Telephone : 0 4524 0798
Fax: 0 4524 0798

Hua Hin Air Traffic Control Centre

Location: Bo Fai Village, Hua Hin Sub-district, Hua Hin District, Prachuap Khiri Khan Province 77110
Telephone : 0 3252 0831
Fax: 0 3252 0833





Summary of Financial Report

	2022	2021	2020
--	------	------	------

Operating Performance (Baht :Million)^{1/}

Total Income	5,573.29	3,162.74	7,391.95
Total Expenditure	7,881.74	6,787.79	10,863.33
Overcollection to be refunded to Member Airlines	(2,308.45)	(3,625.05)	(3,471.38)

Remark ^{1/} Separated Financial Statements

Financial Status (Baht :Million)^{2/}

Total Assets	10,275.82	10,440.82	13,674.49
Total Liabilities	8,672.46	6,901.66	6,387.80
Total Shareholders' Equity	1,603.36	3,539.16	7,286.69

Financial Ratio

Debt-to-equity (D/E) ratio (Times)	5.41	1.95	0.88
Principal Coverage Ratio	9.58	11.75	9.77

Remark ^{1/} AEROTHAI has adhered to the Group Financial Reporting Standards, Financial Instruments, and Thai Financial Reporting Standard 16 regarding Leases (TFRS 16) for the first time since October 1, 2021, and retroactively restated the financial statements regarding the recognition of pending service charges which are paid back to member airlines.

^{2/} The financial statements for the years 2021 and 2020 are re-classified of transactions to comply with the presentation of the annual financial statements for the year 2022 due to the adoption of new financial reporting standards.



Factor Impacting Performance

ICAO Global and Regional Air Navigation Plans

The 40th Session of the ICAO Assembly in 2019 adopted the sixth edition of Doc 9750 Global Air Navigation Plan (GANP) as a strategic direction for global air navigation system development. In this edition, Aviation System Block Upgrades (ASBUs), the stepwise implementation strategy identifying current and emerging technologies and operational procedures required, subject to operational needs, to enhance the air navigation system, is still the major component. Moving towards the adoption of a performance-based approach, compared to the previous editions, Key Performance Indicators (KPIs) for measuring the performance obtained by the implementation of the specified ASBUs elements are also provided in this edition to assist aviation stakeholders in assessing and analyzing the performance gap between their current air navigation systems and the air navigation systems where technologies and operational procedures identified in ASBUs are implemented. With such an evidence-based performance measurement framework, the involved stakeholders will be able to not only better prioritize their initial deployment but also achieve better resource management.

At the regional level, also in 2019, the 30th Meeting of ICAO Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/30) adopted the Asia/Pacific Seamless Air Navigation Service (ANS) Plan, Version 3.0 as the regional strategic objectives to achieve the seamless air navigation service in Asia/Pacific region. In this Plan, technologies and operational procedures stated in ASBUs, which are considered necessary for the enhancement of Asia/Pacific-specific operational environment, are identified together with their corresponding implementation priorities. Moreover, to further improve the seamless Air Traffic Management (ATM) operations, performance objectives in terms of Preferred Aerodrome/Airspace and Route Specifications (PARS) and Preferred ATM Service Levels (PASL) are also defined, including human performance as well as civil/military cooperation. Besides, compared to the previous versions, new initiatives are added in this version, and the target implementation date previously specified is extended to also include the newly introduced implementation phase covering until 2022.



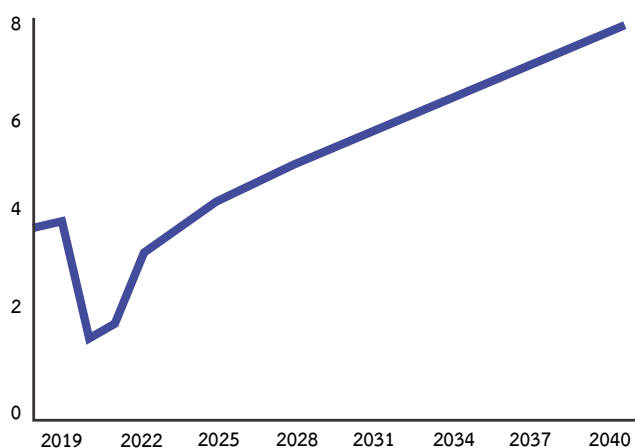
Outlook of Aviation Industry and Trends in Air Traffic

Prior to the COVID-19 pandemic crisis, the outlook of the aviation industry and future trends of air traffic illustrated that the aviation industry was one of the industries with increasing growth and value.

The COVID-19 pandemic impacted the economy at a global scale, particularly the airline business, which was highly affected. This outbreak was estimated to be more serious than any past events, including SARS (2003), Avian Flu (2013) and MERS Flu (2015), in terms of more broadly affected areas around the world and prolonged time. The International Air Transport Association (IATA) evaluated the impact of COVID-19 on global aviation business (as of 26 May 2021). For Thailand, international flight volume has started to decline since March 2020. At present, the situation of the epidemic of COVID-19 tends to improve and since the beginning of the year 2022, the number of flights is likely to continue to increase due to the easing of travel measures to the country.

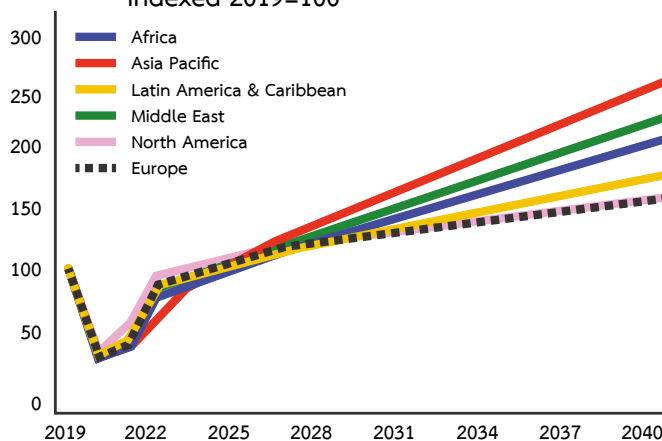
International Air Transport Association (IATA) expect after recovering from the COVID-19 epidemic, demand for air travel will increase both in the short and long term. Global passenger travel to return to 2019 level of activity in 2024 and to expand substantially over the next two decades. Between 2019 and 2040 IATA forecast that air passenger numbers will increase at an average annual rate of 3.3%. Asia/Pacific will be the fastest growing region over the next two decades at an average annual rate 4.5%

Chart 15: Global airpassengers, past and forecast, billions



Source: IATA Air Passenger Forecast,
IATA Economics/Tourism Economics

Chart 16: Passengers per region, 2019 - 2040, indexed 2019=100



Source: IATA Air Passenger Forecast,
IATA Economics/Tourism Economics

In 2022, traffic within Bangkok FIR has been affected by the COVID-19 crisis, resulting in the total volume of 0.45 million flights, a 47% increase from the previous year and still 57% lower than 2019. It is forecast situation will continue to improve due to supporting factor from various policies that the government including passenger travel demand and there are no negative factors affecting the expected flight volume. Daily flight volumes will be able to return to the same or close to pre COVID-19 levels from 2024 onwards.

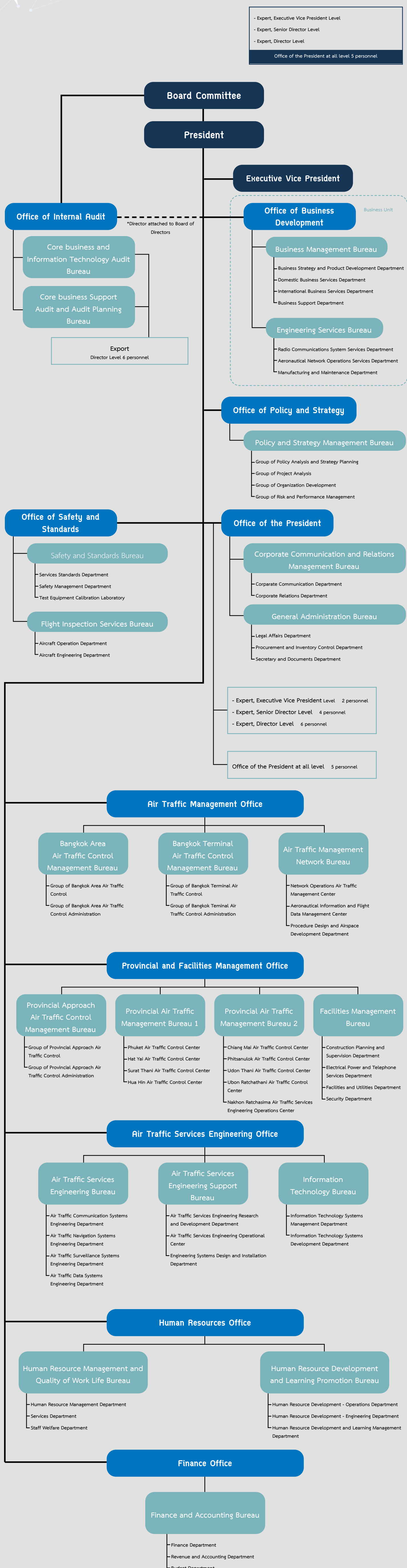
Fiscal Year	Number of flights in Bangkok FIR			
	International	Domestic	Overfly	Total
2021	67,063	210,705	30,288	308,056
2022 (preliminary)	134,257	272,409	46,174	452,840
2022/2021	100%	29%	52%	47%



Company's Structure



Organization Chart





The Committees

There are Committees as follows:

1. The Board of Directors
2. The Audit Committee
3. The Risk Management Committee
4. The Remuneration Committee
5. The Corporate Governance and Corporate Social Responsibility Committee
6. The Legal Committee
7. The Innovation Management Committee
8. The Digital Technology Development Committee
9. The Technology Development Committee on Air Navigation Services
10. The Nomination Committee for Committee/Executive - Vice President Level
11. The President Nomination Committee
12. The President Remuneration Sub-Committee
13. The Labour Relations Committee

The composition of the Board of Directors at the end of the fiscal year 2022 was as follows: (names and details of Directors and the changes during the year in accordance with Section 2)

- | | |
|---|----------------------------|
| 1. Mr. Rapee Phongbupakicha | Chairman of the Board |
| 2. Mr. Pornchai Thiraveja | Vice Chairman of the Board |
| 3. Mr. Puttipong Prasarttong-Osoth | Director |
| 4. Lieutenant Junior Grade Supoj Charoensuk | Director |
| 5. Mrs. Jantira Buruspat | Director |
| 6. Miss Piang-or Loahavilai | Director |
| 7. Air Chief Marshal Kongsak Chantarasopa | Director |
| 8. Mrs. Phongsaward Guyaroonsuith | Director |
| 9. Mr. Anukul Tamprasirt | Director |
| 10. Mrs. Pimporn Ovasith | Director |
| 11. Mr. Nopasit Chakpitak | Director |





Mr. Rapee Phongbupakicha

Chairman of the Board



Mr. Pornchai Thiraveja

Vice Chairman of the Board



Mr. Puttipong Prasarttong-Osoth

Director

Board of Directors



Lieutenant Junior Grade Supoj Charoensuk
Director



Mrs. Jantira Buruspat
Director



Miss Piang-or Loahavilai
Director



Air Chief Marshal Kongsak Chantarasopa
Director



Mrs. Phongaward Guyaroonuith
Director



Mr. Anukul Tamprasir
Director

Board of Directors



Mrs. Pimporn Ovasith
Director



Mr. Nopasit Chakpitak
Director

Company's Senior Management



Mr. Nopasit Chakpitak

President

(Office from April 1, 2022 – Present)



Mr. Tinnagorn Choowong

Executive Vice President
(Operations)



Mrs. Sirikes Niemloy

Vice President
(Air Traffic Management)

Company's Senior Management



Miss Tipaporn Nippakakorn
Vice President
(Office of Policy and Strategy)



Mr. Channarong Chuacharoen
Vice President
(Air Traffic Services Engineering)



Mr. Chumnarn Ruechai
Vice President
(Provincial and Facilities
Administration)



Mr. Teekayu Muratha
Vice President
(Office of Internal Audit)



Miss Voraporn Rhodyoo
Expert
Vice President Level



Mrs. Thaniya Suntharasantic
Vice President
(Office of President)



Mr. Surachai Nuprom
Vice President
(Office of Business Development)



Mr. Chana Tadtasai
Vice President
(Human Resources)



Mr. Paisan Praneetponglang
Expert
Vice President Level

Company's Senior Management

1. Mr. Nopasit Chakpitak

Present Position: President

Date of Birth: March 31, 1965

Age: 57

Joined AEROTHAI: April 1, 2022

Education:

- Bachelor of Engineering (Electrical) in Electrical Engineering Chiang Mai University
- Ph.D in Electronic and Electrical Engineering in Electrical Engineering, University of Strathclyde

Work Experiences: April 1, 2022 Appointed as the President of AEROTHAI

2. Mr. Tinnagorn Choowong

Present Position: Executive Vice President (Operations)

Date of Birth: September 19, 1962

Age: 60

Joined AEROTHAI: July 1, 1986

Education:

- Diploma in Aviation Communication, Civil Aviation Training Center (Thailand)
- Bachelor of Arts in Political Science, Ramkhamhaeng University

Additional Education Qualifications:

- Diploma, Air War College (Class of 47 in 2013), the Royal Thai Air Force Academy
- Leadership Succession Program (LSP), Institute of Research and Development for Public Enterprises (IRDP) (Class of 3 in 2015)

Work Experiences:

• Year 2021-2022	Acting President
• Years 2018-2019	Executive Vice President (Operations)
• Years 2015-2018	Executive Vice President
• Years 2012-2015	Vice President (Air Traffic Management)





Human Resource and Organization Development

At the end of the fiscal year 2022 (September 30, 2022), the total number of staff employed by AEROTHAI was 3,163 distributed as follows:

Head Office	1,856
Suvarnabhumi Airport	448
Don Mueang International Airport	46
Phuket Air Traffic Control Centre	154
Hat Yai Air Traffic Control Centre	123
Surat Thani Air Traffic Control Centre	91
Hua Hin Air Control Centre	49
Chiang Mai Air Traffic Control Centre	143
Phitsanulok Air Traffic Control Centre	102
Udon Thani Air Traffic Control Centre	78
Ubon Ratchathani Air Traffic Control Centre	39
Nakhon Ratchasima Air Traffic Services Engineering	34

Total of Number of Contracted Employees

As at September 30, 2022, the total number of contracted employees employed by AEROTHAI was 32 distributed as follows:

Male	10	คน
Female	22	คน

Total Staff and Contracted Employees Expenditure

Unit: Baht Million

รายการ	2022	2021	2020
Staff's Expenditures and Benefits	5,026.97	4,034.15	7,733.93
Temporary Employees Expenditures	7.18	5.87	11.32

- Note
1. On September 28, 2022, the Board of Directors' meeting resolved to approve the refrain from paying the special prizes for the year 2022.
 2. In 2021, the Board of Directors' meeting resolved to approve the refrain from paying the special prizes for the years 2020 and 2021, the special reward transaction is recorded in the statement of comprehensive income and expenses for the year 2021, in the amount of Baht 1,285.03 million, which consists of a special reward for employees for the year 2020 amounting Baht 1,282.50 million (the said transaction is reversed into the expenses of employee benefits) and a special reward for temporary employees for the year 2020 amounting Baht 2.53 million (such transaction is reversed into other expenses).

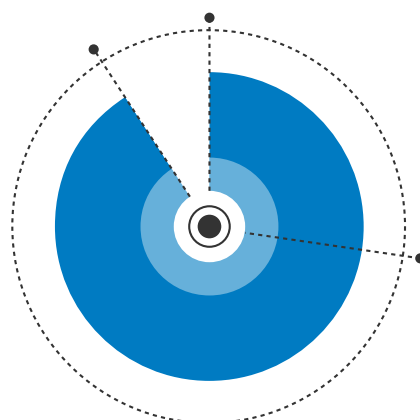


Share Capital and Shareholders Structure

Airlines Shareholders⁹⁴ (as at August 1, 2022)

Airlines 600,000 shares at

Baht 60 million



Government 6,000,000 shares at

Baht 600 million

In the fiscal year 2022, the A Shareholders and B Shareholders were as follows:

The A Shareholders	Number of shares
The Ministry of Finance	6,000,000

The B Shareholders (Airlines) and the Top 10 Highest Number of Shares

No.	B Shareholders	No. of Shares
1	THAI AIRASIA COMPANY LIMITED	141,682
2	NOK AIRLINES PUBLIC COMPANY LIMITED	110,949
3	THAI VIETJET AIR JOINT STOCK CO.,LTD	54,476
4	THAI SMILE AIRWAYS COMPANY LIMITED	51,940
5	THAI LION MENTARI COMPANY LIMITED	41,644
6	BANGKOK AIRWAYS PUBLIC COMPANY LIMITED	32,270
7	THAI AIRWAYS INTERNATIONAL PUBLIC COMPANY LIMITED	29,735
8	CATHAY PACIFIC AIRWAYS	9,681
9	SINGAPORE AIRLINES LIMITED	9,681
10	QATAR AIRWAYS GROUP (Q.C.S.C)	9,066
11	Other 84 airlines	108,876
Total B Shareholders		600,000

Remark: Names of Shareholders allocated shares on August 1, 2022.

State Enterprise's Loans

Long Term Loan

Unit: Baht Million

Bank	Credit Limit	Balance as at September 30			Type of Guarantee
		2022	2021	2020	
Government Savings	1,650.00	63.25	190.19	311.13	None
Krung Thai Bank Pcl.	2,618.40	1,013.53	695.82	-	None
Total	4,328.40	1,016.18	886.01	311.13	

Short Term Loan

Unit: Baht Million

Bank	Credit Limit	Credit Limit	Balance as at September 30			Type of Guarantee
			2022	2021	2020	
Krung Thai Bank Pcl.	O/D	30.00	-	-	-	None
Government Savings	O/D	30.00	-	-	-	None
Krung Thai Bank Pcl.	P/N	3,080.00	1,380.00	540.00	-	None
Government Savings	P/N	300.00	300.00	-	-	None
Bank of Ayudhya Pcl.	P/N	160.00	150.00	160.00	-	None
Expert-Import Bank of Thailand	P/N	1,000.00	1,000.00	-	-	None
Total		4,600.00	2,830.00	100.00	-	



Major Plans and Projects in the Enterprise Plan for the years 2022 – 2026

Plans and Projects Completed in 2022

1. Improve the efficiency of the Aeronautical Surveillance System to support Area and Approach Control Services at Phuket, Surat Thani, and Ubon Ratchathani Airports.

(Implementing Years 2019-2022 with a budget of Baht 144.10 million)

To replace some obsolete equipment and its overall performance is reduced, including being unable to provide replacement original spare parts, therefore, affecting maintenance and maintaining the condition that the system can work continuously. AEROTHAI needs to supply some equipment replacement and improvement, to increase the efficiency and safety of the Secondary Surveillance Radar (SSR) system at the SSR station of Phuket, Surat Thani, and Ubon Ratchathani Airports.

In 2020-2021, contracts were signed, and the replacement of some equipment was completed at all 3 SSR stations. The operation test and the system activation at all 3 SSR stations will complete in 2022.

Plans and Projects Being Implemented

1. Develop the Multilateration (MLAT) Systems at Chiang Mai and Phuket Airports

(Implementing Years 2021-2025 with a budget of Baht 238.24 million)

To increase safety in the ground surveillance efficiency, AEROTHAI has chosen to implement the Multilateration System (MLAT) at high-density regional airports. The MLAT system is developed with a new technology that provides the location and identification of aircraft and vehicles as well as highly accurate positioning values, including an ability to better detect runway incursions. AEROTHAI has reviewed the operating area to be suitable for the development plan of the two airports and has already obtained the area from the airport. Currently, the details and technical specifications of the equipment have been completed. It expects that the contract will sign in 2023, and the installation/testing of the system will complete in 2025.

2. Procurement and Installation of Network Equipment to Support Multilateration (MLAT) Systems at Chiang Mai and Phuket Airports

(Implementing Years 2021-2025 with budget of Baht 38.40 million)

To increase the efficiency of ground surveillance to be appropriate and consistent with the density of aircraft at Chiang Mai and Phuket airports by installing Multilateration (MLAT) systems, which requires a communication network to support an efficient air traffic service. AEROTHAI has reviewed the operational areas to be suitable for the development plans of the two airports. Currently, it is awaiting the procurement of MLAT systems to procure and install a communication network to support the MLAT systems accordingly. It expects to complete in 2025.



3. Procurement and Installation of Aeronautical Information Management (AIM)

(Implementing Years 2019-2023 with a budget of Baht 46.75 million)

The Project is implemented to increase the efficiency in Aeronautical Information Management (AIM) from modern technology standards that focus on the use of electronic technology in accordance with the roadmap for the transition from AIS (Aeronautical Information Services) to AIM by the International Civil Aviation Organization (ICAO). In 2019, the contract was signed, and the installation of the equipment was completed in 2022. It is expected that the system testing will complete in 2023.

4. Acquisition of Doppler Very High-Frequency Omni-directional Range/Distance Measuring Equipment (DVOR/DME) at Lampang, Narathiwat, Phetchabun, Roi Et, Nakhon Si Thammarat, and Surat Thani Airports

(Implementing Years 2020-2024 with a budget of Baht 147.47 million)

DVOR/DME systems that have exceeded 15 years of usage are showing signs of degraded performance and need additional emergency corrective maintenance. AEROTHAI needs to acquire new DVOR/DME systems at Lampang, Narathiwat, Phetchabun, Roi Et, Nakhon Si Thammarat, and Surat Thani Airports to replace the existing aged systems. In the past year, there was a procurement process, but no company has passed the technical qualification. Currently, a new procurement process has been started. The contract is expected to be signed by 2023 and the equipment can be installed/tested by 2024.

Important Investment Projects for the Next 3 Years

1. Construction of the Second Air Traffic Management Centre

(Implementing Years 2024-2029 with a budget of Baht - million)

According to the Business Continuity Management (BCM) policy by the government is to enable the organization to operate its business continuously when affected by risks or threats from inside and outside the company. AEROTHAI, an Air Navigation Service of Thailand, recognizes the importance and necessity of investing in systems/equipment for the air traffic control service with safety and efficiency even in times of threat or crisis. Therefore, AEROTHAI needs to consider establishing a secondary air traffic management facility independent of the current air traffic management facility under the infrastructure Air Navigation Service to be the second air traffic management center consisting of:

1. Bangkok Area Control and Bangkok Approach Control
2. Bangkok Approach
3. Terminal Air Traffic Control at Suvarnabhumi and Don Mueang airports.

In 2022, it is in the process of reviewing the feasibility and cost-effectiveness studies of the Construction of the second Air Traffic Management Centre and studying additional information such as the changes in organizational goals, manpower management, the modification of air navigation technology in the next generation, etc. So, AEROTHAI has reviewed the implementation of the project for the year 2024, which is expected to be completed in 2029 and ready to open the second Air Traffic Management centre 2030.

2. The Air navigation services at U-Tapao Airport

(Implementing Years 2020-2026 with a budget of Baht 1,256.00 million)

According to the Cabinet approved the Development Project of U-Tapao Airport and Eastern Aviation City on October 30, 2018 (the 8th/2018), together with Royal Thai Navy develop U-Tapao airport to be the third major commercial international airport in Bangkok. AEROTHAI has been assigned as an Air Navigation Service Unit at U-Tapao Airport. Therefore, AEROTHAI has to carry out a project to prepare air navigation services at U-Tapao Airport, aiming to open air navigation and related services in 2025. AEROTHAI has prepared a document analysis of the U-Tapao Airport project, which covers the details of the project and the information supporting the feasibility analysis of the project—presented to the Board of Directors on November 5, 2021 (the 14th/2021) and March 31, 2022 (the 3rd/2022), which has approved the budget and a document analysis of the U-Tapao Airport project. Later, it was presented to the Ministry of Transport and the Office of the National Economic and Social Development Council for approval of the project and the budget of the U-Tapao Airport project to the Cabinet. Currently, it is in the process of considering and approving the project and budget. U-Tapao Airport has reviewed the system/equipment installation plans of various agencies to be completed by 2026 to be ready for testing and supporting the opening of U-Tapao Airport.



Important Role in the Global, Regional Forum and others

1. The Ninth Mekong Air Traffic Management Coordination Group Meeting

(MK-ATMCG/9)

AEROTHAI hosted the Ninth Mekong Air Traffic Management Coordination Group Meeting (MK-ATMCG/9) during September 21 – 23, 2022 via Video Teleconference (VTC). Dr. Nopasit Chakpitak, AEROTHAI President, and Mr. Tinnagorn Choowong, Executive Vice President (Operations), extended a warm welcome to all delegates and gave the opening speeches for the meeting.

MK-ATMCG/9 is the collaboration meeting among five aviation regulators and Air navigation service providers (ANSPs) from the Mekong sub-region, namely, Cambodia, Lao PDR, Myanmar, Thailand, and Vietnam. International Civil Aviation Organization (ICAO APAC) and International Air Transport Association (IATA) also participated in this meeting to support this collaboration.

Operation and Achievement

MK-ATMCG/9 aimed to further discuss, engage, exchange views, and collaborate on Air Traffic Management issues within the Mekong sub-region. Specifically, the meeting discussion will include further route structure enhancements, ATM automation linkage through ATS Inter-facility Data Communications (AIDC), Cross-Border ATFM, as well as regional ATM contingency plan harmonization session in accordance with expectations in ICAO Asia/Pacific Regional ATM Contingency Plan. By focusing on the safety and air navigation capacity and efficiency, the outcome of MK-ATMCG/9 will enhance airspace management, airspace capacity, harmonization and route optimization in order to support the Seamless ASEAN Sky vision. The meeting also discussed the future direction of this meeting in order to maintain the dynamism of the cooperation among its members and achieve tangible results.



Picture 1.1 AEROTHAI Welcome remarks, Dr. Nopasit Chakpitak, President of AEROTHAI via Video Teleconference



Picture 1.2 The Ninth Mekong Air Traffic Management Coordination Group Meeting (MK-ATMCG/9) via Video Teleconference on September 21, 2022

2.Airspace Users – ANSP Meeting 2022

AEROTHAI hosted an annual Airspace Users – ANSP Meeting, as usual, (except for the year 2021 due to the spreading of COVID-19) on September 28, 2022, at Asawin Grand Convention Hotel with 100 on-site participants and via videoconference (Zoom meeting)

Operation and Achievement

ANSP Meeting aimed to communicate corporately to Thai airspace users of the current services, future developments, and progress of projects which are implemented to provide better air traffic services. In addition, it was a venue for Airspace Users and Air Navigation Service Providers to develop relationships and express their opinions and recommendations, which will be recorded as action items for further improvements of AEROTHAI’s services. The meeting is served in accordance with AEROTHAI Servicemark and High-Performance Organization strategic objective, which targets standard, safety, and efficiency in every phase of flight and ensures satisfaction from all customers.

3. Signing Memorandum of Agreement

3.1 Signing of Memorandum of Cooperation between Civil Aviation Authority of Thailand (CAAT) and AEROTHAI on Personnel Development in related Air Navigation Services in 2021

To promote and support personnel development in related air navigation services, which will increase work efficiency and develop the capacity of aviation personnel in order to be equipped to comply with international standards. This Memorandum of Cooperation was signed by Mr. Tinnagorn Choowong, Executive Vice President, Acting President of AEROTHAI (at that time), and Mr. Suttipong Kongpool, Director General of CAAT, and effective on December 14, 2021.

3.2 Signing of Letter of Agreement (LOA) on Aeronautical Meteorology between Thai Meteorological Department and AEROTHAI in 2022.

To provide Aeronautical Meteorology Information Services in Thailand between AEROTHAI and Thai Meteorological Department (TMD). The main objectives of this LOA aim at safe and prompt information services and a consistent understanding of roles and responsibilities between the two organizations, in accordance with the requirements of the International Civil Aviation Organization (ICAO) and the Regulation of Civil Aviation Authority of Thailand on the Implementation of Joint Operating Agreements between Aeronautical Meteorological Service Departments and Air Navigation Service, 2016. This LOA is to revise the LOA signed in 2020 in order to be consistent with the current practices and services of the two organizations.



Mr. Nopasit Chakpitak, President of AEROTHAI, attended the signing ceremony via online video conference. Mr. Tinnagorn Choowong, Executive Vice President (Operations) of AEROTHAI as a witness in the Letter of Agreement, and Miss Chomparee Chompurat, Director-General of TMD, signed the Letter of Agreement on Aeronautical Meteorology on 11 July 2022 at TMD Headquarters.

3.3 Signing of Memorandum of Understanding between AEROTHAI and Air Traffic Management Bureau, Civil Aviation Administration of China (ATMB/CAAC)

To establish bilateral collaboration between AEROTHAI and ATMB/CAAC, the People's Republic of China, in developing Air Navigations services in accordance with International Civil Aviation Organization (ICAO) standards and visions. In addition, this Memorandum of Understanding aims at cooperating on Research and Development, Innovation, Exchanges of experiences and best practices and Human Resource Development.



Mr. Saksayam Chidchob, Minister of Transport of Thailand presided over the online signing ceremony of the Memorandum of Understanding together with the executives of the Ministry of Transport and Mr. Tao Ma, Regional Director, ICAO Asia Pacific Office witnessing the ceremony. Mr. Nopasit Chakpitak, President of AEROTHAI signed the Memorandum of Understanding at the Ministry of Transport while Mr. Che Jin Jun, Director General of ATMB/CAAC signed the Memorandum of Understanding at ATMB/CAAC office, Beijing, the People's Republic of China on September 14, 2022.



Company Operating Performance ✈️



Air Traffic Services

Aerodrome Control Service

1. Number of Departure/arrival Flights at Airport (Aerodrome Control Service) in the Fiscal Year 2022

Number of departure/arrival flights at Airport (Aerodrome Control Service) in the fiscal year 2022													
Airport	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Suvarnabhumi	9,975	12,059	14,224	13,975	12,880	15,560	16,216	16,779	16,846	19,522	20,553	19,874	188,463
Don Mueang	5,250	6,827	8,745	8,862	7,271	9,407	10,147	10,667	11,020	11,133	12,149	11,709	113,187
Chiang Mai	1,420	2,357	3,258	3,420	2,848	3,192	3,379	3,220	2,883	3,326	3,467	3,154	35,924
Chiang Rai	557	814	1,115	1,102	1,004	1,035	1,007	978	915	977	858	853	11,215
Hat Yai	998	1,205	1,446	1,568	1,514	1,800	2,012	2,053	1,847	1,970	1,983	1,936	20,332
Phuket	1,761	2,854	4,040	4,071	3,601	4,167	4,754	4,562	4,500	4,762	4,831	4,522	48,425
Sukothai	473	481	353	360	343	541	306	272	423	302	418	414	4,686
Samui	539	661	1,076	997	790	1,007	1,210	1,055	1,050	1,559	1,909	1,398	13,251
Trat	36	74	68	74	59	74	66	72	74	65	68	60	790
Lampang	194	210	194	202	183	220	203	204	195	229	250	234	2,518
Mae Hong Son	16	106	103	70	64	59	33	24	32	24	20	30	581
Phitsanulok	961	1,039	987	783	662	883	716	1,036	1,088	924	867	843	10,789
Phrae	197	68	52	61	42	92	110	99	98	88	79	44	1,030
Nan	253	453	551	531	356	360	321	222	326	274	261	232	4,140
Mae Sot	17	64	131	48	65	59	80	70	98	86	94	92	904
Tak	54	0	12	1	8	33	65	38	59	70	34	17	391
Petchabun	72	98	32	30	52	43	28	67	40	58	33	59	612
Udon Thani	647	1,066	1,025	1,217	1,230	1,337	1,360	1,379	1,440	1,500	1,649	1,292	15,142
Loei	89	93	185	148	104	126	138	151	132	135	125	100	1,526
Khon Kaen	728	887	939	879	790	928	941	940	1,019	1,073	1,024	1,009	11,157
Sakon Nakhon	126	207	213	181	176	198	234	216	247	214	259	275	2,546
Nakhon Phanom	74	97	213	209	201	250	232	220	199	178	194	218	2,285
Ubon Ratchathani	512	699	818	849	753	870	975	937	983	952	938	860	10,146
Roi Et	396	479	379	475	461	471	461	425	502	480	585	462	5,576
Buriram	251	335	229	180	182	245	271	334	465	187	212	258	3,149
Nakhon Ratchasima	579	578	397	172	348	390	435	360	461	107	380	285	4,492
Hua Hin	515	531	581	433	705	400	506	607	798	504	540	495	6,615
Surat Thani	598	782	794	846	873	956	975	1,007	946	1,119	1,072	1,020	10,988
Nakon Si Thammarat	847	884	1,091	1,036	986	1,128	1,176	1,022	924	921	875	931	11,821
Chumphon	50	599	335	788	512	404	254	421	275	592	571	542	5,343
Ranong	44	85	103	100	94	105	120	87	58	70	68	76	1,010
Narathiwat	176	156	164	215	148	161	156	215	194	147	184	193	2,109

Number of departure/arrival flights at Airport (Aerodrome Control Service) in the fiscal year 2022													
Airport	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Trang	143	242	304	311	250	402	411	408	304	320	325	307	3,727
Krabi	252	437	678	680	504	722	934	913	790	825	889	983	8,607
Betong	8	0	0	15	16	47	24	42	47	36	36	32	303

Approach Control Service

2. Number of Flights (Approach Control Service) in the Fiscal Year 2022

2.1 Number of Flights (Approach Control Service) by Sector in the Fiscal Year 2022

Unit	Sectors	Number of Fights (Approach Control Service) by Sector in the Fiscal Year 2022												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
APC	CTR	580	853	1,121	1,162	1,171	1,035	1,035	1,011	951	1,035	908	883	11,745
	NAN	240	471	531	534	361	355	326	228	325	273	261	233	4,138
	PAE	234	96	76	87	72	106	111	106	101	94	92	55	1,230
	PCB	101	127	69	53	78	76	43	113	87	84	60	82	973
	CTR SEC	1,155	1,547	1,797	1,836	1,682	1,572	1,515	1,458	1,464	1,486	1,321	1,253	18,086
	BRM	205	250	255	193	195	265	285	283	435	257	278	299	3,200
	NKR	375	447	373	170	236	254	237	260	359	120	253	206	3,290
	ROT	280	324	345	383	376	385	384	348	402	396	484	389	4,496
	UBL	499	633	769	801	729	842	969	976	1,018	1,002	1,010	929	10,177
	UBL SEC	1,359	1,654	1,742	1,547	1,536	1,746	1,875	1,867	2,214	1,775	2,025	1,823	21,163
	CPN	94	409	243	582	350	351	245	302	290	559	542	502	4,469
	SMU	537	680	1,049	1,003	800	987	1,227	1,068	1,050	1,574	1,920	1,410	13,305
	STN	606	725	754	806	836	910	947	1,002	883	1,037	998	940	10,444
	NKS	911	959	1,114	1,112	1,050	1,199	1,231	1,088	970	956	888	965	12,443
	TRT	235	329	348	272	298	281	311	226	179	196	198	158	3,031
	SMU SEC	2,383	3,102	3,508	3,775	3,334	3,728	3,961	3,686	3,372	4,322	4,546	3,975	43,692
	KKN	718	887	966	892	839	951	970	986	1,049	1,078	1,081	1,028	11,445
	LOY	88	96	202	162	119	132	144	156	144	141	135	107	1,626
	NKP	22	38	50	65	57	86	75	62	66	62	56	75	714
	SKN	157	289	367	319	333	339	406	380	394	336	404	441	4,165
	UDN	625	1,032	1,078	1,164	1,217	1,300	1,412	1,523	1,594	1,795	1,918	1,743	16,401
	KKN SEC	1,610	2,342	2,663	2,602	2,565	2,808	3,007	3,107	3,247	3,412	3,594	3,394	34,351
	TOTAL	6,507	8,645	9,710	9,760	9,117	9,854	10,358	10,118	10,297	10,995	11,486	10,445	117,292



Unit	Sectors	Number of Fights (Approach Control Service) by Sector in the Fiscal Year 2022												
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
CMA	CMA	1,594	2,580	3,536	3,763	3,124	3,368	3,542	3,368	3,039	3,509	3,651	3,291	38,365
	LPN	288	270	263	262	235	273	267	275	246	276	301	268	3,224
	MHS	40	158	142	126	110	81	55	42	55	48	51	54	962
	MST	20	87	191	52	71	72	83	71	100	96	93	96	1,032
	TOTAL	1,942	3,095	4,132	4,203	3,540	3,794	3,947	3,756	3,440	3,929	4,096	3,709	43,583
PSL	PSL	816	916	946	723	622	737	704	916	920	772	738	721	9,531
	THS	320	302	226	227	201	302	216	193	243	185	245	211	2,871
	TAK	46	78	104	56	52	77	74	43	80	80	48	30	768
	TOTAL	1,182	1,296	1,276	1,006	875	1,116	994	1,152	1,243	1,037	1,031	962	13,170
PUT	PUT	1,810	2,908	3,871	4,069	3,672	4,162	4,803	4,567	4,525	4,827	4,839	4,598	48,651
	KBI	281	476	670	690	534	760	965	949	800	844	899	999	8,867
	RAN	43	95	112	113	107	121	127	82	64	77	75	79	1,095
	TOTAL	2,134	3,479	4,653	4,872	4,313	5,043	5,895	5,598	5,389	5,748	5,813	5,676	58,613
HTY	HTY	1,526	1,806	2,004	2,184	2,099	2,364	2,645	2,791	2,528	2,776	2,867	2,869	28,459
	TRN	158	270	311	317	279	409	439	450	322	342	342	348	3,987
	NTW	145	142	148	199	158	184	166	253	211	193	210	207	2,216
	PT	368	429	406	439	385	444	419	444	414	464	525	433	5,170
	TOTAL	2,197	2,647	2,869	3,139	2,921	3,401	3,669	3,938	3,475	3,775	3,944	3,857	39,832

Note: The data is from TOPSKY ATC, HHN APP is not shown in the table due to the transitioning process. Number of flights at Hua Hin airport is, however, indicated in the Aerodrome Control Service table

2.2 Number of Fights (Bangkok Terminal Control Area) in the Fiscal Year 2022

Number of Fights (Bangkok TMA) in the Fiscal Year 2022													
Airport	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Suvarnabhumi	9,975	12,059	14,224	13,975	12,880	15,560	16,216	16,779	16,846	19,522	20,553	19,874	188,463
Don Mueang	5,250	6,827	8,745	8,862	7,271	9,407	10,147	10,667	11,020	11,133	12,149	11,709	113,187
Total	15,225	18,886	22,969	22,837	20,151	24,967	26,363	27,446	27,866	30,655	32,702	31,583	301,650

Note: The data is collected by FDMC database, the data collection according to the BKK TMA by Sector is under development.

Area Control Service

3. Number of Fights (Area Control Service) in the Fiscal Year 2022

Area Control Sector	Number of Fights (Area Control Service) in the Fiscal Year 2022												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1N	2,658	4,050	5,481	5,275	4,598	5,217	5,149	4,979	4,631	4,501	4,985	4,941	56,465
2N	1,465	1,840	2,346	2,337	1,968	2,234	2,397	2,688	2,711	2,701	2,950	3,208	28,845
3N	3,159	4,799	6,558	6,167	5,194	5,922	6,092	6,102	5,687	5,654	6,295	6,561	68,190
4N	2,371	2,676	2,741	2,642	2,236	2,903	3,126	3,802	4,145	4,090	4,739	5,033	40,504
5N	3,252	3,778	4,300	4,260	3,760	4,874	4,599	4,698	4,772	4,446	5,017	5,206	52,962
6N	3,919	4,767	5,409	5,348	4,720	5,783	5,572	5,102	5,039	4,720	5,101	5,278	60,758
1S	4,391	5,819	7,816	7,684	6,768	8,290	9,840	9,769	9,360	8,999	10,189	10,343	99,268
2S	4,334	5,776	8,012	7,946	6,993	8,415	10,106	9,961	9,704	9,474	10,428	10,896	102,045
3S	2,357	3,847	5,125	4,979	4,325	5,223	6,055	5,875	5,447	5,207	5,730	5,797	59,967
4S	517	613	1,109	1,241	1,104	1,082	1,374	1,699	1,860	1,851	2,068	2,165	16,683
5S	2,252	2,586	2,758	2,668	2,434	2,999	3,089	3,716	4,196	4,436	5,342	5,844	42,320
6S	3,222	3,628	4,837	4,849	4,455	5,176	6,035	6,402	6,594	6,719	7,742	8,202	67,861

Note: The data is collected for en-route through area control sector by Radar Track



Performance

Air Traffic Flow Management : ATFM

1. Preparation for the accreditation of air traffic management services, under the category of air traffic flow management

Objective:

To improve the standards of air traffic management services under the category of air traffic flow management (ATFM) in terms of work processes, manuals, HR management and quality assurance process, to be in compliance with the standards required by the Civil Aviation Authority of Thailand (CAAT) in preparation for submitting an application for accreditation of air traffic management services under the category of air traffic flow management.

Duration

Year 2021–2022

Performance Summary

AEROTHAT completed the project, awaiting certification from CAAT once all ANS certification related regulations are issued.

Airspace Management : ASM

2. Preparation for the accreditation of air traffic management services under the category of airspace management

Objective

To improve the standards of air traffic management services under the category of Airspace Management (ASM) in terms of work processes, manuals, HR management and quality assurance process, to be in compliance with the standards required by the Civil Aviation Authority of Thailand (CAAT) in preparation for submitting an application for accreditation of air traffic management services under the category of Airspace Management.

Duration

Year 2021–2022

Performance Summary

AEROTHAT completed the project, awaiting certification from CAAT once all ANS certification related regulations are issued.

Air Traffic Services : ATS/Communications, Navigation, and Surveillance : CNS/Instrument Flight Procedure Design : IFPD]

3. Review/Update Standard Operating Procedures on ATS/CNS/IFPD

Objective

Air navigation services on ATS, CNS and IFPD have standard operating procedures as a guideline showing the operating procedures to provide air navigation services as required by the standards. However, the changing environment in terms of rules, regulations, in the international and national systems may affect the current operations; therefore, it is necessary to have processes to review/update Standard Operating Procedures on ATS/CNS/IFPD to make it always ready to accommodate such changes.

Duration

Year 2021–2022

Performance Summary

The Standard Operating Procedures for the management of ATS/CNS/IFPD Operations Manual has been put in place.



Air Traffic Flow Management Service (ATFM Service)

Bangkok Air Traffic Flow Management Unit (Bangkok ATFMU) provides the Air Traffic Flow Management services within AEROTHAI's area of responsibility (aerodromes and airspace in Bangkok FIR), using ATFM measures to balance the air traffic demand with the available Air Traffic Service (ATS) capacities. The services support a safe provision of air traffic control service, ensure optimal use of air traffic management resources, and reduce the impacts of unplanned delays for airspace users both during congested periods and during unforeseen disruptions. The ATFM services are provided following the Asia/Pacific Regional Framework for Collaborative ATFM, and AEROTHAI has also been playing an active role in the regional cross-border ATFM initiative known as the Asia-Pacific Cross-Border Multi-Nodal ATFM Collaboration (AMNAC).

In the past year, Bangkok ATFMU has used the ATFM measures to manage responses to several capacity-impacting situations including military aerial missions, international joint military air exercises, and runway and infrastructure outages at various aerodromes. The ATFMU has also been the core unit coordinating with international counterparts in response to several regional special events and disruptions, including the conflict over Taipei FIR and South China Sea airspace and the Singapore Air Show 2022. The coordination allowed Bangkok ATFMU to support local air carriers in their operations planning to minimize impacts from those disruptions.

Bangkok ATFMU has also been providing ATFM service for the Afghanistan airspace (Kabul FIR), utilizing ATFM measures to manage overflight traffic from South/Southeast Asia to Europe during the peak nighttime period to prevent the traffic demand from overloading Afghanistan's en route air traffic control center. The service, named BOBCAT ATFM Service, was assigned to AEROTHAI by ICAO in 2007 and has since been a core contributor to air traffic service efficiency over Afghanistan.

However, due to the conflict and political transition in Afghanistan in August 2021, the air traffic service provision over Kabul FIR has since been suspended resulting in airspace users electing to avoid the airspace over safety concerns. In consultation with ICAO and IATA, AEROTHAI therefore temporarily suspended the BOBCAT ATFM Service starting in August 2021, albeit retaining the readiness to resume the service as soon as it is once again required. AEROTHAI's engineering unit continues to perform preventive maintenance on the supporting software and Bangkok ATFMU's personnel continue to receive recurrent training to retain their proficiency.



Aeronautical Communication Services

1. AEROTHAI provides aeronautical fixed services with automatic message switching capability for the exchange of messages among domestic and international aeronautical communication centres. The service is available 24 hours a day 7 days a week. Bangkok Aeronautical Communication Centre is the main Aeronautical Communication Centre in Asia/Pacific Region for receiving, transmitting, and distributing aeronautical messages to all parties involved in Aeronautical Fixed Telecommunication Network (AFTN) and/or Aeronautical Telecommunication Network (ATN) followed ICAO Annex 10 Volume II

2. The international circuits are directly connected through CRV (Common aeronautical Virtual Private Network), submarine cables and satellite. Presently, AEROTHAI operates with direct circuit connections with 12 international aeronautical communication centres as follows:

Circuit	Circuit	Network	Signaling speed
1	Bangkok/Singapore	CRV	64 Kbps
2	Bangkok/Hong Kong	CRV	64 Kbps
3	Bangkok/Mumbai	Submarine cable	64 Kbps
4	Bangkok/Rome	Submarine cable	2 Kbps
5	Bangkok/Beijing	Submarine cable	2 Kbps
6	Bangkok/Kuala Lumpur	Satellite	32 Kbps
7	Bangkok/Phnom Penh	Satellite	64 Kbps
8	Bangkok/Yangon	Satellite	64 Kbps
9	Bangkok/Ho Chi Minh	Satellite	19.2 Kbps
10	Bangkok/Dhaka	Satellite	32 Kbps
11	Bangkok/Vientiane	Satellite	32 Kbps
12	Bangkok/Bhutan	CRV	64 Kbps

3. In 2022, Traffic volume 205,663,787 messages were handled by Bangkok Aeronautical Communication Centre. A total increase of 22,860,699 messages or 12.51 % in comparison to the last fiscal year.





Aeronautical Information Services (AIS)

AEROTHAI is responsible for the flow of information necessary for the safety, regularity and efficiency of international air navigation to entities involved in that information. This responsibility includes providing Notices to Airmen (NOTAM) and En-route Charts as well as other related aeronautical information to aircraft flying on domestic (Bangkok FIR) and international routes.

1. Notice to Airmen (NOTAM)
 - 1.1. NOTAMs are issued by AEROTHAI as the International NOTAM Office and are distributed through AFTN and/or ATN network according to ICAO Annex 15. NOTAM database provides NOTAM information through automatic request and reply service.
 - 1.2. During the fiscal year 2022, AEROTHAI processed a total of 14,192 NOTAMs which is an increase of 517 NOTAMs or 3.78 % in comparison to the last Fiscal Year.
2. Flight Plan (FPL)
 - 2.1. AEROTHAI main responsibility includes the management of flight plans according to ICAO Document 4444
 - 2.2. During the fiscal year 2022, AEROTHAI processed a total of 534,260 messages which is an increase of 133,391 messages or 33.28 % in comparison to the last Fiscal Year.

3. Operational Meteorological (OPMET) Data Services AEROTHAI is a designated Regional OPMET Centre (ROC) as well as Regional OPMET Data Bank (RODB) according to ICAO Annex 3 and ROBEX Handbook.

Human Resource Management ✈️





Promotion of learning and development in Human Resources

The Company provides learning and professional development for employees in all areas of Air Navigation Services, Engineering and Support in order to provide personnel with compliance knowledge. The company also wishes to develop the potential of experts across the various professional fields according to company needs by developing and promoting the company as a learning and innovative organization. By operating in accordance with the Enterprise Plan of the Year 2022-2026, the company intends to achieve the goal of “being an organization that provides the highest quality Air Navigation Services sustainably.” This incorporates 2 of the 4 strategic issues that are important to human capital development, and by adjusting the human capital development system

at AEROTHAI, the company hopes to raise the quality of work in a concrete and standardized way. The third strategic issue; development towards a high-performance organization, plans to promote/develop knowledge management (KM), research and innovation, as well as to develop plans for applying knowledge and innovation to operations as follows:

Human Capital Development

In designing the learning and development system, AEROTHAI has studied the relevant criteria, such as important work plans of AEROTHAI/requirements, CAAT/Public Policy, etc., and has classified employees into 3 groups: leaders, internal employees and outsourced employees. The Human Resources Development Guidelines “Next Generation of Aviation Professionals (NGAP)”, has studied the development of global air traffic operations, technology and changes in various technologies; (Competency-based Training) of ICAO and has set CBT&A guidelines for the development of operational Engineering and Support. This includes the 70:20:10 Learning Model guidelines, which have a development evaluation process, and cover classroom training, virtual classrooms (Virtual Training) and a coach and mentor system, alongside practical assignments. This Learning and Development system will prepare the employee to perform well in current and future positions, and enable the employee to be appointed to a higher level. The Learning and Development System has been designed as follows.



In addition, a 'Training Roadmap' has been designed and divided into leadership development and employee development as follows:

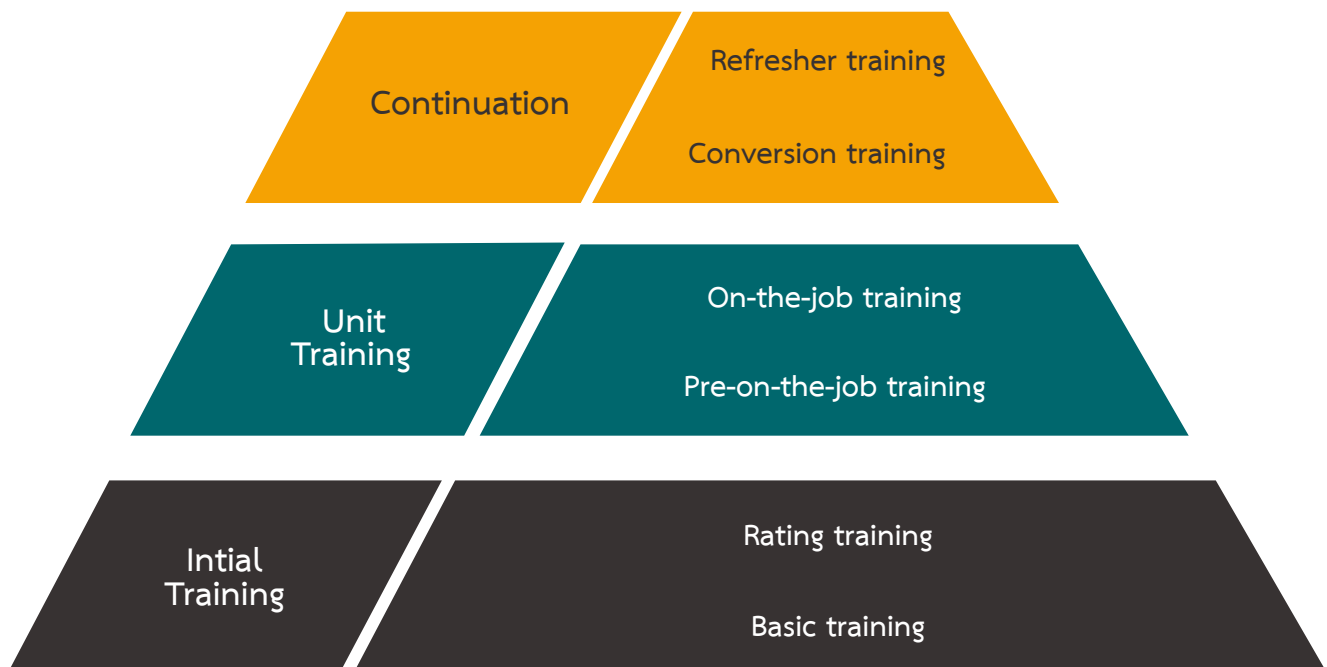
1. Leadership Development has been divided into 3 levels as follows:

- 1.1 Executive Management Level, there was no training course for the Executive Management Level in 2022.
- 1.2 Middle Management Level, AEROTHAI conducted 2 training courses for the Middle Management Level and 2 trainees completed courses.
- 1.3 First Management Level, AEROTHAI conducted 1 training course for the First Management Level and 1 trainee completed the course.

2. Employee Development: Employee development has been divided into 3 areas of development, including Operations, Engineering and Support.

2.1 Development of Operational Personnel

AEROTHAI has guidelines in place for operational personnel in compliance with ICAO Doc 10056 - Manual on Air Traffic Controller Competency-based Training and Assessment. The progression of air traffic controller training has been structured into three phases as per the above-mentioned ICAO Document.



2.1.1 Initial Training The Air Traffic Controller License and Rating (ATCLR) course provides trainees with fundamental knowledge related to basic air traffic operations. Successful completion of this course enables them to progress further onto Unit Training courses provided by each air traffic control center. In 2022, AEROTHAI conducted 3 training courses, and 89 trainees completed the courses.

2.1.2 Unit Training The Unit Training courses are designed to enable trainees to acquire the knowledge that is needed for a specific rating. The courses prepare trainees for working at specific airports or control areas/sectors. In 2022, AEROTHAI conducted 27 training courses, and 199 trainees completed the courses.

2.1.3 Continuation Training The Continuation Training consists of two parts:

a) Refresher training: The refresher training course is conducted to enable air traffic controllers to maintain their competencies.

b) Conversion training: The conversion training course is designed to provide air traffic controllers with the knowledge, skills and attitudes appropriate to changes in their operational environment.

In 2022, AEROTHAI conducted 2 training courses – a Competency Based Review course and a Human Machines Interface (HMI) course. 1,163 trainees completed these courses.

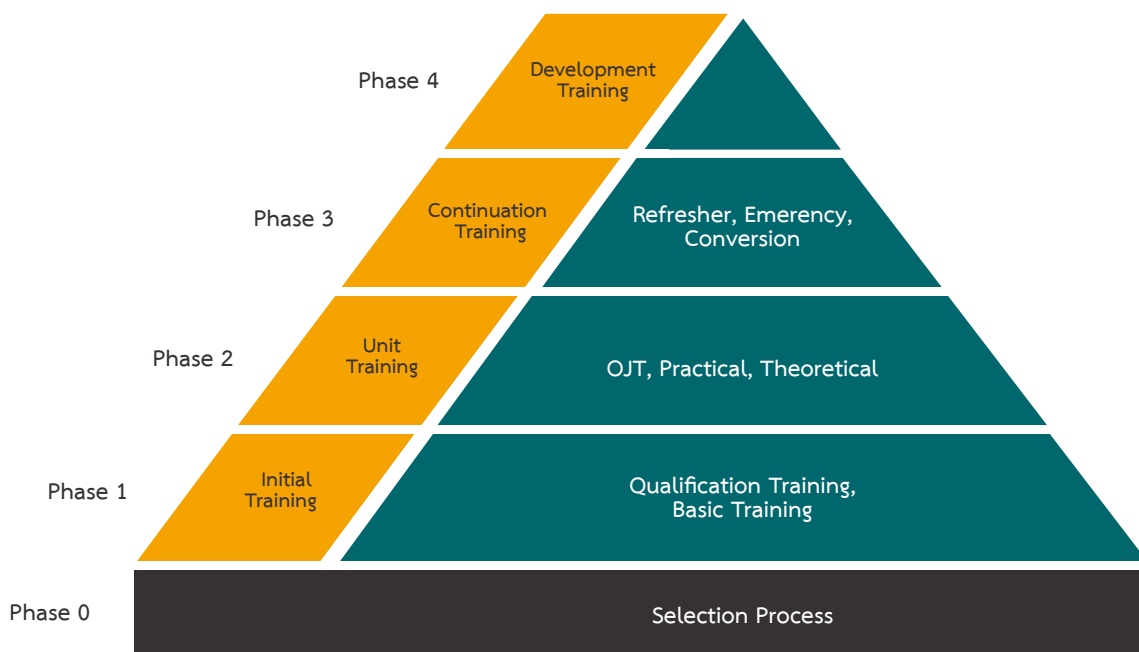
AEROTHAI submitted an application for approval and certification as an Air Traffic Control Training Organization (ATCTO) to the Civil Aviation Authority of Thailand (CAAT) and CAAT issued the Certificate of Air Traffic Control Training Organization Approval in 2022. After being certified by CAAT, the Quality Assurance Team conducted quality assurance audits at Provincial Air Traffic Control Centers. In addition, AEROTHAI organized 3 training courses for internal auditors. 53 trainees completed the courses.

2.2 Human Resources Development in Engineering

AEROTHAI has developed engineering personnel based on ICAO's Doc 10057, which is the guidance for Air Navigation Service Providers (ANSPs) and training providers (CATC) in developing competency-based training and assessment programs for Air Traffic Electronics Personnel (ATSEP), together with ICAO's Doc 9868 and Competency Frameworks. กับเอกสาร Doc 9868 และกรอบความสามารถ (Competency Frameworks)

ATSEP Training Phases

The ICAO Doc 10057 Manual on ATSEP Competency Based Training and Assessment organizer ATSEP training into five phases.



The above figure shows that ATSEP training can be divided into five phases:

Phase 0 Selection Process: Although this phase is not categorized as a training phase, it is important for ANSP to select an ATSEP who is suitable for the required qualifications specified by the organization.

Phase 1 Initial Training: This phase is designed to provide knowledge, abilities, and basic skills for ATSEP, which can be divided into two parts: Basic Training for all ATSEPs and Qualification Training for specific ATSEP jobs.

Phase 2 Unit Training: This phase is both technical and practical training, including On-the-Job Training (OJT) in different environments depending on where systems or equipment are operating.

Phase 3 Continuation Training: This phase involves retaining the capabilities of ATSEPs, such as Refresher Training, Emergency Training, and Conversion Training.

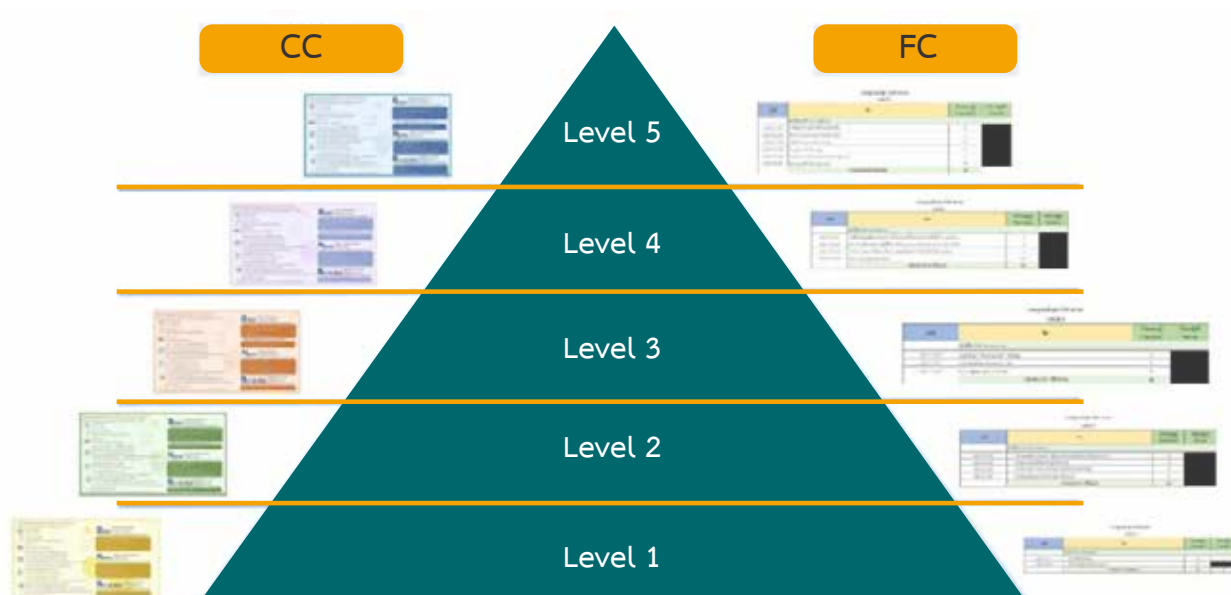
Phase 4 Development Training: This phase involves developing the additional capabilities required for ATSEPs who change roles or develop to work on more complex tasks.

To comply with the Manual of Standards Communication, Navigation, and Surveillance of the CAAT (CAAT-ANS-MOSCNS) Issue 03, Revision 00, September 18, 2020, and the ICAO Training Manual for Engineering Personnel Development as specified in the ICAO Doc.7192 Part E2, in 2020, AEROTHAI implemented a Competency Assessment Process and Approval Document system for CNS/ATM engineers or ATSEPs. At present (year 2022), there are 461 ATSEPs that passed the competency assessment for system watch positions; 461 ATSEPs passed the competency assessment for preventive maintenance positions; 438 ATSEPs passed the competency assessment for corrective maintenance positions; and 121 ATSEPs passed the competency assessment for special task positions.

2.3 Support personnel development

AEROTHAI has set guidelines for employee development to include both Employee Core Competencies and Functional Competencies by analyzing the core competencies which are necessary to conduct business both in the present and future. To support the change of digital technology and in order to drive the company, employees must have the knowledge and skills to perform tasks at the appropriate level for their position. Therefore, a standard curriculum framework has been set up as follows to support employees' learning and development, including career growth.

Development Roadmap



Digital technology in the form of Virtual Training has been applied to support employees' learning and development, in which experts in each area share their knowledge and experience. AEROTHAI conducted 13 Core Competency training courses, and 1,229 trainees completed these courses. AEROTHAI conducted 47 Functional Competencies and 1,462 trainees completed these courses.

Knowledge Management

AEROTHAI Knowledge Management (KM) is currently operated based on State Enterprise Assessment Model (SE-AM), Core Business Enablers Sector 7, Knowledge Management, and Innovation. The objective is to develop a working system that creates value for the organization, as well as establish standards and good practices in knowledge management to enable organizational development towards excellence, sustainability, and creating added value for stakeholders.

In this regard, in the year 2022, AEROTHAI has revised KM Master Plan for the years 2022-2026, as well as defined the KM Structure with roles and responsibilities that focus on participation from the staff at all levels as a framework for implementation. Following the knowledge management process, the results can be summarized as follows:

1. Bring knowledge management tools to develop the organization, apply knowledge management tools to develop staff competency.
2. Manage knowledge of executives in 3 areas:
 - 2.1 The transfer of knowledge and experience from experts to executives acting as company and Thai representatives in order that they can attend global forums and drive company's important projects from an operational perspective.
 - 2.2 The transfer of knowledge and experience from experts to executives acting as company and Thai representatives in order that they can attend global forums and drive company's important projects from an engineering perspective.
 - 2.3 The transfer of knowledge & experience in the role of Program Manager (PGM) in managing the results of various airport development plans including stakeholder management (Stakeholder) both inside and outside the organization.
3. Manage operational knowledge, identified by departments according to the KM process. 56 areas have been collected and stored on each department's website and KM AEROTHAI's website.

In addition, AEROTHAI has also organized communication courses and activities via Zoom, in order to develop staff's knowledge management, containing four projects and one activity through Zoom as follows:

 1. Knowledge Management Seminar Project, to relay the KM Plan, roles and responsibilities regarding knowledge management for managers and knowledge facilitator staffs.
 2. KMLeadership Skill Project, to relay and provide knowledge management guidelines to executives in order to move the company forward.
 3. Fundamentals of Knowledge Management training course, for new knowledge facilitator staff.
 4. Project to develop the knowledge potential of facilitator staff, KM Tools course "Management tools and work process development".
 5. KM Show and Share activities to present the knowledge management work for the year 2022.

Innovation Promotion

AEROTHAI has continuously prioritized and promoted innovation. In 2022, AEROTHAI made 2 significant changes to Innovation Promotion with a plan to run activities every quarter to build a more innovative environment and create a culture of innovation,

1. AEROTHAI Idea & Innovation awards

AEROTHAI has modified some details on the AEROTHAI Idea & Innovation awards by separating important activities into 2 parts:

- 1) AEROTHAI i-Preview: an activity for creators and innovators to gain comments, suggestions, and directions for improving ideas/ innovations after presenting to an Idea/Innovation Commentator Team (i-CT) using only a PowerPoint Presentation. This event will be organized 3 times a year (quarterly, except the 2nd quarter). The creators and innovators can attend an AEROTHAI i-Preview as often as they wish before attending AEROTHAI i-Battle and can choose to attend the event at their own convenience.



2) AEROTHAI i-Battle: an activity for those who passed the AEROTHAI i-Preview round and developed their ideas/innovations, according to the opinion received from i-CT, to be ready for the final round, in which AEROTHAI has announced the results at the end of March. This new version of the AEROTHAI Idea & Innovation awards launched 2 events in 2022, in the 3rd quarter (April - Jun) and the 4th quarter (July - September), with 3 ideas and 3 innovations.

2. MOU for New Growth Engine Project

The signing of a memorandum of understanding between AEROTHAI and International College Chiang Mai University (CMU), under the concept and funding from the Ministry of Higher Education, Science, Research and Innovation (TSU) signifies the desire to produce talents with high performance and potential, ready for changes that occur rapidly in the present era and are in line with the Thailand 4.0 strategy. AEROTHAI in collaboration with faculty members from the International College of Digital Innovation, CMU, has designed and developed a curriculum called “New AEROTHAI Innovator Development Programme”, which focuses on Reskilling and Upskilling in order to support the business base expansion to the Eastern Economic Corridor Innovation Zone. With 85 grants from CMU (8.5 million baht), 3 major areas were planned to be developed: UAV/UTM, Smart Airport, and Digital Transformation. A total of 107 people are participating in the project with 20 topics (ideas) under the specified framework, still in development. The Prototype must be completed in the year 2023. Participants also have to meet Technology Readiness Level (TRL) at level 6-7, a representation of the deliverable demonstrated environment level to reach the final development version, which could be demonstrated in an operational environment level.



AEROTHAI Information Technology Development

AEROTHAI has the responsibility to develop digital technology for the organization by focusing on adding value to the mission of the organization in terms of supporting the operation of air navigation and services (Communication, Navigation, and Surveillance/Air Traffic Management: CNS/ATM) and the development of information systems for administrative tasks (Back-Office), by using digital technology to respond to government policies and practices and the evaluation criteria for state-owned enterprises (SE-AM) under the new evaluation system by defining digital policies and the preparation of digital action plans for bringing to concrete practice through various projects/tasks.

Arrangements of Aerothai digital technology development in the year 2022 for response to the strategy of the Digital Government Development Plan of Thailand 2020 - 2022 are as follows:

Strategy 1: To enhance the quality of service to the people with digital technology.

1. Increase the efficiency of government services with digital technology that people can easily access and conveniently through integration, for example, developing a complaint management system and procuring an Integrated Flight Information Management System (iFIMS) for the exchange of flight information between AEROTHAI and Airports of Thailand (AOT).
2. Increase the capacity of government agencies to become digital organizations by supporting the development of service systems for the potential of serving the people. Including developing the digital mindset of the organization and the necessary skills such as:
 - 2.1. Develop personnel skill to have knowledge of DATA Privacy and Data Governance.
 - 2.2. Develop a working style in accordance with the new way of life by increasing work efficiency and promoting the environment and good quality of life of personnel.
 - 2.3. Establish a research and development centre for Aeronautical Information Service (AIS).
 - 2.4. Establish a research and development centre for Aeronautical Weather Information (MET).
 - 2.5. Analyze and develop the Enterprise Architecture (EA) of the organization.
3. Increase the ability of Cyber Security in the application of digital technology for the government sector as well as provide a mechanism to protect the personal information of the people receiving services from the government, such as developing information technology and research personnel to be competent in Cyber Security.

Strategy 2: Facilitating the Thai business sector with digital technology by providing

digital service system for facilitating entrepreneurs such as preparing, delivering, and keeping electronic tax invoices (e-Tax invoices) and electronic receipts (e-Receipt).

Strategy 3: Pushing for the government on information governance which applied to all processes of the state.

1. Provide a digital system to support the disclosure, exchange, and linkage of government information, including integration of data linkage and joint operations.
2. Develop standards, criteria, and methods related to digital systems for linking, disclosure and exchange of information between each other to achieve good governance, by designing data linkages and cooperating between agencies.

Strategy 4: Develop a mechanism for participation to driven digital government by providing a digital system to make the opportunities for all sectors to express their opinions that lead to the country's development, such as developing a system to listening the stakeholders (Voice of Stakeholders: VOS) for improve the quality management and partner engagement.



Performance on Investment Expenditure

Since the Government has a policy for the state enterprises to set the target for investment expenditure at more than 95% of the approved budget. In 2021, AEROTHAI's accumulated investment expenditure is expected to have accumulated disbursement amounting to Bath 763.89 million which was 100% compared to the approved budget in 2021 that has been revised in the amount of Bath 763.89 million.

Performance Appraisal

AEROTHAI performance appraisal is carried out annually in accordance with an annual performance agreement of state enterprise's operation between the Ministry of Finance and AEROTHAI, with the State Enterprise Policy Office (SEPO) as a regulatory body. The Government emphasizes the importance of State Enterprises becoming more efficient, thereby increasing their competitive edge and creating more added value to the country's assets to support sustainable growth.

The State Enterprise Assessment Model (SE-AM), created by the Government as a tool to assess State Enterprises, consists of 3 main evaluating areas: (1) Strategic Mission, (2) Results of the Enterprise's operations, and (3) Performance in the 8 Core Business Enablers(Corporate Governance & Leadership, Strategic Planning, Risk Management & Internal Control, Stakeholder & Customer, Digital Technology, Human Capital Management, Knowledge Management & Innovation Management, and Internal Audit). AEROTHAI achieved an overall performance appraisal score of 4.2435 in the fiscal year 2021.

SE-AM's Performance Appraisal	Fiscal Year 2021		
	Strategic Mission	Result	Core Business Enablers
Weight	18	42	40
Weighted Score	5.0000	4.5112	3.5589
Total Score		4.2435	



Company's Credit Rating

In the Fiscal Year 2022, TRIS Rating Company Limited (TRIS Rating) affirms the company rating on Aeronautical Radio of Thailand Ltd. (AEROTHAI) at “AAA” with a “Stable” rating outlook. The rating reflects TRIS Rating’s assessment of AEROTHAI’s status as a government-related entity (GRE) with integrally linkage and critical importance to the government, and TRIS Rating’s view of the almost certain likelihood that AEROTHAI would receive timely and sufficient support from the Thai government in times of stress. TRIS Rating expects a gradual recovery of air traffic volume and assesses AEROTHAI to have sufficient liquidity for the next 12 months

The “Stable” outlook reflects TRIS Rating’s expectation that AEROTHAI will maintain its status as a GRE with an integral linkage and critical importance to the government, for its role as the main provider of air navigation services in the country. A rating downgrade could occur if AEROTHAI’s linkage or importance to the government changes, to the degree that it impairs our view concerning the likelihood of the government providing timely and sufficient support to the company in times of stress.

Highlighted Activities

AEROTHAI continuously plays an important role in the development of both global and Asia/Pacific regional air navigation systems such as Global and Regional Cooperation

1. Cross-border Air Traffic Flow Management (Cross-border ATFM)

AEROTHAI has actively supported the International Civil Aviation Organization (ICAO) at both global and regional levels. In particular, AEROTHAI is a member of the ICAO Air Traffic Management Operations Panel (ATMOPSP), which is the global body responsible for developing the global ATFM standards and related guidance materials. At the regional level, aiming at continuously pushing forward the harmonized ATFM implementation across the Asia/Pacific region, under the umbrella of the ICAO Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG), AEROTHAI keeps contributing to the ATFM Steering Group (ATFM SG) and the ATFM Information Requirement Small Working Group (ATFM-IR SWG), especially in developing and maintaining the Asia/Pacific Framework for Collaborative ATFM as well as the regional operational and technical specifications. Throughout 2022, AEROTHAI has played an important role in updating the latest version of the Asia/Pacific Framework for Collaborative ATFM, version 4.0, to provide the stepwise ATFM development framework for the Asia/Pacific region.

Furthermore, AEROTHAI plays the leading role in the Asia/Pacific Cross-Border Multi-Nodal ATFM Collaboration (AMNAC), which involves Air Navigation Service Providers (ANSPs) of another 10 States/Administrations in Asia/Pacific region, i.e. Singapore, China, Hong Kong China, Australia, Cambodia, Malaysia, Myanmar, Indonesia, Vietnam, the Philippines, and Lao PDR, as well as airlines and international organizations. This project is one of the collaborative ATFM projects participated by the highest number of aviation stakeholders in the region. Since 2018, AEROTHAI, together with participating ANSPs have made a number of achievements, including the operational service provision in various events affecting airport capacity and airspace capacity. Moreover, with the need for a single-point of information access enabling by the effective information sharing platform among stakeholders, Technical Sub-Group of the project has



been thus established and tasked to develop an Interface Control Document (ICD) that will define the ATFM system-to-system information linkage, while keeping in view the requirements from airspace users and future development towards System-Wide Information Management (SWIM) framework. In 2019, the ICD, which was developed by Technical Sub-Group to provide the technical specifications for cross-border ATFM data exchange using Aeronautical Fixed Telecommunication Network/Air Traffic Service Message Handling System (AFTN/AMHS), so-called the AFTN/AMHS-based ICD, was adopted by the bodies under the APANPIRG and published on the ICAO Asia/Pacific Regional Office website as technical guidance material for Asia/Pacific States/Administrations in the implementation of cross-border ATFM communication.

Amidst the COVID-19 pandemic in 2020, AEROTHAI, together with AMNAC members, decided to build on their existing coordination platform to facilitate the sharing of COVID-19 impact information related to Air Traffic Management (ATM)/ATFM around the region. The information exchange was not limited to only AMNAC members but has been opened to other Asia/Pacific States/Administrations as well. Besides, AEROTHAI plays an important part in collating the information shared through the coordination platform aforementioned into a region-wide ATM/ATFM Status Update document, a regularly updated one-stop guide to the regional circumstances, for publishing on the ICAO Asia/Pacific regional COVID-19 information sharing webpage for easy reference and access by the aviation community.

2. System-Wide Information Management (SWIM)

AEROTHAI is an active member of the ICAO Asia/Pacific SWIM Task Force (SWIM TF), which is tasked by the APANPIRG to develop the SWIM implementation plan and related requirements for the Asia/Pacific region. In 2019, the SWIM implementation framework developed by AEROTHAI, the Civil Aviation Authority of Singapore (CAAS), and the Federal Aviation Administration (FAA) was adopted by the bodies under the APANPIRG to be Philosophy and Roadmap for Asia/Pacific SWIM Implementation. Furthermore, the Flight Information Exchange Model (FIXM) version 4.1 Extension developed by AEROTHAI to support the ATFM information exchange for cross-border ATFM operations and ATFM/A-CDM (Airport-Collaborative Decision Making) integration in the SWIM environment was adopted by the APANPIRG to be the Asia/Pacific FIXM version 4.1 Extension for use by Asia/Pacific States/Administrations and was uploaded to the ICAO Asia/Pacific Regional Office website. Moreover, the Asia/Pacific FIXM Extension was forwarded to the FIXM Change Control Board (CCB) for review, and it was published on the FIXM official website for use by other stakeholders as well.

During 2020 – 2022, AEROTHAI has been still playing a leading role in regional SWIM development. In particular, several SWIM-related components have been further enhanced, and the progress has been reported to SWIM TF for deliberation and possible adoption, e.g. the testing of security services in accordance with the International Aviation Trust Framework (IATF) being developed by ICAO, the update of the Asia/Pacific FIXM Extension to FIXM version 4.2, the latest FIXM version released in 2021, to support, in addition to cross-border ATFM operations and ATFM/A-CDM integration, traffic synchronization, Flight and Flow Information for a Collaborative Environment (FF-ICE), and Trajectory-Based Operation (TBO).

Additionally, in 2022, to assist the ICAO Asia/Pacific Member States in harmonizing their implementation plans in order to achieve the seamless information exchange across the region in time for future operations, e.g. FF-ICE, AEROTHAI has successfully pushed forward, through the contributory bodies under the APANPIRG, the adoption of the Asia/Pacific SWIM Implementation Timeframe to be between 2024 and 2030, and the inclusion of SWIM in the next edition of the Asia/Pacific Seamless ANS Plan, version 4.0, to be published in 2022.



3. Modernization towards Performance-Based Air Navigation

- Flight and Flow Information for a Collaborative Environment (FF-ICE)

Aiming at ensuring the harmonized implementation across ASEAN, in 2020, AEROTHAI successfully encouraged ASEAN to include FF-ICE-related initiatives in the latest version of ASEAN Air Navigation Service Master Plan, version 2.0.

Furthermore, in an effort to put together components required to support TBO, the FF-ICE Release 1 (FF-ICE/R1) technical trial between AEROTHAI and CAAS was well conducted in 2021 – 2022 to test all of the FF-ICE/R1 services utilizing the SWIM-based information exchange.

- Trajectory-Based Operation (TBO)

To validate and demonstrate the TBO concept, AEROTHAI, FAA, CAAS, Japan Civil Aviation Bureau (JCAB), and NAV CANADA conducted the Multi-Regional TBO Demonstration in 2020 – 2022. The main objectives of this demonstration also included (i) exploring the impacts of TBO within the context of modernization initiatives and (ii) supporting the development of information exchange standards and related ICAO materials. With the successful execution of the lab demonstration in May 2022, the lessons learned have been submitted to the relevant bodies of the ICAO to support the development of the TBO-related Standards and Recommended Practices, guidance materials, and Global Air Navigation Plan.

4. ICAO Global Air Navigation Plan Development

AEROTHAI has been an active member of the ICAO ASBU (Aviation System Block Upgrade) Panel Project Team, a body responsible for drafting ASBU as part of the ICAO Global Air Navigation Plan (GANP), since 2017. The sixth edition of the plan, which is the current edition in use, was adopted by the 40th Session of the ICAO Assembly in 2019.

Continuing on, in 2022, AEROTHAI still played an active role in drafting the new edition of GANP, the seventh edition, which will be presented for adoption by the 41st Session of the ICAO Assembly to be held in September – October 2022.



Organizational Management



Risk Management and Internal Control

AEROTHAI has implemented Enterprise Risk Management (ERM) and Internal Control (IC) in accordance with the Standards and Guidelines for Internal Control of Government's Agencies, 2018, and the Standards and Guidelines for Risk Management of Government's Agencies, 2019, both established by the Ministry of Finance. AEROTHAI has also developed risk management system and processes by following guidelines stated in the State Enterprise Assessment Model (SE-AM). The guidelines and procedures in these documents are based on the concept developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Under AEROTHAI's Risk Organization Structure, the Risk Management Committee (RC) and the Risk Management Working Group (RM) are given the responsibility to oversee risk management and internal control within the organization. Important ongoing work includes a plan to establish an integrated Good Governance, Risk management, and Compliance (GRC) policy, and a plan to promote the AEROTHAI Risk Culture Framework into real practice in order to make risk management a real part of day-to-day operations and decision-making in all levels.

Risk management has been integrated with strategy formulation and linked to operations in order to further create value for AEROTHAI under the risk appetite, which is a decision-making tool, in order to reasonably achieve the goal.

AEROTHAI's enterprise risk management is closely aligned with the organization's objective and strategy setting. Our Risk Management and Internal Control Master Plan 2022 was developed in conjunction with the AEROTHAI Corporate Plan. It also underwent mid-year revision to capture changes in the business context that took place during the year. Risk Factors that were identified in the Risk Management and Internal Control Master Plan 2022 include the following:

1. Strategic Risk: AEROTHAI manages risks in several areas related to the organization strategic positions. Strategic risks include AEROTHAI's issues in the area of air navigation service provider safety and standard, security and AEROTHAI's role in supporting an important government policy/project, AEROTHAI's aim to become an innovative organization. All risks are managed in order to achieve target within an acceptable timeframe.

2. Operational Risk: In terms of operational risks, AEROTHAI focuses on managing risks associated with providing safe and efficient air navigation services, continuous and reliable CNS services, technology, as well as obtaining/maintaining capable and sufficient manpower. Overall, all identified operational risks are managed to be within an acceptable level. Risk management measures are regularly monitored and reviewed in order to keep operational risk performance under control.

3. Financial Risk: AEROTHAI carefully monitors financial risks arising from external factors affecting air traffic demand and income. In the fiscal year 2021-2022, air traffic volume has decreased dramatically due to the effect of the COVID-19 pandemic. AEROTHAI's revenue has been majorly affected, particularly by outbreaks in 2021-2022. As a result of a sharp fall in revenue, a large deficit was accumulated, and the impact is forecasted to last into the year of 2023. AEROTHAI has taken serious action to cut costs in all possible areas that do not affect the safety aspect of our operations, as well as take all necessary measures in order to create financial liquidity. Recovery of traffic and revenue is expected in 2024.

4. Compliance Risk: AEROTHAI follows a good governance concept and complies with all relevant legislations/laws. Emphasis is given to establishing an adequate level of control and appropriate mitigation to manage any potential compliance risk and minimize its potentially harmful impact.

Business Continuity Management (BCM)

AEROTHAI has implemented Business Continuity Management (BCM) in accordance with the ISO 22301 standard since 2019. In 2022, AEROTHAI continued to maintain the BCM system covering all 12 geographical areas (Tung Mahamek, Don Mueang, Suvarnabhumi, and 9 regional centres) for Air Traffic Services (ATS) and Aeronautical Information Services (AIS).





Board of Directors and Responsibilities

Article 33 of the Company's Articles of Association stipulates that the Company's Board of Directors consists of not less than three Directors, and Article 39 stipulates the nomination of Directors by both A and B shareholders as follows:

- (1) The Thai Government shall be entitled to nominate Directors of the Company, and the Thai Government's nominees shall be appointed Directors. One of these Directors, as nominated by the Thai Government, shall be the Chairman of the Board of Directors of the Company.
- (2) The holders of B shares shall be entitled to nominate two Directors, and these nominees shall be appointed Directors.

At the ordinary general meeting in every subsequent year, one-third of the Directors must retire from office. A retiring Director is eligible for re-election. A Director can be appointed

only by a general meeting. If a vacancy occurs in the Board of Directors otherwise than by rotation it may be filled by the remaining Directors, but any person so appointed shall retain his office during such time only as the vacating Director was entitled to retain the same.

THE BOARD OF DIRECTORS IN THE FISCAL YEAR 2022

As of September 30, in the fiscal year 2022, the Board of Directors consisted of the following 11 Directors:

1. Mr. Rapee Phongbupakicha

Chairman

(Appointed as the Director on July 15, 2021, and appointed as Chairman on November 22, 2021)

Age: 62

Position: Retired Officer, Office of the Permanent Secretary for Interior

Education:

- Bachelor of Political Science, Thammasat University
- Master of Public Administration, National Institute of Development Administration

Work Experiences:

- Governor of Chachoengsao Province
- Inspector General, Ministry of Interior
- Governor of Nakhon Sawan Province
- Governor of Phitsanulok Province
- Governor of Nong Bua Lamphu Province

Fields of Competence:

- Organization Management
- Laws
- Transportation and Air Transport
- Engineering



Other Positions:

- Chairman of the Board of Directors, Airport Rail Link
- Subcommittee of the Public Sector Anti-Corruption Commission, the 2nd Screening Committee
- Name listed in the Directors' Pool of State Owned Enterprise in Organization Management

2. Mr. Pornchai Thiraveja

Vice Chairman

(Appointed as the Director on October 19, 2021, and appointed as Vice Chairman on November 5, 2021)

Age: 54

Position: Director General, Fiscal Policy Office, Ministry of Finance

Education:

- Bachelor of Accountancy, Thammasat University
- Master of Political Science (Public Administration), Thammasat University
- Master of Business Administration (Finance), Notre Dame De Namur University, U.S.A.
- Ph.D. in Education (Non-formal education), Chulalongkorn University
- Ph.D. in Management, Suan Dusit Rajabhat University

Work Experiences:

- Deputy Permanent Secretary, Ministry of Finance
- Advisor on Economic and financial, Fiscal Policy office, Ministry of Finance

Training:

- Diploma, The National Defence Course (Class of 64)
- Advanced Audit Committee Program (AACP) (Class of 40), Thai Institute of Directors Association (IOD)
- Director Certification Program (DCP) (Class of 277), Thai Institute of Directors Association (IOD)
- e-Government for Chief Executive Officer Program (e-GCEO) (Class of 6), Digital Government Development Agency (DGA)
- Capital Market Academy Programs (Class of 26), Capital Market Academy
- Advanced Budget Management Program (Class of 4), Budget Bureau
- Executive Development Program (EDP 2) (Class of 8), Office of the Civil Service Commission

Fields of Competence:

- Finance
- Organization Management

Other Positions:

- Director of the Board of Directors, Electricity Generating Authority of Thailand
- Business Rehabilitation Plan Administrator, Thai Airways International Public Company Limited
- Director of the Board of Directors, Esso (Thailand) Public Company Limited
- Chairman of the Board of Directors, Deposit Protection Agency
- Director of the Board of Directors, Bank of Thailand
- Director of the Board of Directors, Financial Institutions Policy Committee
- Director of the Board of Directors, Capital Market Supervisory Board
- Vice Chairman of Fiscal Policy Research Institute Foundation
- Name listed in the Directors' Pool of State Owned Enterprise in Finance
Public Management and Economics

3. Mr. Puttipong Prasarttong-Osoth

Director

(Appointed on January 22, 2021, which the State Enterprise Policy Committee agreed on February 24, 2021)

Age: 57

Position: Vice Chairman, Chief Executive Officer, and Managing Director Bangkok Airways Public Co., Ltd.

Education:

- Bachelor of Accounting, Chulalongkorn University

Work Experiences:

- Executive Vice President Operations, Bangkok Airways Company Limited
- Senior Vice President Operations, Bangkok Airways Company Limited
- Head Pilot of Airbus 319/320 fleet, Bangkok Airways Public Company Limited
- Vice President Operations, Bangkok Airways Company Limited
- Vice President Planning, Bangkok Airways Company Limited

Training:

- Diploma Senior Executive Program (class of 13) , Sasin Graduate Institute of Business Administration of Chulalongkorn University
- Diploma, Joint State - Private Sector Course (Class of 24), National Defence Studies Institute (Class of 25)
- Diploma, Senior Executives on Justice Administration (Batch 13), Judicial Training Institute
- Diploma, Commercial Pilot License, Civil Aviation Training Center
- Capital Market Academy Programs (Class of 16), Capital Market Academy
- Director Accreditation Program (DAP) (Class of 100), Thai Institute of Directors Association (IOD)
- Director Certification Program (DCP) (Class of 241), Thai Institute of Directors Association (IOD)
- Boards That Make a Difference (BMD) (Class of 9), Thai Institute of Directors Association (IOD)

Fields of Competence:

- Organization Management
- Transportation and Air Transport

Other Positions:

- President of the Thai Airways Association
- Chairman of the Board of Directors, Bangkok Airways Ground Services Company Limited
- Chairman of the Board of Directors, Bangkok Air Catering Company Limited
- Chairman of the Board of Directors, Bangkok Air Catering Phuket Company Limited
- Chairman of the Board of Directors, BAC Gourmet House Company Limited
- Chairman of the Board of Directors, WFS-PG Cargo Company Limited
- Chairman of the Board of Directors, Worldwide Flight Services Bangkok Air Ground Handling Company Limited
- Chairman of the Board of Directors, Bangkok Air Catering Chiang Mai Company Limited
- Chairman of the Board of Directors, Bangkok Air Catering Samui Company Limited
- Chairman of the Board of Directors, Gourmet Primo Company Limited
- Director of the Board of Directors, U-TAPAO International Aviation Company Limited
- Director of the Board of Directors, Quality Delicious Company Limited
- Director of the Board of Directors, Quality Delicious and Chief Man Company Limited
- Director of the Board of Directors, Bangkok Dusit Medical Services Public Company Limited
- Director of the Board of Directors, Bangkok Aviation Fuel Services Company Limited
- Director of the Board of Directors, Fuel Pipeline Transportation Company Limited
- Director of the Board of Directors, Bangkok Media and Broadcasting Company Limited
- Director of the Board of Directors, The Sahakol Estate Company Limited
- Pilot of Airbus 319/320 fleet, Bangkok Airways Public Company Limited



4. Lieutenant Junior Grade Supoj Charoensuk

Director

(Appointed on June 28, 2022)

Age: 58

Position: Chief Operation Officer, Thai Airways International Public Company Limited

Education:

- Bachelor of electrical engineering, Royal Thai Naval Academy

Work Experiences:

- Director of Safety and Organizational Accreditation Department, Thai Airways International Public Company Limited
- Executive Vice President, Aviation Support Operations, Thai Airways International Public Company Limited
- Director of Crew Management Department, Thai Airways International Public Company Limited Fields of Competence:
- Transportation and Air Transport
- Engineering

5. Mrs. Jantira Buruspat

Director

(Appointed on June 30, 2021, resigned on January 26, 2022, and reappointed on June 28, 2022)

Age: 58

Position: Inspector-General, Ministry of Transport

Education:

- Bachelor of Science in Agricultural Economics, Chiang Mai University
- Master of Arts in Social Sciences for Development, Chandrakasem Rajabhat University

Work Experiences:

- Deputy Director-General, Department of Land Transport
- Director, Bangkok Land Transport Office Area 5
- Inspector-General, Department of Land Transport

Training:

- Diploma, The National Defence Course (Class of 62)
- Board Essentials Program (BEP) (Class of 1), Thai Institute of Directors Association (IOD)
- Executive Development Program (Class of 9), Office of the Civil Service Commission
- Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives (Class of 19), King Prajadhipok's Institute

Fields of Competence:

- Organization Management

Other Positions:

- Chairman of the Board of Directors, Civil Aviation Training Center
- Director of the Board of Directors, Mass Rapid Transit Authority of Thailand



6. Miss Piang-or Loahavilai

Director

(Appointed on July 15, 2021)

Age: 58

Position: Professor of International College of Digital Innovation, Chiang Mai University

Education:

- Bachelor of Political Science, Thammasat University
- Master of Business Administration (International Business), Seoul National University, Seoul, Republic of Korea
- Ph.D. in Knowledge Management, Chiang Mai University

Work Experiences:

- Director of Sister Cities Research Center and Cross Border E-Commerce (China and Korea Project), International College of Digital Innovation, Chiang Mai University
- Management Consultant, KEC (Thailand) Co., Ltd., Northern Industrial Estate, Lamphun Province

Training:

- Director Certification Program (DCP) (Class of 307), Thai Institute of Directors Association (IOD)
- Corporate Governance Course for Directors and Senior Executives of Regulator class of 24 of State Enterprises and Public Organizations of Public Director, King Prajadhipok's Institute

Fields of Competence:

- Organization Management

Other Positions:

- Director of the Board of Directors, Thailand Transport Portal
- Director of the Board of Directors, Rail Technology Research and Development Agency (Public Organization)
- Director of the Board of Directors, General Hospital Products Public Company Limited
- Listed in the Directors' Pool of State Owned Enterprise of the Ministry of Finance, Specializing in International trade and investment, Organization Management, Innovation And Knowledge Management, and Startup

7. Air Chief Marshal Kongsak Chantarasopa

Director

(Appointed on June 28, 2022)

Age: 59

Position: Commander of the Directorate of Air Operation Control

Education:

- Bachelor of Science in Aeronautical Engineering (First-Class Honors), Royal Air Force Academy (Class of 29)
- Aviation Student (Class of 79-29-1)
- Squadron Officer School (Class of 76)
- Air Commander and Staff College (Class of 40)
- Diploma, The National Defence Course (Class of 59)
- Master of Arts in Public Administration, Ramkhamhaeng University

Work Experiences:

- Advisor, National Defence Studies Institute
- Deputy Chief of Staff of the Air Force
- Chief of the Directorate of Intelligence
- Deputy Chief of the Directorate of Intelligence



Training:

- Executive Relationship Development Training Course, Royal Thai Air Force (Class of 9)
- National Security Management Course (Class of 7)
- Oxford Program on Negotiation
- Capital Market Academy Programs (Class of 29), Capital Market Academy

Fields of Competence:

- Organization Management
- Transportation and Air Transport
- Engineering

Other Positions:

- Director of the Board of Directors, Civil Aviation Training Center

8. Mrs. Phongsaward Guyaronsuith

Director

(Appointed on January 23, 2019, resigned on January 26, 2022, and reappointed on June 28, 2022)

Age: 55

Position: Permanent Secretary for Justice

Education:

- Bachelor of Laws, Thammasat University

Work Experiences:

- Councillor of State of the 2nd Committee
- Director of the Board of Directors, Law Reform Commission
- Acting Director of Strategic Transformation Office
- Deputy Secretary-General of the Council of State, Office of the Council of State
- Permanent Law Councillor

Training:

- Diploma, The National Defence Course (Class of 63)
- Executive Development Program (EDP 1) (Class of 82), Office of the Civil Service Commission
- Senior Executive Law Program (Class of 5), Office of the Council of State
- Ministry Spokesman Course, Office of the Prime Minister
- Advanced Budget Management Program (Class of 6), Budget Bureau

Fields of Competence:

- Laws

Other Positions:

- Director of the Board of Directors, Expressway Authority of Thailand
- Director of the Board of Directors, Airports of Thailand Public Company Limited
- Name listed in the Directors' Pool of State Owned Enterprise in Law, Organization Management and Security



9. Mr. Anukul Tamprasirt

Director

(Appointed on June 28, 2022)

Age: 62

Position: President of the Innova Foundation

Education:

- Bachelor of Agriculture in Horticulture, Kasetsart University
- Master of Telecommunication major, Memphis State University, U.S.A.
- Ph.D. in Knowledge Management, Chiang Mai University

Work Experiences:

- Professor of International College of Digital Innovation, Chiang Mai University
- Chairman of the Program Executive Committee, Master's Degree, Doctorate Degree
- Responsible for teaching Internet of Things, Advanced ERP, e-Tourism, etc.
- Responsible for education, research IOT, Deep Learning, etc.

Training:

- Block Chain Technologies

Fields of Competence:

- Information Technology
- Organization Management
- Engineering

Other Positions:

- Name listed in the Directors' Pool of State Owned Enterprise in International Trade and Investment, Information Technology and Public Administration

10. Mrs. Pimporn Ovasith

Director

(Appointed on September 16, 2022)

Age: 63

Position: Retired Officer, Budget Bureau

Education:

- Bachelor of Business Administration in Accounting, Ramkhamhaeng University
- Master of Business Administration, National Institute of Development Administration

Work Experiences:

- Deputy Director, Budget Bureau
- Advisor, Budget Bureau
- Director, Budgeting Division (security 1), Budget Bureau
- Director, Director's Office, Budget Bureau

Training:

- Diploma, The National Defence Course (Class of 57), National Defence College, National Defence Studies Institute
- Executive Development Program (EDP 1) (Class of 83), Office of the Civil Service Commission

Fields of Competence:

- Financial
- Accounting



Other Positions:

- Director of the Board of Directors, Thailand Transport Portal
- Qualified Member of the Revolving Capital Management Committee, Coin Management National Treasury and the Making of Goods
- Qualified public prosecutor commission
- Name listed in the Directors' Pool of State Owned Enterprise in Financial

11. Mr. Nopasit Chakpitak

Director

(Appointed on June 28, 2022, which the State Enterprise Policy Committee agreed on July 25, 2022)

Age: 57

Position: President, Aeronautical Radio of Thailand Limited

Education:

- Bachelor of Engineering in Electrical Engineering, Chiang Mai University
- Ph.D. in Electronic and Electrical Engineering, University of Strathclyde, Scotland

Work Experiences:

- Dean of International College of Digital Innovation, Chiang Mai University

Fields of Competence:

- Organization Management
- Engineering

Other Positions:

- Director of the Board of Directors, AOT TAFE Operator Company Limited
- Director of the Board of Directors, The Innova Foundation
- Name listed in the Directors' Pool of State Owned Enterprise in Information Technology, Organization Management and Engineering

DIRECTOR RESIGNING DURING THE FISCAL YEAR 2022**1. Mr. Pathom Chaloeuywares**

Director

(Appointed on July 15, 2021 and resigned on October 15, 2021)

Age: 60

Position: Retired Officer, Ministry of Transport

Education:

- Bachelor of Civil Engineering, Prince of Songkla University
- Master of Civil Engineering, Chulalongkorn University
- Master of Public Administration (Class Honor), National Institute of Development Administration

Work Experiences:

- Director-General, Department of Rural Roads
- Deputy Director-General, Department of Rural Roads
- Director, Bureau of Bridge Construction, Department of Rural Roads
- Civil Engineer, Expert Level in Bureau of Bridge Construction, Department of Rural Roads
- Professional Engineer (Civil Engineer), Level 9 in Bureau of Bridge Construction, Department of Rural Roads

Training:

- Volunteer Spirit 904 Course 2/2018 "Peam Bao, Mae Phim"
- Diploma, The National Defence Course (Class of 54)
- Senior Governing Executive Course (Class of 56), Prince Damrong Rajanuphap Institute

Fields of Competence:

- Organization Management
- Engineering

Other Positions:

- Name listed in the Directors' Pool of State Owned Enterprise in Public Administration, Information Technology and Engineering

2. Mr.Amorn Pimanmas

Director

(Appointed on January 23, 2018, and resigned on January 26, 2022)

Age: 48

Position: Professor with Higher Position Allowances, Department of Civil Engineering, Faculty of Engineering, Kasetsart University

Education:

- Bachelor of Civil Engineering (First Class Honor) Chulalongkorn University
- Master of Civil Engineering, University of Tokyo, Japan
- Master of Management, College of Management, Mahidol University
- Doctor of Civil Engineering, University of Tokyo, Japan

Work Experiences:

- President of Thai Structural Engineers Association
- President of Thai Building Information Modeling Association
- Advisory committee, Thai Technical Volunteer Foundation
- Member of Academic Council, Rajamangala University of Technology Phra Nakhon

Training:

- Director Certification Program (DCP) (Class of 276), Thai Institute of Directors Association (IOD)
- Risk Management Program for Corporate Leaders (RCL) (Class of 16), Thai Institute of Directors Association (IOD)
- Strategic Board Master Class (SBM) (Class of 6), Thai Institute of Directors Association (IOD)
- Financial Statement for Directors (FSD) (Class of 39), Thai Institute of Directors Association (IOD)
- Advanced Audit Committee Program (AACP) (Class of 34), Thai Institute of Directors Association (IOD)
- IT Governance and Cyber Resilience Program (ITG) (Class of 13), Thai Institute of Directors Association (IOD)

Fields of Competence:

- Organization Management
- Civil Engineering
- Data Analysis

Other Positions:

- Name listed in the Directors' Pool of State Owned Enterprise in Transport and Transportation, Engineering and Information technology

Connected Transactions of the Board of Directors with the Company

In the fiscal year 2022, the Board of Directors had no connected transactions. In addition, they did not hold any shares or held not more than 10 percent of all voting shares of the Company.

For purchasing/procurement, the contract with AEROTHAI with the Credit limit of 100 million baht or more, there is no counterparty involved with the Company's directors. both on behalf of the management company and the shareholders.

ROLES AND RESPONSIBILITIES OF THE BOARD OF DIRECTORS

In the fiscal year 2022, the Board of Directors set the policies and oversaw the Company's operations. They also played an important part in setting up the strategic plan for organization development in accordance with State Enterprise's practices and the Company's vision stated that "A Sustainable Quality Excellent Air Navigation Service Provider." The Board of Directors appointed knowledgeable and experienced Directors to Sub-Committees for screening any necessary matters as follows:

1. The Executive Committee
2. The Audit Committee
3. The Risk Management Committee
4. The Remuneration Committee
5. The Corporate Governance and Corporate Social Responsibility Committee
6. The Legal Committee
7. The Innovation Management Committee
8. The Digital Technology Development Committee
9. The Technology Development Committee on Air Navigation Services
10. The Recruitment Committee for the Executive Vice Presidents of AEROTHAI
11. The Recruitment Committee for the President of AEROTHAI
12. The Remuneration Subcommittee for the President of AEROTHAI

The Five Independent Directors were also announced.

The Company scheduled the Board of Directors' meetings in advance throughout the year. The meeting was held at least once a month to oversee and monitor the Company's operations. The Board of Directors' meetings would be called for if necessary as shown in the Annual Report so that the Directors would carry out their duties appropriately. The meeting invitation letters and agenda in the form of document and information systems of the Boards of Directors were provided to the Board of Directors 7 days prior to the meeting.

The minutes of the meetings were recorded in writing and kept available for Directors and relevant persons to inspect. In addition, the minutes of the Board of Directors' Meetings were submitted to A Shareholders (the Ministry of Finance and the Ministry of Transport) and summary of the minutes distributed to B Shareholders (Member Airlines) for acknowledgement and also available on website for shareholders.



The Evaluation of Board of Directors

To be in line with Good Corporate Governance practice, the Board of Directors did their evaluation to monitor themselves for better performing their duties. This evaluation also assisted them in setting the Company's direction and supervising the management properly. The evaluation was conducted every six months, and the evaluation form of the committee has been improved to be suitable for the current performance of the Board of Directors and to have guidelines in line with the New State Enterprise Performance Assessment Manual for the year 2020 of the State Enterprise Policy Office. There are 2 forms:

1. **The Self Assessment**, according to good practice, has given importance to the six assessment criteria: 1) outstanding in knowledge and ability, 2) independence, 3) mission preparedness, 4) attention to duties and responsibilities, 5) performance of duties in the committee, and 6) vision of creating added value to the business in the long run, in which the assessment results are at an excellent level.
2. **The Board Evaluation consists of six topics**: 1) Structure and qualifications of the committee, 2) Roles, duties and responsibilities of the committee, 3) Committee practice, 4) Committee communication, 5) Committee relationship with the management, and 6) preparation and conduct of meetings.

Which the assessment results are at an excellent level as follows:

Category of Evaluation	First Evaluation (October 2020 – March 2021)		Second Evaluation (April – September 2021)	
	Point	Level	Point	Level
Self Assessment	137.25	Excellent	136.40	Excellent
Board Evaluation	164.75	Excellent	164.00	Excellent

The Board of Directors' Knowledge and Skills Development

The Company realized the importance of the Board of Directors' competency development, which contributed to the Company highest efficiency and productivity as well as being in line with the new State Enterprise Assessment Model (SE-AM) and Good Corporate Governance practices. Director have attended training/seminar courses related to their roles and responsibilities organized by the Thai Institute of Directors Association (IOD), King Prajadhipok's Institute (PDI). Including participating in various activities of the Company, for example: trip to participate in activities Corporate Social Responsibility (CSR), site visits to the Air Traffic Control Centers to create knowledge and understanding of the company's mission.

The Orientation for the New Directors

The Company organizes an orientation for the Company's directors. Newly appointed and present corporate information and lectures that are beneficial to the performance of duties of the Company's directors and describe the company's main mission the information presented to the directors is as follows:

1. The Company's information consisting of the booklet of the Company's memorandum of association, general information (Company's background and status, shareholders, policies, vision, values, responsibilities in air navigation services and business units), organization chart, personnel, air transport situation, and the Company's performance and financial statements, Corporate Plan, significant projects.
2. Board of Directors' handbook consisting of the names of the Board of Directors and its composition, their authorization and duties, terms, Board meeting, and its allowances, Sub-Committee and their authorization and duties, information of independent directors, the evaluation, the application to be member airlines, an agreement between the Ministry of Transport and the Company, the asset account submission under the Organic Act on Anti-Corruption B.E. 2561 and relevant laws, regulations and the Acts including a booklet of information system application for the Board of Directors.
3. The Board of Directors and Sub-Committee appointment letters.

AUTHORIZED DIRECTORS

In the fiscal year 2022, Authorized Director of the Company has been changed during the year as follows:

- Between October 1, 2022 –November 21, 2021,consisted of:
 - Mr. Puttipong Prasarttong-Osoth
 - Mrs. Jantira Buruspat
- BetweenNovember 22, 2021 –January 25, 2022, consisted of:
 - Mr. Rapee Phongbupakicha
 - Mr. Pornchai Thiraveja
 - Mr. Puttipong Prasarttong-Osoth
- Between January 26, 2022 –June 27, 2022,consisted of:
 - Mr. Rapee Phongbupakicha
 - Mr. Pornchai Thiraveja
 - Mr. Puttipong Prasarttong-Osoth
- Between June 28, 2022 – September 30, 2022,consisted of:
 - Mr. Rapee Phongbupakicha
 - Mr. Pornchai Thiraveja
 - Mr. Puttipong Prasarttong-Osoth
 - Lt. JG. Supoj Charoensuk
 - Mr. Nopasit Chakpitak

THE SECRETARY TO THE BOARD OF DIRECTORS

In the fiscal year 2022, members of the Secretary to Board of Directors consisted of:

- Mr. Nopasit Chakpitak^{1/} Secretary President
- Mr. Tinnagorn Choowong Assistant Secretary Executive Vice President (Operations)
- Mrs. Thaniya Suntharasantic Assistant Secretary Vice President (Office of the President)
- Mr. Debdhanit Yupho Assistant Secretary Chief, Policy and Strategy
Management Bureau (Group of Policy Analysis and Strategy Planning)

Remark: ^{1/}Appointed as the secretary on April 27, 2022

The Board of Directors' Attendance

In the fiscal year 2022, the Board of Directors held 15 meetings with attendance details as follows:

Name		Number of Attendances
Mr. Rapee	Phongbupakicha	15/15
Mr.Pornchai	Thiraveja ^{1/}	12/14
Mr. Puttipong	Prasarttong-Osoth	14/15
Lt. JG. Supoj	Charoensuk ^{2/}	5/5
Mrs. Jantira	Buruspat ^{3/}	9/10
Miss Piang-or	Loahavilai	15/15
ACM. Kongsak	Chantarasopa ^{4/}	5/5
Mrs. Phongsaward	Guyaroonsuith ^{5/}	6/10
Mr. Anukul	Tamprasirt ^{6/}	5/5

	Name	Number of Attendances
Mrs. Pimporn	Ovasith ^{1/}	1/1
Mr. Nopasit	Chakpitak ^{8/}	4/4
Mr. Amorn	Pimanmas ^{9/}	5/5

(The absent attendants were due to other engagement)

Remarks:

1/ Appointed as the Director on October 19, 2021

2/ Appointed as the Director on June 28, 2022

3/ Resigned as the Director on January 26, 2022 and reappointed on June 28, 2022

4/ Appointed as the Director on June 28, 2022

5/ Resigned as the Director on January 26, 2022 and reappointed on June 28, 2022

6/ Appointed as the Director on June 28, 2022

7/ Appointed as the Director on June 16, 2022

8/ Appointed as the Director on June 28, 2022, which the State Enterprise Policy Committee agreed on July 25, 2022

9/ Resigned as the Director on January 26, 2022

The Executive Committee

The Executive Committee consisted of not less than three members and not more than five members. In the fiscal year 2022, the Executive Committee has been changed during the year as follows:

- Between October 1 – November 4, 2021
There is no appointment of the Executive Committee because the number of directors is not complete, the composition of the committee.
- Between November 5, 2021 – January 25, 2022 consisted of:

1. Mr. Pornchai	Thiraveja	Chairman
2. Mr. Puttipong	Prasarttong-Osoth	Member
3. Mrs. Phongsaward	Guyaroonuith	Member
4. Mr. Tinnagorn	Choowong	Assistant Secretary
5. Mrs. Thaniya	Suntharasantic	Assistant Secretary
6. Mr. Debdhanit	Yupho	Assistant Secretary
- Between January 26, 2022 – July 26, 2022
There is no appointment of the Executive Committee because the number of directors is not complete, but the composition of the committee are
- Between July 27 - August 29, 2022, consisted of:

1. Mr. Pornchai	Thiraveja	Chairman
2. Mr. Puttipong	Prasarttong-Osoth	Member
3. Lt. JG. Supoj	Charoensuk	Member
4. Mr. Nopasit	Chakpitak	Member and Secretary
5. Mr. Tinnagorn	Choowong	Assistant Secretary
6. Mrs. Thaniya	Suntharasantic	Assistant Secretary
7. Mr. Debdhanit	Yupho	Assistant Secretary
- Between August 30 - September 30, 2022, consisted of:

1. Mr. Pornchai	Thiraveja	Chairman
2. Mr. Puttipong	Prasarttong-Osoth	Member
3. Lt. JG. Supoj	Charoensuk	Member
4. Mr. Polchak	Nimwatana	Member
5. Mr. Nopasit	Chakpitak	Member and Secretary

6.	Mr. Tinnagorn	Choowong	Assistant Secretary
7.	Mrs. Thaniya	Suntharasantic	Assistant Secretary
8.	Mr. Debdhanit	Yupho	Assistant Secretary

Responsibilities

The Executive Committee was appointed according to Article 42 fourth paragraph of the Company's Articles of Association which stipulates that "In order to facilitate and expedite the conduct of the Company and to supervise the management of the Company more closely the Board of Directors shall set up an Executive Committee of not less than three not more than five persons. Some of the Company's directors were appointed to be the chairman of the board and directors or can appoint an external qualified person to join as a director, amounting to 1 person, and the President shall be a member of the position. There is an administrative department acting as a secretary and an assistant secretary."

The Executive Committee's Attendance

In the fiscal year 2022, the Executive Committee held 5 meetings with attendance details as follows:

	Name	Number of Attendances
Mr. Pornchai	Thiraveja	5/5
Mr. Puttipong	Prasarttong-Osoth	3/5
Mrs. Phongsaward	Guyaroonsuith ^{1/}	2/3
Lt. JG. Supoj	Charoensuk ^{2/}	2/2
Mr. Polchak	Nimwatana ^{3/}	1/1
Mr. Nopasit	Chakpitak ^{4/}	2/2

(The absent attendants were due to other engagements.)

หมายเหตุ

Remark:

1/ Retried from the member of the Executive Committee on January 26, 2022

2/ Appointed as the Director on June 28, 2022

3/ Expert appointed as the member of Executive Committee on August 30, 2022

4/ Appointed as the Director on June 28, 2022 which the State Enterprise Policy Committee agreed on July 25, 2022

The Audit Committee

In the fiscal year 2022, the Board of Directors has appointed the Audit Committee as follows:

1.	Mrs. Pimporn	Ovasith	Chairman
2.	Miss. Piang-or	Loahavilai	Member
3.	Mr. Anukul	Tamprasirt	Member
4.	Vice President (Office of Internal Audit)		Secretary
5.	Senior Director, Core Business and Information Technology Audit Bureau		Assistant Secretary
6.	Senior Director, Support and Planning Audit Bureau		Assistant Secretary

Responsibilities

1. Prepare a charter on internal audits of the Audit Committee in accordance with the scope of responsibility for the Company's operations. Which must be approved by the Board of Directors. The suitability of such charter shall be reviewed at least once a year.
2. Review the efficiency and effectiveness of the internal control process, good governance process and risk management processes.
3. Review for the company financial reporting is accurate and reliable.

4. Review the Company's operations to be in accordance with the law, rules, regulations, working methods, Cabinet resolutions, announcements or orders relating to the Company's operations.
5. Review for the company, there is a good internal audit system and consider the independence of the internal audit unit.
6. Consider related government agencies or transactions that may have conflicts of interest that may affect the Company's operations.
7. Recommendations to the Board of Directors in considering the appointment, transfer, promotion and evaluating the performance of the head of the internal audit unit.
8. Coordinate the results of the audit with the auditor and may suggest a review or check any items that are deemed necessary as well as propose the auditor's remuneration to the Board of Directors.
9. Report the results of the internal audit of the Audit Committee to the Board of Directors. At least once per quarter within 60 days from the end of each quarter Except for the 4th quarter performance report, it must be prepared as an annual performance report and sent such reports to the Ministry of Transport and the Ministry of Finance for acknowledgment within 90 days from the end of the fiscal year of the Company.
10. Evaluate the results of internal audits of the Audit Committee at least once per fiscal year, including reporting the assessment results, problems, obstacles, and improvement plans to the Board of Directors for acknowledgment.
11. Disclosure of the annual performance report of the Audit Committee and the remuneration of the auditors in the Company's annual report.
12. Perform any other tasks as required by law or assigned by the Board of Directors.

The Risk Management Committee

In the fiscal year 2022, the Risk Management Committee has been changed during the year as follows:

- Between October 1, 2021 – January 25, 2022, consisted of:

1. Mr. Pathom	Chaloeywares ^{1/}	Chairman
2. Mr. Puttipong	Prasarttong-Osoth	Member
3. Mrs. Jantira	Buruspat	Member
4. Vice President (Office of Policy and Strategy)		Secretary
5. Senior Director, Policy and Strategy Management Bureau		Assistant Secretary

Remarks: ^{1/}resigned on October 15, 2021

- Between January 26 – July 26, 2022

There is no appointment of the Risk Management Committee due to an insufficient number of members.

- Between July 27 – September 30, 2022 consisted of:

1. Mr. Puttipong	Prasarttong-Osoth	Chairman
2. ACM. Kongsak	Chantarasopa	Member
3. Mrs. Jantira	Buruspat	Member
4. Mr. Nopasit	Chakpitak	Member
5. Vice President (Office of Policy and Strategy)		Secretary
6. Senior Director, Policy and Strategy Management Bureau		Assistant Secretary

Responsibilities

The Risk Management Committee have powers and duties as prescribed by the Board of Directors, namely considering various situations where risks are expected and may affect the Company's mission in all relevant aspects and set out as a policy to prevent and reduce all risks that may occur for management and employees to implement. In the event that the Risk Management Committee has not yet been appointed to the Board of Directors has roles and responsibilities on behalf of the Risk Management Committee until the newly appointed Risk Management Committee takes over.

The Remuneration Committee

In the fiscal year 2022, the Board of Directors has appointed the Remuneration Committee as follows:

- | | | | |
|----|---|--------------|---------------------|
| 1. | Lt. JG. Supoj | Charoensuk | Chairman |
| 2. | ACM. Kongsak | Chantarasopa | Member |
| 3. | Mr. Anukul | Tamprasirt | Member |
| 4. | Vice President (Human Resource) | | Secretary |
| 5. | Senior Director, Human Resource and Quality of Work Life Bureau | | Assistant Secretary |

Responsibilities

1. Establish the policies, and regulations, and evaluation criteria of the President.
2. Consider the evaluation standards of the President's performance.
3. Propose policy or make an approval of remuneration and benefit packages of Management appropriately.
4. Propose the President's evaluation for the Board of Directors' approval.
5. Perform the relevant matters as assigned by the Board of Directors.

The Corporate Governance and Corporate Social Responsibility Committee

In the fiscal year 2022, the Corporate Governance and Corporate Social Responsibility Committee has been changed during the year as follows:

- Between October 1 – November 4, 2021, consisted of:

1.	Mr. Rapee	Phongbupakicha	Chairman
2.	Mr. Puttipong	Prasarttong-Osoth	Member
3.	Mrs. Jantira	Buruspat	Member
4.	Mr. Pathom	Chaloeywares ^{1/}	Member
5.	Mrs. Phongsaward	Guyaroonuith	Member
6.	Mr. Amorn	Pimanma	Member
7.	Miss. Piang-or	Loahavilai	Member
8.	Vice President (Office of the President)		Secretary
9.	Mr. Marnoch	Sawatdee	Assistant Secretary

Remarks: 1/ resigned on October 15, 2021

- Between November 5, 2021 – January 25, 2022, consisted of:

1.	Mr. Rapee	Phongbupakicha	Chairman
2.	Mr. Pornchai	Thiraveja	Member
3.	Mr. Puttipong	Prasarttong-Osoth	Member
4.	Mrs. Jantira	Buruspat	Member
5.	Mrs. Phongsaward	Guyaroonuith	Member
6.	Mr. Amorn	Pimanma	Member
7.	Miss. Piang-or	Loahavilai	Member
8.	Vice President (Office of the President)		Secretary
9.	Mr. Marnoch	Sawatdee	Assistant Secretary

- Between January 26 – July 26, 2022

There is no appointment of the Corporate Governance and Corporate Social Responsibility Committee due to an insufficient number of members.

- Between July 27 - 15 September 2022 consisted of:

1.	Mr. Rapee	Phongbupakicha	Chairman
2.	Mr. Pornchai	Thiraveja	Member
3.	Mr. Puttipong	Prasarttong-Osoth	Member
4.	Lt. JG. Supoj	Charoensuk	Member
5.	Mrs. Jantira	Buruspat	Member
6.	Miss. Piang-or	Loahavilai	Member
7.	ACM. Kongsak	Chantarasopa	Member
8.	Mrs. Phongsaward	Guyaroonsuith	Member
9.	Mr. Anukul	Tamprasirt	Member
10.	Mr. Nopasit	Chakpitak	Member
11.	Vice President (Office of the President)		Secretary
12.	Mr. Marnoch	Sawatdee	Assistant Secretary
- Between September 16- 30, 2022, consisted of:

1.	Mr. Rapee	Phongbupakicha	Chairman
2.	Mr. Pornchai	Thiraveja	Member
3.	Mr. Puttipong	Prasarttong-Osoth	Member
4.	Lt. JG. Supoj	Charoensuk	Member
5.	Mrs. Jantira	Buruspat	Member
6.	Miss. Piang-or	Loahavilai	Member
7.	ACM. Kongsak	Chantarasopa	Member
8.	Mrs. Phongsaward	Guyaroonsuith	Member
9.	Mr. Anukul	Tamprasirt	Member
10.	Mr. Nopasit	Chakpitak	Member
11.	Mrs. Pimporn	Ovasith	Member
12.	Vice President (Office of the President)		Secretary
13.	Mr. Marnoch	Sawatdee	Assistant Secretary

Responsibilities

- Set the Company's Corporate Governance and Corporate Social Responsibility policy and practices.
- Pre-consider, advise, and review the Corporate Governance and Corporate Social Responsibility Plan.
- Monitor and evaluate the Corporate Governance and Corporate Social Responsibility practices.

The Legal Committee

In the fiscal year 2022, the Legal Committee has been changed during the year as follows

- Between October 1, 2021 – January 25, 2022, consisted of:

1.	Mrs. Phongsaward	Guyaroonsuith	Chairman
2.	Miss Chunhachit	Sungmai	Member
3.	Miss Nathsinee	Yuttidhammadamrong	Member
4.	Dr. Abhijai	Chandrasen	Legal Advisor
5.	Vice President (Office of the President)		Secretary
6.	Senior Director, General Administration Bureau		Assistant Secretary
- Between January 26 – July 26, 2022
There is no appointment of the Legal Committee due to an insufficient number of members.



- Between July 27 - September 30, 2022 consisted of:

1. Mrs. Phongsaward	Guyaroonsoith	Chairman
2. Miss Chunhachit	Sungmai	Member
3. Miss Nathsinee	Yuttidhammadamrong	Member
4. Mr. Nopasit	Chakpitak	Member
5. Vice President (Office of the President)		Secretary
6. Senior Director, General Administration Bureau		Assistant Secretary

Responsibilities

To consider and advise regarding laws, including to pre-consider regulations, announcements and contracts as requested by the Company or assigned by the Board of Directors.

The Innovation Management Committee

In the fiscal year 2022, the Innovation Management Committee has been changed during the year as follows:

- Between October 1, 2021 – April 26, 2022, consisted of:

1. Miss Piang-or	Loahavilai	Chairman
2. Miss Wiparat	Deeong	Member
3. Mr. Sutee	Phocharoenchanachai	Member
4. Vice President (Human Resources)		Secretary
5. Senior Director, Human Resource Development and Learning Promotion Bureau		Assistant Secretary
- Between April 22 – September 15, 2022, consisted of:

1. Miss Piang-or	Loahavilai	Chairman
2. Miss Wiparat	Deeong	Member
3. Mr. Sutee	Phocharoenchanachai	Member
4. Mr. Boonkiat	Karawekphan	Member
5. Vice President (Human Resources)		Secretary
6. Senior Director, Human Resource Development and Learning Promotion Bureau		Assistant Secretary
- Between September 16 – 30, 2022 consisted of:

1. Miss Piang-or	Loahavilai	Chairman
2. Miss Wiparat	Deeong	Member
3. Mr. Sutee	Phocharoenchanachai	Member
4. Mr. Boonkiat	Karawekphan	Member
5. Mr. Nopasit	Chakpitak	Member
6. Vice President (Human Resources)		Secretary
7. Senior Director, Human Resource Development and Learning Promotion Bureau		Assistant Secretary

Responsibilities

- Set policies on encouraging the use of creativities and management of innovation.
- Approve the Innovation Management Master Plan.
- Approve handbooks and documents for being guidelines to manage the Company's innovation.
- Encourage, support, and advise for the creation of a creative atmosphere, and creative culture as well as the Company's innovation management to be helpful in operation, including enhancement of the innovation management to be brought to the development and magnifying an outcome to be used in the Company and also a commercial expansion.
- Monitor the action taken under the policies and the Innovation Management Master Plan as well as quarterly report the progress of innovation to the Board of Directors.
- Appoint the Sub-Committees or Working Groups to assist the work as the Committee sees fit.

The Digital Technology Development Committee

In Fiscal Year 2022, the appointed members of the Digital Technology Development Committee were as follows:

- | | | | |
|----|--|----------------|---------------------|
| 1. | Mr. Anukul | Tamprasirt | Chairman |
| 2. | Mr. Nopasit | Chakpitak | Member |
| 3. | Mr. Saknarong | Saengsangapong | Member |
| 4. | Mr. Annop | Tananchana | Member |
| 5. | Vice President (Air Traffic Service Engineering) | | Secretary |
| 6. | Vice President (Human Resources) | | Secretary |
| 7. | Senior Director, Information Technology Bureau | | Assistant Secretary |

Responsibilities

1. Establish the Company's policy on digital technology development.
2. Approve the Company's digital technology development plan.
3. Approve the Company's regulation on digital technology development.
4. Promote, support, give advices, and suggest about the Company's digital technology development.
5. Supervise and monitor the implementation of the Company's digital technology development and quarterly report its progress to the Board of Directors.
6. Appoint sub-committees and working groups to assist as appropriate.

The Technology Development Committee on Air Navigation Services

In Fiscal Year 2022, the appointed members of the Technology Development Committee on Air Navigation Services were as follows:

- | | | | |
|-----|--|--------------|---------------------|
| 1. | ACM. Kongsak | Chantarasopa | Chairman |
| 2. | Lt. JG. Supoj | Charoensuk | Member |
| 3. | Mr. Anukul | Tamprasirt | Member |
| 4. | Mr. Nopasit | Chakpitak | Member |
| 5. | Aviation Expert from the Civil Aviation Authority of Thailand (CAAT) | | Member |
| 6. | Aviation Expert from the Royal Thai Air Force | | Member |
| 7. | Aviation Expert from the Royal Thai Navy | | Member |
| 8. | Aviation Expert from Airline | | Member |
| 9. | Executive Vice President (Operations) | | Secretary |
| 10. | Senior Director, Policy and Strategy Management Bureau | | Assistant Secretary |
| 11. | Chief, Policy and Strategy Management Bureau (Group of Organization Development) | | Assistant Secretary |

Responsibilities

1. Establish the Company's policy on technology development on Air Navigation Services.
2. Consider and approve the Company's technology development plan on Air Navigation Services.
3. Promote, support, advise, and suggest about the Company's technology development on Air Navigation Services and quarterly report its progress to the Board of Directors.

The Recruitment Committee for the Executive Vice Presidents of AEROTHAI

In Fiscal Year 2022, the appointed members of the Recruitment Committee for the Executive Vice Presidents of AEROTHAI were as follows:

- | | | | |
|----|---------------|------------|----------------------|
| 1. | Mr. Anukul | Tamprasirt | Chairman |
| 2. | Miss Piang-or | Loahavilai | Member |
| 3. | Mrs. Jantira | Buruspat | Member |
| 4. | Mr. Nopasit | Chakpitak | Member and Secretary |

Responsibilities

To consider the recruitment's method, procedures and timeframe until the recruitment procedures completed and submit its result to the Board of Directors for approval.

The Recruitment Committee for the Presidents of AEROTHAI

In Fiscal Year 2022, the appointed members of the Recruitment Committee for the Presidents of AEROTHAI were as follows;

- | | | | |
|----|--|-------------------|---------------------|
| 1. | Mrs. Jantira | Buruspat | Chairman |
| 2. | Mr. Puttipong | Prasarttong-Osoth | Member |
| 3. | Miss Piang-or | Loahavilai | Member |
| 4. | Mr. Apirat | Chaiwongnoi | Member |
| 5. | Mr. Nattawut | Paisalwattana | Member |
| 6. | Vice President (Human Resources) | | Secretary |
| 7. | Senior Director, Human Resource Management and Quality of Work Life Bureau | | Assistant Secretary |

Responsibilities

Establish the characteristic, methods of recruiting and nomination of persons with knowledge, abilities, experience and suitable qualifications in accordance with the Standard Qualifications of State Enterprise, Directors and Employees Act B.E. 2518 (1975), and its amendments and guidelines set by the Ministry of Finance, taking into account transparency and accountability to hold the position of the President of the Company.

The Remuneration Subcommittee for the President of AEROTHAI

In Fiscal Year 2022, the appointed members of the Remuneration Subcommittee for the Presidents of AEROTHAI were as follows;

- | | | | |
|----|--|-------------------|---------------------|
| 1. | Mr. Pornchai | Thiraveja | Chairman |
| 2. | Mr. Puttipong | Prasarttong-Osoth | Member |
| 3. | Representative of the State Enterprise Policy Office | | Member |
| 4. | Vice President (Human Resources) | | Secretary |
| 5. | Senior Director, Human Resource Management and Quality of Work Life Bureau | | Assistant Secretary |

Responsibilities

1. Consider the remuneration of the President and negotiate with the person nominated as the President.
2. Submit the result of consideration along with the draft contract to the Board of Directors for consideration and then propose to the Ministry of Finance for further approval.

The Independent Directors

In the fiscal year 2022, the Independent Directors consisted of:

- | | | |
|----|------------------|---------------|
| 1. | Miss Piang-or | Loahavilai |
| 2. | ACM. Kongsak | Chantarasopa |
| 3. | Mrs. Phongsaward | Guyaroonsuith |
| 4. | Mr. Anukul | Tamprasirt |
| 5. | Mrs. Pimporn | Ovasith |

The Independent Directors have performed their duty in line with a principle of "Independence" which is defined as "a key to foster the Directors responsibilities. A certain number of the Independent Directors should be comprised of the Board of Directors and they can suggest or reports with consideration of their duties and responsibilities independently and justly without direct or indirect benefits or advantages in that case and without considering any benefits relating to properties or positions. In addition, the Independent Directors are not under any influence from people, groups or situations that would result in the Company and shareholders incurring damage or loss of appropriate benefits due to act or omission of act."



Policy and Payment of the Board of Directors' Remunerations

AEROTHAI is a State Enterprise under the resolution of the Cabinet, setting of the Board of Directors' remuneration includes monthly remuneration and meeting remuneration, which is in line with the Ministry of Finance's criteria and practice.

The 2020 Ordinary General Meeting on 27 January 2020 approved monthly remuneration and meeting remuneration of the Board of Directors as follows;

1. The Board of Directors' Remunerations

- 1.1 Monthly Remuneration for directors at Baht 10,000.- per person per month. In case his/her office term was not a whole month, monthly remuneration would be paid proportionately. The rate of the said remuneration for the chairman would be double that of the rate for directors.
- 1.2 Meeting Remuneration for state enterprise directors will not exceed Baht 20,000.-per meeting. Regarding payment of the meeting remuneration to the Chairman, the rate of payment will be 25% higher than the rate paid to a director. The payment shall not exceed once a month, however, in case of a reasonable cause, meeting remuneration might be paid more than once a month, but not exceeding 15 times per year.

2. Meeting Remuneration for Sub-Committees

- 2.1 Audit Committee
 - 2.1.1 Monthly remuneration for directors at Baht 10,000.- per person per month. The payment is still made to the Audit Committee although that month has no meeting. In case his/her office term was not a whole month, monthly remuneration would be paid proportionately.
 - 2.1.2 The rate of payment of Chairman of the Audit Committee will be 25% higher than the rate paid to a director.
- 2.2 Director who is appointed by the Board of Directors to be members of committee/sub-committee or working group.
 - 2.2.1 Monthly remuneration for directors at Baht 10,000.- per person per month.
 - 2.2.2 The rate of payment to the Chairman of the Audit Committee will be 25% higher than the rate paid to a director.
- 2.3 Payment of Meeting Remuneration for the Sub-Committee
 - 2.3.1. The meeting remuneration will be paid to the director who attend the meeting. The total payment would not exceed 2 groups of committees and would not exceed once a month for each committee.
 - 2.3.2. Lump sum payment of monthly remuneration for the Audit Committee will be counted as payment of meeting remuneration for sub-committee.

Apart from the above remunerations, the Company has no other benefits for the directors.

The Board of Directors' Remunerations and Sub-Committees

1. Meeting Remunerations

No.	Committees	Amount (Baht)
1	The Board of Directors	1,995,000.00
2	The Executive Committee	132,500.00
3	The Audit Committee	12,500.00
4	The Risk Management Committee	122,500.00
5	The Remuneration Committee	0.00
6	The Corporate Governance and Corporate Social Responsibility Committee	245,000.00
7	The Legal Committee	35,000.00
8	The Innovation Management Committee	62,500.00
9	The Digital Technology Development Committee	12,500.00
10	The Technology Development Committee on Air Navigation Services	55,000.00
11	The Recruitment Committee for the Executive Vice Presidents	85,000.00
12	The Recruitment Committee for the Presidents of AEROTHAI	97,500.00
13	The Remuneration Subcommittee for the President of AEROTHAI	22,500.00
รวม		2,877,500.00

2. Monthly Remunerations & Meeting

No.	Committees		Amount (Baht)
1	Mr. Rapee	Phongbupakicha	680,000.00
2	Mr. Pornchai	Thiraveja	459,193.55
3	Mr. Puttipong	Prasarttong - Osoth	512,500.00
4	Lt. JG. Supoj	Charoensuk	171,000.00
5	Mrs. Jantira	Buruspat	378,500.00
6	Miss. Piang-or	Loahavilai	562,500.00
7	ACM. Kongsak	Chantarasopa	176,000.00
8	Mrs. Phongsaward	Guyaroonsuith	276,000.00
9	Mr. Anukul	Tamprasirt	178,500.00
10	Mrs. Pimporn	Ovasith	47,500.00
11	Mr. Nopasit	Chakpitak	142,258.06
12	Mr. Amorn	Pimanma	180,000.00
13	Mr. Pathom	Chaloeywares	4,516.13
Total			3,768,467.74

The Labour Relations Committee

In the fiscal year of 2022 (October 2021 - September 2022), there were 12 meetings with following attendance details:

				No. of attendance
1.	Mr. Puttipong	Prasarttong-Osoth	Chairman	12
2.	Mr. Tinnagorn	Choowong	Member (Employer)	12
3.	Mrs. Sirikes	Niemloy	Member (Employer)	12
4.	Mr. Channarong	Chuacharoen	Member (Employer)	12
5.	Mr. Chamnan	Ruechai	Member (Employer)	12
6.	Mr. Chana	Tadtasai	Member (Employer)	12
7.	Mr. Niwat	Lekdee	Member (Employer)	12
8.	Ms. Nipaporn	Worakitwijarn	Member (Employer)	12
9.	Mr. Sathaporn	Srisomwong	Member and Secretary (being appointed to act as the Secretary for another position in replacing No. 10, effective from 29 March 2022)	12
10.	Mrs. Pornwalai	Visalteerakorn	Member and Secretary (being appointed to act as the Secretary until 28 March 2022)	5

			No. of attendance
11. Mr. Matee	Khamhaeng	Member (Employee)	12
12. Mr. Nirut	Puttstit	Member (Employee)	12
13. Mr. Ulan	Siribunyarit	Member (Employee)	12
14. Acting 2 nd Lieutenant Chai	Chinapairot	Member (Employee)	11
15. Mr. Rattanyu	Klinpikul	Member (Employee)	11
16. Mr. Jirasak	Mr. Jirasak	Member (Employee)	12
17. Ms. Orisa	Cheawkasem	Member (Employee)	12
18. Mr. Samreng	Sarnphok	Member (Employee)	12
19. Mr. Sapol	Singhadara	Member (Employee)	12

Remuneration for Senior Executives

YEAR	Persons	เงินเดือนและค่าตอบแทนอื่น (ล้านบาท)
2020	6	39.98
2021	4	16.36
2022	4	8.59

As of September 30, 2022

Remarks:

1. The remuneration for the President (1 person) was included (1 April - 30 September 2022).
2. In 2022, there were 2 Vice Presidents (1 October 2021 - 14 January 2022) and 1 Vice President (15 October - 30 September 2022).
3. Other remunerations for senior executives of AEROTHAI include position allowance, license fee, while the lump sum of remuneration for company car and special award were refrained to pay in the fiscal year of 2022.



Internal Audit



Internal Audit

The internal audit activities for the year 2022 were conducted with independence, objectivity, ethic and proficiency in accordance with the standards internal audit practices, focusing on enhancing the performance of the auditing unit for higher achievement in line with AEROTHAI's objectives and correct reporting, conforming to the laws, regulations and required standards and requirements, enhancing the risk management, internal control and good corporate governance in a systematic manner for the audited units and the Company. In addition, the Internal Audit Office has also focused on encouraging our internal auditors to extend the expertise both knowledge and skill in their auditing areas and supporting them to obtain certificates of professional practice from both domestic and international professional associations.

Internal Audit Plan

In the year 2022, the Internal Audit Office reviewed the 2022 Audit Plan and developed the 5 years strategic risk-based audit plan (fiscal years 2023 – 2027) and the Audit Plan for the fiscal year 2023 which is in compliance with AEROTHAI's enterprise plan, strategies and targets, as well as gathered related information such as Enterprise Plan (fiscal years 2023 – 2027, Master Plan for Risk Management and Internal Control for the year 2023, Memorandum of Agreement for State Enterprise Appraisal Report, Appraisal Report on AEROTHAI's Performance Status, State Enterprise Performance Assessment Report on Core Business Enablers (Baseline), Risk Assessment and Internal Control Report of AEROTHAI. The risk assessment was applied as a tool to prioritize and select activities to be audited based on AEROTHAI's key risk criteria, and the Executive Management was also discussed about the internal audit plan for the fiscal year 2023 and the 5 years strategic risk-based audit plan (fiscal years 2023 – 2027) to acknowledge the expectations of the Board of Directors, President, senior management, Office of the Auditor General of Thailand, external auditors, and other stakeholders, so that we can ensure that the auditing plan of the Office of Internal Audit is met the Company's policies, goals and operational objectives.



Internal Audit Execution

For internal audit execution, the office provides an assurance and consulting services as the result of our auditing execution, our stakeholders can ensure that the Company complies with laws, regulations, Company policies, and related commands, as well as the reliability of financial information and the work system that impacts on AEROTHAI's goals, are identified and being properly mitigated. Moreover, we also provide the report for the suitability maintaining of the Company's assets and the report of assessment of the efficiency and cost-effectiveness for the use of resources to operate the Company's businesses so that all stakeholders are confident in AEROTHAI's operations.

The audit execution plan in detail has been evolved by means of collecting related basic information to be used for determining risk factors, internal controls and other significant abnormalities, then applying them to set up auditing objectives, execution framework, and the auditing program. The auditing report, including recommendations/improvement guidelines, is proposed to the audited units and executives for their further actions.

In the fiscal year of 2022, the Office of Internal Audit has fully completed its auditing program as well as the other auditing activities assigned by management. The Internal Audit Office has also applied information technology on internal audit management in its operations to increase the efficiency and productivity of the internal audit process. In the fiscal years of 2021 and 2022, the Internal Audit Office has prepared a plan to develop the Internal Audit Office with the objective to enhance the performance of the Internal Audit Office.

Development of Auditors' Competencies

Competency is the one of our code of ethic that internal auditors apply their knowledge, skill and experience in their internal audit services including assurance review and consultation. Therefore, the Office of Internal Audit promotes knowledge, skill and professionalism for our internal auditors, so that the internal auditors perform their services with proficiency and carefulness in accordance with the standards and code of ethic for the professional internal audit of Thailand and the Institute of Internal Auditors (IIA) of the United States that can assure audited units of our services.

Internal auditors are continuously developed and trained both internal and external including other skills necessary to perform their job efficiently. The Office of Internal Audit has also promoted and encouraged internal auditors to acquire various certificates in internal audit and other certificates necessary for their works. Presently, 14 of internal auditors (58.33%) are certified as professional auditors.

Compliance with the criteria for performance appraisal of state enterprises based on the new appraisal system for the year 2021

The Internal Audit Office has complied with the criteria for performance appraisal of state enterprises based on the new appraisal system, resulting in the integration between Enablers in all 8 areas. The appraisal result on the internal audit for the year 2021 was scored of 2.7820, and the Internal Audit Office has required the components and qualifications, including independence and objectivity of the Audit Committee and established the charter of the Audit Committee and the charter of the Internal Audit Office in line with the International Internal Audit Standards (IIA) and criteria on the performance appraisal of state enterprises including: independent structure of the internal audit unit, the establishment of the policy on the disclosure of conflicts of interest, and the full execution of policy, provision of guideline for evaluating the quality of internal audit works with self-assessment, assessment by the audited units every time after execution, and assessment by third parties.

Internal auditors have skills necessary to perform their auditing works and communicate the auditing results to the executives of the audited units, as well as are able to close all auditing jobs as planned.



Financial Report

Report of the Board of Directors' Responsibility to the Financial Statements

The Company's Financial Report was arranged under the approval of the Company's Board of Directors to present the Company's annual financial and operating performance in accordance with Thai Financial Reporting Standards (TFRSs).

The Company's Board of Directors was aware of the responsibility to prepare financial statements in compliance with TFRSs as well as financial information presented in the 2022 Annual Report. Therefore, the Company applied appropriate accounting principles on a consistent basis with due consideration of optimal estimation in preparing the Company's financial statements. All important information was sufficiently disclosed in the notes on the Company's Financial Statements for the benefits of the Company's shareholders and stakeholders.

In addition, The Company's Board of Directors has deployed and maintained effective systems of risk management and internal controls which provided reasonable assurance that the Company's accounting records were accurate, complete and sufficient to protect the assets of the Company as well as prevent fraud or other material irregular activities.

The Company's Board of Directors monitored the preparation of financial reports by appointing the Audit Committee to oversee the quality of the Company's financial reports and internal control systems. The Audit Committee's opinion regarding such matters was disclosed under the Audit Committee's Report in this Annual Report.

In the Board of Directors' opinion, the Company's internal control systems were satisfactory and could assure the reliability of the Company's financial statements in compliance with TFRSs, legal requirements and other associated regulations.

The Company's Operation Analysis – Separate Financial Statements of the Company

In the fiscal year 2022, the Company has an under-recovery or income under expenses at Baht 2,308.45 million.

Items	2022	2021	Increase (Decrease)	
			Amount	%
Income				
Income from air navigation service charges	4,805.61	2,664.35	2,141.32	80
Other related services	649.22	404.46	244.76	61
Income of staff welfare fund	3.49	6.81	(3.32)	(49)
Other income	114.91	87.12	27.79	32
Total income	5,573.29	3,162.74	2,410.55	76
Expenses				
Operating expenses Expenses of staff welfare fund	7,512.80	6,505.36	1,007.44	15
Finance costs	313.63	269.55	44.08	16
Finance costs	55.31	12.88	42.43	32
Total expenses	7,881.74	6,787.79	1,093.95	16
Income over (under) expenses for the year	(2,308.45)	(3,625.05)	1,316.60	36

1.1 Income Analysis

The Company's total income in the fiscal year 2022 was Baht 5,573.29 million. This was derived mainly from income from air navigation service charges of Baht 4,805.67 million or 86% of total income along with income from other related services including rental and maintenance of equipment, aeronautical telecommunications services (AOC), and work orders accounting for 12% of total income or Baht 649.22 million. In addition, there also were income from other services at Baht 114.91 million or 2% and income of staff welfare fund at Baht 3.49 million.

Actual income from air navigation service charges was Baht 4,805.67 million with an increase of Baht 2,141.32 million or 80% from the previous year due to the COVID-19 pandemic was relaxed together with the government policy to open the country brought higher air traffic volume into Thailand.

Income of Baht 649.22 million from other related services increased by 61% or Baht 244.76 million from the previous year mainly due to higher income from work orders at Baht 160.51 million as well as income from rental and maintenance of equipment and Airline Operational Control services (AOC) increased Baht 84.24 million due to the higher in air traffic volume. The other income of Baht 114.91 million increased Baht 27.79 million from the previous year mainly because of an increase in interest received from overdue debt. Income of staff welfare fund decreased by 49% or Baht 3.32 million from the previous year due to the decline income from nutrition work which had to comply with the measures to prevent the spread of COVID-19

1.2 Expenditure Analysis

The Company's total expenses in the fiscal year 2022 was Baht 7,881.74 million, of which Baht 5,026.97 million was accounted for employee benefits, Baht 2,485.83 million was other operating expenses, Baht 313.63 was staff welfare fund expenses, and the remaining Baht 55.31 million was the finance costs. This year, the Company still strictly active the measure on cost saving across the whole company to relief the COVID-19 effect. Therefore, the Company could reduce total expenses by 26% or at Baht 2,790.83 million, mainly the staff cost and the other operating expenses whichever not affecting core business on air navigation services.

2. Analysis of Financial Status

2.1 Assets Analysis

The Company's total assets as at 30 September 2022 was Baht 10,275.82 million, comprised of 31% current assets and 69% non-current assets, with the following details:

Items	2022	2021	Increase (Decrease)	
			Amount	%
Current assets	3,150.71	2,303.05	847.66	37
Non-current assets				
- Other non-current financial assets	11.94	12.41	(0.47)	(4)
- Long-term loans	7.79	10.77	(2.98)	(28)
- Buildings and equipment	6,228.06	7,169.69	(941.63)	(13)
- Right-of-use assets	713.26	748.64	(35.38)	(5)
- Intangible assets	41.06	73.26	(32.20)	(44)
- Non-current financial assets pledged as collateral	123.00	123.00	-	-
Total	10,215.82	10,440.82	(165.00)	(2)

In the fiscal year 2022, total assets decreased by 2% or Baht 165 million from the previous year, mainly from current assets increased by 37% or Baht 847.66 million which were an accounts receivable increased Baht 743.86 million and other current financial assets that was 6-month fixed bank deposit of the welfare fund increased Baht 100 million.

Non-current assets of Baht 7,125.11 million decreased from last year about 12% or Baht 1,012.66 million, mainly the buildings and equipment decreased from the expiration of its lifetime value.

2.2 Liabilities Analysis

The Company's total liabilities as at 30 September 2022 was Baht 8,672.46 million, comprised of 40% current liabilities and 60% non-current liabilities with the following details:

Items	2022	2021	Increase (Decrease)	
			Amount	%
Current liabilities				
- Short-term loans from financial institutions	2,830.00	100.00	2,130.00	304
- Current portion of long-term loans from financial institutions	63.25	126.94	(63.69)	(50)
- Other current liabilities	590.87	129.82	(138.95)	(19)
Non-current liabilities				
- Long-term loans from financial institutions	1,013.53	759.07	254.46	34
- Lease liabilities	679.06	711.67	(32.61)	(5)
- Provisions for employee benefits	3,478.64	3,863.03	(384.39)	(10)
- Non-current provisions	17.11	11.13	5.98	54
Total	8,672.46	6,901.66	1,770.80	26

In the fiscal year 2022, total liabilities increased by 26% or Baht 1,770.80 million from the previous year. The current liabilities were mainly the short-term loans from financial institutions since the Company had to draw the loans to increase financial liquidity as the COVID-19 pandemic impacted on revenue under expenses. The non-current liabilities were mainly provisions for employee benefits and long-term loans for projects investment.

2.3 Shareholders' Equity Analysis

The Company's equity as at 30 September 2022 was Baht 1,603.36 million with the following details:

Items	2022	2021	Increase [Decrease]	
			Amount	%
Authorized share capital	660.00	660.00	-	-
Staff welfare fund	362.15	335.27	26.88	8
Unappropriated	581.21	2,543.89	(1,962.68)	(77)
Total	1,603.36	3,539.16	(1,935.80)	(55)

The capital structure as at 30 September 2022 comprised of total liabilities of Baht 8,672.46 million or 84% and shareholders' equity of Baht 1,603.36 million or 16%.

3. Cash Flow Analysis

In the fiscal year 2022, the Company's ending balance of cash and cash equivalents as at 30 September 2022 was Baht 1,457.42 million, increased from the beginning balance by Baht 5.34 million. Net cash from financing activities was mainly from loans from financial institutions. Net cash used in operating activities was mostly an income under expenses this year. Additionally, net cash provided by investment activities was mainly from investment in equipment, work in process assets, intangible assets and other current financial assets.

Items	2022	2021	Increase (Decrease)
Net cash used in operating activities	(1,935.21)	(3,549.09)	1,613.88
Net cash from investing activities	(294.09)	1,912.13	2,206.22
Net cash from financing activities	2,234.56	1,217.38	1,017.18
Effect of exchange rate changes on cash and cash equivalents	0.08	(0.50)	0.58
Cash and Cash Equivalents -At the end of the period	1,457.42	1,452.08	5.34

4. Financial Ratio Analysis

In the fiscal year 2022, the Company's debt-to-equity ratio increased from the previous year due to the decrease in accumulated income over expenses which an effect of COVID-19 pandemic. Additionally, the Debt Service Coverage Ratio (an ability to pay principal and interests) derived from net cash flows from operating activities which was mainly from the higher depreciation and amortization of the completed projects.

Items	2022	2021	Increase (Decrease)
Debt-to-Equity Ratio (times)	5.41	1.95	3.46
Debt Service Coverage Ratio (times)	9.58	11.75	(2.17)

The Company's funds for various investments are financed by income-over-expenses that the Company retains according to the resolution of the Ordinary General Meeting and long-term loans from financial institutions. The ability to repayment loans depends mainly on depreciation which is already included in Air Navigation Services Charges (ANS Charges) to be collected from Airlines.





Financial Trend

1. Financial trend in 2023

According to the Company's 2023 Financial trend (Years 2023 - 2027) which was approved by the Company's Board of Directors at 7/2022 Meeting on 29 June 2022, the total income in 2023 is expected to be Baht 7,730.10 million, with an increase of 48% forecasted overall air traffic volume from 2022. This recovery in flight volume is forecasted from the resolved in the Corona Virus Disease (COVID-19) pandemic situation due to the government policy in relaxing public health measures by reopening country. At present, the Company still maintains the unit rate of ANS charges for En Route at Baht 3,500 per unit and Terminal at Baht 500 per unit.

In 2023, however, the flight volume is still less than pre-pandemic level. Therefore, the Company will keep on strictly implementing overall cost reduction measures. The total operating expenditures is expected to be Baht 10,040.50 million. As a result, the Company projects to have an under-recovery amount of Baht 2,310.40 million in 2023.

The Company has revised the Capital Expenditure Budget of 2023 to be in line with the Company's Corporate Plan for 2023 - 2027. The Company has prioritized the investments to be in line with current situation by postponing all non-safety related investments that have no impact on the provision of air navigation services. Accordingly, the Company has thoroughly managed investment plan to continuously maintain standards and safety in providing air navigation service. Moreover, the Company has emphasized on income generated investments and safety-related investments to be ready for aviation industry recovery after COVID-19 situation is resolved. The ceiling of the Capital Expenditure Budget in 2023 that was approved by the Cabinet on 20 September 2022 is at Baht 420.00 million. However, this amount does not include a budgetary for U-Tapao International Airport air navigation services provision project which is now in approval process. The limit of investment budget is expected at approximately Baht 1,256 million. The duration of project is 3 years (Years 2023 -2025) which has already approved by the Company's board of director 14/2022 (660) Meeting on November 5, 2022. The Project is in the consideration process by Ministry of Transport before propose to cabinet for approval.

2. Financial Trend in 5-year period (2023 - 2027)

5-year Financial Forecast (2022-2026): The Company projects that overall air traffic volume will recover in 2023 since the COVID-19 outbreak situation unraveled and the country was reopening. However, Overall air traffic volume expected to resume to pre-pandemic level in 2024 which in line with IATA's projection. In accordance with income and expenditure 5 years projection (Years 2023 - 2027), the Company will have income-over-expenditure in 2024 due to increase in air traffic volume which resulting from the normal situation has resumed. Nonetheless, the Company projects the increase in revised unit rate of air navigation charges from year 2023 (The current unit rate has been used since 2013) to be in line with actual cost. However, the unit rates are still within the ceiling which was approved by Civil Aviation Board.



Besides, the Company has managed financial risk which may incur from external factors that affect aviation industry such as wars and economic crisis that arise as a consequence of wars etc. and may cause an emergency situation which will result in reduction of income and liquidity problem. The Company will, therefore, implement measures according to financial contingency plan on expenditures, investment, income and source of fund as well as set an appropriate expenditure control and reduction plan and measures to efficiently manage cost and expenditure of the Company to be consistent with the situation to mitigate the financial impact from an under-recovery as well as improving cash flow from operating activities to be sufficient in any situations.

5-year Investment Plan and Source of Financing: According to the 5-year investment plan (2023-2027) which is consistent with the Company's Corporate Plan for 2023-2027, the limit of investment budget is expected at approximately Baht 7,000 million. The major investment includes U-Tapao International Airport air navigation services provision project. Besides that, the investment will be mainly used to ensure the continuity of safety services and enhance competitiveness and capacity to serve air transport of the Country. The sources of investment include long-term loan and other remaining working capital.





KPMG Phoomchai Audit Ltd.
50th Floor, Empire Tower
1 South Sathorn Road, Yannawa
Sathorn, Bangkok 10120, Thailand
Tel +66 2677 2000
Fax +66 2677 2222
Website home.kpmg/th

บริษัท เคพีเอ็มจี ภูเก็ต สอบบัญชี จำกัด
ชั้น 50 เอ็มไพร์ทาวเวอร์
1 ถนนสาทรใต้ แขวงยานนาวา
เขตสาทร กรุงเทพฯ 10120
โทร +66 2677 2000
แฟกซ์ +66 2677 2222
เว็บไซต์ home.kpmg/th

Independent Auditor's Report

To the shareholders of Aeronautical Radio of Thailand Ltd.

Opinion

I have audited the financial statements of Aeronautical Radio of Thailand Ltd. (the "Company"), which comprise the statements of financial position as at 30 September 2022, the statements of comprehensive income over (under) expenses, changes in equity and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

In my opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as at 30 September 2022 and its financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRSs).

Basis for Opinion

I conducted my audit in accordance with the State Audit Standards (SASs) and Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Company in accordance with the SASs as determined by the State Audit Commission and the Code of Ethics for Professional Accountants issued by the Federation of Accounting Professions that is relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the SASs and these ethical requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Emphasis of Matter

I draw attention to note 4 to the significant impact of COVID-19 pandemic on business operation and management plan. However, my opinion is not modified in respect of this matter.

Other Matters

The SASs as mentioned in the *Basis for Opinion* section and the *Auditor's Responsibilities for the Audit of the Financial Statements* section is relevant to the particular section of those SASs applicable to the audit of financial reporting by independent auditor.



KPMG Phoomchai Audit Ltd., a Thai limited liability company and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a Swiss entity which is not a member firm of the KPMG network. All rights reserved.



Other Information

Management is responsible for the other information. The other information comprises the information included in the annual report, but does not include the financial statements and my auditor's report thereon. The annual report is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I will not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to management and request that the correction be made.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with TFRSs, and for such internal control as management determines 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, management is 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 management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the SASs and TSAs 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 the SASs and TSAs, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, 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 my 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.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.



- Conclude on the appropriateness of management's 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 I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's 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, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with management regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

(Banthit Tangpakong)
Certified Public Accountant
Registration No. 8509

KPMG Phoomchai Audit Ltd.
Bangkok
28 November 2022

Aeronautical Radio of Thailand Ltd.
Statement of comprehensive income and expenses

		Year ended 30 September	
	Note	2022	2021
		(Baht)	
Income			
Income from air navigation service charges		4,805,669,138	2,664,347,064
Equipment rental, maintenance and NOC income		444,521,989	360,277,051
Income from work orders		204,695,829	44,178,036
Income of staff welfare fund	17	3,490,107	6,808,301
Other income		114,912,067	87,124,765
Total income		5,573,289,130	3,162,735,217
Expenses			
Costs of production		149,470,889	43,031,460
Supplies used		19,884,062	15,779,032
Employee benefit expenses	13	5,026,974,032	5,316,656,056
Depreciation and amortisation expenses		1,248,335,549	1,270,785,433
Repair and maintenance expenses		379,972,749	277,617,194
Rental expenses and property tax		152,586,622	173,728,631
Utilities and communication expenses		161,924,709	154,267,209
Expenses of staff welfare fund	17	313,629,174	269,546,722
Other expenses		373,647,275	538,528,656
Reversal of special rewards	13	-	(1,285,034,968)
Finance costs		55,314,172	12,879,815
Total expenses		7,881,739,233	6,787,785,240
Income under expenses for the year		(2,308,450,103)	(3,625,050,023)

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



Aeronautical Radio of Thailand Ltd.

Statement of comprehensive income and expenses

		Year ended 30 September	
	Note	2022	2021
		(Baht)	
<i>Other comprehensive income over (under) expenses</i>			
<i>Items that will not be reclassified to income over (under) expenses</i>			
Gain on remeasurements of defined benefit plans	12	<u>372,644,489</u>	<u>237,972,532</u>
Total items that will not be reclassified to income over (under) expenses		<u>372,644,489</u>	<u>237,972,532</u>
Comprehensive income over (under) expenses for the year		<u>372,644,489</u>	<u>237,972,532</u>
Total comprehensive income under expenses for the year	14	<u>(1,935,805,614)</u>	<u>(3,387,077,491)</u>
<i>Income under expenses for the year</i>			
The Company		(1,998,311,036)	(3,362,311,602)
Staff welfare fund	17	<u>(310,139,067)</u>	<u>(262,738,421)</u>
		<u>(2,308,450,103)</u>	<u>(3,625,050,023)</u>
<i>Comprehensive income under expenses for the year</i>			
The Company		(1,625,666,547)	(3,124,339,070)
Staff welfare fund	17	<u>(310,139,067)</u>	<u>(262,738,421)</u>
		<u>(1,935,805,614)</u>	<u>(3,387,077,491)</u>
Basic income under expenses per share	15	<u>(349.77)</u>	<u>(549.25)</u>

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



Aeronautical Radio of Thailand Ltd.

Statement of changes in equity

	Note	Retained income over expenses			Total equity
		Issued and paid-up share capital	Staff welfare fund	Unappropriated	
		(Baht)			
Year ended 30 September 2021					
Balance at 1 October 2020		660,000,000	337,847,676	5,928,393,642	6,926,241,318
Comprehensive income over (under) expenses for the year					
Income under expenses		-	(262,738,421)	(3,362,311,602)	(3,625,050,023)
Other comprehensive income over expenses		-	-	237,972,532	237,972,532
Total comprehensive income over (under) expenses for the year		-	(262,738,421)	(3,124,339,070)	(3,387,077,491)
Transfer to staff welfare fund	17	-	260,161,638	(260,161,638)	-
Balance at 30 September 2021		660,000,000	335,270,893	2,543,892,934	3,539,163,827

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

Aeronautical Radio of Thailand Ltd.

Statement of changes in equity

	Note	Issued and paid-up share capital	Retained income over expenses		Total equity
			Staff welfare fund	Unappropriated	
			(Baht)		
Year ended 30 September 2022		660,000,000	335,270,893	2,543,892,934	3,539,163,827
Balance as at 1 October 2021					
Comprehensive income over (under) expenses for the year					
Income under expenses		-	(310,139,067)	(1,998,311,036)	(2,308,450,103)
Other comprehensive income over expenses		-	-	372,644,489	372,644,489
Total comprehensive income over (under) expenses for the year		-	(310,139,067)	(1,625,666,547)	(1,935,805,614)
Transfer to staff welfare fund	17	-	337,017,093	(337,017,093)	-
Balance at 30 September 2022		660,000,000	362,148,919	581,209,294	1,603,358,213

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

Aeronautical Radio of Thailand Ltd.
Statement of cash flows

	Year ended 30 September	
	2022	2021
	(Bath)	
<i>Cash flows from operating activities</i>		
Income under expenses for the year	(2,308,450,103)	(3,625,050,023)
<i>Adjustments to reconcile income under expenses to cash receipts (payments)</i>		
Unrealised (gain) loss on foreign exchange	1,661,769	(406,320)
Expected credit losses	103,993,946	258,759,334
Depreciation and amortisation	1,248,576,096	1,271,064,717
Gain on disposal of buildings and equipment	(3,068,873)	(419,447)
Loss on written-off of assets	462,407	1,706,574
Dividend income	(61,757)	(545,072)
Interest income	(71,782,185)	(59,898,501)
Finance costs	55,314,172	12,879,815
Provisions for employee benefits	176,690,981	248,871,109
(Reversal of) provisions	7,441,729	(7,963,073)
Reversal of special rewards	-	(1,285,034,968)
	<u>(789,221,818)</u>	<u>(3,186,035,855)</u>
<i>Changes in operating assets and liabilities</i>		
Trade and other accounts receivable	(808,296,298)	(137,265,611)
Supplies	1,057,709	(7,425,175)
Other current assets	(4,913,877)	5,837,070
Trade and other accounts payable	(199,116,088)	(32,671,300)
Accrued expenses	23,475,142	(10,122,043)
Deposits	(3,162,338)	(32,619,960)
Other current liabilities	33,395,871	(14,388,925)
Employee benefits paid	<u>(188,430,402)</u>	<u>(134,396,083)</u>
Net cash used in operating activities	<u>(1,935,212,099)</u>	<u>(3,549,087,882)</u>

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

Aeronautical Radio of Thailand Ltd.

Statement of cash flows

	Year ended 30 September	
	2022	2021
	(Baht)	
<i>Cash flows from investing activities</i>		
Proceeds from (acquisition of) other financial assets	(99,526,915)	2,634,761,160
Dividends received	61,757	545,072
Loans	(29,715,795)	(37,359,724)
Proceeds from repayment of loans	31,071,546	33,523,672
Acquisition of equipment, assets under construction and intangible assets	(236,708,378)	(764,411,736)
Proceeds from disposal of equipment	3,273,405	1,240,388
Interest received	37,449,117	43,829,644
Net cash from (used in) investing activities	(294,095,263)	1,912,128,476
<i>Cash flows from financing activities</i>		
Proceeds from short-term loans from financial institutions	2,830,000,000	700,000,000
Proceeds from long-term loans from financial institutions	317,710,000	695,820,000
Repayment of short-term loans from financial institutions	(700,000,000)	-
Repayment of long-term loans from financial institutions	(126,940,000)	(126,940,000)
Interest on long-term loans from financial institutions paid	(42,884,925)	(4,110,463)
Payment of lease liabilities	(35,504,906)	(39,408,341)
Interest on lease liabilities paid	(7,817,868)	(7,983,797)
Net cash from financing activities	2,234,562,301	1,217,377,399
Net increase (decrease) in cash and cash equivalents, before effect of exchange rate changes	5,254,939	(419,582,007)
Effect of exchange rate changes on cash and cash equivalents	82,876	(498,973)
Net increase (decrease) in cash and cash equivalents	5,337,815	(420,080,980)
Cash and cash equivalents at 1 October	1,452,081,525	1,872,162,505
Cash and cash equivalents at 30 September	1,457,419,340	1,452,081,525
<i>Non-cash transactions</i>		
Acquisition of right-of-use assets under lease contracts	3,329,522	787,498,036

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

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

Note	Contents
1	General information
2	Basis of preparation of the financial statements
3	Significant accounting policies
4	Impact of COVID-19 pandemic
5	Related parties
6	Cash and cash equivalents
7	Supplies
8	Buildings and equipment
9	Leases
10	Intangible assets
11	Interest-bearing liabilities
12	Provisions for employee benefits
13	Employee benefit expenses
14	Income tax
15	Basic income under expenses per share
16	Financial instruments
17	Staff welfare fund
18	Commitments with non-related parties
19	Contingent liabilities



Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

These notes form an integral part of the financial statements.

The financial statements issued for Thai statutory and regulatory reporting purposes are prepared in the Thai language. These English language financial statements have been prepared from the Thai language statutory financial statements, and were approved and authorised for issue by the Directors on 28 November 2022.

1 General information

Aeronautical Radio of Thailand Ltd., the “Company”, is a state enterprise under the Ministry of Transport. The Company’s role and responsibilities are providing air traffic management and related services for the Civil Aviation Authority of Thailand in 3 areas including Air Traffic Management (ATM), Aeronautical Communications, Navigation, and Surveillance (CNS) System/Services, and Aeronautical Information Services (AIS) and Aeronautical Charts under the Air Navigation Act 1954 and its amendments by allowing the Civil Aviation Authority of Thailand (CAAT) to supervise the Company’s services which is in accordance with the resolution of the Cabinet at the meeting on 15 December 2020.

2 Basis of preparation of the financial statements

The financial statements are prepared in accordance with Thai Financial Reporting Standards

The preparation of financial statements in conformity with TFRS requires management to make judgements, estimates and assumptions that affect the application of the company’s accounting policies. Actual results may differ from these estimates. Estimates and underlying assumptions that are described in each note are reviewed on an ongoing basis. Revisions to accounting estimates are recognised prospectively.

3 Significant accounting policies

(a) Foreign currencies

Foreign currency transactions

Transactions in foreign currencies including non-monetary assets and liabilities denominated in foreign currencies are translated to the respective functional currencies at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate at the reporting date.

Foreign currency differences are generally recognised in income over (under) expenses.

(b) Financial instruments

(b.1) Classification and measurement

Financial assets and financial liabilities (except trade accounts receivable (see note 3(d))) are initially recognised when the Company becomes a party to the contractual provisions of the instrument, and measured at fair value plus or minus, for an item not at fair value through income over (under) expenses (FVTPL), transaction costs that are directly attributable to its acquisition or issue.

On initial recognition, a financial asset is classified as measured at: amortised cost; fair value through other comprehensive income (FVOCI); or FVTPL. Financial assets 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 prospectively from the reclassification date.

On initial recognition, financial liabilities are classified as measured at amortised cost using the effective interest method or FVTPL. Interest expense, foreign exchange gains and losses and any gain or loss on derecognition are recognised in income over (under) expenses.

Financial assets measured at amortised costs are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by expected credit losses. Interest income, foreign exchange gains and losses, expected credit loss and any gain or loss on derecognition are recognised in income over (under) expenses.

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

(b.2) Derecognition and offset

The Company derecognises a financial asset when the contractual rights to receive the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Company derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. The Company also derecognises a financial liability 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 the modified terms is recognised at fair value.

The difference between the carrying amount extinguished and the consideration received or paid is recognised in income over (under) expenses.

(b.3) Impairment of financial assets other than trade accounts receivable

The Company recognises allowances for expected credit losses (ECLs) on financial assets measured at amortised cost, debt investments measured at FVOCI.

The Company recognises ECLs equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial instrument since initial recognition or credit-impaired financial assets, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

ECLs are a probability-weighted estimate of credit losses based on forward-looking and historical experience. Credit losses are measured as the present value of all cash shortfalls discounted by the effective interest rate of the financial asset.

The Company assumes that the credit risk on a financial asset has increased significantly if it is more than 90 days past due, significant deterioration in credit rating, significant deterioration in the operating results of the debtor and existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Company.

The Company considers a financial asset to be in default when:

- the debtor is unlikely to pay its credit obligations to the Company in full, without recourse by the Company takes action such as realising security (if any is held); or
- the financial asset is more than 180 days past due.

(b.4) Write offs

The gross carrying amount of a financial asset is written off when the Company has no reasonable expectations of recovering. Subsequent recoveries of an asset that was previously written off, are recognised as a reversal of impairment in income over (under) expenses in the period in which the recovery occurs.

(b.5) Interest

Interest income and expense is recognised in income over (under) expenses using the effective interest method. In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortised cost of the liability.

(c) Cash and cash equivalents

Cash and cash equivalents comprise cash balances, call deposits and highly liquid short-term investments which have maturities of three months or less from the date of acquisition. Bank overdrafts that are repayable on demand are a component of cash and cash equivalents for the purpose of the statement of cash flows.



Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

(d) Trade accounts receivable

A trade account receivable is recognised when the Company has an unconditional right to receive consideration. A trade account receivable is measured at transaction price less allowance for expected credit loss. Bad debts are written off when incurred.

The Company estimates lifetime expected credit losses (ECLs), using a provision matrix to find the ECLs rates. This method groups the debtors based on shared credit risk characteristics and past due status, taking into account historical credit loss data, adjusted for factors that are specific to the debtors and an assessment of both current economic conditions and forward-looking general economic conditions at the reporting date.

(e) Supplies

Supplies, which comprise of spare parts, are measured at the lower of cost and net realisable value.

Cost of supplies is calculated using the weighted average cost principle, and comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs to complete and to make the sale.

(f) Buildings and equipment

Buildings and equipment are measured at cost less accumulated depreciation and impairment.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes capitalised borrowing costs and the costs of dismantling and removing the items and restoring the site on which they are located including transfers from other comprehensive income of any gain or loss on qualifying cash flow hedges of foreign currency purchases of buildings and equipment. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

Differences between the proceeds from disposal and the carrying amount of buildings and equipment are recognised in income over (under) expenses.

Subsequent costs

The cost of replacing a part of an item of buildings and equipment is recognised in the carrying amount of the item when the future economic benefits embodied within the part will flow to the Company, and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of buildings and equipment are recognised in income over (under) expenses as incurred.

Depreciation

Depreciation is calculated on a straight-line basis over the estimated useful lives of each component of an asset and recognised in income over (under) expenses. No depreciation is provided on freehold land and assets under construction.

The estimated useful lives are as follows:

Buildings and building improvements	7 - 20 years
Utility systems	5 - 20 years
Radar and communication equipment	7 - 15 years
Power generators	6, 20 years
Other equipment and teleprinters	7 - 20 years
Furniture and office equipment	5 - 7 years
Vehicles	5 years
Aircrafts	5 - 25 years
Assets from donations	5 - 25 years
Musical instruments and sports equipment	7 years



Aeronautical Radio of Thailand Ltd.

Notes to the financial statements

For the year ended 30 September 2022

(g) Intangible assets

Other intangible assets that are acquired by the Company and have finite useful lives are measured at cost less accumulated amortisation and impairment losses. Subsequent expenditure is capitalised only when it will generate future economic benefits. Amortisation is calculated on a straight-line basis over the estimated useful lives of intangible assets and recognised in income over (under) expenses.

The estimated useful lives are as follows:

Software licences	5 years
-------------------	---------

(h) Leases

At inception of a contract, the Company assesses that a contract is, or contains, a lease when it conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

As a lessee

At commencement of a contract, the Company allocates the consideration in the contract to each lease component on the basis of its relative stand-alone prices of each component. For the leases of property, the Company has elected not to separate non-lease components and accounted for the lease and non-lease components wholly as a single lease component.

The Company recognises a right-of-use asset and a lease liability at the lease commencement date, except for leases of low-value assets and short-term leases which are recognised as expenses on a straight-line basis over the respective lease terms.

Right-of-use asset is measured at cost, less any accumulated depreciation and impairment loss, and adjusted for any remeasurements of lease liability. The cost of right-of-use asset includes the initial amount of the lease liability adjusted for any prepaid lease payments, plus any initial direct costs incurred and an estimate of restoration costs, less any lease incentives received. Depreciation is charged to income over (under) expenses on a straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Company by the end of the lease term or the Company will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment.

The lease liability is initially measured at the present value of all lease payments that shall be paid under the lease. The Company uses the Company's incremental borrowing rate to discount the lease payments to the present value. The Company determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

The lease liability is measured at amortised cost using the effective interest method. It is remeasured when there is a lease modification, or a change in the assessment of options specified in the lease. 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 income over (under) expenses if the carrying amount of the right-of-use asset has been reduced to zero.

As a lessor

At inception or on modification of a contract, the Company allocates the consideration in the contract to each component on the basis of their relative standalone selling prices.

At lease inception, the Company considers to classify a lease that transfers substantially all of the risks and rewards incidental to ownership of the underlying asset to lessees as a finance lease. A lease that does not meet this criteria is classified as an operating lease.

The Company recognises finance lease receivables at the net investment of the leases, which includes the present value of the lease payments, and any unguaranteed residual value, discounted using the interest rate implicit in the lease. Finance lease income reflects a constant periodic rate of return on the Company's net investment outstanding in respect of the leases.

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

The Company recognises lease payments received under operating leases in income over (under) expenses on a straight-line basis over the lease term as part of rental income. Initial direct costs incurred in arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income.

The Company estimates lifetime expected credit losses (ECLs), using a provision matrix to find ECLs rate. This method groups the lease receivables based on shared credit risk characteristics and past due status, taking into account historical credit loss data, adjusted for factors that are specific to the debtors and an assessment of both current economic conditions and forward-looking general economic conditions at the reporting date. The Company derecognises the lease receivables as disclosed in note 3(b).

(i) Impairment of non financial assets

The carrying amounts of the Company assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the assets' recoverable amounts are estimated. For goodwill and intangible assets that have indefinite useful lives or are not yet available for use, the recoverable amount is estimated each year at the same time.

An impairment loss is recognised in income over (under) expenses if the carrying amount of an asset exceeds its recoverable amount, unless it reverses a previous revaluation credited to equity, in which case it is charged to equity.

The recoverable amount is the greater of the asset's value in use and 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. For an asset that does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss of asset recognised in prior periods is reversed if there has been a change in the estimates used to determine the recoverable amount. 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.

(j) Employee benefits

Defined contribution plan

Obligations for contributions to defined contribution plans are expensed in income over (under) expenses as the related service is provided.

Defined benefit plans

The Company's net obligation in respect of defined benefit plans is calculated by estimating the amount of future benefit that employees have earned in the current and prior periods. The defined benefit obligations is discounted to the present value, which performed annually in accordance with actuarial principles using the projected unit credit method.

Remeasurements of the net defined benefit liability, actuarial gain or loss are recognised immediately in OCI. The Company determines the interest expense on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the ending of the annual period, taking into account any changes in the net defined benefit liability during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in income over (under) expenses.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in income over (under) expenses. The Company recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

Other long-term employee benefits

The Company's net obligation in respect of long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognised in income over (under) expenses in the period in which they arise.

Termination benefits

Termination benefits are expensed at the earlier of when the Company can no longer withdraw the offer of those benefits and when the Company recognizes costs for a restructuring. If benefits are not expected to be settled wholly within 12 months of the end of the reporting period, then they are discounted.

Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognised for the amount expected to be paid 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.

(k) 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 pre-tax 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 a finance cost.

Warranties

A provision for warranties is recognised when the underlying products or services are sold. The provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities.

Restructuring costs

A provision for restructuring is recognised when the Company has approved a detailed and formal restructuring plan, and the restructuring either has commenced or has been announced publicly. Future operating losses are not provided for.

Onerous contracts

A provision for onerous contracts is recognised when the expected benefits to be derived by the Company from a contract are lower than the unavoidable cost of meeting the Company's obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Company recognises any impairment loss on the assets associated with that contract.

(l) Fair value measurement

Fair value is 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 in the principal or, in its absence, the most advantageous market to which the Company has access at that date. The fair value of a liability reflects its non-performance risk.

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

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

- Level 1: quoted prices in active markets for identical assets or liabilities.
- 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: inputs for the asset or liability that are based on unobservable input

If an asset or a liability measured at fair value has a bid price and an ask price, then the Company measures assets and asset positions at a bid price and liabilities and liability positions at an ask price.

The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price i.e. the fair value of the consideration given or received. If the Company determines that the fair value on initial recognition differs from the transaction price, the financial instrument is initially measured at fair value adjusted for the difference between the fair value on initial recognition and the transaction price and the difference is recognised in income over (under) expenses immediately. However, for the fair value categorised as level 3, such difference is deferred and will be recognised in income over (under) expenses on an appropriate basis over the life of the instrument or until the fair value level is transferred or the transaction is closed out.

(m) Revenue

(m.1) Revenue recognition

Revenue is recognised when a customer obtains control of the goods or services in an amount that reflects the consideration to which the Company expects to be entitled, excluding those amounts collected on behalf of third parties, value added tax.

Revenue from sales of goods is recognised on the date on which the goods are delivered to the customers. Revenue for rendering of services is recognised over time based as the services are provided.

For bundled packages, the Company recognises revenue from sales of products and rendering of services separately if a product or service is separately identifiable from other items and a customer can benefit from it or the multiple services are rendered in different reporting periods. The consideration received is allocated based on their relative stand-alone selling prices.

(m.2) Contract balances

Contract assets are recognised when the Company has recognised revenue before it has an unconditional right to receive consideration. The contract assets are measured at the amount of consideration that the Company is entitled to, less allowance for expected credit loss. The contract assets are classified as trade receivables when the Company has an unconditional right to receive consideration.

Contract liabilities including short-term and long-term advances received from customers are the obligation to transfer goods or services to the customer. The contract liabilities including short-term and long-term advances received from customers are recognised when the Company receives or has an unconditional right to receive non-refundable consideration from the customer before the Company recognises the related revenue.

(n) Income tax

Income tax expense for the year comprises current and deferred tax, which is recognised in income over (under) expenses except to the extent that it relates to items recognised directly in other comprehensive income over (under) expenses.

Current tax is recognised in respect of the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

The measurement of deferred tax reflects the tax consequences that would follow the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities, using tax rates enacted or substantively enacted at the reporting date. Current deferred tax assets and liabilities are offset in the separate financial statements.

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 each reporting date and reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(o) Income over (under) expenses per share

The Company presents basic income over (under) expenses per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the income over (under) expenses attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held.

(p) Related parties

A related party is a person or entity that has direct or indirect control or has significant influence over the financial and managerial decision-making of the Company; a person or entity that is under common control or under the same significant influence as the Company; or a person or entity over which the Company has direct or indirect control or has significant influence over the financial and managerial decision-making.

4. Impact of COVID-19 pandemic

In 2022, the Company still affected by COVID-19 pandemic. From the 3rd quarter of 2022, the severity of pandemic was reduced, thus the entry measure into Thailand has also been more relaxed since then. After the country fully open to visitors with no entry restrictions during the 4th quarter of 2022, the number of flights are getting higher continually. Therefore, the flight volumes for generating income was 59% greater than last year but still accounted 60% less than 2019 before COVID-19 pandemic occurred. The Company's 2022 income under expenses was Baht 2,308 million. The ongoing measure of cost saving throughout the organisation still strictly activated to reduce the impact from income under expenses. The major decreasing expenses are on staff costs and other operation expenses that not affecting core business on air navigation services.

For the projection of income over expenses for the year 2023, after the relaxation of COVID-19 pandemic which leads to the higher flights movement, the Company forecasts that the flight volumes for generating income will increase from last year but still less than the normal situation before the COVID-19 pandemic occurred and will be fully recovered to be normal again in 2024, which in line with the estimation of the International Air Transport Association (IATA).

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

5 Related parties

Related parties that the Company had significant transactions with during the year were as follows:

Name of entities	Country of incorporation/ Nationality	Nature of relationships
Member airlines	Thailand	The Company's shareholders, jointly hold 9% shareholding in the Company, and having a representative as a director of the Company
State-owned financial institutions	Thailand	Common shareholders
Key management personnel	Thai	Persons having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of the Company.

Significant transactions for the years ended 30 September with related parties were as follows:

	2022 (in million Baht)	2021
Member airlines		
Income from air navigation service charges	4,100	2,382
Equipment rental, maintenance and NOC income	74	74
State-owned financial institutions		
Finance costs	46	5
Key management personnel		
Directors and various committees' remuneration	3	3
Remuneration for state enterprise directors	1	1

Balances as at 30 September with related parties were as follows:

	2022 (in million Baht)	2021
Trade accounts receivable		
Member airlines	1,749	1,005
	<u>1,749</u>	<u>1,005</u>
Less allowance for expected credit loss	(700)	(583)
Net	<u>1,049</u>	<u>422</u>
Loans from finance institutions		
State-owned financial institutions	3,757	1,426
Total	<u>3,757</u>	<u>1,426</u>
Current	2,743	667
Non-current	1,014	759
Total	<u>3,757</u>	<u>1,426</u>

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

Significant agreements with related parties

Member airlines agreements

As at 30 September 2022, the Company entered into agreement with 96 member airlines (2021: 92 member airlines) to agree on terms and conditions of the service fee, financial support to the Company and the distribution of the Company's shares among all member airlines totaling 9% of the Company's total shares.

Loans from state-owned financial institutions

Short-term loans

As at 30 September 2022, the Company issued promissory notes to various state-owned financial institutions in amount of Baht 2,680 million. The payment is scheduled during October to December 2022 with an interest at the agreed rate.

Long-term loans

On 3 September 2007, the Company entered into a long-term loan agreement with a state-owned financial institution in amount of Baht 1,650 million. The loan agreement has a term of 15 years with a grace period of 2 years from the date that the Company draws up the first loan. The principal repayment is due every 6 months from the end of the grace period by repaying the 1st - 25th installments in amount of Baht 63.47 million and the 26th installment of Baht 63.25 million. The loan bears an interest rate as agreed in the contract and the interest is due every 6 months from the date that the Company draws up the first loan. The loan is unsecured.

On 22 March 2021, the Company entered into a long-term loan agreement with a state-owned financial institution in amount of Baht 2,678.40 million. The principal repayment and last interest payment are due within 3 years and 6 months from the date that the Company draws up the first loan. The loan bears an interest rate as agreed in the contract and the interest is due every 6 months from the date that the Company draws up the first loan. The loan is unsecured. As at 30 September 2022, The Company has long-term loan obligation from this agreement in amount of Baht 1,013.53 million.

6 Cash and cash equivalents

	2022	2021
	(in million Baht)	
Cash on hand	2	2
Cash at banks - current accounts	8	7
Cash at banks - savings accounts	1,447	1,443
Cash and cash equivalents in the statement of financial position	1,457	1,452

7 Supplies

	2022	2021
	(in million Baht)	
Spare parts for aircrafts	25	27
Spare parts for navigation aids	26	27
Spare parts for radar	17	14
Spare parts for radio equipment	4	4
Office supplies	3	4
Total	75	76

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

8 Buildings and equipment

	Buildings and building improvements	Utility systems	Radar and communication equipment	Power generators	Other equipment and teleprinters	Furniture and office equipment	Vehicles	Aircrafts	Assets from donations	Musical instruments and sports equipment	Assets under construction and installation	Total
<i>Cost</i>												
At 1 October 2020	2,996	1,643	9,641	699	1,620	1,382	6	901	92	4	945	19,929
Additions	-	-	-	-	-	-	-	-	-	-	763	763
Transfers	95	62	250	11	56	55	-	-	2	-	(532)	(1)
Disposal	-	(6)	(40)	(7)	(40)	(15)	-	-	-	-	-	(108)
At 30 September 2021 and 1 October 2021	3,091	1,699	9,851	703	1,636	1,422	6	901	94	4	1,176	20,583
Additions	-	-	-	-	-	-	-	-	-	-	237	237
Transfers	51	66	460	121	19	133	-	-	-	-	(851)	(1)
Disposal	-	(8)	(2)	(19)	(1)	(3)	-	-	(1)	-	-	(34)
At 30 September 2022	3,142	1,757	10,309	805	1,654	1,552	6	901	93	4	562	20,785
<i>Depreciation</i>												
At 1 October 2020	2,161	1,036	6,139	405	1,171	1,059	5	266	84	3	-	12,329
Depreciation charge for the year	118	104	611	56	126	135	-	37	5	-	-	1,192
Disposal	-	(6)	(40)	(7)	(40)	(15)	-	-	-	-	-	(108)
At 30 September 2021 and 1 October 2021	2,279	1,134	6,710	454	1,257	1,179	5	303	89	3	-	13,413
Depreciation charge for the year	120	97	619	62	108	131	1	37	2	-	-	1,177
Disposal	-	(8)	(2)	(19)	(1)	(2)	-	-	(1)	-	-	(33)
At 30 September 2022	2,399	1,223	7,327	497	1,364	1,308	6	340	90	3	-	14,557

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

	Buildings and building improvements	Utility systems	Radar and communica- tion equipment	Power generators	Other equipment and teleprinters	Furniture and office equipment (in million Baht)	Vehicles	Aircrafts	Assets from donations	Musical instruments and sports equipment	Assets under construction and installation	Total
<i>Net book value</i>												
At 30 September 2021												
Owned assets	812	565	3,141	249	379	243	1	598	5	1	1,176	7,170
	<u>812</u>	<u>565</u>	<u>3,141</u>	<u>249</u>	<u>379</u>	<u>243</u>	<u>1</u>	<u>598</u>	<u>5</u>	<u>1</u>	<u>1,176</u>	<u>7,170</u>
At 30 September 2022												
Owned assets	743	534	2,982	308	290	244	-	561	3	1	562	6,228
	<u>743</u>	<u>534</u>	<u>2,982</u>	<u>308</u>	<u>290</u>	<u>244</u>	<u>-</u>	<u>561</u>	<u>3</u>	<u>1</u>	<u>562</u>	<u>6,228</u>

The gross amount of the Company's fully depreciated plant and equipment that was still in use as at 30 September 2022 amounted to Baht 8,074 million (2021: Baht 6,925 million).

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

9 Leases

Right-of-use assets at 30 September 2022

	2022	2021
	(in million Baht)	
Land and buildings	791	787
Total	791	787

In 2022, additions to the right-of-use assets of the Company was Baht 3 million (2021: Baht 787 million).

The Company leases a number of land and buildings with government agency for 3 years, with extension options at the end of lease term. The rental is payable either monthly or yearly as specified in the contract.

Extension options

The Company has extension options on land and building leases exercisable by the Company up to 30 days before the end of the non-cancellable contract period. Where practicable, the Company seeks to include extension options in new leases to provide operational flexibility. The extension options held are exercisable only by the Company and not by the lessors. The Company assesses at lease commencement date whether it is reasonably certain to exercise the extension options. The Company reassesses whether it is reasonably certain to exercise the options if there is a significant event or significant changes in circumstances within its control.

For the years ended 30 September

	2022	2021
	(in million Baht)	
<i>Amounts recognised in income over (under) expenses</i>		
Depreciation of right-of-use assets - land and buildings	39	39
Interest on lease liabilities	8	8
Expenses relating to short-term leases	14	14
Expenses relating to leases of low-value assets	2	2
Lease expense	137	149

In 2022, total cash outflow for leases of the Company were Baht 198 million (2021: Baht 204 million).

10 Intangible assets

	Software licences (in million Baht)
<i>Cost</i>	
At 1 October 2020	242
Additions	3
At 30 September 2021 and 1 October 2021	245
Additions	1
At 30 September 2022	246
<i>Amortisation and impairment losses</i>	
At 1 October 2020	131
Amortisation for the year	41
At 30 September 2021 and 1 October 2021	172
Amortisation for the year	33
At 30 September 2022	205
<i>Net book value</i>	
At 30 September 2021	73
At 30 September 2022	41

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

11 Interest-bearing liabilities

	Secured	2022 Unsecured	Total (in million Baht)	Secured	2021 Unsecured	Total
Short-term loans from financial institutions	-	2,830	2,830	-	700	700
Long-term loans from financial institutions	-	1,077	1,077	-	886	886
Lease liabilities	-	716	716	-	748	748
Total interest-bearing liabilities	-	4,623	4,623	-	2,334	2,334

As at 30 September 2022, the Company had unutilised credit facilities totalling Baht 3,434.87 million (2021: Baht 3,082.58 million).

	2022			2021		
	Minimum lease payments	Interest	Present value of minimum lease payments (in million Baht)	Minimum lease payments	Interest	Present value of minimum lease payments
Finance lease liabilities						
Within 1 year	44	7	37	44	8	36
1 - 5 years	174	27	147	216	33	183
After 5 years	571	39	532	567	38	529
Total	789	73	716	827	79	748

12 Provisions for employee benefits

	2022 (in million Baht)	2021 (in million Baht)
Post-employment benefits	68	49
Defined benefit plan	3,349	3,666
Other long-term employee benefits	62	148
Total	3,479	3,863

Defined benefit plan

The Company operate a defined benefit plan based on the requirement of the State Enterprise Labor Relations Board Announcement (No. 4) B.E. 2562 (2019) to provide retirement benefits to employees based on pensionable remuneration and length of service. The defined benefit plans expose the Company to actuarial risks, such as longevity risk and interest rate risk.

	2022 (in million Baht)	2021 (in million Baht)
Present value of the defined benefit obligations		
At 1 October	3,666	3,799
Include in income over (under) expenses:		
Current service cost	149	163
Interest on obligation	87	74
	236	237
Included in other comprehensive income over (under) expenses		
Actuarial gain	(372)	(238)
- Financial assumptions	3,530	3,798
Benefit paid	(181)	(132)
At 30 September	3,349	3,666

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

<i>Principal actuarial assumptions</i>	2022	2021
	(%)	
Discount rate	3.78	2.44
Future salary growth	7.5	7.5
Employee turnover	0	0

Assumptions regarding future mortality have been based on published statistics and mortality tables.

At 30 September 2022, the weighted-average duration of the defined benefit obligation was 15 years (2021: 16 years).

Sensitivity analysis

Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

<i>Effect to the defined benefit obligation</i>	1% increase in assumption		1% decrease in assumption	
<i>At 30 September</i>	2022	2021	2022	2021
	(in million Baht)			
Discount rate	(234)	(289)	266	331
Future salary growth	3	3	(4)	(1)

13 Employee benefit expenses

	2022	2021
	(in million Baht)	
Personnel expenses	4,552	4,700
Defined benefit plans	236	237
Provident fund contributions	298	367
Increase (decrease) in liabilities for long-service awards	(64)	10
Others	5	3
Total	5,027	5,317

Provident fund contributions

The provident fund established by the Company for its employees on a voluntary basis for being membership. The Contributions are made by monthly from the employees at rates ranging from 2% to 15% of their basic salaries and from the Company at rates ranging from 8.5% to 15% of the employees' basic salaries. The provident funds are registered with the Ministry of Finance as juristic entities and are managed by licensed Fund Manager.

The Company refrained from contributing to the provident fund for 4 months from March to June 2021, which complied with the Ministry of Finance Notification (No. 2) B.E. 2564 and remitted to the provident fund at the rate 2% for 6 months from October 2021 to March 2022, by the order of the resolution at the Extraordinary General Meeting of the Provident Fund No. 1/2021, held on 17 September 2021.

Refrain from special rewards payment

On 28 September 2022, the Board of Directors of the Company approved the refrain from special rewards payment for the year 2022.

On 25 August 2021, the Board of Directors of the Company approved the refrain from special rewards payment for the year 2020 and 2021. The Company recognised the reversal of the special rewards in the statement of comprehensive income and expenses for the year ended 30 September 2021 amounting to Baht 1,285 million.

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

14 Income tax

On 15 December 2020, the Cabinet resolution approved the country's civil aviation policy regarding the assignment of the Company, a state enterprise, to acting as an agency providing air traffic management and related air navigation services for the Civil Aviation Authority of Thailand in 3 areas as follows:

- (1) Air Traffic Management (ATM);
- (2) Aeronautical Communications, Navigation, and Surveillance (CNS) System/Services; and
- (3) Aeronautical Information Services (AIS) and Aeronautical Charts.

The Civil Aviation Authority of Thailand shall supervise the Company's services to be in accordance with the standards prescribed under the Air Navigation Act B.E. 2497 (1954) and its amendments.

The company is exempt from income tax under the Royal Decree on Tax Exemption (No. 170) B.E. 2529 (1986) which stated that:

"There shall be exempted from income tax on income derived from charges collected for radio communication services in connection with international aviation between surface and surface stations or between air and surface stations, radio communication in connection with meteorological services, and other relating services, paid to the juristic company or partnership assigned by the government with the execution of responsibilities under the Convention on International Civil Aviation, but only on the portion collected from aviation companies."

15 Basic income under expenses per share

	2022	2021
	<i>(in million Baht /</i>	<i>in thousand shares)</i>
<i>Income under expenses attributable to ordinary shareholders for the year ended 30 September</i>		
Income under expenses attributable to ordinary shareholders of the Company	<u>(2,308)</u>	<u>(3,625)</u>
<i>Ordinary shares outstanding</i>		
Number of ordinary shares outstanding (basic) at 30 September	<u>6,600</u>	<u>6,600</u>
Income under expenses per share (basic) <i>(in Baht)</i>	<u>(349.77)</u>	<u>(549.25)</u>

16 Financial instruments

(a) Carrying amounts and fair values

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy. It does not include fair value information for financial assets and financial liabilities measured at amortised cost if the carrying amount is a reasonable approximation of fair value.

Aeronautical Radio of Thailand Ltd.

Notes to the financial statements

For the year ended 30 September 2022

	Carrying amount		Fair value				
	Financial instruments measured at FVTPL	Financial instruments measured at amortised cost	Total	Level 1	Level 2	Level 3	Total
			(in million Baht)				
<i>At 30 September 2022</i>							
<i>Financial assets</i>							
Loans	-	26	26	-	-	26	26
Other financial assets:							
Deposits at financial institutions	-	220	220				
Debt instruments	12	-	12	-	12	-	12
Total other financial assets	12	220	232				
Financial assets pledged as collateral	-	123	123				
<i>Financial liabilities</i>							
Loans from financial institutions	-	(3,907)	(3,907)	-	(3,907)	-	(3,907)
<i>At 30 September 2021</i>							
<i>Financial assets</i>							
Loans	-	28	28	-	-	28	28
Other financial assets:							
Deposits at financial institutions	-	120	120				
Debt instruments	12	-	12	-	12	-	12
Total other financial assets	12	120	132				
Financial assets pledged as collateral	-	123	123				
<i>Financial liabilities</i>							
Loans from financial institutions	-	(1,586)	(1,586)	-	(1,586)	-	(1,586)

Financial instruments measured at fair value

Type	Valuation technique
Investments in marketable unit trusts classified as financial assets measured at FVTPL	The net asset value as of the reporting date

Financial instruments not measured at fair value

Type	Valuation technique
Debt securities and other financial liabilities	Discounted cash flows

(b) Financial risk management policies

(b.1) Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's receivables from customers and investments in debt securities.

(b.1.1) Trade accounts receivable

The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, management also considers the factors that may influence the credit risk of its customer base, including the default risk associated with the industry and country in which customers operate.

The Company limits its exposure to credit risk from trade accounts receivable by establishing a maximum payment period of 6 months.

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

The following table provides information about the exposure to credit risk and ECLs for trade accounts receivable.

<i>Trade and other accounts receivable</i>	2022	2021
	<i>(in million Baht)</i>	
Trade accounts receivable		
Cheque on hand	-	11
Airlines receivables	2,297	1,436
Domestic receivables	33	57
Oversea receivables	55	22
Accrued income	26	30
	2,411	1,556
<i>Less allowance for expected credit loss</i>	<i>(1,112)</i>	<i>(1,001)</i>
	1,299	555
Other accounts receivable		
Interest receivables	2	2
Penalty to contractors	18	18
Prepaid expenses	24	27
Advances	26	31
	70	78
Total	1,369	633

<i>At 30 September 2022</i>	Airlines receivables	Domestic and oversea receivables	Total trade accounts receivable	Allowance for expected credit loss
			<i>(in million Baht)</i>	
Less than 1 month	746	26	772	28
1-3 months	270	10	280	57
3-6 months	334	25	359	151
6-12 months	357	2	359	261
More than 12 months	590	25	615	615
Total	2,297	88	2,385	1,112
<i>Less allowance for expected credit loss</i>	<i>(1,081)</i>	<i>(31)</i>	<i>(1,112)</i>	
Net	1,216	57	1,273	

<i>At 30 September 2021</i>	Airlines receivables	Domestic and oversea receivables	Total trade accounts receivable	Allowance for expected credit loss
			<i>(in million Baht)</i>	
Less than 1 month	241	31	272	6
1-3 months	96	8	104	18
3-6 months	320	10	330	186
6-12 months	250	8	258	242
More than 12 months	529	22	551	549
Total	1,436	79	1,515	1,001
<i>Less allowance for expected credit loss</i>	<i>(963)</i>	<i>(38)</i>	<i>(1,001)</i>	
Net	473	41	514	

Loss rates are based on actual credit loss experience over the past three years. These rates are multiplied by scalar factors to reflect differences between economic conditions during the period over which the historical data has been collected, current conditions and the Company's view of economic conditions over the expected lives of the receivables.

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

The normal credit term granted by the Company are as follow:

Air navigation service charges

Member airlines	Invoices are issued on the 7 th with a credit term of 15 days from the invoice date with due on 22 th .
Non-member airlines	Invoices are issued on the 7 th with due within invoiced month (payment is due on the last day of the invoiced month).

Equipment rental and maintenance income

Member airlines	Invoices are issued on the 7 th with a credit term of 30 days from the invoice date with due on 6 th or 7 th of the next month.
Non-member airlines	Invoices are issued on the 7 th with due within invoiced month (payment is due on the last day of the invoiced month).

Movement of allowance for expected credit loss of trade accounts receivable

	2022	2021
	<i>(in million Baht)</i>	
At 1 October	1,001	742
Addition	111	259
At 30 September	1,112	1,001

(b.1.2) Investment in debt securities

The Company has an investment in Vayupak Fund 1, amounting to Baht 10 million, according to the resolution of the Board of Directors meeting held on 31 October 2013. Such investment is from the consideration of the State Enterprise Policy Office (SAO) that the Company was a potential state enterprises with quite high flexibility in management and can invest in investment units of Vayupak Fund 1 after conversion without contrary to regulations of the Ministry of Finance regarding accounting and finance of state owned enterprise B.E. 2548 (2005). Therefore, the Company is proposed to consider joining in supporting the investment in the fund after converting to type B investment units, as well as total of 34 other potential state enterprises in order to support the Ministry of Finance's policy in managing securities held by the state for maximum benefit.

At 30 September 2022 and 2021, Vayupak Fund 1 holds approximately 93% of equity securities and approximately 7% in debt securities/deposit.

The Company's exposure to credit risk arising from investment in debt securities is limited because the counterparties are state-owned financial institutions for which the Company considers to have low credit risk.

(b.1.3) Cash and cash equivalents

The Company's exposure to credit risk arising from cash and cash equivalents is limited because the counterparties are state-owned financial institutions for which the Company considers to have low credit risk.

(b.2) Liquidity risk

The Company monitors its liquidity risk and maintains a level of cash and cash equivalents deemed adequate by management to finance the Company's operations.

The following table are the remaining contractual maturities of financial liabilities at the reporting date. The amounts are gross and undiscounted and include contractual interest payments and exclude the impact of netting agreements.

Aeronautical Radio of Thailand Ltd.

Notes to the financial statements

For the year ended 30 September 2022

	Carrying amount	1 year or less	Contractual cash flows More than 1 year but less than 5 years (in million Baht)	More than 5 years	Total
At 30 September 2022					
Non-derivative financial liabilities					
Trade and other accounts payable	236	236	-	-	236
Accrued expenses	100	100	-	-	100
Loans from financial institutions	3,907	2,893	1,014	-	3,907
Lease liabilities	716	44	174	571	789
	<u>4,959</u>	<u>3,273</u>	<u>1,188</u>	<u>571</u>	<u>5,032</u>
At 30 September 2021					
Non-derivative financial liabilities					
Trade and other accounts payable	431	431	-	-	431
Accrued expenses	76	76	-	-	76
Loans from financial institutions	1,586	827	759	-	1,586
Lease liabilities	748	44	216	567	827
	<u>2,841</u>	<u>1,378</u>	<u>975</u>	<u>567</u>	<u>2,920</u>

(b.3) Market risk

The Company has loan agreements with floating interest rates. The loan interest rates are referenced to various rates, such as the 6-month fixed deposit interest rate announced by commercial banks (FIX6MONTH), the Bangkok Interbank Offered Rate (BIBOR) announced by the Bank of Thailand, and interest rates according to market conditions (Money Market Rate).

However, in managing source of funds in the past, the Company has discussed with representatives of the Public Debt Management Office, Ministry of Finance in analysing and defining financial instruments with period and interest rate suitable for the Company's requirement. This causes the Company to have low finance costs and able to manage the risk of interest expense within the budget according to the Company's financial plan without using any derivatives or interest rate swap contracts.

17 Staff welfare fund

The Company contributes 9% of the basic salary to the staff welfare fund as a budget for staff welfare. The Welfare Management Committee is responsible for managing the fund.

Details of staff welfare fund were as follow:

	2022	2021
	(in million Baht)	
Assets		
Cash and cash equivalents	99	166
Other accounts receivable	26	30
Loans	26	28
Other current financial assets	220	120
Equipment	1	1
Total assets	<u>372</u>	<u>345</u>
Liabilities		
Other accounts payable	4	3
Accrued expenses	6	7
Total liabilities	<u>10</u>	<u>10</u>

Aeronautical Radio of Thailand Ltd.
Notes to the financial statements
For the year ended 30 September 2022

	2022	2021
	<i>(in million Baht)</i>	
Staff welfare fund		
Beginning balance	335	338
Contributions during the year	337	260
Income under expenses	(310)	(263)
Total staff welfare fund	362	335
Total liabilities and staff welfare fund	372	345

Refrain from contributions to staff welfare fund

The Board of Directors at the meeting held on 24 June 2020 approved the refrain from contributions to the staff welfare fund for 6 months from July to December 2020.

18 Commitments with non-related parties

	2022	2021
	<i>(in million Baht)</i>	
Capital commitments	234	305
Other commitments <i>(short-term lease and services commitments and purchase orders for goods and supplies)</i>	493	602
Total	727	907

19 Contingent liabilities

Issues regarding fines and surcharges of VAT

The Company provides air navigation services and related services according to the agreement with the Ministry of Transport which falls in an exemption for Value Added Tax (VAT) according to the Royal Decree under the Revenue Code Regarding Value Added Tax Exemption (No. 239), B.E. 2534 (1991) as amended by the Royal Decree Issued under the Revenue Code Regarding Value Added Tax Exemption (No. 254), B.E. 2535 (1992) section 4. Then, the Revenue Department examined the Company in overall aspects between fiscal years 2003 to 2011 with no issues or observations about VAT on all of the Company's income. However, in November 2013, the Revenue Department's officer examined the Company's income for fiscal year 2012 and sent an official letter of the examination results later in March 2014 that there is an issue about VAT relating to the Company's income from work orders to non-airlines customers in accounting period 2012. After continuously monitored and coordinated with the Revenue Department officer about the issue, the Company found that the Company has tax payable relating to VAT from October 2011 to June 2018 at a total amount of Baht 234.77 million which consists of VAT at the amount of Baht 112.11 million with penalty and surcharge at the amount of Baht 122.66 Million.

However, the Company had already made a VAT payment at the amount of Baht 112.11 million to the Revenue Department on 8 August 2018. For penalty and surcharge at the amount of Baht 122.66 million, the Company sent a letter Ref. ART 1228/2561 dated 1 August 2018 to the Ministry of Finance requesting for an extension in submitting the VAT from the due date to get the exemption on penalty and surcharge. Now, The Company has already opened a Fixed Deposit Account-12 months at Krung Thai Bank PCL at the amount of Baht 123 million as a collateral of guarantee to Revenue Department in order to postpone the penalty and surcharge payment.

Sustainable Quality Excellent Air Navigation Service Provider

Sustainable Development Policy

“The management of AEROTHAI has aimed to create quality navigation services and other assigned services to induce the balance of sustainable development in terms of economy, society and environment”

Sustainability Report

1. The source of the report

Aeronautical Radio of Thailand Company Limited has prepared an Integrated Sustainability Report together with the Company's annual report. to disclose operational information Important for the Company's annual sustainable development

According to the reporting guidelines according to the GRI Sustainability Reporting Standards or GRI Standards, with a reporting period from October 1, 2021 to September 30, 2022, the company is committed to action in response to the Sustainable Development Goals. in line with the 20-year National Strategic Plan, the 11th - 12th National Economic and Social Development Plan, and the criteria for evaluating the performance of state enterprises that focus on sustainable development according to the global goals (Sustainable Development Goals : SDGs) of United Nations Organization and to respond to the needs and expectations of different stakeholders.

2. Scope of the report (Disclosure 102-49, 102-50, 102-51, 102-52)

The Company has prepared the Sustainability Report as the same as the 2022 Annual Report, with the reporting framework in accordance with GRI Standards, comprising General Disclosure and Management of the Company (GRI 101 (Foundation), GRI 102 (General Disclosure), GRI 103. (Management Approach) information on sustainable development in 3 dimensions, namely the economic, social and environmental aspects (GRI 200 (Economic), GRI 300 (Environment) and GRI 400 (Social)), which are the essence of the year 2022 by the company. The goal of the organization's sustainable development is to provide top quality air navigation services (AEROTHAI Servicemark) to create professional personnel. (Professionals) develop into

a high-performance organization (High Performance Organization (HPO) and create competitiveness for the country and create value for the aviation industry (Value for National Competitiveness and Aviation Industry) set out in the Corporate Strategic Plan. to achieve the vision “To be an organization that provides sustainable air navigation services with the highest quality”

To make reporting more clear, the company has adjusted the reporting scope by using the SDGs target framework as a guiding framework. and adjust the reporting framework for each topic to be in line with the GRI (Consolidated Set of GRI Sustainability Reporting Standards 2018) framework, and to focus more on participation from all sectors in the organization. By allowing all departments to collect, collect, and consider information consistent with the Sustainable Development Framework for participation in the preparation of sustainable development reports throughout the organization.

3. Confidence in the report

The company has arranged for the audit of financial reports from external agencies. The information presented in this report is the information carried out in accordance with the corporate strategic plan approved by the Board of Directors. and the Ministry of Transport including the relevant master plan Has been approved by the Board of Directors finished For results from the implementation of the corporate strategic plan and the master plan is presented to senior management. and the relevant committees/sub-committees already

AEROTHAI Business (Disclosure 102-2,102-6)

AEROTHAI, assigned by Thai Government, is responsible for Air Navigation Services and Business Related Services, as follows :

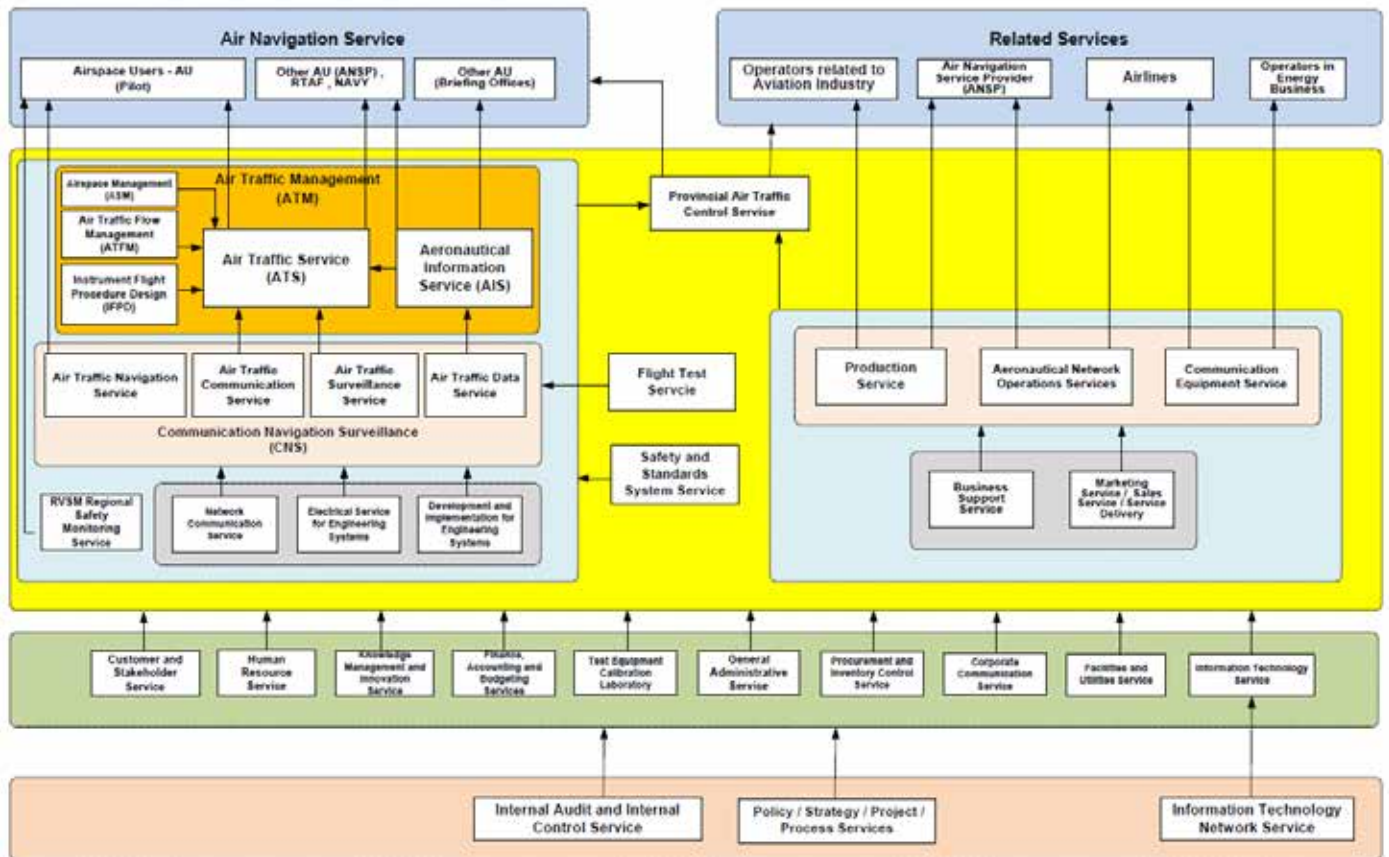
1. Air Navigation Services

AEROTHAI, assigned by Thai Government, is responsible for Bangkok Flight Information Region : (Bangkok FIR). Business Objective are safety, national security and drive business by utilizing our expertise about air traffic services, engineering and technology which has been sustainably developed. Air Navigation services under AEROTHAI’s Responsibility be consist of 3 parts :

- 1.1 Air Traffic Management** (Air Traffic Management : ATM) (Including : Airspace Management (ASM), Air Traffic Flow Management (AFTM) and Air Traffic Services(ATS)
- 1.2 Communication, Navigation and Surveillance (CNS)** (Including : Communication System (C), Navigaiton System (N), and Surveillance System (S))
- 1.3 Aeronautical Information Services : AIS)** (Including : International NOTAM officed (NOF) and Pre-flight information Services)



Services and Products of AEROTHAI (Internal / External)



ฉบับที่ 25 หมวด 2565

Air Traffic Management



Airspace Management



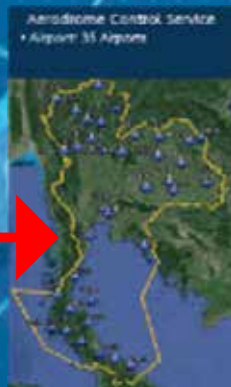
Air Traffic Flow Management



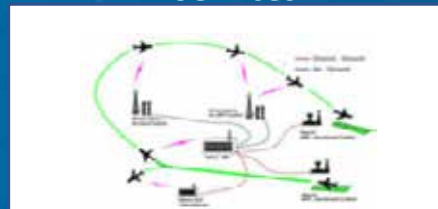
Air Traffic Control Service



Flight information Service



Communication, Navigation and Surveillance Services



Communication System



Navigation System



Surveillance System

Aeronautical Information Service



2. Related Services Providers

The important role of related services providers is to manage our resources by utilizing our expertise which has been sustainably developed. Our policy is to extend our services to others, such as aviation organizations and other sectors, to generate revenue and compensate for the air traffic service's expenses. Another role is to be strategic arms to continue the improvement of air traffic service in other countries and support the increasing traffic growth within this region. It is responsible for providing the design, development, manufacture, maintenance, training, and consultancy of air navigation and related services. For the fiscal year of 2022, AEROTHAI's business performances are as follows:

Related Services Providers

Supply, Delivery, Installation, and Commissioning of Communication, Navigation and Surveillance/ Air Traffic Management (CNS/ATM), Meteorological Equipment & Other Related Goods and Services at Gautam Buddha Airport (GBA Project) for Civil Aviation Authority of Nepal (CAAN).



Provision of Automatic Message Handling System (AMHS) for Directorate of Communications and Electronics, Royal Thai Air Force.

The Office of Business Development emphasizes increasing business opportunities by collaborating with domestic and international business partners. This aspect is to simultaneously gain know-how and technology to level up the quality of products and services, also to facilitate the aviation operators and airlines to utilize their resources at the optimum and increase the efficiency of air traffic flow management in Asia. The products and services are as follows:

Business Partner and Innovation



AOC



Airline Operational Communications (AOC)

GLOBALink/ASIA VHF Air-Ground Data Link Network and FOMAX System and Related Services at Sites in the Asia Pacific



Aerodrome Control Simulator



Developed the 3-Dimension Aerodrome Simulator for air traffic service with WM Simulator Co., Ltd



Developed the radio control unit operated in radio communication system and related system for air traffic service with IFZ Innovative Co., Ltd.



e-Ground Planning Board




AEROTHAI has developed Mission Critical Communications Solutions (MCCS) over 4G/ 5G



AEROTHAI's Value Chain (Disclosure 102-9, 102-10)

AEROTHAI connect people and commercial activities through Air Navigation Services and Related Services of over expectation at an international standard. AEROTHAI is ready to support the growth in number of flight, passenger and transportation through the air navigation development. AEROTHAI has responded to stakeholder requirement through numbers activities in the value chain are as follows :

Value Chain Contributors	Air Navigation Services Construction
 Directors and Employees	<ul style="list-style-type: none">- Feasibility Study for Technology Development and Standards of Air Navigation System.- Development and Replacement of Air Navigation System Time Frame.
 Business Partners	<ul style="list-style-type: none">- Study of Airport Development Plan and Air Navigation Technology Development- The Worthiness Study of Air Navigation Technology Development- Submission for Approval of Construction Plan/Project.- Survey and Detailed Design- Construction/Install Equipment/ Operation Management/ Job inspection- Enables the Air Navigation System.
 Regulators	<p>There is Transparency in Every Step of the Hiring Process /Job Inspection</p> <ul style="list-style-type: none">- Can Check Every Step- Stakeholder Involvement and Support from Related \ Agencies

Value Chain Contributors	Products/Related Services Concerning the Air Navigation Services
 <p>Directors and Employees</p>	<ul style="list-style-type: none"> - Feasibility Study for Technology and Products - Feasibility Study for Air Navigation Training and give Counsel
 <p>Business Partners</p>	<ul style="list-style-type: none"> - Education About Customer Needs and Expectations - Study of Worthiness, Marketing and Business Plan - Submit for Approval of Products and Services Distributes - Survey and Detailed Design of Product and Services - Construction/Install Equipment/ Operation Management/ Job inspection
 <p>Safety Standard, Product and Service Standards Inspection</p>	<ul style="list-style-type: none"> - Service Standards Inspection/International Quality Standard - Stakeholder Involvement and Support from Related \ Agencies



Air Navigation Services/Related Services

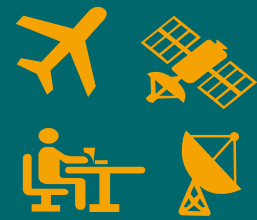
AEROTHAI's Value Receivers



Air Navigation Service



Related Services Concerning the Air Navigation Services



Service Users, Customers, Entrepreneurs, Partners and Cooperation Partners

Air Traffic Management

Related Services Concerning the Air Navigation Services Management



Shareholders

Parcel, Spare Parts and Inventory Management

Contract/Agreement Management Service



System/Equipment Maintenance/Facility and Flight Control Towers Maintenance Management



Business Partners

Air Navigation Safety, Security and Services Standards

Stakeholder Involvement



Communities, Societies and Stakeholders

ประเภทบริการที่ให้บริการ	ค่าจ้างบริการ		ค่าจ้างบริการ	รวมค่าบริการ	รวมค่าบริการ*
	มูลค่า (ล้านบาท)	จำนวน (เที่ยว)			
บริการจราจรทางอากาศ	0.537.32	0	0.0462	5.11	1.8338
บริการจราจรทางอากาศ			0.0000	4.33	1.9409
บริการขนส่งผู้โดยสาร	776.52	53	0.0016	4.38	0.0015
บริการขนส่งผู้โดยสาร - Air TN					0.0072
บริการขนส่งผู้โดยสาร - Air to Ground		201	0.0064	4.29	0.0076
รวมค่าบริการทั้งหมดปีงบประมาณ 2564					4.2177

การสำรวจความพึงพอใจผู้ใช้บริการ

Value Award



ต่อเนื่องปีที่ ๘

The highest rating from TRIS Rating “AAA”

AEROTHAI Has been rated Company Rating “AAA” 8 consecutive years (2016-2022) “Stable” Outlook the highest rating by TRIS Rating, which reflects its good safety record, strong financial status, and experienced management team. TRIS Rating holds the view that the company’s credit profile is enhanced by its unique and important role to the Thai government and the likelihood that it would receive extraordinary support from the government in a stress scenario. The key rating considerations included strategic role in aviation industry.



Meteorological Implementation Award

Aeronautical Radio of Thailand Co., Ltd. (AEROTHAI) received recognition plaque “Meteorological Implementation Award” from the Thai Meteorological Department



ต่อเนื่องปีที่ ๘
คะแนน ๘๘.๔๖

Performance Score “A” For 8 consecutive years

Year 2022, National Anti-Corruption Commission Has assessed the integrity and transparency in the operation of government agencies for the Company. In the score of 88.46 percent, which is a very good grade. 8 consecutive years.



SQCOTEC Certification International certifies that Aeronautical Radio of Thailand Ltd. Operates a management system that has been assessed as conforming to

ISO 9001 : 2015 for the scope of activities The Provision of Aeronautical Information Services compose of NOTAM, Pre-Flight Information Service, Post-Flight Information Service, Flight Data Management and Aeronautical Fixed Service By Communication thru the AFTN and ATN, including Meteorological Information Exchanging Services

AEROTHAI's Performance in 2022

Corporate Governance



Economic



Safety, Occupational Health and Work Environment



Social Value Creation



The Company and Stakeholders

The company focuses on management under the framework of good corporate governance. Operate business by giving importance to stakeholders - stakeholders by disseminating information openly in terms of vision The Company's Strategic Plan master plan all aspects including the data from the satisfaction survey dissatisfaction needs and expectations of customers and service users to be applied in the preparation of the organization's strategic plan and the master plan of key stakeholders in order to meet the needs and expectations of all stakeholders as well as building good relationships and confidence in the operations between the companies with stakeholders

1. Satisfaction survey target group Dissatisfied with the needs and expectations of the stakeholders

1.1 Determine the target group of stakeholders, consisting of 3 main groups as follows:

- Air Navigation Services (ANS) > Pilot and Co-Pilot
- Aeronautical Information Services (AIS) > Pilot, Co-Pilot and Dipatcher
- Rental Services of Communication Devices such as Trunked Radito and AFTN Terminal + Air to Ground Radio > Enterprise users of aviation communications equipment and does not operate in the field of aviation

1.2 Determine the survey services for a total of 8 areas as follows:

- Air traffic management service in the category of Air Traffic Management-Air Traffic Service : ATM-ATS (under ANS)
- Air traffic management services. Air Traffic Management- Airspace Managemet : ATM-ASM (under ANS)
- Air traffic management services. Type of Air Traffic Management – Air Traffic Flow Management : ATM-ATFM (under ANS)
- Communication system service air navigation assistance system and aircraft tracking systems (Communication Navigation Surveillance: CNS) (under ANS)
- Instrument Flight Procedure Design (IFPD) service (under ANS)
- Aviation information service (Aeronautical Information Service: AIS/NOTAM Office), including flight plan information, Flight Plan and other ATS messages.
- Safety and Security standards
- Communication equipment rental services include Trunked Radio, Air to Ground Radio and AFTN Terminal.

1.3 Survey issues according to the Company's air navigation service mission within the framework of Key Performance Area (KPA) as follows

- Safety
- The ability to manage the support of the airspace system (Capacity).
- Cost-effectiveness
- Efficiency
- Understanding and caring (Empathy)
- Predictability. (Predictability)
- Reliability (Reliability)
- Assurance in service



2. Satisfaction survey results Dissatisfaction with the needs and expectations of the stakeholders

2.1 Overall satisfaction

From the overall satisfaction survey of the company Compared to 5 years, satisfaction scores have consistently been at a high level of satisfaction.



Note: In 2020, the Company did not conduct a survey. Satisfied service users from the epidemic problem Corona virus 2019 (COVID-19)

Quality issues surveyed

- The ability to provide air navigation services
- Effectively manage the problem of delays in the rank of aircraft takeoff and landing.
- Agility and continuity in all flight stages
- Fuel economy in flight operations
- Mobility and continuity in flight operations
- The ability to provide air navigation services that allow flight operations to be planned in advance
- The ability to provide air navigation services in unusual situations
- Knowledge, skills, ability to control air traffic, the use of English and providing concise and up-to-date information by ATC staff.
- Understanding and paying attention to the needs of users without requesting and meet the requirements requested during flight operations.
- The quality of the CNS system as a whole

If comparing the results of the satisfaction survey over the period of 15 years, the company's satisfaction survey results were at the score level of 3.51-4.50, which is in the high level of satisfaction evaluation criteria.

evaluation criteria satisfaction level

ระดับคะแนนเฉลี่ย	ความหมาย
4.51-5.00	พึงพอใจมากที่สุด
3.51-4.50	พึงพอใจมาก
2.51-3.50	พึงพอใจปานกลาง
1.51-2.50	พึงพอใจน้อย
1.00-1.50	พึงพอใจน้อยสุด

2.2 Meeting the needs and expectations of key stakeholders

The Company has surveyed the needs and expectations of 2 key stakeholder groups:

Group 1, cooperating agencies and Group 2, regulatory agencies.

The results of the survey of needs and expectations were in the evaluation criteria at the 3.84 score, which was a high level of satisfaction.

กลุ่มผู้มีส่วนได้ส่วนเสียที่สำคัญ	1 คะแนน	2 คะแนน	3 คะแนน	4 คะแนน	5 คะแนน	ไม่มีความคิดเห็น (N/A)
กลุ่มที่ 1 หน่วยงานคู่ความร่วมมือ (Collaborator)	6	35	127	406	348	53
กลุ่มที่ 2 หน่วยงานกำกับดูแล (Regulators)	0	2	40	49	70	34
รวม	6	37	167	455	418	87
ระดับความพึงพอใจเฉลี่ยรวม	3.84					

Corporate Governance for AEROTHAI's sustainable development

The corporate governance for AEROTHAI's sustainable development is authorized by the Committee of Corporate Governance and Corporate Social Responsibility. The Committee's responsibilities consists of both identifying corporate governance and social responsibility policy and recommending management in 2019 SEPO's principle and guidelines on corporate governance for State-Owned Enterprise in accordance with the corporate strategy of AEROTHAI's Master plan (2022-2026) deployment.

1. The Corporate Governance and Corporate Social Responsibility Committee

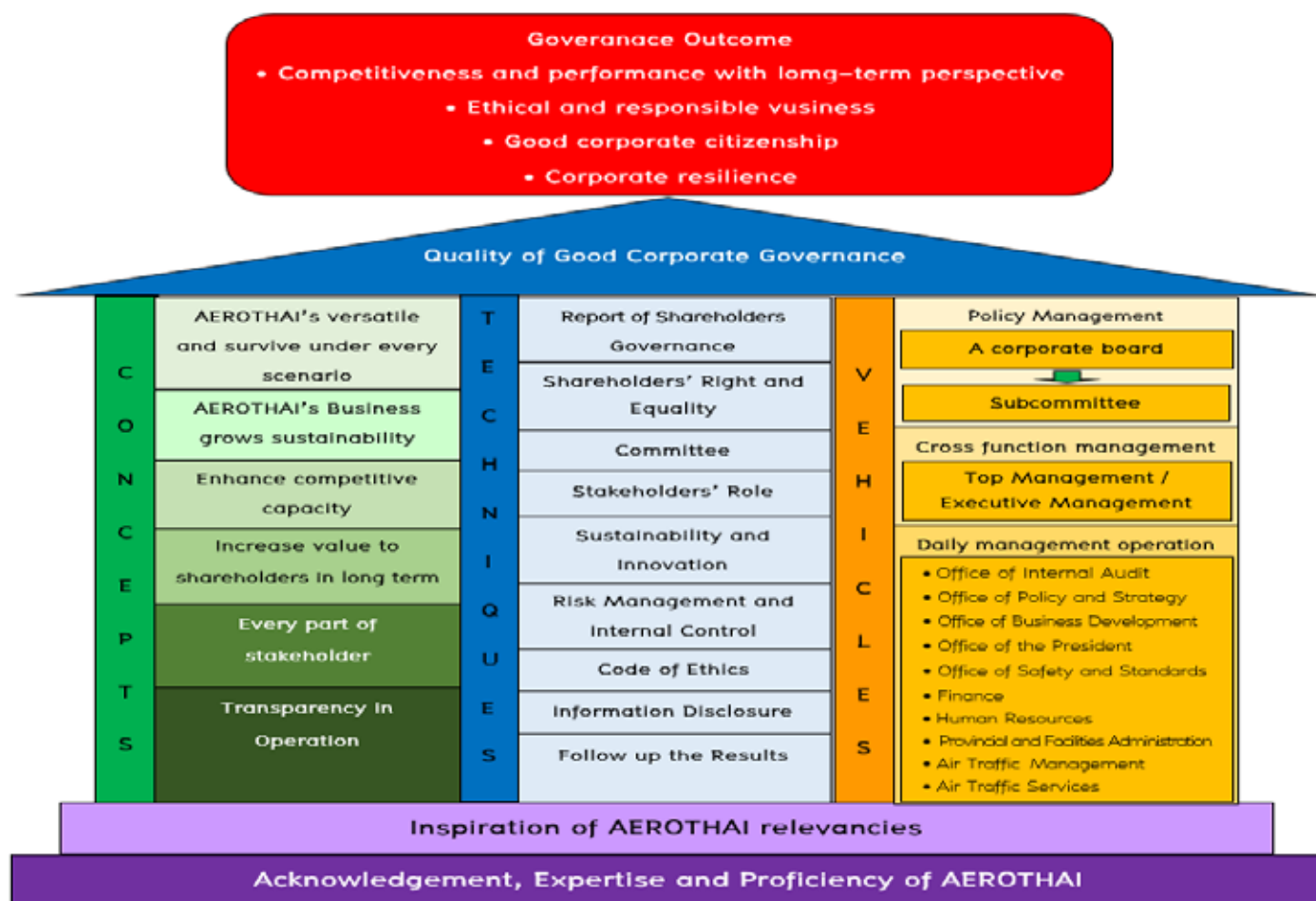
Committee's authorizations are as followings; imposing policy and guidelines on corporate governance and corporate social responsibility, considering, recommending and monitoring corporate governance plan in accordance with Master plan of corporate social responsibility. In addition the committee still follows and assesses the impact of corporate governance and social responsibility.

2. The AEROTHAI's policy in corporate governance and social responsibility

Aeronautical Radio of Thailand Ltd. strictly adheres to administration under principles and guidelines on corporate governance with international-standard while realizing the sustainable air traffic service and air navigation service and national interests.

3. The Organization of Corporate Governance for AEROTHAI's sustainable development

Adhering to good corporate governance, 2019 SEPO's principle and guidelines on corporate governance for State-Owned Enterprise, AEROTHAI establishes the qualified Corporate Governance Structure as a guideline as followings



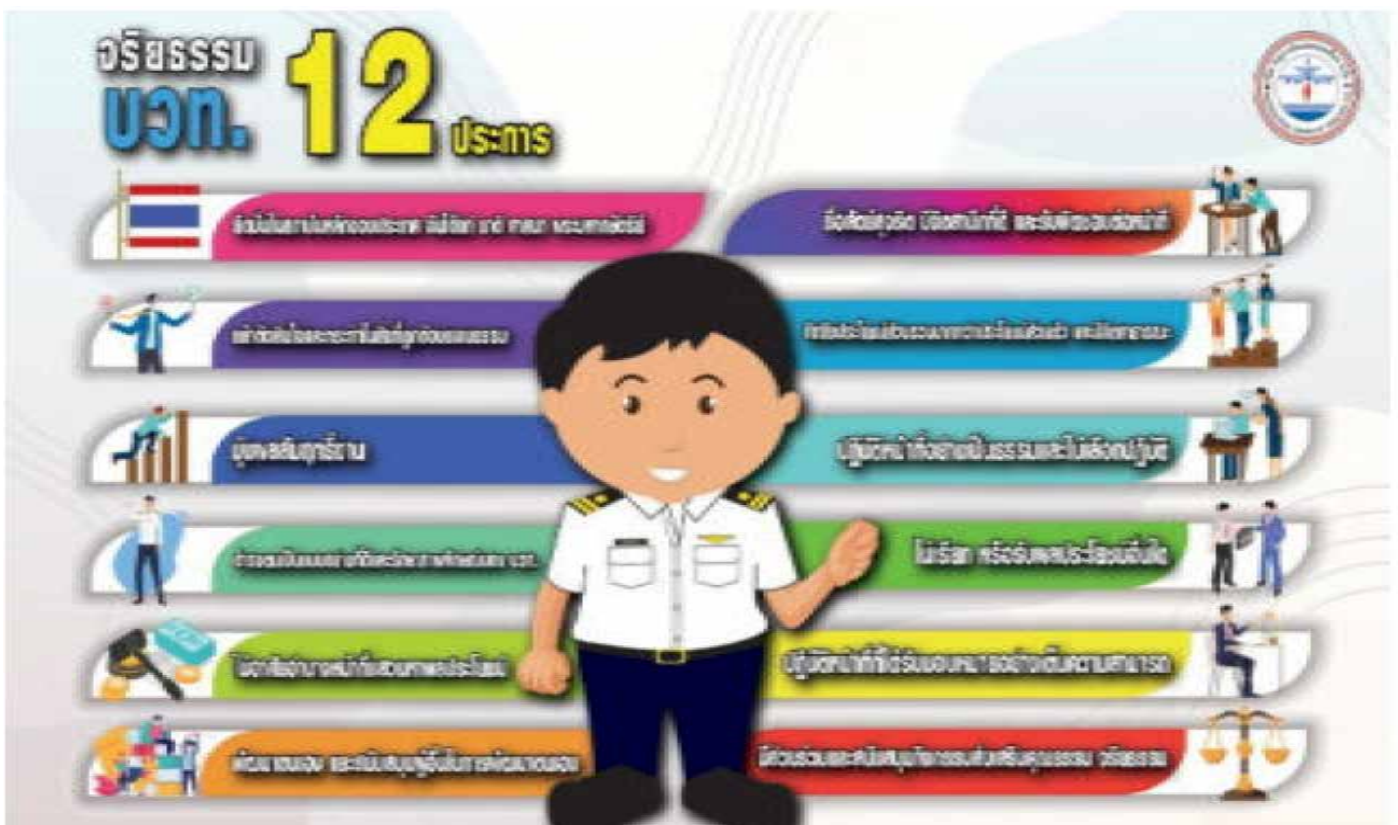
In compliance with the 2019 SEPO's principle and guideline of corporate governance, the corporate governance structure provides top executives for policy management functioning as the Board of Directors and Subcommittee which impose policy and direction of administration with cross functional management. TM/EM; Top Management/Executive Management Meeting's responsibility consist of implementing corporate governance policy and reporting the impact to the corporate board through daily management. Office of Internal Audit, Office of Policy and Strategy, Office of Business Development, Office of the President, Office of Safety and Standards, Finance, Human Resources, Provincial and Facilities Administration, Air Traffic Management and Air Traffic Services Engineering. are the leader in standard and criteria in corporate governance and leadership implementation as well as the coordinator with every part of organization in driving enablers with the 2022 SEPO's State Enterprise Assessment Model and master plan for corporate governance and social responsibility. Furthermore office of the President integrates the outcome to increase corporate operation transparently with long-term value increasing to shareholders dependent on every sectors of stakeholder through competitive capacity and sustainable development with agility.

4. AEROTHAI's Anti-Corruption

AEROTHAI set guideline of accelerating declaration of intent to administration with honesty, no gift policy, corruption risk management plan in business procurement terms and operation plan for prevention and corruption in conformity with National Anti-Corruption Strategy and setting criterias for corruption prevention as follows

- 4.1 Declaration of intent to administration with honesty
- 4.2 No gift policy
- 4.3 Corruption risk management plan in business procurement terms
- 4.4 Operation plan for prevention and corruption in conformity with National Anti-Corruption Strategy
- 4.5 Publicize the information
- 4.6 Convince stakeholders to participate in operation
- 4.7 Strengthen the transparency in procurement
- 4.8 Handle complaints of corruption
- 4.9 Prevent bribery
- 4.10 Prevent conflict of interest
- 4.11 Monitor discretion
- 4.12 Promotion internal and external communication

Enhancing the cultivation of Moral Ethic and Integrity employees' awareness as well as encourages operation-working climate focusing on organizational value implied to establish Moral Promotion Center. Moreover Working Group of Anti-Corruption's obligations are coordinating and cooperating in prevention and suppressing of corruption with external agencies like the National Counter Corruption Commission, Bureau of Corruption Suppression in State Enterprise, State Enterprise Policy Office, Ministry of Transportation, State Enterprise organization and other public sectors through participating in other activities. The Example are Idol Model of Transportation, 2022, Anti-Corruption Day, 2022, Operate on Morality Organization Model, 2022, Volunteer spirit of Transportation, 2022.



5. Assessment of Integrity and transparency of AEROTHAI's operation

The Company has an evaluation of integrity and transparency in its operations by the National Anti-Corruption Office. At a very good level for 8 consecutive years Year 2022 received points 88.46

Integrity and transparency of AEROTHAI's operation is assessed by National Counter Corruption Commission with excellent score level for 8 years. The Corporate has accelerated an integrity and transparency operation for sustainable conveyance.

ITA Operations Communication On the company's website system

ITA Operational Guidelines

- In 2014 AEROTHAI improved handling complaints systematically.
- In 2015 the knowledge Transfer of anti-corruption was set throughout the corporate.
- In 2016 AEROTHAI supported integrity in Human Resource Management.
- In 2017 it constructed the procedure of check and balance an independent agencies.
- In 2018 AEROTHAI increased the channel of communication and public promotion in integrity and transparency throughout every targets.
- In 2019 it established the system of integrity and transparency management by assigning ITA Ambassador to communicate Integrity and Transparency Assessment with every stakeholder. ITA Administration function as the monitor of the whole ITA Assessment completely.
- In 2020 it established the system of integrity and transparency publication on internal and external AEROTHAI website completely.
- In 2021 it established open data integrity and transparency the publication on internal and external AEROTHAI website.
- In 2022 it still established the publication on internal and external AEROTHAI website continuously. ITA Approver represents the top management's responsibility in ITA Assessment to drive Integrity and Transparency operation sustainably.



6. The Acceleration of AEROTHAI's Moral Organization sustainably

AEROTHAI set guideline of accelerating moral organization throughout the corporate under the acceleration plan of Integrity Promotion conforming with Ministry of Culture's framework in promoting and improving of moral organization. Our organization's culture dimension is used to produce social value and straighten economic value of Nation.

Aligning the organization's operation to be moral organization with imposing the working plan of promotion and development to be the model of Ministry of culture's moral organization under the National Master plan in Moral promotion Number 1 (2017-2022), the AEROTHAI set the project in Enterprise Plan year 2022 – 2026. The framework of promoting and developing moral organization divides the implementation plan to 3 phases. The first phase 2020 operation leads to Moral Promotion Organization, the second phase 2021 an operation leads to be Moral Organization and the third phase 2022 an operation leads to the sustainable Moral Model Organization. In 2022 AEROTHAI passed the assessment Model Moral Organization of Ministry of culture's moral organization

Year 2022, continue to be a model moral organization according to the model moral organization criteria of the Department of Religious Affairs Ministry of Culture By reviewing the 2022 moral goals that are consistent with the 4 virtues, namely sufficiency, discipline, honesty, volunteering and the 2022 moral promotion plan, with a total participation of 2,527 management and employees, representing 80.22%.

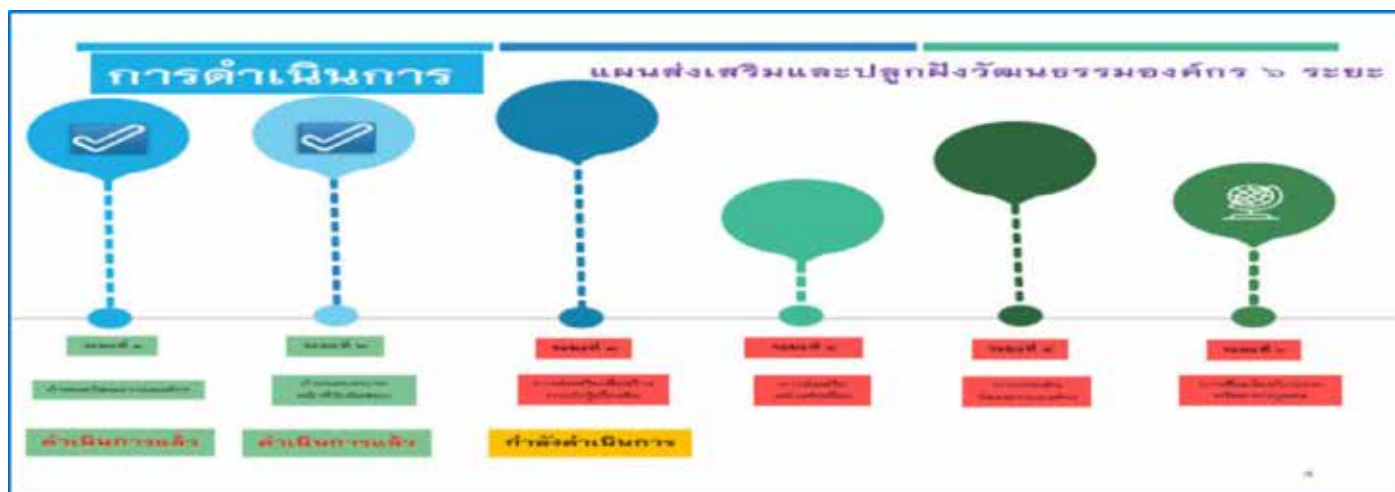


The good deeds that I want to continue to do to create a sustainable culture of the body are:

Savings on utilities of the company Compliance with the rules, regulations, and regulations of the Company Performing duties with honesty and participation in public benefit activities

7. Driving the corporate culture for the sustainability of the company

The company increases work efficiency by using digital technology. In addition to the organization's adaptation during the epidemic of coronavirus disease (COVID-19) in using digital technology as a tool of communication more from the company, the company has formulated a strategy to instill employee behavior. That is consistent with the corporate culture (AEROTeam) has a good relationship in the organization. and have a good experience in working (Employee Experience) with a plan to promote Employee Engagement & Employee Experience, encouraging employees to have behaviors that match the organizational culture (AEROTeam) and corporate values Age, gender and job differences are managed (Merging Differences across Generations, Genders and Jobs). Human resource change management is appropriate. Work plan and promotion of ethics, ethics and good governance (HR Governance) in the human resource management system of the Company. The implementation of the corporate culture promotion plan is divided into 6 phases.



Appointment of committees and working groups to promote and instill corporate culture Pushing for the promotion of culture by continually organizing activities via Zoom Meeting, Facebook, etc.



- ผวท. พบพนักงาน

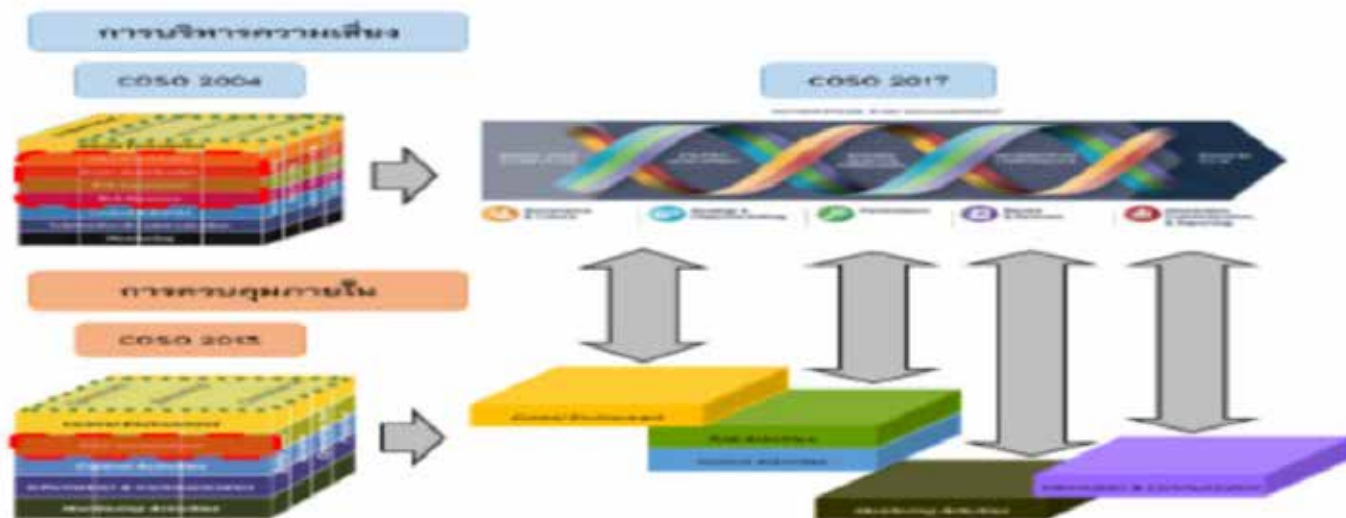


- กิจกรรมกีฬา



Risk Management and Internal Control and Company Sustainability

The Company attaches great importance to risk management and internal controls to support the management and achievement of the Company's goals. to meet the standards by focusing on responsibility (Accountability) and transparency (Transparency) and can increase the opportunity to create value for the organization. There is a risk management plan that is consistent with the COSO risk management practice guidelines.



from considering the risk factors that result in risk factors and specify the level of importance of each risk cause and establishing activities/measures to control risks In order to know the important issues for monitoring and risk management services, in 2022 the Company has defined 4 risks as follows:



Strategic Risk



Operational Risk



Financial Risk



Compliance Risk

The Company communicates and reports on risk management and internal control performance through the Risk Management Committee meeting system. Risk Management Subcommittee by using information technology to support the assignment system, data reception, data transmission, which is the company's official electronic system such as the Correspondence System, Meeting System, Document System, etc. for the communication of risk information for knowledge. or public relations measures, asking for cooperation from employees using communication channels via intranet web pages or through various application channels such as Facebook, Line, Twitter, etc. In addition, the Company Risk and internal control performance are reported in the annual report on an annual basis. including the company There is also a policy to use technology to support important performance reporting through the AEROTHAI DIGITIZATION system and develop an Early Warning system in the future to support important decision making in timely operations



Practice guidelines Good Corporate Governance Policy risk management; and Compliance with laws and regulations

The company has prepared guidelines for practice. Good Corporate Governance Policy risk management and compliance with laws and regulations (Guideline on Governance Risk Compliance: GRC) so that the Company overall management in terms of corporate governance The implementation of the strategy and being able to achieve results according to the goals set by the Company, as well as meeting the reasonable expectations of the stakeholders. This is a system that involves linking the management system with work systems, processes, personnel, information and technology, which requires a selection of methods of control under the law that complies with regulations. Code of Conduct and related practices. The company has adopted the GRC policy to practice that supports the implementation of the GRC Compliance Model, which consists of 4 components as follows:

- 1.1 Learn : Organizational Context Analysis corporate culture and the expectations of the stakeholders In order to fully understand the goals and strategies of the company.
- 1.2 Align : Strategic planning that goes in the same direction as the organization's goals and the implementation of the plan and control in the same direction as the strategy through a decision that considers the value of Analyze the internal and external environment Risk Management and Law Regulations related to the company
- 1.3 Perform : Driving the Company's operations and preventing situations that do not follow Goals through both offensive and defensive control.
- 1.4 Review: Determining activities to monitor and improve the design and efficiency of All operations and controls of the Company.

Operational safety and security

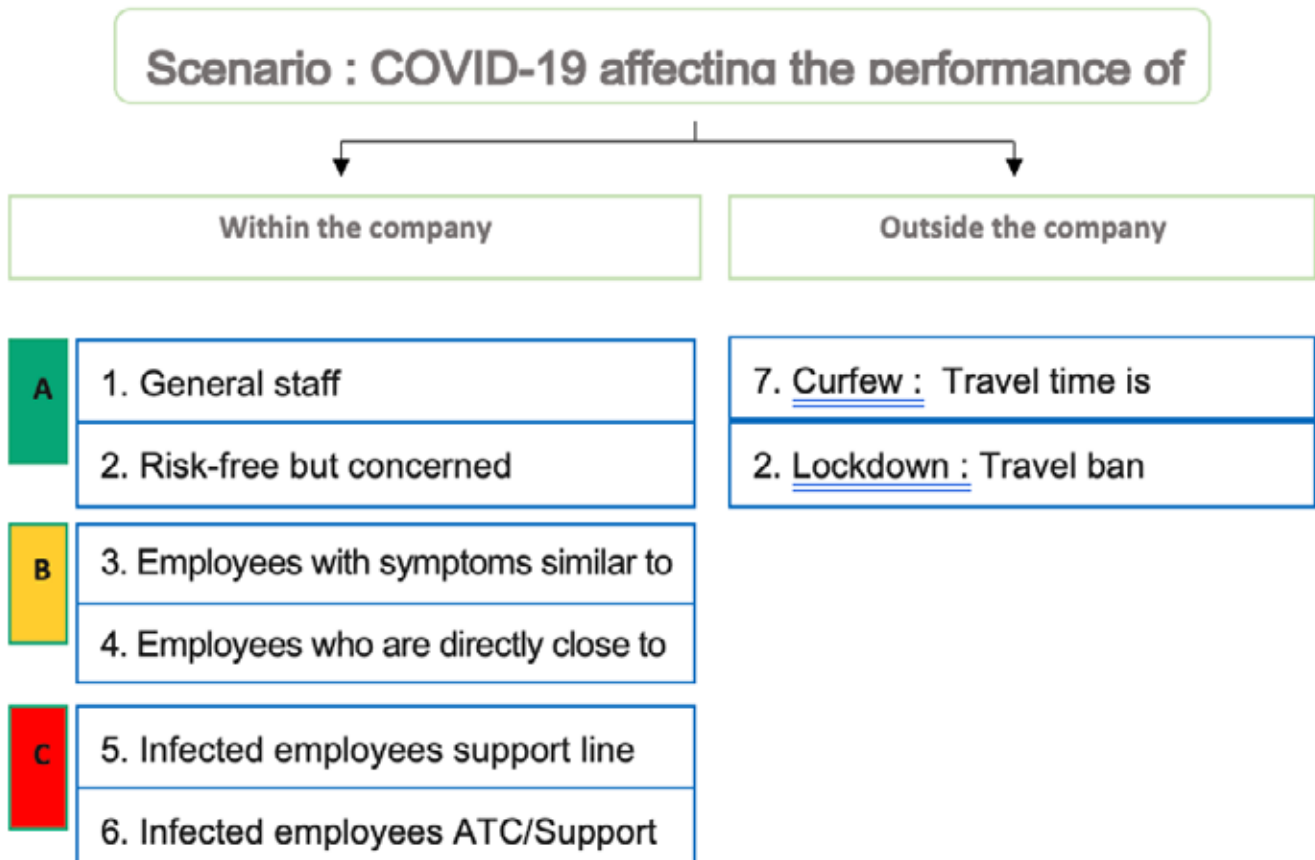
Business continuity management

A significant risk that arises and greatly affects the Company's business operations is the impact of the coronavirus disease (COVID-19) crisis affecting the number of flights operated by the Company. and the financial situation, the Company has measures to monitor Prevent outbreaks in the organization Including finding ways to continually review financial measures. In 2022, the company has reviewed the announcement regarding the appointment of a working group to prepare a business continuity plan in Thung Maha Mek area. (By repealing the original announcement of 2019) (Announcement No. Cover 25/2565 dated January 20, 2022) for the purpose of business continuity management (BCM) and operational efficiency. Comply with the requirements of industrial product standards ISO22301/TIS 22301 There is a business continuity plan (BCP) in the Thung Maha Mek area. (Headquarters of Aeronautical Radio of Thailand Co., Ltd.) to be in an orderly manner. and prepare for disaster/crisis situations affecting air traffic services and efficient air navigation information services and develop a plan to cover the diversity of emergency/crisis situations today.

The Company has continually implemented measures to support the epidemic situation of COVID-19 as follows:

- 2.1 Guidelines/measures/support plans Specific agencies/specific areas such as operating agencies engineering department Supporting and Administrative Units
- 2.2 Guidelines for working within the accommodation (Work From Home) of employees
- 2.3 Guidelines for slope in the epidemic situation
- 2.4 Criteria and procedure for reimbursement of infection detection fees
- 2.5 Rapid Antigen Test Guidelines
- 2.6 Communication between situations

The Company has prepared an updated COVID-19 situation response plan as of September 2022 (for a guideline in all areas) with the objective of being a guideline for both internal and external operators. Relevant external parties to comply with laws and regulations and the company Able to operate continuously under critical situations as well as building trust in management and good image for stakeholders. by determining the guidelines for the implementation of the plan to support the situation has defined the situation according to the risk group into 3 groups:



Note : Case A and B include employees working on shifts and not no shifts.

Note : The plan covers only the outbreak situation that affects the work of employees. To be used as guideline for managing the situation by excluding other long-term effects such as long-term finance. Personnel management.

Procedures for each situation are defined according to the group of employees and the level of severity. In practice, the company Establish the COVID-19 Situation Administration as the central unit responsible for in operation The Company's operations has given importance to the laws/regulations/regulations/ guidelines related to the Communicable Disease Act Emergency Decree on Public Administration in Emergency Situations Order of the Center for Covid-19 Situation Administration and Guidelines of the Civil Aviation Authority of Thailand.

The Company and Sustainable Development (Disclosure 102-19, 102-20, 102-22)

The Company attaches great importance to responding to the needs and expectations of all stakeholder groups, and focus on the implementation of the organization's mission in line with the Global Sustainable Development Goals (SDBs), which covers the three dimensions of economic, social and environmental dimensions. To reduce risks and business impacts including leading to improvement of work processes in accordance with international guidelines

The Company operates on sustainable development through the Sustainable Development Working Group, which has the President to approve the operating results and assign policies through the Executive Management Meeting (EMM).

1. Sustainable Development Management Structure (Disclosure 102-19, 102-20, 102-22)

Board of Directors and various committees are responsible for managing and monitoring operations according to the company's policies, strategic plans, strategies and goals, indicators, including the executives performing duties for the benefit of the Company, and shareholders which has a clear management structure There is a balance and can be checked. The roles and responsibilities of the Board of Directors and the management are separated. by the Board of Directors Appoint a committee to help screen 9 important works consisting of Board of Directors Audit Committee Risk Management Committee Remuneration Committee Law and Order Committee Innovation Management Committee Corporate Governance Committee and Corporate Social Responsibility Digital Technology Development Board Air Navigation Service Technology Development Committee and have independent directors Conducted by the Managing Director - the President of the Company To be the top executive for the development of the organization towards sustainability in the long term

The company has considered the structure of responsible persons for sustainable development operations. The President has approved the appointment of the Sustainable Development Working Group on August 23, 2022 to be responsible for the operation under the responsibility of the Executive Management Meeting (EMM) which has directors. The President is the chairman by the Sustainable Development Working Group It is responsible for formulating operational guidelines and driving the Company's sustainable development results. To be in line with the performance evaluation criteria of state enterprises (State Enterprise Assessment Model: SE-AM) year 2022 of the Office of the State Enterprise Policy Office. Ministry of Finance The details are as follows.

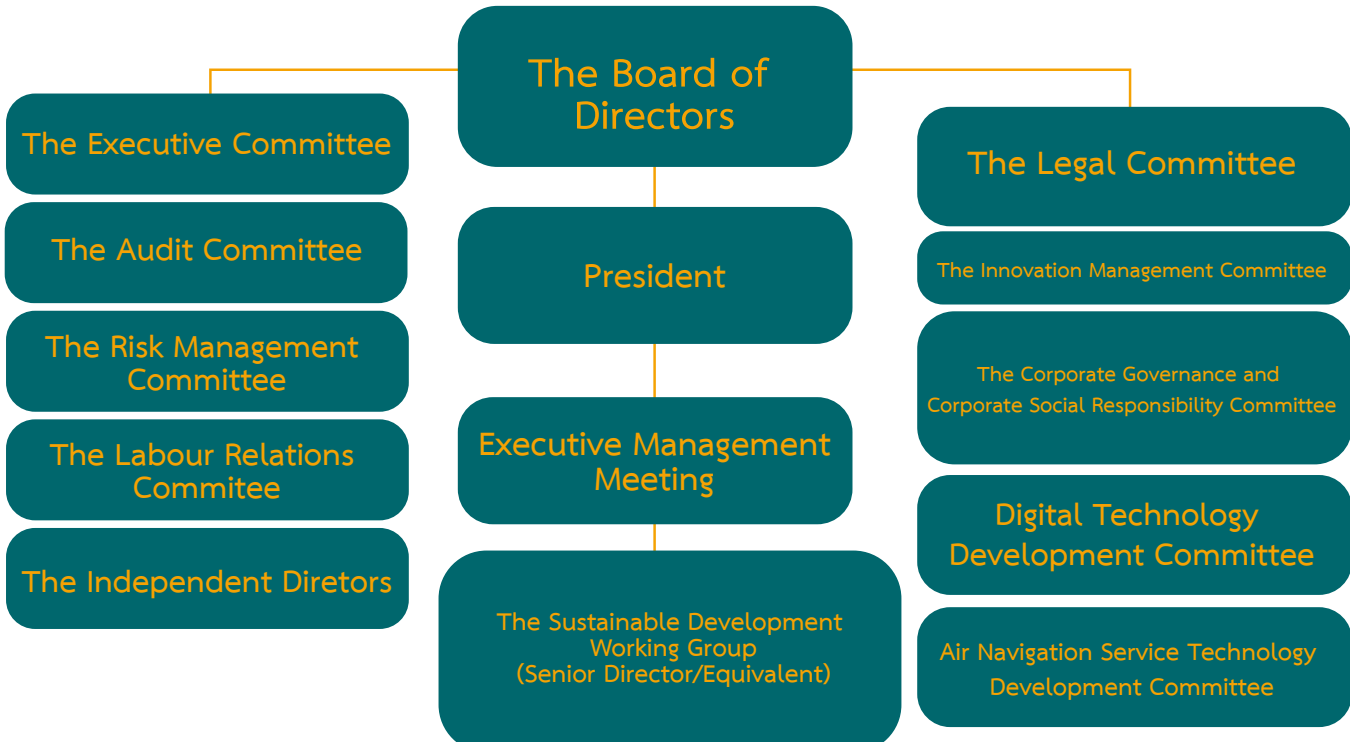
Corporate Sustainable Development Working Group

The company has assigned a working group to determine the operational guidelines and drive the results of the company's sustainable development operations. Aeronautical Radio of Thailand Co., Ltd. in accordance with the performance assessment criteria of state enterprises (SE-AM) year 2022 of the State Enterprise Policy Office. Ministry of Finance By assigning workers as follows:

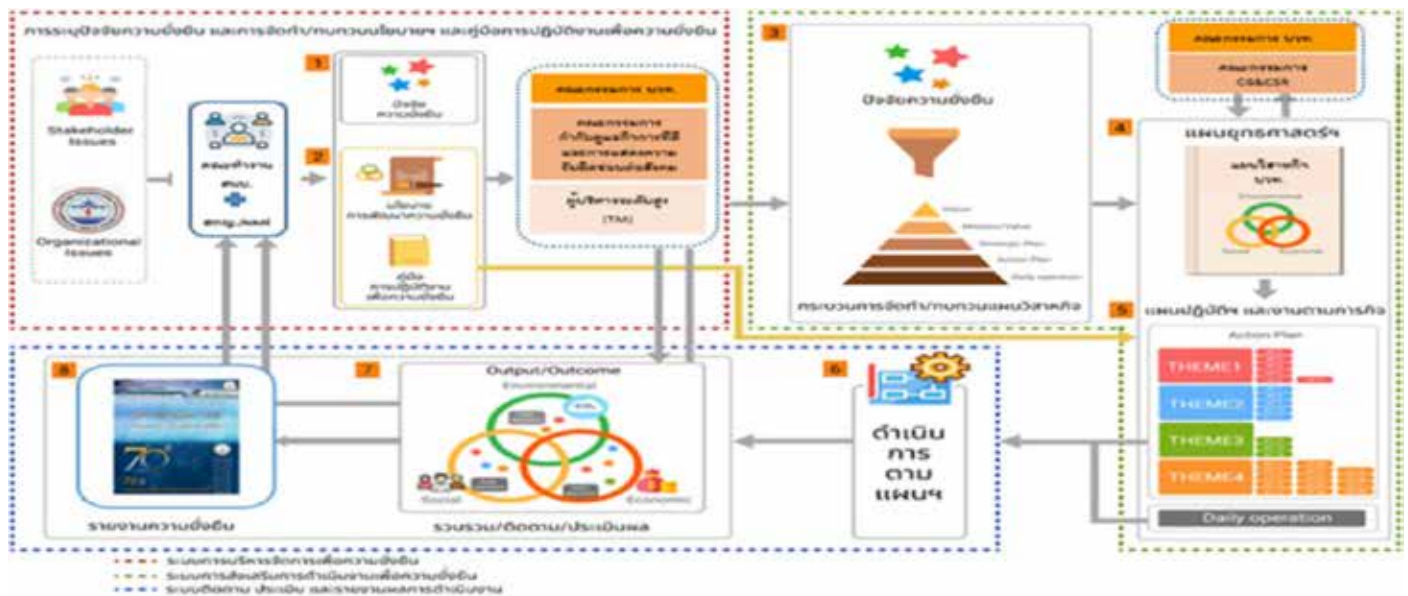
1. Vice President (Office of Policy and Strategy)	Working group consultant
2. Senior Director, Policy and Strategy Planning	Working group leader Department
3. Director attached to Office of the President,	Worker group leader Senior Director Level
4. Senior Director, Air Traffic Management Network Bureau	Worker
5. Senior Director, Standards and Safety Bureau	Worker
6. Senior Director, Air Traffic Services Engineering Bureau	Worker
7. Senior Director, Air Traffic Services Engineering	Worker Support Bureau
8. Senior Director, Information Technology Bureau	Worker
9. Senior Director, Corporate Communication and	Worker Relations Bureau
10. Senior Director, General Administration Bureau	Worker
11. Senior Director, attached to Office of the Vice President	Worker (Office of the President)
12. Senior Director, Human Resource Management	Worker and Quality of Work Life Bureau
13. Senior Director, Human Resource Development	Worker and Learning Promotion Bureau
14. Senior Director, Facilities Management Bureau	Worker

By allowing the working group to have a meeting and summarize the operating results to present the results to Meeting of high-level executives (EMM) to consider for acknowledgment and/or to propose to the Board of Directors (Disclosure 102-18, 102-20, 102-22 102-23).

Sustainable development structure and responsible person structure
Sustainable Development of the Company Aeronautical Radio of Thailand Co., Ltd.



2. The Company's Sustainable Development Operations Framework



The Company's Sustainable Development Operations Connected to various operations, consisting of stakeholders and the preparation of corporate strategic plans. It analyzes sustainability factors in the enterprise plan review process in line with the United Nations Sustainability Goals in relation to air transport and air navigation services, covering economic, social and environmental dimensions.

3. Sustainable Development Policies and Practices

The Company announced the Sustainable Development Policy on November 3, 2022 and the Company approved the Sustainability Development Manual as a guideline on September 30, 2022 under the integration of sufficiency economy principles. Criteria for evaluating state enterprise performance of the State Enterprise Policy Office International standards for sustainability and social and environmental responsibility in accordance with the United Nations (UN) ISO 26000 as well as the International Civil Aviation Organization (ICAO) International Air Navigation Service Standards to guide the operations of the United Nations. The organization covers economic, social and environmental dimensions. by formulating policies and guidelines for sustainable development (Disclosure 102-16)as follows:

“The management of AEROTHAI has aimed to create quality navigation services and other assigned services to induce the balance of sustainable development in terms of economy, society and environment”

4. Guidelines for the implementation of the Sustainable Development Policy consist of:

- 4.1 Comply with relevant laws, regulations and international standards
- 4.2 Operate the business by taking into account the balance of economy, society and environment.
Including stakeholders. All parties in the operation for sustainable growth of the organization.
- 4.3 Raise awareness of the Company’s sustainability management policy for partners, customers and stakeholders as well as promote the application of sustainable development guidelines to reduce the impact from operations throughout the value chain. To build confidence of partners, customers and all groups of stakeholders.
- 4.4 Continuously promote the development of innovation and technology in operations. using core competencies in the business aspect of the organization to create sustainable benefits of the organization, society, environment and improve the quality of life of the community leading to the sustainability of the community
- 4.5 Adhering to the principle of being a good civilian of society in working with honesty, integrity, morality and ethics. Conduct business openly, transparently, and set a good example in creating behaviors that lead to culture. Sustainable business operations

5. Company’s strategy towards sustainability

AEROTHAI currently employs the Corporate Plan of 2022-2026. This enterprise plan has prescribed strategic issues covering the following four dimensions to ensure the performance creates achievements leading to corporate sustainability are as follows :

Providing Safe and efficient Air Navigation Services AEROTHAI Servicemark	Providing comprehensive, adequate, equitable air navigation services, along with the quality of air navigation services with safety standards. Achieve goals that exceed the expectations of service users. and focus on increasing the capacity to support including other management in order to optimize flights with the most cost-effective. In addition, it also focuses on the development of aviation services to help reduce the impact on the environment significantly.
Developing Employees Professionalism Professionals	The personnel of the organization are those who have knowledge and skills. expertise Efficiently respond to the needs of stakeholders acceptable Comparable with leading organizations in the midst of an appropriate corporate culture and atmosphere and excellent quality of life It is an organization that is the first choice of talented and good people.
Becoming High performance Organization High Performance Organization : HPO	Is a high performance organization accepted Recognized/praised by the aviation community at national, regional and international levels for sustainable growth with quality management throughout the organization Manage change effectively good governance system Develop innovation based on digital technology including efficient and balanced financial management and focus on continuous improvement in order to enhance the ability to operate proceeding to the international level create satisfaction for service users and management of relationship building with stakeholders to achieve sustainable corporate goals.

Improving National Competitiveness And Creating Value for the Aviation Industry



Value for National Competitiveness and Aviation Industry


It is the main mechanism for developing the potential of the country, and create value for the aviation business both in terms of building capacity in the quality of air transport systems that support tourism business and in other related fields taking into account national interests and economic security and pushing regional air navigation services to be linked and consistent, integrated which are goals and benefits that will be shared To support the upgrade of the country's air navigation service quality and the country's overall competitiveness in a sustainable way.

6. Integration of organizational development with the Sustainable Development Goals (SDGs Integration)



Company Sustainability Development Manual has determined important factors that make the company Sustainable and is analyzed as an input factor in the preparation of the Company's strategic plan. in the Enterprise Plan 2022-2026, which defines key factors in accordance with the sustainability goals according to the SDGs

Sustainability Factor	Environmental Issues	KPA	Strategic Objectives	SDGs Target
1. Create of good experiences and services for clients	<ul style="list-style-type: none"> Expectation and satisfaction of service users. Aviation Dangerous Factors A new type of air-craft Remotely Operated Aerodrome Air Traffic Services (RATS) Trajectory-Based Operation (TBO) System Wide Information Management (SWIM) Concept Total Airport Management (TAM) Air Navigation Act (No. 14) B.E. 2562 National Airspace Master Plan GANP 6th edition ASEAN ANS Master Plan Flight path structure and airspace management. Innovation development and implementation. 	1. Implementation of Standard 2. Safety 3. Security 4. Capacity 5. Efficiency 6. Global Interoperability 13 Customer Engagement	SO1 To provide safe and secured services in all phases of flight. SO2 To increase capacity and efficiency in air navigation services. SO5 To improve corporate performance through Total Quality Management (TQM) along with change management and increase customers and stakeholders' satisfaction.	 SDG9 Calls for building resilient and sustainable infrastructure and promotes inclusive and sustainable industrialization

Sustainability Factor	Environmental Issues	KPA	Strategic Objectives	SDGs Target
2. Reduce environmental impact	<ul style="list-style-type: none"> Reduction of greenhouse gas emissions in the domestic aviation system in Thailand and international environmental sound effects 	1. Environment	<p>SO1 To provide safe and secured services in all phases of flight.</p> <p>SO2 To increase capacity and efficiency in air navigation services.</p> <p>SO5 To improve corporate performance through Total Quality Management (TQM) along with change management and increase customers and stakeholders' satisfaction.</p>	 <p>SDG 13</p> <p>Take urgent action to combat climate change and its impact. (Seeks to implement the United Nations Framework Convention on Climate Change commitment to achieving a climate-neutral world by mid-century to limit global warming to well</p>
3. Human Resource development	<ul style="list-style-type: none"> Aviation personnel development according to Thailand's 15-year Air Transport Plan (2019-2033) Human Resources Management Employee's corporate commitment. Employee retirement. Competency of employees and management. Talent Management 	1. Competency 2. Productivity 3. Employer Engagement	<p>SO3 To improve employee competency and human resource management in order to achieve company's vision and sustainable growth.</p> <p>SO4 To improve workplace environment and increase employee engagement</p>	 <p>SDG8</p> <p>Promote inclusive and sustainable economic growth, employment and decent work for all.</p>

Sustainability Factor	Environmental Issues	KPA	Strategic Objectives	SDGs Target
4. Financial Flexibility	<ul style="list-style-type: none"> Air traffic volume and revenue from air navigation services Financial situation and corporate credit rating Employee expenses 	11. Corporate Performance 16. Cost Effectiveness	SO5 To improve corporate performance through Total Quality Management (TQM) along with change management and increase customers and stakeholders' satisfaction. SO8 To maintain air navigation charges that is fair, transparent, and competitive through efficient management of organizational budget and finance.	 SDG8 Promote inclusive and sustainable economic growth, employment and decent work for all.
5. Information Technology and Decision Support System	<ul style="list-style-type: none"> Government policies on information technology and communication or digital. Acts and laws. Related to information and communication technology. Adoption of digital technology. To increase operational efficiency and reduce corporate costs 	15. Digital Transformation Knowledge Management & Innovation	SO7 To be an organization of innovation with the foundation of knowledge management and digital technology.	 SDG9 Calls for building resilient and sustainable infrastructure and promotes inclusive and sustainable industrialization.



Sustainability Factor	Environmental Issues	KPA	Strategic Objectives	SDGs Target
6. Good Corporate Governance	<ul style="list-style-type: none"> Summary of operating results according to the indicators of the enterprise plan/operation according to plans and projects. 	14 Corporate Government & Corporate Social Responsibility	SO6 To enhance Good Corporate Governance and Corporate Social and Environmental Responsibility according to international standards.	 <p>SDG16 Calls for peaceful and inclusive societies based on respect for human right, protection of the most vulnerable, the role of law and good governance at all levels.</p>
7. Social Responsibility Mindsets	<ul style="list-style-type: none"> Summary of operating results according to the indicators of the enterprise plan/operation according to plans and projects. 	14 Corporate Government & Corporate Social Responsibility	SO6 To enhance Good Corporate Governance and Corporate Social and Environmental Responsibility according to international standards.	 <p>SDG9 Calls for building resilient and sustainable infrastructure and promotes inclusive and sustainable industrialization</p>

Note: Operations under the inputs and SDGs targets are in accordance with the enterprise plan. 2022-2026 of the Company

7. The company has analyzed strategic challenges affecting corporate sustainability.
to be an important import factor in the preparation of enterprise plans 2022-2026 of
the Company

- 7.1 World crises, including epidemics, natural disasters, economic crises political crises and emergency situations, as well as fluctuations in air traffic Uncertainties with the aviation industry affecting the flight volume crisis Air Navigation Service Mission and revenue from services, air navigation or financial crises affect the survival and corporate sustainability as a challenge to Adapting and driving the organization to be able to overcome various crises sustainably.
- 7.2 Developing the capacity of the country's air traffic system, airport system and air traffic management that need to be continually developed and integrated to keep up with the growing air traffic volume as well as maintain/develop the potential of air navigation services to be safe effective and has continuity in all environments/situations, ready to support when the aviation situation affected by the COVID-19 crisis returns to normal
- 7.3 The changing competitive context The emergence of a multinational air navigation service organization (Manufacturer / leading large technology organization) which has many advantages or international air carriers and the development of Air transport technologies such as the Unmanned Aircraft System (UAS), which result in the need for management and Providing air traffic services that are in addition to the current aviation context Unmanned Aircraft Traffic Management (UTM) including the Air Navigation Act (No. 14), 2019. More competitive and open opportunities for new service providers who may come and compete for the business of the organization to operate in the future.
- 7.4 New aviation laws/regulations/requirements/standards, especially the Air Navigation Act (No. 14), 2019 As a result, the organization has to adapt to comply with and keep up with the changes in aviation laws and standards of the country. for the standardization and sustainability of the organization

sustainability development operations in economic, social and environmental dimensions

1. Sustainability factor, Economic dimension

1.1 Safety of air navigation services

The company attaches great importance to the development of safety standards and quality of air navigation services. by developing both air traffic service personnel and engineering personnel to continuously support air traffic services The implementation of safety standards and quality in the main mission of the organization is to build confidence in the stakeholders and enhance the country's economic competitiveness as well.

in the operation of the company Has determined that the number of accidents (Number of Accidents) is an important indicator of the evaluation of the Company's performance. in preparing an evaluation memorandum with the Ministry of Finance annually Throughout the past period, there were no statistics on accidents from air traffic services as follows:

(target 0.223 times / hundred thousand flights)

Indicators	performance (Unit number of times per hundred thousand flights)					
	2017	2018	2019	2020	2021	2022
Number of Accidents	0	0	0	0	0	0

Note : Information as of September 26, 2022

1.2 Efficient investment in infrastructure development projects

Air Navigation Service which is the main mission of the company It is one mechanism that strengthens the air transport in terms of stability Trust in the journey of passengers around the world and enhancing the country's economic potential. The Company, as the air traffic control agency of Thailand Therefore, we have focused on quality and operational standards for the past 74 years.

The company has developed systems, equipment, personnel and processes in providing air navigation services. both air traffic management and air traffic service support equipment such as communication systems, air navigation assistance systems and aircraft tracking system or CNS (Communication Navigation and Surveillance).

(1) Develop the Multilateration (MLAT) Systems at Chiang Mai and Phuket Airports

(Implementing Years 2021-2025 with investment budget of Baht 237.52 million and operating budget of Bath 0.72 million)

From the transition of air traffic management technology based on the new ICAO concept of air traffic management, the technology of aviation navigation has been changed from Ground-Based Technology to Space-Based Technology. Along with the development of technology in related areas of Air Traffic Service (ATS), Airspace Management (ASM), and Air Traffic Flow Management (ATFM), which increases regional competitiveness. Therefore, to maintain its potential as an aviation hub in Southeast Asia, AEROTHAI needs to develop an air navigation service infrastructure. To modify air traffic management methods to support the preparation of airspace development to accommodate changes in air traffic volume and link the air route network with countries that will develop according to ICAO's concept.

Objectives and goals: To provide Thailand with potential and competitive air navigation service system in line with the standards and changes of current world aviation technology. Reduce current limitations and barriers to operations and meet the needs of stakeholders.

AEROTHAI has reviewed the operating area to be suitable for the development plan of the two airports and has already obtained the area from the airport. Currently, the details and technical specifications of the equipment have been completed. It expects that the contract will sign in 2023,



MLAT system installation area at Chiang Mai Airport

(2) Procurement and Installation of Network Equipment to Support Multilateration (MLAT) Systems at Chiang Mai and Phuket Airports Implementing Years 2021-2025 with investment budget of Baht 37.20 million and operating budget of Bath 1.20 million)

To increase the efficiency of ground surveillance to be appropriate and consistent with the density of aircraft at Chiang Mai and Phuket airports by installing Multilateration (MLAT) systems, which requires a communication network to support an efficient air traffic service. AEROTHAI has reviewed the operational areas to be suitable for the development plans of the two airports. In 2020, AEROTHAI completed the equipment’s details and technical requirements following the MLAT system’s installation location. Currently, it is awaiting the procurement of MLAT systems to procure and install a communication network to support the MLAT systems accordingly. It expects to complete in 2025.



MLAT system installation area at Phuket Airport

(3) Improve the efficiency of Doppler Very High Frequency Omni-directional Range/Distance Measuring Equipment (DVOR/DME) at Lampang, Narathiwat, Phetchabun, Roi Et, Nakhon Si Thammarat, and Surat Thani Airports (Implementing Years 2021-2024 with investment budget of Baht 147.47 million)

DVOR/DME systems that have exceeded 15 years of usage show signs of degraded performance and need additional emergency corrective maintenance. AEROTHAI needs to acquire new DVOR/DME systems at Lampang, Narathiwat, Phetchabun, Roi Et, Nakhon Si Thammarat, and Surat Thani Airports to replace the existing aged systems. In 2019, AEROTHAI was procuring, but no company has passed the technical qualification. Currently, a new procurement process has been started. It expects that the contract will sign in 2023, and the installation/testing of the system will complete in 2024.



DVOR/DME System

(4) The Air navigation services at U-Tapao Airport (Implementing Years 2020-2026 with investment budget of Baht 1,256.00 million)

According to the Cabinet, it approved the Development Project of U-Tapao Airport and Eastern Aviation City on October 30, 2018 (the 8th/2018), to develop U-Tapao Airport as the third major commercial international airport in Bangkok. AEROTHAI has been assigned as an Air Navigation Service Unit at U-Tapao Airport. Therefore, AEROTHAI has to undertake a project to prepare air navigation services at U-Tapao Airport, aiming to open-air navigation and related services in 2025.



AEROTHAI has prepared a document analysis of the U-Tapao Airport project, which covers the details of the project and the information supporting the feasibility analysis of the project—presented to the Board of Directors on March 31, 2022 (the 3rd/2022), which has approved the budget and a document analysis of the U-Tapao Airport project. Later, it was presented to the Ministry of Transport and the Office of the National Economic and Social Development Council for approval of the project and the budget of the U-Tapao Airport project to the Cabinet. Currently, it is in the process of considering and approving the project and budget.

เอกสารการวิเคราะห์โครงการจัดเตรียมความพร้อมเพื่อให้บริการการเดินอากาศ ณ สนามบินอู่ตะเภา

1.3 Development of the Unmanned Aircraft System Ecosystem Increase business opportunities in the future

The Company pushes for the development of the Unmanned Aircraft System Ecosystem in ECC promotes new industrial drives Connecting the infrastructure communication system in the Eastern Special Development Zone (EEC) project, in accordance with the resolution of the Eastern Special Development Zone Administration Subcommittee (EEC), which the Eastern Special Development Zone Administration Subcommittee has approved the Aeronautical Radio of Thailand Unmanned Aircraft System Ecosystem project.

ขอบเขตการดำเนินการ UAS Ecosystem ในพื้นที่สามจังหวัดของ EEC



- (1) UAS Traffic Management (UTM) consist of UTM/ATM/STM Airspace and User Prerequisite/ One Stop Services.
- (2) Approved Training Organization (ATO) consist of UAS Pilot Training and UAS Pilot Instructor.
- (3) UAS Services consist of UAS Package Delivery/ Air Mobility Services, Emergency/Medical Transport and Drone Port.
- (4) Maintenance, Repair and Operation (MRC) consist of Manufacturing, Maintenance, Repair and Operation, Standard Approval, and Modification.
- (5) UAS Centre consist of Software and Application Development, Regulatory Sandbox, Laboratory & Quality Infrastructure and UAS Startup Centre.

AEROTHAI has started a project to develop an air traffic management system for unmanned aircraft. Drive UAS Traffic Management: (UTM) in the Bangkok Control Zone, a 35-mile radius around Bangkok (or approximately 65 kilometers from Don Mueang Airport) with the “OpenSky” application, which is open to operators of unmanned aerial vehicles or drones. Have tried the application to get permission before flying the drone. in the pilot area

In the operation of the company A Memorandum of Understanding (MOU) was signed for an Air Traffic Management Pilot Project for Unmanned Aerial Vehicles. In the Wangchan Valley area between PTT Public Company Limited (PTT) Aeronautical Radio of Thailand Company Limited and AI and Robotics Ventures Company Limited (ARV) to develop and test data link.

In ARV’s UAS Flight Operations and Fleet Management application and platform with the Unmanned Aircraft System Traffic Management (UTM) developed by The Company, in collaboration with the Civil Aviation Authority of Thailand (CAAT) and DELV AEROSPACE Co., Ltd., will help increase the efficiency of the UTM Ecosystem to be flexible for the use of all airspace users. as well as being safe and efficient using the Wang Chan Valley project as an operational area and can expand its use to other areas both domestically and internationally This will help determine the relevant guidelines and regulations that will support the industry of the future (New S-Curve) for continuous development. Support the economic expansion of Thailand to grow sustainably.

1.4 The Outstanding Performance

The Office of Business Development is a business unit providing related services concerning the air navigation service of the Aeronautical Radio of Thailand (AEROTHAI). The important role of related services providers is to manage our resources by utilizing our expertise which has been sustainably developed. Our policy is to extend our services to others, such as aviation organizations and other sectors, to generate revenue and compensate for the air traffic service's expenses. Another role is to be strategic arms to continue the improvement of air traffic

service in other countries and support the increasing traffic growth within this region. It is responsible for providing the design, development, manufacture, maintenance, training, and consultancy of air navigation and related services. For the fiscal year of 2022, AEROTHAI's business performances are as follows:

- (1) Supply, Delivery, Installation, and Commissioning of Communication, Navigation and Surveillance/Air Traffic Management (CNS/ATM), Meteorological Equipment & Other Related Goods and Services at Gautam Buddha Airport (GBA Project) for Civil Aviation Authority of Nepal (CAAN) during 2019 – 2022



- (2) Provision and installation of the additional radio communication command system for Naval Communications and Information Technology Department, Royal Thai Navy during 2021 – 2022
- (3) Provision of Automatic Message Handling System (AMHS) for Directorate of Communications and Electronics, Royal Thai Air Force during 2021 – 2022

(1) Developed the 3-Dimension Aerodrome Simulator for air traffic service with WM Simulator Co, Ltd

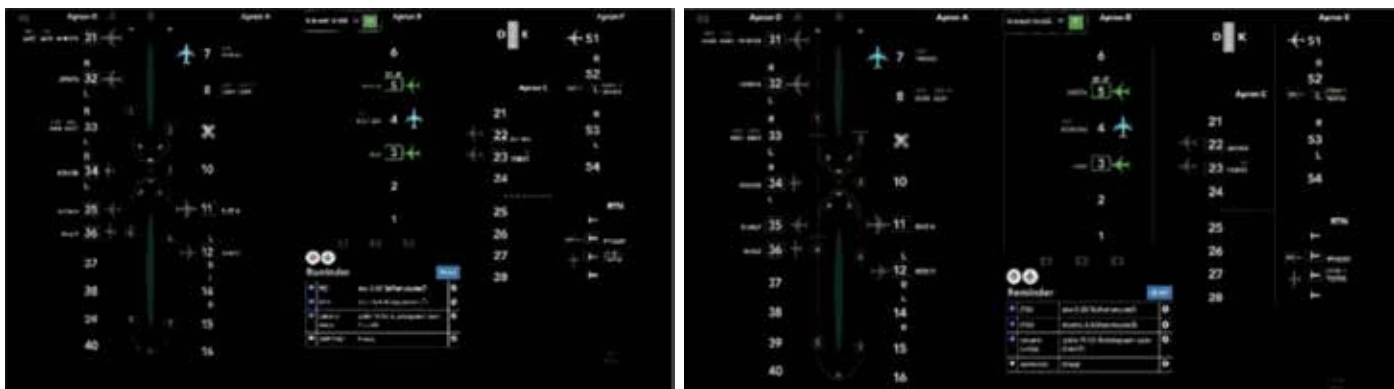


(2) Developed the radio control unit operated in radio communication system and related system for air traffic service with IFZ Innovative Co, Ltd.



(3) Also, AEROTHAI has developed Mission Critical Communications Solutions (MCCS) over 4G/ 5G for commercial use with Advance Wireless Network Co, Ltd. For innovation, AEROTHAI has designed and developed programs and applications for in-house use. First, the e-Ground Planning Board program is to facilitate the air traffic controllers for ground operation by showing the parking area and aircraft position. This program can arrange the operation plan in advance and send the alert message such as blind spot areas, bottleneck areas around taxiways, and the condition or limitation of push back for air traffic control centers and airports. Other applications operated via radio communication, are JTrack and Telematics & Fleet Management System for using at the airports.





รูปภาพ e-Ground Planning Board



ระบบ JTrack และระบบติดตาม Telematics & Fleet Management System

1.6 Fair Trade Competition

The Office of Business Development conducts fair trade competitions under the trade competition law and adheres to good governance by performing the assigned tasks at full efficiency, promoting fair business operations, and preventing unfair business practices.

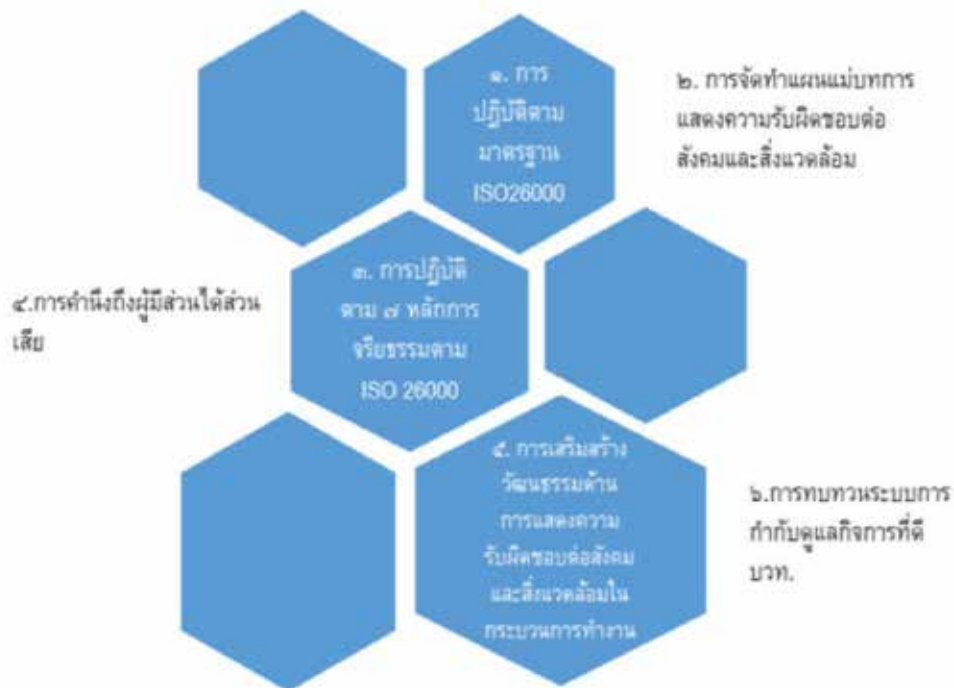
1.7 Advertise products and services through digital media

AEROTHAI has operated business not in the traditional way but also by adapting itself to the new circumstance by emphasizing the expansion of the market, increasing the potential of technology, focusing on digital marketing as well as using the easy-to-access and easy-to-understand content to attract customers/ users' interest and bring them to AEROTHAI. AEROTHAI has published the products/ services information for building the understanding and educating the use of products and services through the AEROTHAI website: www.aerothai.co.th/business and Facebook group: Airspace Users – ANSP (Thailand).

2. Sustainability factor, social and environmental dimensions

Social and Environmental Responsibility in Process (CSR in process) in accordance with ISO 26000

The Company operates in accordance with the criteria for assessing the performance of state enterprises of the NESDB (SE-AM) for the year 2019, by 2022, by establishing a master plan on social and environmental responsibility. 2022-2026 By specifying the performance indicators according to ISO 26000 standards in accordance with SE-AM guidelines, including policies and manuals on social and environmental responsibility in the process that were prepared in December 2020, which are scheduled to be implemented in 2022-2023



Operations in 2022, the Company provides social and environmental responsibility management services. in the form of planning (Plan), implementation of plans (Do), monitoring and measuring performance (Check), and improvement/development (Act).

Planning

-Preparation of CSR policy/handbook

Improvement/development

-There is a report on performance/ indicators.



Operation

-Communication CSR information to related parties

-Raise awareness/cooperation in

Monitoring/Evaluation

-Track performance/metrics

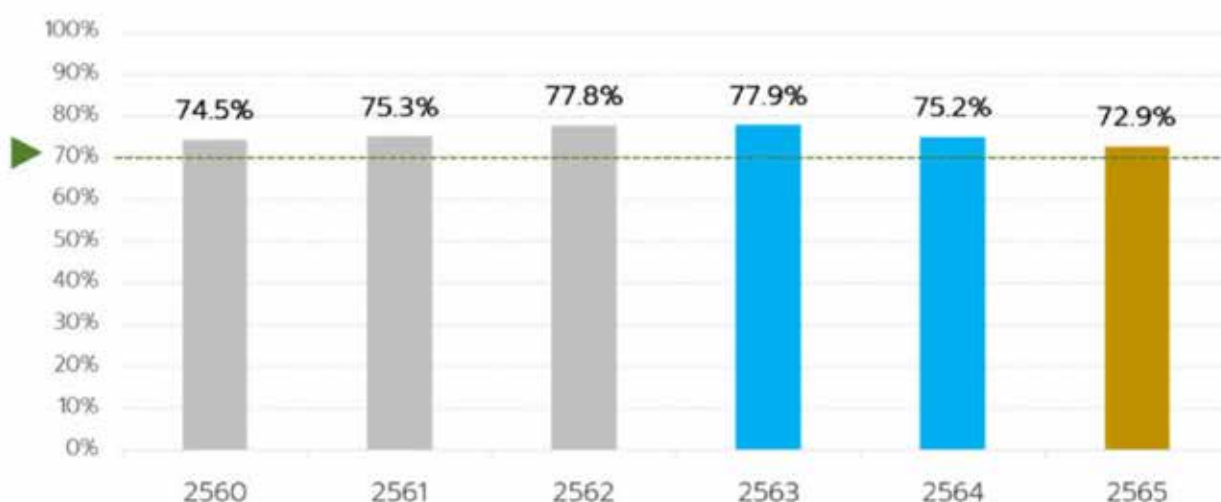
-Assess

performance/metrics

The company has hired the National Productivity Institute to survey the organization for the year 2012 to use the information as a guideline to develop the organization to suit the current situation. Every year there will be a review of questions to keep them up-to-date. The engagement issue still consists of 3 aspects: 1. Talking about the organization (Say), 2. Staying with the organization (Stay) and 3. Doing good things for the organization (Strive) for the question of satisfaction (Engagement Factors) has adjusted both the content and the amount, but still retain the same 7 factors as 1. Organizational management 2. Compensation and welfare 3. Direct supervisors 4. Workload 5. Organizational image 6. Responsible work 7. Professionalism

The survey results It was found that the employees of AIT were at the level of commitment. It has an overall engagement score of 72.9% (Criteria used to assess organizational commitment. Organizational engagement scores of more than 70% mean organizational engagement) and the survey data statistics since 2017 are as follows

Engagement Trend



i พนักงานยัง “ผูกพัน” กับองค์กร แต่แนวโน้มของคะแนนลดลงในช่วง 3 ปีหลัง นับแต่เกิดสถานการณ์ COVID

The top 3 factors that employees are satisfied with are 1. Organizational image 2. Workload 3. Professionalism.

Summary of recommendations for improvement in the year 2016 is to create Employee Experience as follows:

EMPLOYEE EXPERIENCE

Employee Journey



- 1) Organization Restructuring consists of arranging the amount of work / manpower to be appropriate in both quantity and quality Job Rotation Staff Pool (Matrix)
- 2) Competency Development consists of developing training that is relevant to the job and can be applied in practice. Increase internal training standards Increase measurement efficiency Develop guidelines for leadership development. Develop criteria for selecting trainees
- 3) Performance Management consists of developing an evaluation system for Career Path promotion.
- 4) Hybrid Workplace consists of defining rules, rules, criteria, productivity of working from home, equipment/technology support, Digital Platform, reducing work processes/processes, and downsizing the organization by hiring outsource.
- 5) Agile Management which contains Key Factors



In addition, it continues to continue from the year 2021, including performance appraisals. Personnel potential development to improve for the benefit of the organization Coupled with the current situation, the organization has to review the work systems that affect employees to be up-to-date. and keep up with the changes as follows:

1) Performance appraisal

Study and analyze to improve models, systems, methods, criteria and JA factors, indicators used in performance evaluation. To be more up-to-date in accordance with organizational policies and assigned tasks And when it's done, there will be a review to educate. Communicate with management and employees

In addition, human resource management It also operates under the HR vision of “Building Professional Personnel” by preparing a Human Resources Master Plan. Year 2012 - 2016 and make an action plan to operate under the above master plan Important projects such as corporate restructuring to suit the current environment 10-year manpower plan, Leave without pay, etc.

2). Development of personnel potential

All departments jointly develop personnel according to the Core Competency (CC) and Functional Competency (FC). All employees are assessed for the Competency Gap and prepare IDP plans for both CC and FC to determine the development course to suit each next person

- Promotion of learning management to help the company Achieve your vision, goals and strategies.

- promoting innovation to create new value for the company and concrete stakeholders. At the same time, there is also learning management and personnel development. both operational Engineering and support, and also set the direction of human resource development according to the goals, visions. “Building professional personnel” to drive the achievement of goals according to the vision of the company. for corporate sustainability

(2) Changes in work behaviors according to new lifestyles

The epidemic of COVID-19 has caused economic, social, and cultural changes, along with technological advancements that continuously affect the way we live and work in the government sector. The Company's operating patterns during the past 2 years have set measures for employees to work in the Work From Home style according to the measures set by the government as well as other agencies across the country. In addition, the impact of COVID-19 affects the financial situation of the Company. significant in the short term that requires a revision of financial measures and how it works In order to support long-term operations and financial management, the company has set a new way of working practice (New Normal), with a review of human resource management operations to support and support the new work style. Normal, with the establishment of government guidelines that support life and work, a new way of life in the form of a hybrid workplace, both working at the company's office Operation within the accommodation and off-site operations To make the operation flexible, flexible and able to respond to the needs of stakeholders in a timely manner

(3) Innovation Management

AEROTHAI aimed to be an innovation driven organization to a Sustainable Quality Excellent Air Navigation Service Provider. Therefore, the company has implemented innovation management in accordance with AEROTHAI's Innovation Management Master Plan which has been driven by 3 key leading factors : 1) Competent personnel, 2) Standard innovation processes for valuable result, 3) infrastructure for systematic innovation development.

2020 Major Innovation Project : MOU New Growth Engine Proect

(3.1) The signing of a memorandum of understanding between CU. and the College of Digital Innovation, CMU under the concept and funding from the Ministry of Higher Education, Science,

Research and Innovation (TSU) who wants to create personnel with high performance and potential to be ready for changes that occur rapidly in the present era and are in line with the Thailand 4.0 strategy.

(3.2) AEROTHAI in collaboration with faculty members from the International College of Digital Innovation, CMU designed and developed curricula called "New AEROTHAI Innovator Development Programme", which focus on Reskilling and Upskilling AEROTHAI personnel to be prepared and be ready to support the business base expansion to the Eastern Economic Corridor Innovation Zone. With 85 grants from CMU (8.5 million baht), 3 main majors were developed : started with UAV/UTM, followed by Smart Airport and Digital Transformation respectively. With those 3 main majors, a total of 107 people has participated in the project.

Project Result

In 2022, AEROTHAI has developed 20 topics (ideas) under the specified framework, which are still in developing process. The Prototype must be completed in 2023. They also have to meet Technology Readiness Level (TRL) at level 6-7 (Representative of the deliverable demonstrated environment level to Final development version of the deliverable demonstrated in operational environment level).

(4) Personnel development to have a body of knowledge in digital technology

in order to prepare to support the development of the country's digital technology and To play a role in the future business of all sectors in the Thailand 4.0 era and entering the New Normal era of Thai society, the company has accelerated the importance of developing personnel throughout the organization to have knowledge, understanding, ready to will work with the company Adjust the operating model by using digital technology according to the Green ICT policy by providing training in the Digital Literacy category according to the lessons learned from the Digital Government Development Agency. With e-Learning, TDGA e-Leaning consists of 4 courses:

Course 1

Digital Literacy course to provide employees with an understanding of basic digital technologies. and digital skills in working, communicating and working with others.



Course 2

Understanding and effective use of digital technology (Understanding and Using Digital Technology)



Course 3

Using digital tools for government work (Essential Digital Tools for Workplace)

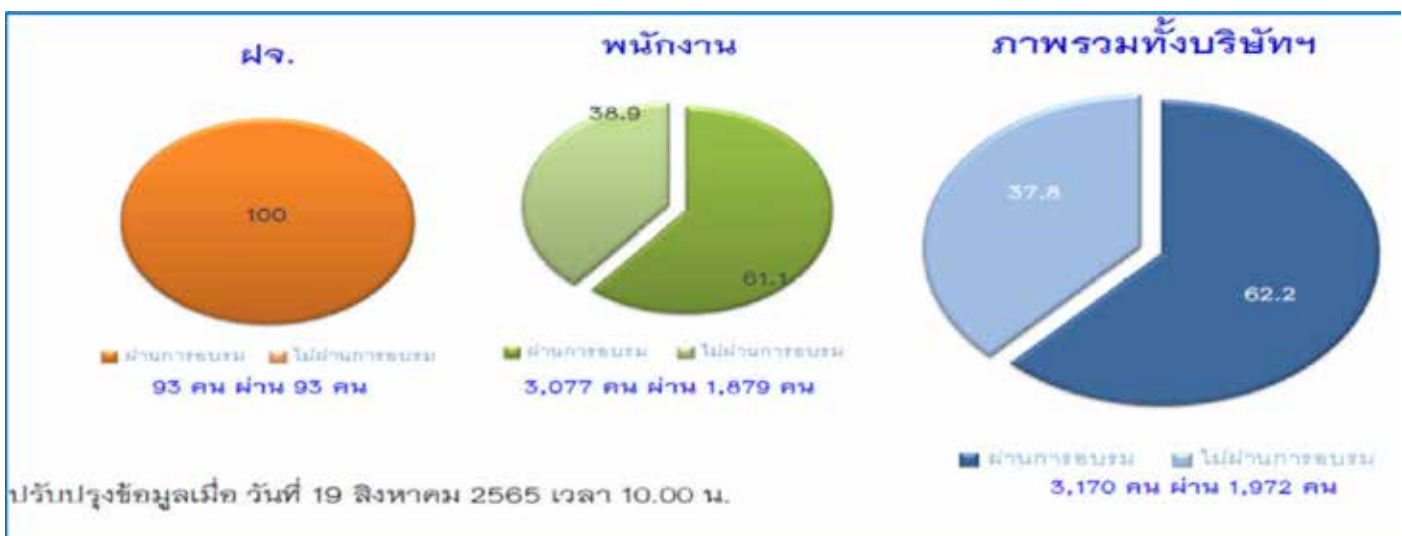


Course 4

Cybers Security Awareness



The total number of trainees as of August 2022 is 1,972 people, representing 62.20%.



(5) Step into the digital age with security

Digital technology plays an increasingly important role in people's work and daily life. To move into the digital age of the company to be safe, the company has transferred digital knowledge to employees. by providing communication through the intranet system on the issue of AEROTHAI Digital Transformation To communicate about the digital technology policy Applying digital technology to all parts of the organization as well as cyber security (Digital Continuity Management), preventing access to personal information and fake news, etc.



AEROTHAI Digital Transformation



(6) Promoting knowledge of air navigation services

The Company attaches importance to social and environmental responsibility. To strengthen the strength of the important community of the company, which will lead to the goal of developing the company long term sustainability There has been a project to promote air traffic services (Air Traffic Services/ communication, Navigation and Surveillance System : ATS/CNS) for Grade 3 students living in communities surrounding the Company's offices across the country. The objective is to provide an alternative for young people to study in the field of air services related fields in the future. Including providing knowledge and understanding about the danger factors arising from community activities such as fireballs, floating lanterns, smoke lanterns, the use of drones in various activities and community radio stations, etc. that affect air navigation services. to youth and focusing on the youth to be able to pass on such knowledge and understanding to their parents.

In 2022, the Company has prepared multimedia media to organize the target schools selected by the Suvarnabhumi and Don Mueang Air Traffic Control Centers, as well as the Provincial Air Traffic Control Centers. which is a school in the community Located in the take-off and landing line of the surveyed aircraft found that it was affected by the noise of the aircraft's flight. and communities that have statistics on the activities of various traditions that affect the air traffic services from the release of sky lanterns, smoke lanterns and fireballs, etc., a total of 10 schools, as follows:

(6.1) Schools, central educational institutions surrounding the Company Suvarnabhumi Airport and Don Mueang, including Don Mueang Chaturachinda School Thepsirin Romklao School.

(6.2) List of schools Educational institutions that are located and affected by the flight control center include:

- Udon Thani Air Traffic Control Center, including Udon Pichairakpittaya School
- Chiang Mai Air Traffic Control Center , including Don Pin School and Sarasan Witaed Lanna School
- Ubon Ratchathani Air Traffic Control Center, including Benjama Maharaj School and Naree Nukun School
- Phitsanulok Air Traffic Control Center, including Naresuan University Demonstration Secondary School
- Hat Yai Air Traffic Control Center , including Ban Wat Liap School and Ban Thon School

Media of the Air Navigation Service Knowledge Promotion Project ATS/CNS (Air Traffic Services / Communications, Navigation and Surveillance System)

Link Project to promote knowledge of air navigation services ATS/CNS <https://youtu.be/S7UKd3BgxKA>

(7) Safety, Occupational Health and Work Environment

Safety, Occupational Health and Work Environment of employees is and important

foundation in advancing the organization in a stable and sustainable manner. In 2022, Under Safety, Occupational Health and Work Environment Laws from Department of Labor Protection. Base on the implementation of 5 years plan (year 2020-2024), projects and routine tasks, for the preparation of policies and operating manuals on Safety, Occupational Health and Work Environment of the Company, many activities related to Safety, Occupational Health and Work Environment have been organized every year. In 2022, the following activities were organized :

- (7.1) Fire fighting and fire evacuation drill.
- (7.2) Measurement of light intensity, noise level and air quality on workplace.
- (7.3) Activity of competitions of outstanding enterprise on occupational safety and work environment.
- (7.4) Daly measurement of small dust particles in the air.
- (7.5) Preparation of measures to prevent of the Covid-19).



Annual Fire Fighting and Evacuation Fire Drill Training 2022
At Head Office (Tungmahamek)
On 23 June 2022

In addition to safety, occupational health and environment It will be part of the company's BCP plan to operate according to the plan to cope with the situation of the COVID-19 epidemic. by providing knowledge channels COVID-19 monitoring, which is updated daily to enable employees to stay up-to-date on the situation.



Communicating and disseminating information about the situation of COVID-19 infected by the PO Committee via the company's intranet channel Aeronautical Radio of Thailand Co., Ltd.

-  **วัคซีนโควิด 19**
ประเทศไทย **NEW**
-  **สถานการณ์ COVID-19**
สำหรับนักพัฒนา
-  **สถานการณ์ทั่วโลก**
-  **แอปพลิเคชัน**
หมอชนะ
-  **แนวทางการเฝ้าระวังโรค COVID-19**
ในประชากรกลุ่มแรงงานต่างด้าว
-  **แนวทางการเฝ้าระวังโรค COVID-19**
(ARI, Pneumonia)



สถานการณ์ผู้ติดเชื้อ COVID-19
ภายในประเทศ
อัปเดตรายวัน
Interactive Dashboard

-  **รายงาน COVID-19**
ประจำวัน
-  **Bubble and Seal**
-  **คู่มือใช้งาน DDC-Care**
-  **คู่มือการใช้ระบบ Colab**
(สำหรับเจ้าหน้าที่พัฒนา)
-  **คู่มือการปฏิบัติตามมาตรการ**
ผ่อนปรนกิจการและกิจกรรม

Communicating and disseminating the situation of COVID-19 infected by the PORS, in addition to reporting the situation within the company, can also help employees follow the news of the COVID-19 situation outside, knowledge of how to follow preventive measures. and related manuals that are useful to all employees as well

Record of Accident from Work and Environment Indication

For occupational safety, Indicator was set at zero for accidents from work and environment for ปี 2018 – 2022 as follows :

(Target : 0 accident)

Location	Year 2018	Year 2019	Year 2020	Year 2021	Year 2022
Head Office (Tungmahamek)	0	0	0	0	0
Don Mueang Airport Office	0	0	0	0	0
Suvarnabhumi Airport Office	0	0	0	0	0
Flight Test Department	0	0	0	0	0
Chiang Mai Air Traffic Control Centre	0	0	0	0	0
Phitsanulok Air Traffic Control Centre	0	0	0	0	0
Udon Thani Air Traffic Control Centre	0	0	0	0	0
Ubon Ratchathani Air Traffic Control Centre	0	0	0	0	0
Nakhon Ratchasima Air Traffic Service	0	0	0	0	0
Phuket Air Traffic Control Centre	0	0	0	0	0
Hat Yai Air Traffic Control Centre	0	0	0	0	0
Surat Thani Air Traffic Control Centre	0	0	0	0	0
Hua Hin Air Traffic Control Centre	0	0	0	0	0

3. Environmental Sustainability

3.1 Digital transformation and step towards environmentally friendly digital technology or Green ICT

From the COVID-19 situation, it has caused the restructuring of the global economy of the company and is an important catalyst for Thailand to enter the full 4.0 era faster. There is an economic competitiveness of innovative goods and services (Innovation Economy) based on digital technology. Smart technologies and applications are being used as important tools in economic activities. Including the continuous development of road and rail infrastructure. This gives people more transportation options and lower costs. as well as the impact of rising oil prices. As a result, the recovery of air transport has slowed down. which has a significant impact on the Company's business as well

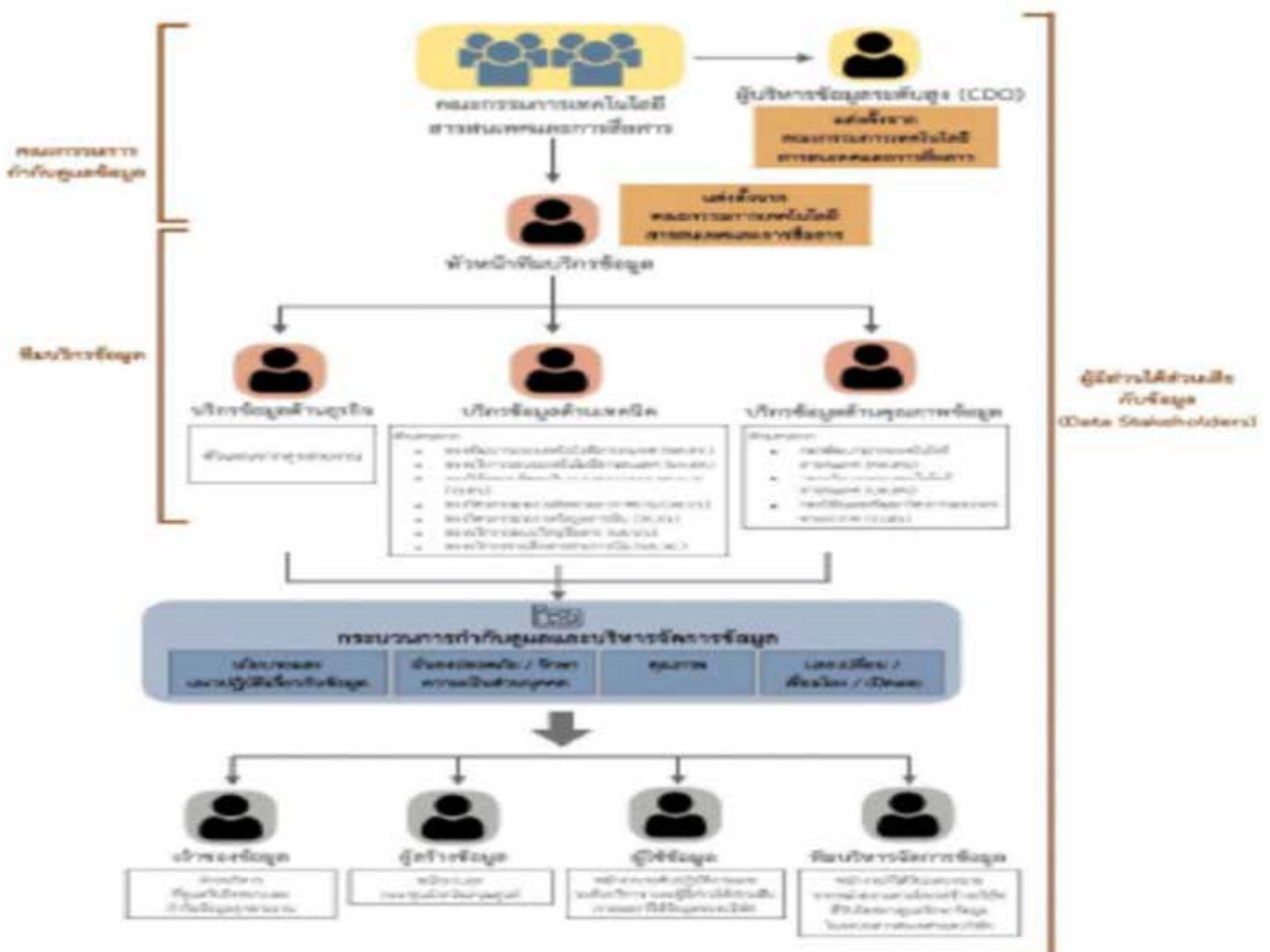
In addition, social and cultural factors of Thailand have entered the era. “Aged Society” causes the population of the working age to decline. It is estimated that in 2025 there will be 20 percent of the elderly and by 2050 there will be 30 percent of the elderly. In addition, Thai society has more access and use of digital technology, with more Thai population using the Internet. and having the highest use of social media in the world (data from the Thai Internet Innovation Research Center Co., Ltd.) shows the stepping into a new way of life (New Normal) of Thai society. new things and develop self-learning quickly As a result, at present, every organization has access to the Internet in the office and adapts the format of documents and publications to digital work place more. New Normal by

- (1) Determining data security and privacy policies for safe and secure access to digital assets. No matter where the asset or person is.
- (2) Adapting operational processes to digital formats to support data-driven business decisions Ready for big data analytics and automation

- (3) Use the Enterprise Mobility Management service system to maintain security, such as controlling the confidential information of the organization. Controlling the use in accordance with the policy Protecting your device from viruses or malware Enterprise application installation management Latest software updates and ongoing security briefings

The company has established policies and guidelines for management and use of digital technology. environmentally friendly or Green ICT to be used in the organization to optimize power management reduce greenhouse gas emissions reduce waste generation including recycling And to increase the channels to protect the global environment, such as reducing the use of printers (Printers) and paper, establishing a Green Data Center by using technology. Virtualization To reduce server volume, Cloud Computing technology is used to reduce the wastage of ICT resources and administrative expenses.Actions to drive Green ICT have data governance (Data Governance Framework) in accordance with the framework of the Digital Governance Agency (DGA) under the supervision of the Information and Communication Technology Board (announcement at Cover 102/2564 dated 30 September 2021)

Information and Communication Technology Committee



3.2 Conducting business on social and environmental responsibility

(1) 2,400 hours of volunteer work and public health activities

Due to budget constraints and impacts from the spread of the Coronavirus Disease (COVID-19) over the past 3 years, the Company has continually emphasized on social and environmental activities by collaborating with government agency in the field of volunteering. With the cooperation of management and employees, in 2022, the company cooperated in volunteering, accounting for an average of 2,400 hours of volunteer work. The company has carried out various activities with the Ministry of Transport, Ministry of Public Health, Sathorn District, and the Royal Thai Army Communications Battalion (Thung Maha Mek) as follows:



300 people 2,400 hours with public health volunteer activities

Management and employees join volunteer activities. “Take part in facilitating people at 30-minute waiting areas after vaccination” at Bang Sue Central Station, Chatuchak District, Bangkok, together with the Ministry of Transport, and the Ministry of Health In December 2021, March and June 2022





Support food and dessert for volunteers at Bang Sue Central Station

The Company by Executive Vice President (Operations) Acting President, Mr. Tinagorn Choowong, together with representatives of employees Join to support lunch, dinner, dessert, along with drinking water to facilitate the staff of medical personnel who work continuously on October 28, 2021, amounting to 1,200 sets, amounting to 52,900 baht. On October 29, 2021 Amount of 800 sets, amounting to 44,300 baht, and on November 15, 2021, amounting to 1,600 sets, amounting to 55,000 baht.



Receive a plaque

Miss. Duangta Samitsuwan, Exectutive Vice President (Administration) of the Company attended the ceremony of awarding plaques to various agencies, organizations, both public and private sectors. that supports the mission of the Vaccination Center, Bang Sue Central Station and award certificates to medical personnel and volunteers on Friday, December 24, 2021, with Mr. Anutin Chanvirakul, Minister of Health presided over the ceremony of awarding the aforementioned plaque at the gate 1 of the Vaccination Center Bang Sue Central Station Bangkok.

(2) Cooperation with government agencies for volunteering on important occasions

(2.1) Participate in volunteer activities with the Ministry of Transport

The Company has carried out CSR activities to help people who have suffered from floods. By organizing a survival bag with the Ministry of Transport to donate 500 sets to flood victims in Pathum Thani Province On Wednesday, October 20, 2021.





The Company by Executive Vice President (Operations) Acting President, Mr. Tinagorn Choowong, with management and company employees participate in volunteer activities “Knowing love and unity environmental protection Improve the quality of life” to offer royal merit. On the occasion of the birthday of His Majesty King Bhumibol Adulyadej the Great, with Mr. Saksayam Chidchob, Minister of Transport presided over the activities Join to pack consumables into gift bags. “Send encouragement from the transport” and presented to the representatives of the Chakraphat Phong community. and households in Soi Nakhon Sawan 1 at the clubhouse and auditorium Ministry of Transport On Monday, December 20, 2021.



The Company cooperates and supports the implementation of the scholarship program under the Royal Grant Foundation. Crown Prince by sending a check to the Ministry of Transport in the amount of 200,000 baht to support scholarships in such projects as the Secretariat of the Cabinet has asked for cooperation from agencies and state enterprises that have potential and operate Corporate Social Responsibility (CSR) on June 17, 2022

Volunteer activities for public charity On the occasion of His Majesty the King’s birthday at the Ministry of Transport Primary School Chakkraphong community The fortress defeated area and households in Soi Nakhon Sawan The fortress defeated area Bangkok with the Minister of Transport presided over the oath of allegiance ceremony to be a good official and the power of the land as well as presiding over the opening ceremony of the exhibition and activities in honor of His Majesty the King On the occasion of the royal birthday “Roi Jai Phak Phra Baramee Pok Klao” at the front of the Ministry of Transport Along with the media and volunteers 904 donated bags to send encouragement from transport. There were 300 participants in the activity on Wednesday, July 27, 2022.

(2.2) Participate in volunteer activities bestowed by His Majesty the King with the Sathorn District Office

The Company participated in the Royal Volunteer Activity “We do good deeds with heart” For the safety, occupational health of the religion, the place and the community surrounding the company’s establishment

His Majesty the King’s birthday His Majesty King Bhumibol Adulyadej the Great On Wednesday, December 1, 2021 at Wat Yannawa, Bangkok.



Developing and cleaning the Suanplu 1 moat on the occasion of King Ramkhamhaeng’s day Around the Suanplu 1 Moat, Narathiwat Ratchanakarin Road to improve the landscape of Bangkok to be beautiful and neat On Friday, January 14, 2022.

Developing cleaning of Lam Kradong Intersection, Chan Road, by cleaning, collecting garbage, cutting down trees, removing weeds, pouring microbial water to adjust water conditions. to improve the landscape of Bangkok Make it beautiful and complete on Friday, February 11, 2022.



Campaign activities to increase knowledge for people to use cars to use the road for safety. ready to facilitate people to cross the road at Nang Linchi Road Bangkok On Friday, February 18, 2022.



Religious development at Wat Suthiwararam Bangkok On the day of remembrance of His Majesty King Phra Buddha Loetla Naphalai by cleaning the floor Peel the drain pipe around the temple. Collecting communication cables, collecting garbage, cutting down trees, removing weeds to improve the landscape of Wat Sutthiwararam. Make it beautiful and complete on Thursday, February 24, 2022.



Public relations activities for the prevention of COVID-19 as well as handing over the royally bestowed alcohol hand sanitizer at Baan Eua Athon Community, Suan Plu, Bangkok to increase the safety of the community On Tuesday, March 8, 2022.



Home delivery activity to Uncle Kaew Langpien under the project to help the underprivileged in the community, Don Kusol Pattana, Sathorn District, Bangkok as well as providing consumables Including appliances necessary in daily life for Uncle Kaew as well on Wednesday, March 9, 2022



Develop religious sites at Wat Yannawa Bangkok On the day of remembrance of King Nang Klao Chao Yu Hua by cleaning the floor Peeling drains around the temple area, collecting garbage, cutting down trees, removing weeds to improve the landscape. Make it beautiful and complete on Friday, March 25, 2022



Develop office buildings in Sathorn District, gardens and sports fields under the expressway On the occasion of the birthday of Her Majesty Queen Suthida Bajrasudhabimalalakshana by collecting garbage Cut and trim trees, remove weeds to improve landscaping. to be beautiful On Thursday, June 2, 2022.

(2.3) Participate in volunteer activities with the Royal Thai Army 1st Communications Battalion

The Company participated in the Royal Volunteer Activity “We do good deeds with heart” Conduct activities for safety, occupational health of the communities surrounding the Company’s establishment.

“Volunteer spirit to bring the children across the road” by facilitating students, parents and the general public. for safety when crossing the road as well as handing out the royally bestowed alcohol gel at Sikkha Asia Kindergarten School and people in the community By the 1st Communications Battalion, together with the volunteer spirit of 904 in Sathorn district, which the 904 volunteer spirit of the company was the representative to participate in the activity. On Wednesday, June 8, 2022



Volunteer activity by His Majesty the King “We do good deeds with the heart”

Making merit on the occasion of the birthday of His Majesty the King

1st Communications Battalion with Royal Volunteer 904 under Sathorn District Which has a volunteer spirit bestowed upon the Company’s 904 to participate in a campaign to provide knowledge to prevent COVID-19, as well as to distribute alcohol gel to the community in Sathorn area. To increase safety for people in the community as follows:

- Suanplu market area On Monday, July 4, 2022
- Suanplu Community Area On Saturday, July 9, 2022
- Nang Linchee Market area On Thursday, July 14, 2022.
- TPI market area on Tuesday, July 19, 2022.
- Yen Akat Road On Sunday, July 24, 2022.





Home repair and housing improvement projects for the poor and low-income people of Lt. Col. Chanin Lamwibul, commander of the 1st Communications Battalion assigned to Maj. Gen. Vorayot Leungsuwan, commander-in-chief. 1 Wait for the chairman, along with representatives of the Thung Maha Mek Police Station. and volunteer spirit bestowed by the Company's 904 as a representative to participate in the activities Donate a house to Mrs. Pranee Thongnim, who is visually impaired. and live alone at the Pattana Phatthana Community, Yannawa District, where the old old house dilapidated Therefore, the whole house has been renovated, installing support rails, painting the walls, as well as running the electrical system. give a new one as well as providing consumer goods with various factors On Monday, July 4, 2022.

Sathorn District Office 1st Communications Battalion, AEROTHAI, government and private agencies in the area Join the Royal Volunteer Activity “We do good deeds with our hearts” to make merit for the public. On the occasion of Her Majesty Queen Sirikit’s birthday

Her Majesty the Queen The Queen Mother

Sathorn District Office The 1st Communications Battalion, the Company, government agencies and private sectors in the area, totaling 100 people joined the volunteer spirit activity “We do good deeds with our hearts” at the area under the expressway on Chan Road on the occasion of Her Majesty Queen Sirikit’s birthday. Her Majesty the Queen The Queen Mother by cutting down trees, removing weeds to improve the landscape. To be beautiful and complete on Thursday, August 11, 2022



Sathorn District Office 1st Communications Battalion, the Company, government agencies and private sectors in the area Join the Royal Volunteer Activity “We do good deeds with our hearts” to make merit for the public. On the day of the death of Somdet Phra Mahitalathibet Adulyadej Vikrom Phra Boromrajchanok

Sathorn District Office The 1st Communications Battalion, the Company, government agencies and the private sector in the area, totaling 300 people, jointly organized a volunteer activity “We do good deeds with heart” at the Health Center 63 (Teo Chew Association) on the occasion of the death anniversary. Somdej Phra Mahitalathibet Adulyadej Vikrom His Majesty the King by Cut and trim trees, remove weeds to improve landscaping. Make it beautiful and complete on Thursday, September 22, 2022.





Aeronautical Radio of Thailand

102 Ngamduplee ,Rama IV ,Tungmahamek
Bangkok 10120, Thailand.

Tel. 66 (0) 2285 9035 Fax. 66 (0) 2287 3798

www.aerothai.co.th E-mail : prga@aerothai.co.th