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Chapter III

Evolution of Transportation and Communication System

As pointed out in the first chapter, Communication Technology has brought about the amazing changes across the world in the mid-twentieth century. The Western World has achieved the material prosperity with the help of gradual changes in the development of the Communication System in the advent of modernity. In fact, the concept of modernization remained synonymous to communication. Amongst the East Asian countries, Thailand seems to be at the forefront in the development of communication. It is probably due to this that Thailand is becoming increasingly industrialized and modern.

It would be interesting to throw light on historical development of the Communication System in Thailand, particularly focusing upon the changes that have occurred from time to time in the communication system. This chapter provides details of the Railway, Buses, and the Post – Telegraphs Systems in Thailand as the modes of communication.

1. The Railway: The State Railway of Thailand:

The start of the communication system is, in fact, the same like any other Asian countries. From the distant ages in the past up to the time when the city of Bangkok was chosen as the new capital of Siam with the exception of the water-borne traffic along rivers and canals, the only means of inland communication in the country had been those borne by animals such as oxen, buffaloes, horses, elephants with howdahs and bullock-carts, which had indeed been very popular among the people of that time for their daily use in traveling as well as in
transporting goods from place to place. Communication by rail was still then completely unknown.

It is because of the cordial relationship between the reign of King Chulalongkorn and the United Kingdom, Thailand could begin Railway network. As days rolled by and finally during the reign of King Rama V issued, a Royal Proclamation pertaining to the construction on the first state railway line in Siam from Bangkok to Nakhon Ratchasima in the Northeast was issued on March 9, 1891. The Ministry of Public Works, under the auspices of His Majesty King Chulalongkorn, had engaged Mr. G.M. Campbell, a distinguished businessperson from England, to undertake the construction of this railway line. The "Foundation Laying" ceremony was presided over by King Chulalongkorn on March 9, 1891. The starring day of the first rail service from Bangkok to Ayutthaya, March 26, 1894, was considered as a red-letter day ever to be remembered in the annals of the Royal State Railways of Siam.¹

The office of the Royal State Railways of Siam was first established under the control of the Ministry of Public Works in October 1890, and was divided into two departments, namely the Northern and the Southern Railways which controlled the networks of the east and west banks of the Chao Phaya River respectively. These Departments were given responsibilities to administer all state railway functions, to supervise and control private railways in accordance with the provisions of the concession granted to each of them. The Director-Generals of the two departments and most of their principal staff were Europeans as they were skilled, trained in the technical knowledge required for the Railway. Thai people were unknown about the railway. Management and
administration of the railway services become problematic on many counts for these two departments. Moreover, the expenditure part was more for the management. In order to cut down the expenditure, the two Departments were merged into one called “Department of the Royal state Railways of Siam” on June 5, 1917.²

The Railway authorities and the government of Thailand felt that the spread up of narrow gauges has not been meeting the transportation as well as the economic need in the country or outside. At the time of the merging of the Northern and Southern Railway Offices, The East Bank System still adopted a standard gauge of 1.4435 m., different from that of the West Bank System, which was of 1.00 m. gauge. This created a great deal of inconvenience to the progress of the enterprise itself. A Royal Decision, therefore, was given for the unification of gauges, that is to say, all new state railway lines were to be built to meter gauge, and all existing 1.435 m. lines to be converted within ten years into meter gauge in uniformity with those of the railways in the neighboring countries, i.e., Malaysia, Burma and Cambodia. The conversion was commenced on November 20, 1920 and completed in the year 1930. These efforts, in truism, were accelerated for entitling Thailand industrialized as well as promoting the trade and commerce.³

As regards the progress of the railways development at the end of King Chulalongkorn reign (1868-1910), the total length of lines open to traffic amounted to 774 km. King Vajiravudhis (reign 1910-25), took initiative in drastically expanding and increasing the length to 1,804 km. The King Prajapok’s reign (1924-34) and King Anandhamahidolis reign (1934-46), 418 km and 259 km were added
respectively. As a result, the total length of the lines was 2,481 km in 1946. It reveals from the fact that the Royal State Railway of Siam did gradually develop and eminent rate in bestowing progress upon the country is found beyond doubt.\textsuperscript{4}

However, the far East threat of the World War II at last broke out in 1941 and Siam inevitably fell into its terrible clutches. The war had implicated the larger life of the country as Thailand remained with allies. The Railway buildings, lines and bridges as well as the rolling stock and workshops were air-raid and almost destroyed throughout the entire Kingdom. The destruction of communication system was large and the Royal State Railway of Siam was put under the tremendous pressure of overcoming it. However, the year 1945 brought peace to Thailand with the end of the World War. This has certainly facilitated to the Royal State Railway to start efforts for bringing efficiency in the Railways functioning as well as to begin restoration work of the railways. The Restoration program was immediately planned by the Government to bring the Railways back to the pre-war condition, and to hasten its development for the benefit of the public, which was the impassioned spirit of its venerable creator King Chulalongkorn. The most important decision in the overall improvement in the services of the Railway, which was taken by Government, was to run the administration on the principle of providing autonomy to the Railway in order to foster commercial, flexible principles. Consequently, in 1951, the Royal State railways of Siam became a state enterprise by virtues of the Sate Railway of Thailand Act B.E. 2494 (1951). This has surely helped in consolidating a total route length of 4,041 km.\textsuperscript{5}
The Present Railway of Thailand

It is the second most important mode after the road transport. The length of its entire network is approximately 4,000 kilometers. The major routes of the rail transport are as follows:

Northern Route: Bangkok - Chiang Mai, approximately 751 kilometers;

North-Eastern Route: Bangkok- Nong Khai, approximately 624 kilo-meters;

Southern Route: Bangkok-Sungaikolok, approximately 1,159 kilometers.  

At present, the Railway of Thailand is the largest state enterprise of Thailand in terms of manpower with a total staff about 26,412 (Officers = 10,354; Technical, skilled labour and others = 16,058).  

However, “Railways of Thailand” as a separate entity in the public sector is working over the last 50 years; the winds of Globalization, Liberalization and Private section seem to be creating making inroads in it by various ways. As a part of it, in the Bangkok Metropolitan area, concessions for rail transport construction have been granted to the private sector and some are already in operation:

The Bangkok Transit System (BTS), an elevated mass rapid transit, started its operation on 5th December 1999. It comprises two routes: the Sukhumvit Route (14 kilometers) and the Silom Route (9 kilometers), converging at the Central Station on Rama 1 Road. It is planned to extend both routes in the near future.

The first phase of the underground transit system of the Metropolitan Rapid Transit (MRT) is called the Blue Line (22 kilometers)
in operation along Rama IV Road-Ratchadapisek Road-Lad Prao Road-
Phaholyothin Road route, which will connect with the BTS System. This
system is expected to begin operation in 2002.\(^{10}\)

According to the Transport Master Plan, two more MRT
lines will be constructed, namely the Blue Line (Extended Section) and
the Orange Line. Bangkok Elevated Road and Transit System on
*Rangsit-Yommarat-Huamark Route* are in the process of studying
feasibility.\(^{11}\)

Recognizing its great capacity and the low cost of
operation and less harmful effect on the environment, the government
has set a policy to emphasize rail transport development and also
planned ambitious projects for efficient and comfortable rail services to
the people. To cope with the growing demand for transport within the
country and to promote rail links with the neighboring countries, the
government plans to launch several projects including the construction of
four new rail routes connecting with the existing ones. One route is
likely to originate in *Buayai* and terminate in *Nakhon Phanom*, while
another will link *Map Ta Phut* and Rayong. The third route will lie
between *Denchai* and *Chiang Rai*, while the last line will connect Surat
Thani and Phang Nga. Moreover, the Government System also plans to
develop the double-track rail system nationwide. In the initial stage, if it
suggested a double-track route will be constructed on the outskirts of
Bangkok. After the completion of this construction, the rail transport in
these areas will be more efficient and can fulfill the demands of the
public.\(^{12}\)

It is in immense future to point out that Railway System
in Thailand not only develops its internal links, routes for transportation,
but also gradually looking into the developmental aspect of the rail network connecting to neighbouring countries. At First, Thailand has a rail network connected to the Malaysia. This has facilitated the passengers to travel by train from Bangkok to Butterworth-Kuala Lumpur in Malaysia and then to Singapore. Other important link is currently under-construction Railway Link to the Mekong River Bridge in Nong-Khai Project, once it is completed, the transportation of goods and people from Thailand to Lao PDR shall be more convenient. In addition, the following projects connecting the domestic rail network with international ones are going to facilitate for transportation and travel quite significantly among ASEAN, ESCAP, and GMS member countries.

**ASEAN’s Singapore-Kunming Railway System**

ESCAP’s Trans-Asian Railway Thailand’s construction of five railway routes: *Denchai-Chiang Rai : Bua Yai-Mukdahan-Nakhon Phanom* (Lao PDR); *Arunyaprathet-Phnom Penh* (Cambodia); *Ubon Rachathani-Mek* (Lao PDT); and Chiang Rai-Chiang Khong (Lao PDR).

The Thai government is considered as the supporter of New Economic reform, which believed that there should be free openings in economy and other fields. As a part of the commitment to privatization and liberalization, the Thai Government has set a policy to encourage the private sector’s participation in both construction and service sector under these projects. It is expected that the rail transport will become a significant mode for the domestic and international transport in this region.¹³
International Sea Transport

Among all modes of transport, ports are recognized as the most important international trade. At present, Thailand has four major ports, *Laem Chabang Port*, *Songkhla Port*, and *Phuket Port*. Most of the traffic passes through two major ports, namely Bangkok and *Laem Chabang*. These two ports also handle containers, serving 90% of imports and exports of the country. In addition, there are approximately 151 private ports, most of which are situated along the *Chao Phraya River* in Bangkok and its surrounding and along the southern and eastern coasts of Thailand.\(^{14}\)

The Government has a police to develop and expand *Laem Chabang Port*, *Songkhla Port*, and *Phuket Port* in order to serve the increasing number of passengers and goods. In particular, *Laem Chabang Port* has been positioned to become the centre of transport by sea in this region. This port was designed to serve Post Panama vessels. *Songkhla Port* and *Phuket Port*, located in the southern part of Thailand, are being developed according to the sub-regional economic co-operation project named the Indonesia-Malaysia-Thailand Growth Triangle (IMT-GT).\(^{15}\)

Furthermore, the Government has a future plan to construct a new port in the southern part of Thailand in *Satun Province* in order to promote Thailand as the centre of goods transport on the west coast (Andaman Sea).

Inland Waterway Transport

Thailand has two main rivers that can be utilized as the domestic and sub regional transportation routes, namely the *Chao Phraya River*-passing through the central and northern part Thailand,
approximately 1,700 kilometers in length, and the Mekong River-passing through six countries in this sub region starting from Southern China, through Laos PDR, Cambodia, Thailand, Myanmar, and ending in Vietnam, approximately 4,880 kilometers in length. Under the quadrangle economic cooperation between China (Yunnan), Lao PDR, Myanmar and Thailand, the four countries agreed to open up the Lan-Chang-Meakong River for commercial navigation among the four countries. The Quadripartite Agreement has come into operation with effective from 2001. Thailand is prepared to build two ports along this river, at Chiang Sean and Chiang Khoum, to help facilitate the traffic.\textsuperscript{16}

\textbf{Air Transport}

Bangkok is currently considered as an aviation hub of the Southeast Asian region. The Bangkok International Airport plays a major role in the international aviation together with the four other international airports situated in major cities, namely Chiang Mai, Chiang Rai, Hat Yai, and Phuket. It is beyond doubt that the this mode of communication has played significant role in making Thailand modern and affructive in terms of economic and cultural development. Presently under construction, the New Bangkok Inter-national Airport (NBIA) is set to replace the current Bangkok International Airport and will be developed to become a regional aviation hub. At the initial stage, it will be able to serve approximately 30 million passengers per year and up to 100 million passengers when completed.\textsuperscript{17}

With regard to international air transport, Thailand has two designated airlines providing such services, namely Thai Airways International (THAI) and Angel Airline. Two designated airlines
providing domestic services are Thai Airways (THAI) and Bangkok Airways, as a private airline, provides services on routes not overlapping those of Thai’s.\footnote{18}

Apart from carrying passengers, both airlines also provide air cargo services in particular, the “THAI Cargo” worldwide route net covers 76 cities in 35 countries on four continents, with more than 350 flights each week to key cities in Europe, Australia, and North America, 36 Asian cities and 23 towns in Thailand.\footnote{19}

The formation of the Star Alliance in 1997 among THAI, United Airlines, Lufthansa, Scandinavian Airlines System (SAS), and Air Canada, has proved the largest airline alliance in the history of commercial aviation. In 2000, the Alliance roes to greater heights: with the addition of 13 members-Air New Zealand, All Nippon Airways, Ansett Australia, Austrian Airlines Group, and Varig Brazilian Airlines. Singapore Airlines, Mexican Airlines and British Midland Airways are set to join the alliance within 2000. Together, this group of airlines offers the most comprehensive global travel network with the exceptional seamless travel benefits.\footnote{20}

**Road Transport**

It plays an important role in supporting the economic growth, trade and investment of the country. It is to be pointed out that 90 percent of transportation in Thailand depends upon Road transport. Since, the road transport is a faster and more convenient mode capable of providing door-to-door services; it is more popular than rail and waterway transport. The highway systems have been helpful in attracting largely the people travel by road. Highways in Thailand are divided into five categories: Special Highways, National Highways, Concession
Highways, Municipal Highways, and Rural Highways. Highways throughout Thailand account for 255,000 kilometers in length. More than 40 percent of them are asphalt and concrete highways of international standards and are sufficient to serve people in every part of Thailand to a certain extent.\(^\text{21}\)

Presently, a number of highways are under construction to facilitate traveling between Bangkok and main cities in each part of the country and to connect with the highway networks of neighbouring countries. This has not only stimulated rapid social and economic development throughout the country, but also has set the country in the vein so as make it to a communication hub in the region.\(^\text{22}\)

Two important highway construction projects are the project for the 4-lane highways, connecting North-south and East-west, and the Intercity Highway Project. The Latter comprises 13 routes, extending over 4,000 kilometers throughout Thailand, involving a construction time of 20 years (1996-2016).\(^\text{23}\)

After the Greater Meakong Sub region (GMS) Network is completed, the highway network of Thailand will link with those of the neighboring countries by three routes: The Bangkok-Phnom Penh-Ho Chi Minh City-Wung Tao route, originating in Phanom Sarakham, Thailand and terminating at the border with Cambodia, The East-West Corridor: Mukdahan-2nd Mekong Bridge-Sawanakhet, Lao PDR (Route 9)-Vietnam. The Chiang Rai-Kunming route (through PDR to Myanmar).\(^\text{24}\)

As with the GMS Network, highway networks of all ASEAN member countries, which are more or less of the same standard, will be interconnected after the ASEAN Highway Networks are
completed in order to facilitate the transportation of goods and people among the ASEAN members. The Government of Thailand has so successful efforts, which will certainly have a safe and modern road infrastructure sufficient to meet the demands of the public.  

Postal Services: The means of communication within the Kingdom of Siam were very much similar to the methods used elsewhere in the world. Messages or letters were carried overland by fast footmen, horseback riders, pigeons or by dugout canoes along existing waterways and canals.

These old ways of communication were used from the time. The Capital City of Bangkok was founded in 1782 up until around 1867, during the reign of His Majesty King Rama IV. The Kingdom of Siam, during that era, was increasingly opening her door to foreign trade, especially with the seafaring merchants of Europe and America. Increasingly, these foreign trading partners were seeking at that time to establish long-term commercial relations with Sam. Councils, embassies and trading agents of quite a number of friendly countries were being established in Bangkok. As trade gradually expanded, the need for business contacts and commercial correspondence, as well as private contacts with other countries, especially those of Europe, increased dramatically.

Postal Service

Because of the friendly relations with Thailand, the British Government took initiative to develop the Postal Services, which in fact became much popular largely. The British interests were also involved in doing so. After realizing lack of a systematized postal service, which had proved to be a hindrance to trade in general, the
British Embassy undertook to set up the first overseas postal service in this country. A riverside guards building within the embassy's premises was vacated to make room for the first Postal Office. The British were also the first people to introduce postage stamps into this country; the first stamps used by the British post office were those issued in Malaya and India, and for identification of the mail, stamps issued for sale in this country were printed with the letter "B" for Bangkok. All postal items were processed via the post office in Singapore, and were transported overseas by the British merchant along with their destination. However, the British Embassy discontinued the postal service in 1882, as the Thai Postal Department was inaugurated the following year.\textsuperscript{27}

The very early beginnings of the Thai postal service were of course influenced by the British example which continued for nearly fifteen years, and which led the ranking nobility and several members of the Royal Family to follow suit. The framework of the Thai postal service was initiated by His Serene Highness Prince \textit{Bhamurangsri} and eleven other members of the Royal Family, a pioneering group which published and distributed a journal – the title was simply "Court".\textsuperscript{28}

The first issues of the Court journal were distributed among the ranks of the ruling nobility on September 26, 1875, and were hand delivered by "Postmen", using the English terminology. The Postage stamps were also introduced for delivery of fees to the regular subscribers of the journal. Unfortunately, though, for untold reasons, the publication of the court Journal was terminated on July 22, 1876, and with it, the first contemporary Thai postal service.\textsuperscript{29}

The matter was later taken up by \textit{Chao Mern Sameurchairaj}, a ranking courtier, who petitioned His Majesty (\textit{Rama IV})
to establish a permanent postal service in Bangkok, but His Majesty being fully aware of the complications involved in such an undertaking, made the decision to send Chao Mern Sameurhairaj to closely study the workings of the postal systems in Japan and China, and upon his return, The King commissioned H.R.H. Prince Banurangsri, publisher of the defunct Court Journal, cooperation with the preparations to set up the first postal service in Bangkok.  

The Postal Department was inaugurated on July 2, 1867 while the groundwork and early functioning of the service were greatly assisted by a British immigrant, Henry Alabaster, and after receiving royal consent the postal department finally went into regular service on August 4, 1883. A Royal Decree was also promulgated on this same date. The first Post Office was located in a riverside building on Klong Ong Arng (canal). The first postal districts were Samsen, being the northern district, Srapratham to the eastside of Bangkok, Bang Koralam to the south and Talard Plu (market) to the west. Some years later, the first telegraph equipment was also installed in this building.  

**Development of the Postal Service**

Before merging the post and telegraph departments in 1898, the postal service was extended to various neighboring provinces, namely Samut Prakan, Phra Pra Daeng and Nonthaburi on August 26, 1885, while 6 new post offices were opened in various parts of Bangkok. New services were also introduced during this period, like the delivery of official and business journals, registered mail, postal parcels and packages of sample materials and merchandize and postal orders. Envelopes were also produced and sold by the Postal Department for the first time.
However, the most significant development during this period was the establishment of the Post & Telegraph Training School on February 22, 1889, which gave Thai nationals the opportunity to receive training courses in operation and administration of the post and telegraph services with foreign trainers and advisors. The school aimed at replacing foreign personnel with trained Thai personnel a transition, which took place some years later. 33

Thailand joined the International Postal Organization on January 1, 1885 and on May 1, 1887, the first overseas Mail Order service was opened for service to the public. In 1891, Thailand sent representatives to attend a Meeting of the International Postal Organization in Vienna, Austria, after which the first Bangkok-Berlin (Germany) postal service was opened on July 1, 1891. The Justice Department also amended the original Royal Decree of 1885 which was renamed as the "Royal Decree of the Rattanakosin Postal Service Sor Gor 116", enforced on October 1, 1897. 34

In 1898, the telegraph 'money order' service was introduced, which greatly convinced business money remittances within the country. The overseas registered mail service was established in 1903, along with the overseas parcel delivery services. On the domestic scene, the development of the postal service was gradually speeding up, and new post offices were sprouting all over the country. Mailing offices were also opened at the railway stations throughout the country which extended to district or "Amphoe" and subdistrict "King-Amphoe" post offices. 35

P.O. Boxes and locally printed postage stamps began appearing between 1906 and 1917. In those early days, nationwide
projects, especially government services such as those mentioned above, needed years to gain popularity among the urban and rural population.\footnote{36}

By 1926, both post and telegraph services were in popular use, but the original system needed up-grading to improve the service. Hence, H.R.H. Prince Aksornyothon, who also introduced the “discount rate system” called the Franking Service, initiated the amendment of the Post and Telegraph Service Regulations; however, only an experimental service was set up within the Ministry of Interior.\footnote{37}

The Government also gave permission to local merchants to set up privately owned post offices in 1927; these small operations were mostly found in small communities and market places in urban areas. Government reimbursements and remittances for services rendered and stamps sold were not efficient enough and only small profit was made if any. The project never became a success.\footnote{38}

However, the postal service did have other success stories with the introduction of postcards, which became highly popular, and the postage on delivery service for parcels and packages, where payment for the delivery service is collected at the point of destination, which was also well received by the public.\footnote{39}

The airmail pouch service was opened in 1928, which saw the gradual phasing out of the sea mail service, except for parcels and packages, which was later also transferred to the airmail service as the commercial aviation between Thailand and industrial countries of the West prospered.\footnote{40}

In 1929, Phra Kittikolsart, director of the PTD was sent to London to attend the annual meeting of the International Postal Service, whence the following agreements were signed: the Postal Parcel
Agreement, the Overseas Postal Order, the Postal Remittance and the agreement on air carriage of News Prints and Journals. These agreements were opened for public service on July 1, 1930. After the transition from Absolute to Constitutional Monarchy, the postal service was greatly improved with the introduction of such new services as overseas registered mail the postal field service for border areas, the airmail parcel and packages service, postage cheques and money orders, while the Franking System was introduced for official mail within the country. The Postage fees were standardized using the same rates for both mailed letters and parcels, fees were calculated by distance and weight of the item being sent. The Airmail service was discontinued during the Second World War, and was resumed in 1958.\(^{41}\)

The expansion and improvement of the domestic postal service was seriously taken to task between 1960 and 1976, between the First and Third National Economic and Social Development Plans during the Government of Field Marshal Sarit Thanarat. The first NESDP's overall expansion plan for the Post and the Telegraph Service divided Bangkok and Thonburi into two separate postal areas, which was subdivided into 12 postal districts in all.\(^{42}\)

A budget allotment was given to build two central post offices in each of the 12 postal districts. This project was completed in 1960, and during the third NESDP (1962-1967), 17 other postal districts and a total of 34 post offices were constructed throughout Bangkok and Thonburi.\(^{43}\)

Between 1961 and 1966, district and sub-district post offices were not only constructed in the Bangkok and Thonburi areas, but the outlying provinces and important provincial townships were
given priority. The new types of services such as the issuing of postal money orders instead of postal cheques, the handling systems of airmail and registered mail both domestic and overseas were also much improved, during this time. The Post and Telegraph Dept, new road, also opened up packaging and parcel services at this time. In 1962, an agreement between the PTD and the Interior Ministry placed the supervision of rural district and sub-district post offices under "Kamnans", a local term for village chiefs. The Kamnan’s salary was paid by the PTD. ⁴⁴

The Post vans and mobile post offices played an important part in modernizing and speeding up the delivery service. The Mail vans collected mail within an operational radius of 100 kilometers around Bangkok and Thonburi, while post boxes were installed on pavements throughout the twin cities. The cost of airmail letters rose from 2 to 5 baht per envelope as demand increased. Post offices were also set at the railway stations and important junctions, and the mail bogies were in service on all rail routes.

Telegraph Service

In 1875, His Majesty King Rama V granted royal approval to the Ministry of Defense to lay the first telegraph cable between Bangkok and the outlying province of Samut Prakan, situated on the east bank at the mouth of the Chao Phaya River, a total distance of 45 kilometers. Later, this cable was further extended to reach the Pu Rai Peninsular which included a submarine cable connecting the lighthouse located bank of the on the bank of the river, Delta. The purpose was to enable the lighthouse to report on shipping traffic arriving and departing the Chao Phya. ⁴⁵
After the success of this experimental line, another long distance cable was laid between Bangkok and the Bang Pra-in township, which was later extended to the city of Ayuthaya in 1878. A few years later, the first telegraph cables were laid to connect Bangkok and Saigon of French Indochina; the lines were laid through the towns of Prachin Buri, Kabinburi, Aranyapathet and Sisophon connecting with the Cambodian cable at Khlong Kam Pong Pak (canal) which was the natural borderline between the two kingdoms. The line was officially opened to public and official use on January 16, 1883.46

The cost of telegraphing in those days was 1 Ferng (Approx 12 Stang – 1 Baht equals 100 Stangs) for calls outside the kingdom, while domestic calls were charged 1 Art (Approx 8 Stangs) per word. In that same year, the Bangkok-Kanchanaburi line was completed, and was later extended to the border district of Kao Dan on the Thai-Burmese border, which was connected up with the Burmese cable to the township of Moulmein, and was opened for public service in February 1883. It was in this period that His Majesty King Rama V established the Telegraph Department as an independent agency, thus ending the Defense Department control over the telegraph service. His Serene Highness Prince Bhanurangsri Sawarngwongse received royal appointment as the first governor of the Telegraph Department.47

The Development of the Telegraph

On July 1, 1885, Thailand was admitted as a member of the International Telegraph Organization. At this period, three new long distance cables were laid between Chon Buri and Trad provinces passing through the townships of Siracha, Chanthaburi and Rayong; the second line was from Siracha to Koh Kharm (Island) on the Eastern Seaboard,
while the third line connected Sawankaloke and Mea Sot. It is important to note that, in the early 1880's, the telegraph service was running into heavy debts - it was recorded that between March 1883 and April 1884, the telegraph service incurred a loss of 178,265.32 baht in operations and maintenance, while its initial income from both sales of postal items and services was 25,588.50 baht which clearly showed that the telegraph service was financially struggling for survival. 48

However, the department continued regular service, and even invested in laying the Saiburi-Songkhla and the Saiburi-Kulabukha lines - the second line was later connected up with the Malayan telegraph network and connected Bangkok with Penang Island and Singapore, while all important townships within the country were all linked with the central office in Bangkok.

After merging of the Post and the Telegraph departments and the inauguration of the Post and Telegraph Department (PTD) on July 19, 1898, the telegraph service expanded considerably, and the scope of responsibility of the PTD likewise, with the introduction of the telephone and radio telephone services. 49

In 1902, telephotography was brought into service in Thailand, and in 1904 the first radio-telephone, made by Telefunken, Germany, was installed for a trial service between stations located on the Si Chang Island, Siracha, Chon Buri Province and the Golden Mount (Pukhao Thong) in Wat Saket (Monastery); unfortunately the results of this experiment proved to be unsuccessful. Later, in 1907, the Marconi Telex System, made in Great Britain, was introduced for service in the Royal Thai Navy (RTN) and the army in 1912. This was when the word "Radio" was first used by the armed forces in this country. The PTD also
invented the Thai language signal based on Morse Code, for use in domestic communications. 50

In 1913, His Majesty King Rama V granted permission to the navy to set up their first Teletype Station in Saladaeng District, Bangkok with the construction of another station in Songkhla Province in the South. The line was exclusively used by the navy, until May 1st, 1913 when an agreement was struck between the PTD and the RTN which opened the Bangkok-Songkhla line for public service. Some time later, the original 'Single Current Simplex Morse System' equipment was replaced by the newer 'Double Duplex System', and the PTD personnel were trained to transcribe messages from the "Sounder" instead of the old method of decoding. 51

On January 1, 1928, the first telex system was opened for service between Bangkok and Berlin, and not long afterwards, similar links were made between Bangkok and other capitals of the industrialized West. Curing this time, the British Watstone and Creed high-speed transmitters and receivers were in service, including the French made Baudot teleprinters. The system was consequently changed from the 'Duplex' to the 'Quaduplex' system, which has a larger capacity for spontaneous exchanges of messages. On August 10, 1931, the German made Radio-photographic machine, which was installed to link Bangkok and Berlin for the first time. 52

**Radio Broadcasting Station**

The first experimental radio station was set up by H.R.H. Prince Aksornyothin at his Ban Dok palace. As the trial broadcasts proved successful, the PTD then established its own Radio and Technical Section in that year, and went on the air on May 30, 1928,
using a 37 meter wave length and equipped with a 200 watt transmitter, the station's code name was '4PJ'. The first permanent radio station was set up on February 25, 1930 called Radio Bangkok, Phayathai. The station was located on the top floor of the Phayathai Hotel in Phayathai district, Bangkok. This was the first time in history that advertisements were heard on the radio in Thailand.\(^53\)

Note: His Serene Highness Prince Aksornyothin also initiated the first introduction of the television network in this country; he contracted an American company to set up a trial station in Bangkok but unfortunately, the revolution of 1932 which gave the country its first constitution, caused the Television Project to be temporary shelved.

**Development of the Radio Service**

After Radio Bangkok went on the air on February 25, 1930, two other radio stations were set up in Phitsanulok Province and Lak See District in Bangkok for aviation purposes of both commercial and military aircrafts.\(^54\)

Many new services were later introduced such as radio advertisement and radiotelephone services. The first radio-telephone between Bangkok and Berlin and Japan came into service in 1934, while additional air navigation radio stations were set up in Nakhon Ratchasima, Udon Thani and Surat Thani and on Samui Island, and the radiotelephone system was changed from the 'Four Wise System' to the 'Two Wise System' in 1935.\(^55\)

After the Second World War, the Minister of communications ordered the PTD to install extra sets of radio transmitters for emergencies during wartime. The extra sets of radio
transmitters for emergencies during wartime. The extra sets were installed at Wat Lieb Station called the "Por Nor One Station".56

Invention of the Teleprinter

In 1953, Samarn Boonyarataphan, senior technician in the PTD, succeeded in invention the first Thai language teleprinter by inventing the Spacing Control Mechanism. The Thai model superior to both the British and Japanese models, as Samarn's was a bilingual (Thai/English). The model was later patent rights were sold off to the Japanese before the PTD issued its certification approving Samarn' work.

After the merging of the Post and Telegraph departments into one department in 1899, the administration of the provincial Post & Telegraph offices came under the responsibility and supervision of the provincial governor on July 1st, 1899. For practicality, on April 1, 1912, the administration of the PTD was transferred from the Ministry of Public Works to the Ministry of Communications.

A Royal Decree was promulgated for control of the Radio Telecommunications Service in 1914, which gave permission to the PTD to install the Telex and Radio Telephone systems in the kingdom. An additional clause was added to the Decree in 1921 to allow the PTD to render radio services to ships navigating within Thai territorial waters.57

On March 30th, 1926, a meeting was called by H.R.H. Prince Aksornyothin between representatives of the Post and Telegraph Department, the Ministry of Naval Operations and the Royal Thai Army Air Corps and the Ministry of Defense to regulate wave length and its utilization within the kingdom.58

In 1945, after the end of hostilities in the Pacific Region, the PTD was transferred from the Ministry of Economy to the Ministry
of Communications, while the technical sections of the telegraph and telephone services were merged into one section called the Telegraph and Telephone Technical Section.\textsuperscript{59}

On April 1\textsuperscript{st}, 1939, the supervision of the Radio Broadcasting Service was transferred from the Post and Telegraph Dept to the Advertising Section of the Department of Advertising (now known as the Public Relations Department).\textsuperscript{60}

The Government Savings Department was transferred from the Post and Telegraph Dept and set up as an independent enterprise called the Government Savings Bank in January 1947.

The navigation radio service was later transferred from the PTD to the Transport Department in 1946. The Air Navigation Radio Station was set up into an independent office called the Civil Aviation Radio Service of Thailand Co Ltd, in 1948.

In 1953, the Telegraph and Telephone Technical Department was again divided into two separate divisions called the Telephone Technical Division and the Telegraph Technical Division, and a Technical Department of the Public Relations Department was also given control and supervision of overseas communications in 1953.

On April 26th, 1966, the cabinet approved the construction of the satellite receiving station in Siracha, Chon Buri Province, and Thailand was admitted into the International Satellite Communications Network Organization which allowed the Thai Government to utilize Intelsat satellite facilities over the Pacific and Indian oceans. The Siracha satellite station was completed in 1970.

On February 26, 1977, the Communications Authority of Thailand (CAT) was established to control all telecommunications
services, which was originally the responsibility of the PTD. Thus, the PTD was left with four sections, namely the Secretarial, Planning, International Communications and the Radio Frequency Control sections, while the number of employees was reduced from 17,000 to a mere 250 permanent staff.  

Summary:

It evident from the above discussion that Thailand has historically made the mark in the development of Communication System with the co-operation of British Government since the beginning of nineteenth century. The Railway System, Postal Services, Telegraph Services, Teleprinter, Air Services, Seaways, Road Services that have developed satisfactorily to extent that Thailand stand in the first few states in South East Asian countries.

More over, Thailand as on today is developing fast because of its policy of economic reform and policy of going with the changes that are occurring with the help of Globalization, Liberation and Privatization.
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