Myanmar Telecommunications Sector

(Summary)

Until the year 2012 Myanmar's telecommunications environment was in an extremely bad situation. Then in 2013, the Myanmar government licensed Telenor of Norway and Ooredoo of Qatar to operate as telecommunications carriers in Myanmar, and KDDI began providing technical support to Myanmar Posts and Telecommunications. This brought dramatic improvements in the situation. As for mobile phones, the diffusion rate was only at around 2% in 2011 and grew rapidly to reach 89% in 2016, growth of over 40x.

The mobile phone has brought a great change to people's lives and to the business environment. As for the internet, the diffusion rate is still low, but this means that there is a lot of room for future growth. Taking note of this fact, Japanese corporations and corporations from other countries are acquiring licenses to provide internet services and are entering the broadband market in Myanmar.

Once the diffusion rate of broadband grows, telecommunications infrastructure should become easier to use as it becomes more capable of handling the expanding volume of data which systems are able to send. The change should enrich people's lives, while business is expected to become more efficient and contribute more toward the growth of Myanmar's economy. Telecommunications is an industry which should be watched in the future.

1. Myanmar Telecommunications Environment Improved Greatly Since 2013

Myanmar's telecommunications environment has seen immense changes over the past few years. Until around the year 2012, telecommunications were handled exclusively by Myanmar Posts and Telecommunications (MPT). Since the company had a monopoly on telecommunications quality was extremely low, and often telephone calls from Tokyo would not go through, and even if one could connect, the quality of the sound was so bad that it was sometimes impossible to carry on a conversation. The low quality of the telecommunications environment became an issue in attempting to do business in Myanmar.

However, in 2013 the Myanmar government licensed Telenor of Norway and Ooredoo of Qatar to operate as telecommunications carriers in Myanmar, and KDDI began providing technical support to Myanmar Posts and Telecommunications. This brought major changes in the situation. With foreign corporations directing Myanmar's telecommunications field, investment in telecommunications infrastructure has been taking place nonstop since that time, bringing major improvements to the telecommunications environment.

Particular attention is being given to mobile phone related infrastructure. A comparison of the number of landline, mobile phone, and broadband subscribers, and mobile phone diffusion rates in 2011 before foreign corporations began major investments, and in 2016, we can immediately see the

extent of change which took place. First of all the number of landline subscribers declined by around 10,000, while the diffusion rate of landlines fell from 1.00% to 0.94%. The average private household in Myanmar does not own a telephone (landline), and even businesses have only one or two phones on their premises. This fact reveals exactly how major the above numbers are.

Chart 1: Number of Subscribers of Landlines, Mobile Phones, and Broadband, and Diffusion Rates

	2011		2016	
	Number of Subscribers	Diffusion Rate (%)	Number of Subscribers	Diffusion Rate (%)
Landlines	523,865	1.00	514,385	0.94
Mobile Phones	1,243,619	2.38	48,728,399	89.26
Broadband	21,898	0.04	30,240	0.06

Source: International Telecommunication Union (ITU); compiled by writer of this report

Looking specifically at mobile phones we see that in 2011, the number of subscribers totaled 1,243,619, while the diffusion rate stood at 2.38%. However, by the year 2016, the number of subscribers had grown to 48,728,399, with the diffusion rate at 89.26%, representing a colossal amount of growth. It's not easy to get infrastructure which can handle this number of subscribers up and running in such a short period of time, but the process has actually moved along smoothly, and the market has expanded with no major disruptions occurring. This can be said to be a manifestation of the high level of technical capability of foreign corporations. It was 2014 when market expansion accelerated the most.

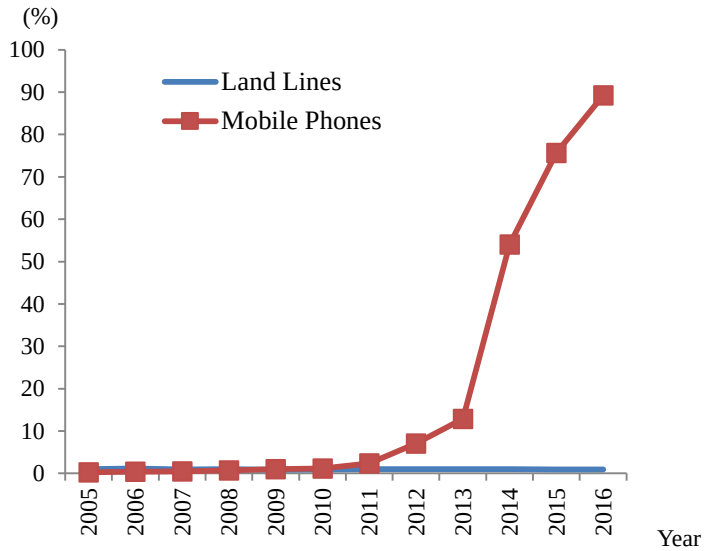
One of the major factors was the appearance of low-cost SIM cards. Until then SIM cards were extremely expensive in Myanmar, and only the affluent could own a mobile phone. Then in 2014 a new SIM card selling for around 150 yen came into the market, and at this price, almost anyone could purchase one. As a result, large numbers of people now wanted to buy a mobile phone, and crowds of people would be lined up outside shops eager to buy them. This occasionally caused quite a bit of chaos. You could call this period in Myanmar the mobile phone boom. Currently the market appears to have passed by the boom period, and one rarely sees such long lines outside mobile phone shops anymore. On the other hand, interest in mobile phones continues with the introduction of 4G service and newer mobile phone models with high functionality.

In this way mobile phone use has spread rapidly amongst the people of Myanmar, and has now become an essential part of everyday life. Mobile phone coverage is also expanding, and now encompasses all of the major domestic regions. Meanwhile, in addition, coverage is improving throughout Asia, thereby improving the convenience of mobile phone use in many regions. In terms of quality, telecommunications has become more stable, and use for business has also improved greatly.

There were three companies providing mobile phone services in Myanmar as of 2016, including MPT, Telenor, and Ooredoo. In January 2017, Viettel of Vietnam also entered the market by establishing a tie-up with a Myanmar company. The new company is Myanmar National Tele & Communications Co., Ltd (Mytel). Mytel plans on carrying out USD 2 billion in investment in the future, with a target of mid-2018 for start of business.

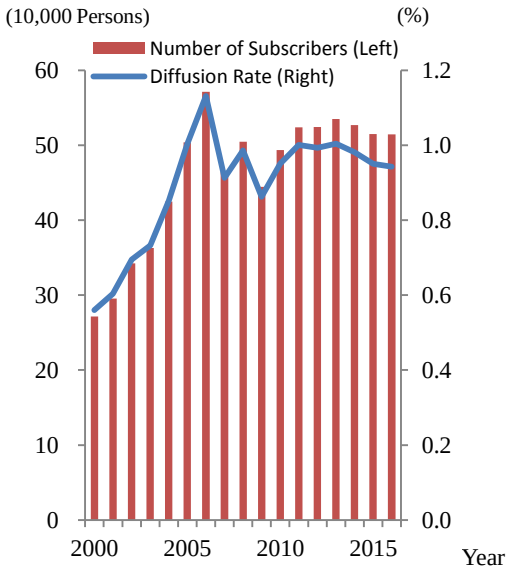
Now there are four companies operating mobile phone services in Myanmar, two of them domestic and two of them foreign. The four companies are now in heated competition, bringing cheaper and better mobile phone service to Myanmar. The telecommunications business environment is now said to be a good one, and is headed for further progress and developments.

Chart 2: Diffusion Rates for Landlines and Mobile Phones



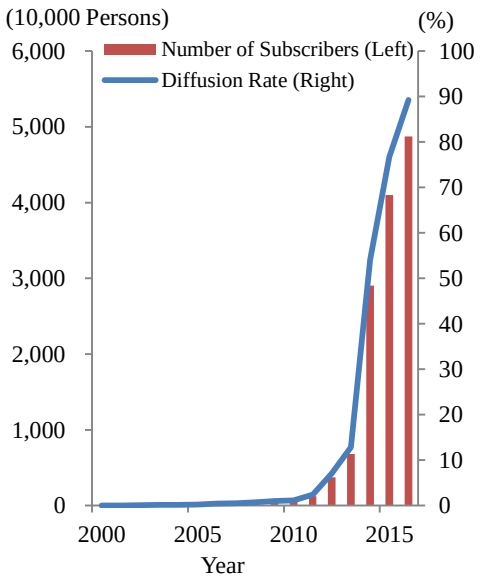
Source: ITU; compiled by writer of this report

Chart 3: Number of Subscribers & Diffusion Rates for Land Lines



Source: ITU; compiled by writer of this report

Chart 4: Number of Subscribers & Diffusion Rates for Mobile Phones



Source: ITU; compiled by writer of this report

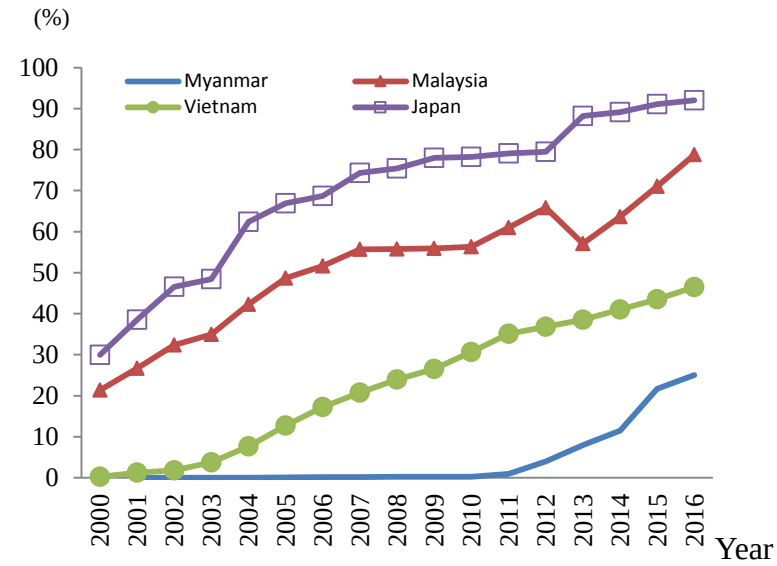
2. Opportunity in the Broadband Market

As was describe in the previous section, mobile phone infrastructure in Myanmar was provided primarily by foreign corporations, and as a result, mobile phone use has become quite widespread. The mobile phone market in Myanmar is oriented mostly toward smartphones. As for mobile phone handsets, Huawei of China and Samsung of Korea have a large share of the market. These companies have a tendency to market new models quite frequently. Because of this, the quality of their products has improved rapidly, and their user environments are comfortable. Purpose of use is mainly as a phone, as well as for Facebook and internet use. The average individual's Facebook utilization rate in Myanmar is extremely high, and corporations also make use of the platform due to its potential for advertising.

However, the reality is that means of communication other than mobile phone are not progressing much. Traditional telephones (landlines), whose market share has declined, are representative in this sense, and show no signs of becoming more widespread in the future. Currently the broadband market is attracting attention. The broadband diffusion rate had reached only 0.06% as of the year 2016, with the number of subscribers at around 30,000. This means that there is plenty of room for growth. Meanwhile, looking at the diffusion rate of internet use, which is considered to have a high rate of correlation with the broadband market, we see that in 2016 Myanmar was still at a fairly low rate of around 20%.

The internet diffusion rate in Japan is 90%, while in Malaysia it stands at 70% and in Vietnam around 50%. Myanmar still has a ways to go in comparison to these other major internet using nations in Asia, and shows a lot of room for growth in the internet market. It is not difficult to imagine that once broadband infrastructure progresses further, the internet diffusion rate is also likely to grow. As it becomes more capable of handling larger volumes of data, the internet will generate more business opportunities. Many corporations, including foreign corporations, will naturally take note of this fact and acquire licenses to operate in Myanmar, and further development of internet infrastructure will likely follow, along with market expansion in the future.

Chart 5: Internet Diffusion Rate



Source: ITU; compiled by writer of this report

Although telecommunications infrastructure in Myanmar has sometimes been provided by domestic Myanmar companies, there are many cases where foreign corporations are used due to the higher quality of services they can provide. When we look at investments on the part of foreign corporations in internet related businesses in Myanmar, we can see that the largest share of investments in fiber cable installation and related businesses can be accounted for by foreign investment.

A representative example is that of Fiber Link Myanmar Company Limited, which took in capital from Singapore in FY2016. The government authorized cumulative investments of around 860 million dollars in foreign investment in the company during that year. An amount such as this is huge from the perspective of Myanmar's economy, and is expected to contribute greatly to the country's economic growth.

Chart 6: Amount of Government-Authorized Foreign Direct Investment in Internet Related Businesses

Fiscal Year	Name of Corporation	Nationality	Main Areas of Business	Authorized Amount of Investment (Mil Dlrs)
2013	Frontier Company Limited	Singapore	IT & software service	0.3
2015	Frontier Company Limited	Singapore	IT & software service	3.3
	Campana Mythic Co.,Ltd	Singapore	Fiber cable	16.0
2016	FPT Myanmar	Singapore	Network installation	50.0
	Marga Global Telecom	Singapore	Data center, wireless internet	26.0
	Southeastasianet Technologies Myanmar Co.,Ltd	Malaysia	Internet applications	9.7
	Fiber Link Myanmar Company Limited	Singapore	Fiber cable	858.9

Source: Myanmar Ministry of Communications and Information Technology (MCIT); compiled by writer of this report

As of December 12, 2017, there were 137 companies providing internet related services in Myanmar, including 4 mobile phone companies and all other types of telecommunications related companies. On the surface this may seem like quite a large number of companies, but the situation in Myanmar is such that one never knows when it might be possible to acquire a license to operate a telecommunications related business. Licenses may be available one day, and then suddenly the next day they will be unavailable.

For this reason, businesses usually acquire a license first, and then begin setting up operations. The actual number of companies able to actively provide services is much less than the total number of licenses. Looking at the nationality of the 137 corporations holding these licenses, we see that there are 94 local Myanmar companies and 43 foreign companies. Foreign companies are of various nationalities, but Singapore corporations are the largest in number. Others are from Malaysia, Thailand, Laos, China, and elsewhere.

In addition to licenses acquired by the four major mobile phone companies, there are four types of telecommunications licenses associated with internet services. Internet service licenses are categorized as follows: (1) Application Service License for those providing wired internet services, (2) Network Service License for companies providing wireless internet services, (3) Network Facilities Services License (Class) for companies providing internet related infrastructure such as fiber cable and communications towers, and (4) Network Facilities Services License (Individual) for companies offering all internet services listed in (1) through (3).

There is some cost associated with acquiring a license, including an application fee, the license fee itself, and a renewal fee when renewing the license. The Network Facilities Services

License (Individual) requires an application fee of 10 million kyat (approximately 800,000 yen), a license fee of 50 million kyat (approximately 4 million yen), and a renewal fee of 50 million chat (approximately 4 million yen). The term of validity for the internet license is 15 years. In addition, there is a fee required whenever a company already holding a license wants to expand the area its services cover. This additional license for larger coverage requires going through the application procedure all over again as if for the first time, but this time for the larger coverage.

The licensing fee is not cheap for a domestic Myanmar company. The question of which type of license should be acquired depends very much on a company's financial condition and business strategy. As of January 2017, there were 51 companies providing wired and wireless communications infrastructure, while 23 companies offered wired communications services only, and 16 companies provided wireless service only. Companies providing only communications infrastructure totaled 43.

Chart 7: Telecommunications Licensing Categories and Number of Companies Having Acquired Licenses (As of December 12, 2017)

	License Category	Local Companies	Foreign Companies	Total
1	Nationwide Telecommunication License	2	2	4
2	Network Facilities Services License (Individual)	36	15	51
3	Network Service License	10	6	16
4	Network Facilities Services License (Class)	27	16	43
5	Application Service License	19	4	23
Total		94	43	137

Source: MCIT; compiled by writer of this report

Chart 8: Cost of Acquiring License (Unit: Chat)

	NFS (I) License			
		NFS (Class) License	NS License	AS License
Application Fee	10,000,000	2,500,000	5,000,000	2,500,000
Licensing Fee	50,000,000	12,500,000	25,000,000	10,000,000
Annual Administrative Fee	2% of earnings	0.5% of earnings	1% of earnings	0.5% of earnings
Licensing Fee for Additional Services (such as international gateway service etc.)	5,000,000	1,250,000	2,500,000	1,250,000
Renewal Fee	50,000,000	12,500,000	25,000,000	10,000,000

Source: MCIT; compiled by writer of this report

3. Outlook for the Future

Myanmar has experienced major improvements in its telecommunications environment in a short period of time having made use of the technical know-how of foreign companies. At first, investment was mostly mobile phone related, then in 2014 and 2015 Myanmar experienced a mobile phone boom. The rapid spread of mobile phones has brought a great change in people's lifestyles and the business environment.

However, looking around at the current state of affairs, mobile phones have quite an advanced diffusion rate, and the business of providing infrastructure for mobile phones appears to have reached its peak. Now a new trend is taking over – that of the broadband market which may now be moving into its own boom period. The diffusion rate of broadband is still low, and so is the closely related field of internet. Under these circumstances there is much room for future growth in the new internet services market. Taking note of this fact, many corporations, both foreign and domestic, have entered the market.

As of 2015 a total of 22 companies had acquired wired, wireless, and telecommunications infrastructure licenses, were followed by 19 more companies gaining licensing in 2016 and then another 10 companies in 2017, bringing the current total to 51 companies holding internet licenses. The percentage of companies which started their internet service fairly recently in FY2015 and FY2016 is especially high. In other words, there is still a long way to go before internet infrastructure reaches its peak. Hence we can assume that full-scale growth is still in the future.

Once the scale of the broadband and internet market expands, the volume of data which systems are capable of sending will also grow, and as was the case with mobile phones, Myanmar's telecommunications environment promises further improvements in the future. The change should enrich people's lives, while business is expected to become more efficient and contribute more toward the growth of Myanmar's economy. The telecommunications market in Myanmar is an area of business worthy of close attention in the future.

(This research paper is compiled by DIR and all opinions and findings are only the view of original researcher.)