Ch.6 Risk Management Analysis

In the course of operating its business, the Company faces three major types of internal and external risks, namely: industry risk, financial risk and operating risk. The Company realizes the damages these risks may cause and therefore has established a risk management committee to set policies in order to minimize any particular incident's effect on the Company's operations.

Industry Risk

Technology Changes and Development

1. Wireless Broadband Access (WBA), a new technology

(1) Potential impact

WBA is a communications technology based on Orthogonal Frequency Division Multiplexing (OFDM) and is capable of providing speeds of up to 10 Mbps on the equivalent frequency bandwidth of 3G's 5MHz. Considered a foundation for the next generation of mobile broadband communications, WBA poses a reasonable threat to 3G technology.

To meet the challenges of emerging global wireless broadband technologies and other development trends in the communications industry, the National Communications Commission (NCC) has adopted a two-stage approach in licensing WiMAX technology. The first stage involved the release on July 26, 2007 of six regional licenses -- three in the north and three in the south. These licenses, with a spectrum of 30MHz each and valid for six years, can be consolidated into a nationwide license. The second stage would be the release of at least one nationwide license, valid for 10 years, after June 2009. As WiMAX is still an evolving technology, the Company submitted a conservative bid and was not awarded a license in the initial stage.

(2) Countermeasures

While the standard for mobile WiMAX protocol (IEEE802.16e) has been set in line with the WiMAX Forum's timetable, equipment interoperability tests are still ongoing. Given the limited number of WiMAX equipment suppliers, the likelihood of a commercial launch before the end of 2008 is low. The suspension of a WiMax deployment cooperation between Sprint Nextel and Clearwire has raised concerns about the development of WiMAX.

The technology for 3.5G High Speed Downlink Packet Access (HSDPA), in comparison, is mature and ready for commercialization. The speed of the connection throughput for 3.5G is 7.2 Mbps and should rise to 10.8 Mbps with continuous upgrades, placing it on the same level as WBA. In the short term, HSDPA will be a more commercially competitive technology than WBA. In addition, the 3G extended long-term evolution technology that is under development may provide the same services as WiMAX. The Company is fully involved in this technology's development and evaluation is ongoing.

To cope with the dynamic changes in the market, TWM has drawn up a long-term plan to strengthen its wireless broadband and multimedia services. It has hired a renowned global consulting agency to analyze industry trends and formulate effective strategies.

2. Rising popularity of Internet protocol

(1) Potential impact

The popularity of Internet Protocol (IP) has revolutionized the telecommunications business and network infrastructure, giving rise to increased communications traffic. Among these changes, the introduction of voice-over IP (VoIP) service has had the greatest impact on the fixed-line operators' voice revenue. The increasing popularity of wireless local area networks (WLAN) could also facilitate the deployment of voice over WLAN (VoWLAN) and affect mobile operators' future voice revenue.

(2) Countermeasures

The necessity of building an IP core network infrastructure based on next generation network (NGN) is an urgent task. The Company has organized an IP Infrastructure Committee to study and analyze the demand, costs and benefits of developing an IP multimedia subsystem (IMS) and IP core access and transmission technologies. The Company has also started many IMS application trials in the lab to keep abreast of the technology's development. Additionally, it is conducting research on advanced optical network transmission technology to introduce the latest cost-effective optical network backbone at the appropriate time in the future.

3. Telecommunications and media convergence

(1) Potential impact

The mobile and fixed-line communications and media industries, which have similar service models and technologies, have been on a converging trend in recent years. This has facilitated the exchange and transmission of digital content and services among different carriers, systems and platforms, and is a factor for potential consolidation in the telecommunications and broadcasting industries.

(2) Countermeasures

As mentioned, the Company has hired a renowned global consulting agency, which is also tasked with analyzing trends and issues arising from the convergence of fixed and mobile communications and implementing measures to address the trend toward communications and media convergence. In addition, the Company has merged Taiwan Fixed Network (TFN) and Taiwan Fixed Network Media (TFNM, formerly known as Fu Yang Media) and acquired Taiwan Telecommunication Network Services (TTN) in 2007 to enhance the Company's competitiveness in the digital era. In 2008, TWM will integrate the group's resources in research and development into digital convergence in order to launch services as soon as possible.

Regulatory Changes

1. Communications Administration Act

(1) Potential impact

In line with the trend toward digital convergence, the NCC submitted a Communications Administration Act to the Cabinet for review on December 20, 2007. The draft legislation combines the current "Telecommunications Act," the "Cable Radio and Television Act", the "Radio and Television Act", and the "Satellite Broadcasting Act" by eliminating the boundaries between the telecom and broadcasting industries, and regulating these industries by infrastructure, service platform and content instead.

(2) Countermeasures

During the act's drafting, the Company proposed amendments to protect its rights. The Company will closely monitor the draft's progress as well as continue its efforts to consolidate the TWM group's resources to keep pace with the digital convergence trend.

2. Pricing right and call revenue shifted to fixed-line operators

(1) Potential impact

To encourage mobile operators, the NCC promoted in 1977 the "Mobile network pricing mechanism for network interconnection and other matters relating to local calls," with the right to set prices for fixed-to-mobile calls awarded to mobile operators. However, interconnection charging will be changed from the beginning of 2011, with the right to set prices being transferred from mobile operators to fixed-line ones. As such, major fixed-line operators will receive the call revenue and pay an interconnecting charge and a transition fee to mobile operators for every fixed line to mobile call. The transition fee will be decreased proportionally on a yearly basis from the beginning of 2011 to the end of 2016. Smaller fixed-line operators will only have to pay interconnecting charges to mobile operators.

(2) Countermeasures

With the proliferation of and convenience provided by mobile phones, calling from fixed lines has been replaced by handsets, thereby limiting the impact on revenue of the change in pricing for fixed line to mobile calls. Moreover, with the fast development of 3G and data applications, the Company will focus on various value-added services and content to satisfy users' needs and boost usage.

3. Minimum paid-in capital requirement for fixed-line operators

(1) Potential impact

Effective Feb. 1, 2008, the paid-in capital requirement was lowered from NT$16 billion to NT$8.4 billion for new fixed-line operators and from NT$40 billion to NT$21 billion for the three existing fixed-line operators to foster competition.

(2) Countermeasures

TFN has paid-in capital of NT$40 billion. The lower paid-in capital requirement will allow TFN to have a more efficient balance sheet.

4. CHT cutting price for local loop

(1) Potential impact

After finding CHT's local loop a bottleneck, NCC ordered the telecom operator in late 2006 to rent it out to other operators, with the monthly fee fixed at NT$140 – down from

NT$220 per month. The measure, approved on Sept. 1, 2007, translates into a 36% cost-saving for TFN in terms of leasing lines from CHT.

(2) Countermeasures
With local loop costs dropping, TFN will evaluate the feasibility of renting a local loop line and co-locating with CHT to achieve economies of scale in select areas to increase revenue from ADSL services. Despite reduced local loop costs, it is still hard for non-CHT fixed-line operators to provide competitive prices. TFN will therefore continue to petition the NCC for further price cuts on local loop and open fiber-to-the-building (FTTB) access in the future.

5. Price cap on cable TV

(1) Potential impact
According to Article 51 of the “Cable Radio and Television Act,” cable TV charges should be reviewed and approved by local governments on an annual basis. Pricing for 2008 was approved before Jan. 10 this year. Among the regions in which TFN Media Co., Ltd.(TFNM) operates, only Taipei County lowered the price ceiling from NT$550 to NT$520.

(2) Countermeasures
TFNM will continue holding talks with local governments about its cost structure to set a more reasonable price ceiling and suggest that the NCC amend the “Cable Radio and Television Act” to centralize decision-making for pricing to enhance information transparency. It would also request that a more flexible pricing system be adopted to give system operators more resources to invest in digital services.

6. Digitalization of cable TV

(1) Potential impact
Since its establishment, the NCC has actively promoted the digitalization of cable TV as a key policy and has held numerous meetings with cable system operators to collect their opinions. Among the major issues that TFNM has to address during this period of transition are the commencement of digital services in Taipei County in 2008, cable operators providing a free second set-top box, and price packages for different program services.

(2) Countermeasures
TFNM, the subsidiary of the Company, will continue to hold dialogue with the NCC on the difficulties of forming partnerships with other cable system operators and propose an alternate solution. As for the expenditure for set-top boxes, TFNM and other operators are planning to obtain approval from the Fair Trade Commission for joint procurement to reduce costs.

Financial Risk

1. Impact of interest rate fluctuations

The Company has pegged the floating interest rate for its first unsecured corporate bond with a total value of NT$7.5bn at 2.25% and 2.45% through interest rate swap (IRS) agreements upon issuance. All other issued corporate bonds have fixed interest rates. The Company is thus completely hedged against interest rate fluctuations.

The IRS is settled semi-annually and is classified as a “cash-flow hedge.” Based on the fair market valuation provided by banks as of January 15, 2008, the Company has a mark-to-market loss of around NT$8 million from the IRS. This unrealized loss does not affect the income statement and is instead booked under shareholders' equity.

The main factors affecting the mark-to-market estimation are the US interest rate, the yield curve and the US$-to-NT$ interest rate differential. When the bond matures and the IRS terminates, the gain/loss associated with the IRS will cease.

2. Impact of exchange rate fluctuations

The Company's main business is providing mobile phone services and its main service area is Taiwan. Except for its international roaming business, all operating revenues are denominated in NT dollars. Some of the Company's capital expenditures are denominated in euros and US dollars. To minimize impacts from foreign exchange rate fluctuations, the Company hedges risks through foreign currency deposits.

The Company's foreign exchange gain totaled NT$23.563 million in 2007, and exchange rate fluctuations had a minimal impact on the Company.

3. Impact of inflation

Inflation had a minimal impact on the Company's operating performance in the past year up until the publication date.

Operating Risk

Investment Policy and Reasons for Gains & Losses for High-Risk/High-Leverage Financial Products, Derivatives, Loans to Others, and Guarantees of Debts

1. The Company did not engage in high-risk, high-leverage financial investment in recent years.

2. The Company passed the "Rules and Procedures on Lending and Making Endorsement/Guarantees" to supervise financing and endorsement activities. As the counterparties in its loans and guarantees to others are all its subsidiaries, there is minimal operating risk.

3. The derivative product positions the Company held in 2007 were for purposes other than trading. The interest rate swap contracts were signed to minimize interest rate risks in bank borrowings on a floating interest rate. The Company's hedging strategies are meant to avoid cash flow risks. No substantial earnings/loss resulted from the derivative transactions.

Mergers and Acquisitions

1. Merger and acquisition update

(1) Hong Yuan Investment Co., Ltd. merged into TFN Investment Co., Ltd., a subsidiary of the Company, on June 5, 2007.

(2) Acquired 100% of Reach & Range Inc. through share swap with TFN Digital Co., Ltd., a subsidiary of the Company, on June 29, 2007.

(3) TFN Digital merged into TFN Investment on June 30, 2007.

(4) Fu Yang Media Co., Ltd. merged into TFN Media Co., Ltd. on December 1, 2007.

(5) Mobitai Communications Co., Ltd. merged into TransAsia Telecommunication Inc. (TAT) on December 15, 2007.

(6) Merger of Taiwan Fixed Network Co., Ltd. (TFN) and Taihsing International Telecommunication Co., Ltd. TIT acquired 84.03% of TFN's shares through a public tender offer of NT$8.3 per share from March to April, 2007, and continued acquiring its shares on the Emerging Stock Market from May to December. TIT merged with the former TFN and was renamed TFN on December 28, 2007.

(7) Completion of acquisition of Taiwan Telecommunication Network Services Co., Ltd. (TTN). Taiwan United Communications Co., Ltd. (TUC), a subsidiary of the Company, acquired 98.35% of TTN's shareholding at NT$13.843 per share between August and November 2007, and acquired the remaining shareholding through a share swap on December 31, 2007.

(8) TUC merged into TFN (the former TIT) on January 1, 2008.

2. Expected benefits and potential risks

(1) Expected benefits:

The mergers and acquisitions should contribute to corporate integration and enhance operating efficiency.

(2) Potential risks:

There are no potential risks involved as the Company has already owned controlling interests in the above-mentioned companies and had control over their operations prior to the mergers.

(3) Countermeasures:

Not applicable.

Supply and Distribution Concentration (Supplier and Customer Risk)

The Company's main supplier is Chunghwa Telecom (CHT) for network interconnections and leased lines. These costs accounted for 22.21% of total operating costs in 2007. The Company has been increasing usage of leased lines supplied by other fixed line operators (e.g. Taiwan Fixed Network) to spread out supplier risk.

On the revenue side, CHT is the Company's largest customer due to interconnection revenue. However, the Company has a very diverse subscriber base for its mobile services. As such, there is no customer concentration risk.

Due to the addition of new players and an expanding telecom subscriber base, the Company expects its supplier and customer risk to continue to decrease in the coming years.

1. Top Supplier (over 10% of total operating costs)

2007			2006			Reason for change
Company	Amount (NT$'000)	% of operating costs	Company	Amount (NT$'000)	% of operating costs	
Chunghwa Telecom	4,981,191	22.21%	Chunghwa Telecom	4,624,745	22.64%	For business purposes

2. Top Customer (over 10% of total revenue)

2007			2006			Reason for change
Company	Amount (NT$'000)	% of revenue	Company	Amount (NT$'000)	% of revenue	
Chunghwa Telecom	9,194,171	17.93%	Chunghwa Telecom	9,122,441	19.05%	For business purposes

Impact of Changes in Brand Image to the Company's Risk Management Policies: None

Expected Benefits and Risks Related to Plant Facility Expansions:

Not applicable

Significant Shareholding Changes of Directors, Supervisors and Major Shareholders:

The shareholding changes of directors, supervisors and major shareholders, disclosed in Chapter 4, had a minimal impact on the Company.

Changes in Management Control:

Not applicable

Significant Lawsuits and Non-litigious Matters

Summary of all material litigation, administrative proceedings, and other non-litigious matters in which the Company or its directors, supervisors, managers and major shareholders (with more than 10% shareholding), or subsidiaries were involved within the past two years up to the report's publication date, that may have a significant impact on shareholders' equity or the share price are listed below:

1. The Company

Damage claim against Chunghwa Telecom Co., Ltd.

Parties Involved: The Company is the plaintiff and Chunghwa Telecom Co., Ltd. is the defendant

Amount Claimed: NT$211,521,377

Date of Filing: July 26, 2004

Grounds for Lawsuit:

In accordance with the Agreement on Network Interconnection entered into by the Company and Chunghwa Telecom Co., Ltd., CHT shall not activate calls that are not specified in the agreement. However, CHT completed the illegal routing of calls from CityPhone and Best Way Telecommunication Co., Ltd. Such illegal routing caused the Company great losses in interconnection fees. The Company thus filed a lawsuit demanding compensation for the amount stated above.

Status: The case was settled out of court.

2. The Company's directors, supervisors, managers and major shareholders (with more than 10% shareholding): None.

3. The Company's subsidiaries

(1) **TransAsia Telecommunications Inc.**

Damage claim by TransAsia Telecommunications Inc. (TAT) against Chunghwa Telecom Co., Ltd.

Parties Involved: TAT is the plaintiff and CHT is the defendant

Amount Claimed: NT$40,946,017

Date of Filing: July 26, 2004

Grounds for Lawsuit:

In accordance with the Agreement on Network Interconnection entered into by TAT and CHT, CHT shall not activate calls that are not specified in the agreement. However, CHT completed the illegal routing of calls from CityPhone and Best Way Telecommunication Co., Ltd. Such illegal routing caused TAT great losses in interconnection fees. TAT therefore filed a lawsuit demanding compensation for the amount stated above.

Status: The case was settled out of court.

(2) **Mobitai Communications Co., Ltd.**

Damage claim by the Company's affiliate, Mobitai Communications Co., Ltd. against Chunghwa Telecom Co., Ltd.

Parties Involved: Mobitai is the plaintiff and CHT is the defendant.

Amount Claimed: NT$18,216,593

Date of Filing: August 2005

Grounds for Lawsuit:

In accordance with the Agreement on Network Interconnection entered into by Mobitai and CHT, CHT shall not activate calls that are not specified in the Agreement. However, CHT completed the illegal routing of calls from CityPhone and Best Way Telecommunication Co., Ltd. Such illegal routing caused Mobitai great losses in interconnection fees and Mobitai thus filed a lawsuit demanding compensation for the amount stated above.

Status: The case was settled out of court.

Violation of Regulations and Internal Policies

1. The Company

(1) **Grounds for violation:**

The National Communications Commission (NCC) asserted in a letter to the Company dated March 16, 2007, that the rate plan, "New Generation Campus Mobile Plan 499/ 599/ 999," was in contravention of the first paragraph of Article 9 of the "Administrative Regulation Governing Tariffs of Type I Telecommunications Enterprises," enacted pursuant to the third paragraph of Article 26 of the "Telecommunications Act." A fine of NT$300,000 was imposed on the Company pursuant to the fourth sub-paragraph of the first paragraph of Article 62-1 of the "Telecommunications Act".

Internal punishment: None

Improvement: The Company has submitted the rate plan to the NCC.

(2) **Grounds for violation:**

The NCC asserted in a letter to the Company dated August 7, 2007, that the Company expanded the switching equipment in its network system without obtaining the NCC's approval. The Company was therefore in contravention of Article 57 of the "Regulations Governing Mobile Communication Business," enacted pursuant to the sixth paragraph of Article 14 of the "Telecommunications Act." A fine of NT$300,000 was imposed on the Company pursuant to Article 63 of the "Telecommunications Act."

Internal punishment: None

Improvement: The Company has filed an application for the expansion.

(3) **Grounds for violation:**

The NCC asserted in a letter to the Company dated October 17, 2007, that the Luzhou-Minzu franchise store provided substitute SIM cards to customers without identifying and checking the personal information of said customers. The Company was therefore in contravention of the first and second paragraphs of Article 73 of the "Regulations Governing Mobile Communication Business," enacted pursuant to the sixth paragraph of Article 14 of the "Telecommunications Act." A fine of NT$300,000 was imposed on the Company pursuant to Article 63 of the "Telecommunications Act."

Internal punishment: The franchise store has been fined 100 times the service charge for SIM card change as compensation.

Improvement: The Company has reviewed the relevant regulations thoroughly to make sure all the employees of its franchise stores are well informed, and has strengthened training in related matters.

(4) **Grounds for violation:**

The NCC asserted in its letter to the Company dated November 30, 2007, that the Jhongli-Youming franchise store sold prepaid SIM cards to customers without identifying and checking the personal information of said customers. The Company was therefore in contravention of the first and second paragraphs of Article 73 of the "Regulations Governing Mobile Communication Business," enacted pursuant to the sixth paragraph of Article 14 of the "Telecommunications Act." A fine of NT$300,000 was imposed on the Company pursuant to Article 63 of the "Telecommunications Act."

Internal punishment: The Company has terminated its contract with the franchise store.

Improvement: The Company has reviewed the relevant regulations thoroughly to make sure all the employees of its franchise stores are well informed, and has strengthened training in related matters.

(5) **Grounds for violation:**

The NCC asserted in its letter to the Company dated November 1st, 2007 that the Company constructed a base station (BTS) without prior official approval. The Company was therefore in contravention of the first paragraph of Article 22 of the Regulations Governing Mobile Communication Business, enacted pursuant to the sixth paragraph of Article 14 of Telecommunications Act. As such, a fine of NT$300,000 was imposed on the Company pursuant to Article 63 of the Telecommunications Act.

Internal punishment: None

Improvement: The mentioned BTS was removed.

2. The Company's subsidiaries:

None

Risk Management

Risk Management Policies

1. Promote a management business model based on risk management.
2. Establish a risk management structure that can effectively cite, evaluate, supervise and control risks.
3. Create a company-wide risk management structure that can limit risks to an acceptable range.
4. Set up good risk management practices and continue to improve upon them.

Risk Management Structure

The Company's risk management structure is made up of three committees. The functions of each committee are as follows:

(1) Operations and Management Committee: Conduct periodic reviews of each business group's operating target and performance to ensure the Company's guidance and budget execution.

(2) Safety and Health Committee: Tasked with supervising and reducing potential risks to workers' health and safety.

(3) Information Security Management Committee: Supervise important information assets for confidentiality, integrity, availability, and regulations compliance to control and reduce operational risks to an effective and reasonable level.

Risk Monagement Committee Organization

Risk Management Committee	Operations and Management Committee	
	Safety and Health Committee	1. Telecom control room security team
		2. IT data center security team
		3. Office security team
		4. Direct stores' security team
	Information Security Management Committee	1. Information security audit team
		2. Information security incident management team
		3. Information security operation team