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 set forth risk management policies and a risk management committee to minimize any particular incident's effect on the Company's operations.

Industry Risk

Technology Changes and Development

1. Wireless broadband access (WBA)

(1) A potential threat

The licenses and frequencies for wireless broadband access (WBA) are scheduled to be released in mid 2007. 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 5 MHz. Considered a foundation for the next generation of mobile broadband communications, WBA poses a reasonable threat to 3G technology.

(2) Countermeasures

Based on the schedule announced by the WiMAX Forum, while the standard for mobile WiMAX protocol (IEEE802.16e) has been set, the equipment interoperability test will not be completed until the second half of 2007. Supplies of WiMAX equipment are therefore limited, with South Korea the only country operating a commercial network. 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 3.6 Mbps, but this should rise to 10.8 Mbps on continuous upgrades, placing it on the same level as WBA. In the short term, HSDPA will be a more commercially competitive technology than WBA.

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. The agency will also conduct studies and forecasts of the long-term effects and benefits of WBA, as well as evaluate the value of a WBA license, and other measures to secure TWM's long-term competitiveness.

2. Rising popularity of Internet protocol

(1) Impact

The popularity of Internet protocol (IP) has generated increasing traffic over the telecommunications network infrastructure delivered via IP packets. It has resulted in major revolutions in the telecommunications business and network architecture. Among these revolutions, 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 network (WLAN) could also facilitate the deployment of voice over WLAN (VoWLAN) and affect mobile operators' future voice revenues.

(2) Countermeasures

TWM has organized an IP Infrastructure Committee to study and analyze the demand, cost and benefits of developing and setting up an IP multimedia subsystem and IP core access and transmission technologies. The company will then take steps to develop these technologies and implement IP advances in a timely manner.

TWM has completed the research and development of a SIM-based authentication platform, offering a customized WiFi/GSM dual mode handset called the TG310. TWM aims to grab a slice of the growing market for VoWLAN by introducing the TG310 in its “Campus Mobile Extension Service” campaign to tap the student market.

3. Telecommunications and media convergence

(1) Digital convergence

The communications and the media industries 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.

(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.

Regulatory Changes

1. Administrative plan promulgated by new regulatory body

(1) NCC’s objectives

A new regulatory body, the National Communications Commission (NCC), was established at the beginning of March 2006. The NCC promulgated the “2006 Administrative Plan” on May 30, listing 28 key points governing communications policy and 50 action points, in line with its four objectives of: (1) promoting effective competition in the age of digital convergence; (2) overseeing the sound development of the telecommunications, broadcasting and information services industries; (3) safeguarding the rights and interests of the public; and (4) promoting multiculturalism and respect for the minorities.

(2) Countermeasures

The Company will actively participate in the enactment of or revisions to related laws and regulations to maintain its customers’ and shareholders’ best interests.

2. Controversy over telecom tariffs

(1) Mandatory rate cuts

To promote a more equitable pricing system, the NCC issued a directive on December 29, 2006, that telecom operators should cut tariffs on landline calls, 2G mobile, 2G prepaid and the highest postpaid rate plan for 2G services by 4.88% per annum for three consecutive years.

(2) Countermeasures

The Company has filed a petition with the NCC. The Company contends that the commission failed to disclose its basis for calculating mobile tariffs, take into account mobile operators’ operational costs, and conduct a thorough survey of overseas telecom operators’ related regulations on tariff controls.

3. WiMAX licensing

(1) Licensing may commence in June

To effectively promote broadband wireless access and its application, the NCC conducted a series of public consultations and hearings to form a consensus view on licensing policy in the second half of 2006. Based on its draft proposal, which had been sent late last year to the legislature for review, WiMAX licensing will be divided into two stages: six regional licenses will be released in the first stage and several national licenses will be issued in the second. NCC announced to open up WiMAX service in February 2007 and will conduct the licensing procedure in June 2007.

(2) Countermeasures

Mobile services have stepped into a new era with the development of WiMAX. The Company will continue to monitor changes and developments in regulatory policy in regard to licensing and carefully evaluate the possibilities before tendering a bid.

4. Network integration

(1) Base stations protest

In response to rising domestic protests against the installation of mobile base stations, the NCC has not only limited the number of existing base stations, but also strictly reviewed its licensing policy. In November 2006 the NCC began to draw up a plan to reduce the total number of existing base stations, including amending Article 43-1 of the Telecommunications Act, allowing base stations under the same business group to be integrated for the purpose of network sharing.

(2) Countermeasures

The proposed integration is expected to reduce domestic protests and lower telecom operators' base station related operating expenses.

5. TWM equipment co-location at CHT premises

(1) Petition for co-location

Pursuant to the policy of promoting fair competition in the telecommunications market, the company had repeatedly asked CHT to allow equipment co-location at the main exchanges but progress had been slow. On February 27, 2006, the Company filed a petition with the NCC to settle the dispute. NCC ruled on June 22, 2006, that CHT should open up its premises in three phases within nine months from the date of the ruling.

(2) Developments

The Company has been negotiating with CHT on co-location plans and related charges prior to the filing of the petition. In line with the NCC's ruling, co-location plans have progressed to the third phase. These are expected to allow the Company to save operational expenses on leased lines.

6. Chunghwa Telecom ordered to offer wholesale prices to operators

(1) Pricing change

The NCC declared that Chunghwa Telecom has to offer wholesale prices rather than retail prices to Type I telecom service providers on leased lines and approved the wholesale prices proposed by CHT pursuant to Article 9-1 of the Regulations Governing the Tariff of Type I Telecommunications Business. The new pricing system applies to fixed-line and mobile operators, starting from December 1, 2006, and January 13, 2007, respectively.

(2) Impact

According to preliminary estimates, the Company would save NT$50m in leased line expenses per annum.

Financial Risk

Impact of Fluctuations in Interest Rates, Exchange Rates and Inflation on the Company's Earnings and Countermeasures

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.

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 and forward contracts.

Excluding the one time foreign exchange gain incurred by the disposal of investment in Chunghwa Telecom through an ADR issue, the Company's foreign exchange gain totaled NT$60m, of which NT$47m was derived from operating activities, in 2006. In summary, 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 and endorsement activities, nor did it lend to others in recent years.

2. The derivative transactions the Company did in 2006 were for purposes other than trading. The interest rate swap contract was signed in order 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.

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 31, 2007, the Company has a mark-to-market loss of around NT$321m 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.

Mergers and Acquisitions

1. Merger and acquisition update

(1) Merger of Taihsing Den Syun Co., Ltd. with Taiwan Cellular Co., Ltd.
The subsidiary, Taihsing Den Syun Co., Ltd., merged with Taiwan Cellular Co., Ltd. on May 1, 2006, with the former as surviving company.

(2) Acquisition of minority interests of TransAsia Telecommunications Inc.
On February 8, 2006, the Company established TAT International Telecommunications Co., Ltd. by investing its shares in the former TransAsia Telecommunications Inc. The Company then acquired TransAsia Telecommunications Inc. as a 100% owned subsidiary on June 27, 2006, in full accordance with the Enterprise Mergers and Acquisitions Law.

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 already owned controlling interests in both companies and had controled their operations prior to the mergers.

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 22.64% of total operating costs in 2006. 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 over the coming years.

1. Top Supplier over 10% of total operating costs

2006			2005			Reason for change
Company	Amount (NT$'000)	% of operating costs	Company	Amount (NT$'000)	% of operating costs	
Chunghwa Telecom	4,624,745	22.64%	Chunghwa Telecom	4,492,186	23.21%	Minor changes

2. Top Customer over 10% of total operating costs

2006			2005			Reason for change
Company	Amount (NT$'000)	% of operating costs	Company	Amount (NT$'000)	% of operating costs	
Chunghwa Telecom	9,122,441	19.05%	Chunghwa Telecom	9,484,888	20.01%	Minor changes

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: Not applicable

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 with in the past two years up to the report's printing date, that may have a significant impact on shareholders' equity or the share price are listed below:

1. The Company

(1) 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 Taipei District Court on August 31, 2006 ruled in favor of TWM demanding payment from CHT. CHT has filed an appeal. The case is pending in the Taiwan High Court.

(2) 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$239,080,365

Date of Filing: November 2005

Grounds for Lawsuit: There was a shortfall in payment of interconnection charges associated with various categories of traffic transmitted to the Company during the period from September 2002 to March 2004 by CHT. Despite the Company's demand for payment, CHT failed to make up for the shortfall. The Company therefore sought and subsequently obtained an administrative decision from the Directorate General of Telecommunications, under the Ministry of Transportation and Communications, against CHT on September 26, 2005, for CHT to make up for the aforementioned shortfall calculated based on the agreed rates for traffic transmissions specified in the relevant contract. The Company thereafter initiated a legal action against CHT to claim damages incurred in this regard, calculated to be the aforementioned amount, on the grounds including non-performance of debt obligations by CHT pursuant to the relevant law.

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 communications caused TAT great losses in interconnection fees. TAT therefore filed a lawsuit demanding compensation for the amount stated above.

Status: The Taipei District on Aug 31, 2006 ruled in favor of TAT demanding payment from CHT. CHT has filed an appeal. The lawsuit is pending in the Taiwan High 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 communication caused Mobitai great losses in interconnection fees and Mobitai thus filed a lawsuit demanding compensation for the amount stated above.

Status: The lawsuit is currently pending in the Taipei District Court.

Violation of Regulations and Internal Policies: None

Risk Management

Risk Management Policies

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

Risk Management Structure

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

(1) Operations and Management Committee: Conduct periodic reviews of business operating risks with regard to budget execution, financial control and the reliability of the Company's financial reports.

(2) Safety and Hygiene Committee: Supervise and reduce potential risks to workers' health and safety.

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

2. Each committee is further divided into several sub-committees to support their work in managing risks. A brief organization chart follows: