# 7. BUSINESS (Cont'd)

#### **Advertising Sales**

ASTRO sells advertising time on the majority of its television channels. On the international channels, ASTRO generally sells up to three minutes each hour. On its locally produced channels, ASTRO sells up to 10 minutes each hour which is the maximum allowance under Malaysian regulations. Advertising rates are currently based on programme genre as well as the potential reach of the various channels. ASTRO has increased rates on an annual basis as the subscriber base has increased and as the potential reach of some channels has grown.

The sectors that spent the most on advertising in 2002 according to NMR were classifieds/appointments, telecommunications, toiletries/toilet goods, automotive, corporations, government agencies and utilities.

The multi-channel subscription television sales staff work together with the radio, publications and interactive groups to develop cross-selling synergies. Through these efforts, ASTRO can offer unique access to targeted demographics across multiple platforms.

Certain restrictions within the Malaysian advertising market have limited the growth of television advertising. Advertisements are currently subject to local content rules that require, generally, that advertisements must be produced in Malaysia using only Malaysian talent. As responsibility for these policies migrates to the Commission, market participants, including ASTRO, are hopeful that these restrictions will be lessened. In addition, alcohol advertising on television is banned in Malaysia, and in late 2001, tobacco companies voluntarily agreed not to engage in any form of tobacco-related advertising on television, creating an advertising gap for the television industry. In order to counter the effects of these limitations and resulting revenue gaps, ASTRO has sought to increase sales revenue from advertisers traditionally using other media in Malaysia and has attempted to attract advertisers by providing accurate and detailed market and segment data.

#### 7.6 Radio

ASTRO operates 16 themed music channels (including five terrestrial FM stations) broadcast on the ASTRO satellite television platform. ASTRO, which was awarded radio broadcasting licences in 1996 through its subsidiaries, MEASAT Radio and Maestra Broadcast, began operations in January 1997 and quickly grew to be Malaysia's leading national radio broadcaster. AMP provides technical, programming, sales and marketing and management services for the radio stations which are licensed to MEASAT Radio and Maestra Broadcast. Since 1995, AMP has had a relationship with Austereo Group Limited ("Austereo"), Australia's leading radio group. During this time, Austereo has provided certain consultancy services to AMP. AMP, MEASAT Radio and Maestra Broadcast are wholly-owned subsidiaries of RAPS.

# **Programming**

ASTRO was the first broadcaster to introduce format radio programming into the Malaysian market. Format radio targets each station's programming at a particular demographic group through frequently researching the target audience and implementing the findings through disciplined programming. Each of AMP's five radio stations are individually branded, marketed and programmed to appeal to specific demographic groups and market segments. ASTRO believes that this segmentation generates listener loyalty and a high level of listener interaction.

### 7. BUSINESS (Cont'd)

NMR Radio Listenership Survey, Sweep 1 April 2003 indicated that AMP's five terrestrial FM stations have a combined reach of approximately 8.2 million listeners per week. AMP's station collectively also have a 43 per cent. share of all listeners from 12 years and above in any average quarter hour.

The five terrestrial radio stations and their programming formats are as follows:

Station	Target Audience Ag	e Format Language		Weekly Audience <sup>1</sup>	Website	Advertising Share <sup>2</sup>
	(in years)			(in millions)		(in percentage)
ERA	18-39	Adult contemporary	Malay	5.64	era.fm	19.9
MY FM	18-39	Adult contemporary	Mandarin, Cantonese	2.02	my.com.my	15.4
hitz.fm	12-29	Top 40	English	1.34	hitz.fm	12.1
Mix FM	25-39	Adult contemporary	English	0.59	mix.fm	13.3
Light & Easy	3 <b>5</b> +	Easy listening	English	0.52	lightradio.com.my	6.9

Notes:

- ERA (Malay) Targets Malay speakers between 18-39 years of age, featuring contemporary and popular Malay music from the 1980s, 1990s and today. ERA is Malaysia's top-rated radio station. According to NMR Radio Listenership Survey Sweep 1, April 2003, ERA has a reach of more than 5.6 million listeners and 43.4 per cent. of Malay listeners aged 12 years old and above listen to ERA in an average quarter hour.
- MY FM (Mandarin & Cantonese) Targeted towards urban Chinese-speaking listeners aged 18 to 39, featuring adult contemporary music of the 1980s and 1990s. According to NMR Radio Listenership Survey Sweep 1, April 2003, MY FM is Malaysia's top-rated Chinese language radio station and the number three ranked station overall. MY FM has a reach of 2.0 million listeners, and 34.7 per cent. of Chinese listeners aged 12 years old and above listen to MY FM in an average quarter hour.
- hitz.fm (English) A high-energy youth network featuring top-40 and new music appealing to listeners aged 12 to 29 years. hitz.fm is Malaysia's top-rated English language radio station. hitz.fm has a reach of 1.3 million listeners.
- Mix FM (English) Targeted at listeners aged 18 to 39 years, playing adult contemporary hits from the 1970s to today including mainstream pop. Mix is the number two ranked English language radio station. Mix has a reach of 588,000 listeners in an average week.
- Light & Easy (English) Targets listeners aged 35 years and above, playing soft adult contemporary music. Light & Easy is the number three ranked English station with a reach of 524,000 listeners in an average week.

The five terrestrial radio stations and 11 additional music channels are broadcast as part of ASTRO's multi-channel subscription television service. Like the five terrestrial FM stations, these 11 music channels are formatted and designed to appeal to specific audience groups. AMP does not currently sell airtime on any of the additional 11 channels, but plans to do so in the future. The additional 11 channels are as follows:

<sup>&</sup>lt;sup>1</sup> NMR Radio Listenership Survey Sweep 1, April 2003.

<sup>&</sup>lt;sup>2</sup> NMR Adex Reports for the 12 months ended 31 July 2003.

# 7. BUSINESS (Cont'd)

Channel name	Description
India Beat	Hindi and Tamil pop and movie music
Golden Oldies	Good times and great oldies
Nostalgia	Music memories from the 1940s and 1950s
Jazz	Living history of the Jazz genre
Opus	Fine classical music
Rock	Legendary rock music
Melody	Cantonese and Mandarin pop music of the 1960s and 1970s
Wirama Melayu	Malay hits of the 1960s and 1970s
Varia	Malay contemporary music
Osai	Southern Indian channel with Tamil music
Musiq'a	Contemporary Arabic music

# **Advertising and Promotions Sales**

RAPS and its subsidiaries derive revenues primarily from advertising sales through the sale of advertising spots, which are generally 30 seconds in duration and which are limited by regulation to an aggregate of 10 minutes per hour per station. Advertisers choose the time of day in which they wish to advertise or can buy run-of-station spots which give them spots spread across the day. RAPS and its subsidiaries use "local insertion units" in its advertising operations, so that selected local advertising content can be broadcast to audiences in each particular geographical location. This has opened up a new group of clients who would have not had the means or the need to buy nationwide advertising spots. RAPS and its subsidiaries also generate income from the sale of promotions, which take the form of sponsorships and the integration of client names and products into competitions and the programming itself. RAPS and its subsidiaries also generate revenue from the sale of on-line advertising and promotion. These integrated on-air, on-the street (station promotional vehicle activity) and on-line promotion strategies are unique to RAPS and its subsidiaries in the Malaysian market. RAPS and its subsidiaries enter into long-term contracts with many of its top advertising clients thereby providing certainty for both RAPS and its subsidiaries and its clients.

RAPS and its subsidiaries have achieved compound annual net revenue growth of 56.0 per cent. since its first full year of operation in fiscal 1998, increasing from RM9.6 million in fiscal 1998 to RM88.7 million in fiscal 2003. This growth has come through a combination of rate growth and increased demand for advertising spots. Over the 12 months ended 31 July 2003, according to NMR, RAPS and its subsidiaries captured 67.7 per cent. of total radio advertising sales in Malaysia, up from 64.8 per cent. for the same period of the prior year. The following table sets forth ASTRO's percentage share of radio advertising during ASTRO's most recent three and a half fiscal years.

	As at or for th	ne year ended 3	l January	As at or for the six months ended 31
	2001 RM	2002 RM	2003 RM	July 2003 RM
		(in millio	ns)	
Total radio advertising sales(1)	104	120	148	69
ASTRO's radio advertising sales(2)	55	74	98	49
ASTRO's share of radio advertising sales(3)	53%	62%	66%	71%

Source: NMR estimates

# Notes:

- Figures were provided by NMR for the total Malaysian market and include free spots given to advertisers
  and local insertion units and exclude sponsorships and promotions.
- (2) NMR estimates.
- (3) Derived based on NMR estimates on total radio advertising sales and NMR estimates of ASTRO's radio advertising sales.

# 7. BUSINESS (Cont'd)

AMP's product sells at premium advertising rates within the Malaysian market as a result of a number of strategies. ASTRO's format-specific programming strategy gives advertisers the ability to place their advertisements on the stations that focus on the particular market segments they wish to target, at optimum times, maximising their advertising's effect and efficiency. The integration of on-air advertising schedules with other promotions available through AMP also adds to the effectiveness of the advertising and works to build high rates.

ASTRO is also introducing new advertising rate packages in order to shift demand from stations with excess advertising demand to those with lower demand for advertising spots. The new rate packages direct excess demand by offering discounts across all stations on a particular buy if advertising space is purchased on any of the less popular radio stations, thereby attracting more aggregate demand.

ASTRO's ability to direct advertising demand across its network of stations is a key tool in maximising AUR and the yield on its inventory of spots. ASTRO has been successful in managing its rate and fill levels across all five stations such that it has achieved compound annual AUR growth of 27.4 per cent. over the last two fiscal years. ASTRO believes that AMP will be able to continue to drive rate growth and fill rates through its value added sales strategy, the continued improvement of its integrated promotions, through continued audience growth and through careful inventory management.

ASTRO is focused on protecting and building its market leadership position through the improvement of its product through research and disciplined programming, developing its onair talent, improving its sales service, staff training and pursuing client-focused sales techniques and continuing to develop of its other key differentiating factors, such as onground and on-line promotions. To capture further opportunities, ASTRO is considering expanding its radio business into new formats in Malaysia and expanding its successful brands into new products.

# **AMP** Interactive

As a complement to the significant listenership base that ASTRO has developed and the station loyalty generated through format radio, ASTRO has expanded its reach to listeners by creating interactive capabilities online with each FM terrestrial station having its own website.

AMP Interactive is responsible for the creation and development of the websites for each of the five terrestrial FM stations, ASTRO's multi-channel subscription television website (astro.com.my), the Xfresh Teen Community's website (xfresh.com) and a website for the 16 satellite music channels (dvrplayer.com). AMP Interactive has been successful in building format radio's communities and accumulated over 817,000 registered online members over the 18 months ended 31 July 2003. ASTRO believes the websites for the five terrestrial FM networks have gained industry notice and user acceptance, particularly the hitz.fm and Era.fm sites. ASTRO intends to enhance and expand these websites in the future.

AMP Interactive is able to continue to drive the success of its websites via the production of highly targeted online content made more relevant and engaging by its interaction with the onair content. These websites serve to further build the format's communities and to allow advertisers to reach consumers through targeting the demographics of each station via a complementary media.

AMP Interactive's advertising proposition to the local market of selling bundled radio and Internet is the first of its kind in Malaysia and thus far has been well-received by both national and multinational advertisers. Clients of AMP Radio and ASTRO TV are able to leverage on this media-bundling proposition to increase the effectiveness of their advertising campaigns. Clients are able to extend their on-air campaigns to the respective radio websites, providing much more information about their campaign and promotion. AMP Interactive plans to use its database of users to generate additional revenue streams in the future.

# 7. BUSINESS (Cont'd)

Key statistics on average over 12 months ended 31 July 2003 for the main websites operated by AMP Interactive, including the five FM stations' websites and the ASTRO and Xfresh websites, are set forth below:

Website	Target Audience	Average Monthly Page Views <sup>(1)</sup>	Average Monthly Visits <sup>(1)</sup>	Average Length of Stay <sup>(1)</sup>
				(in minutes:seconds)
www.era.fm	Under 40	3,824,200	232,246	15:59
www.hitz.fm	Under 40	1,546,433	151,808	12:57
www.my.com.my	Under 40	1,457,204	138,727	14:15
www.mix.fm	Under 40	714,550	88,253	17:21
www.lightradio.com.my	Over 35	222,881	69,504	16:07
www.astro.com.my	Over 14	1,341,508	120,850	14:22
www.xfresh.com	13-19	1,918,812	53,668	18:06

#### Note:

(1) Averages based on ASTRO statistics from 1 August 2002 to 31 July 2003.

#### Content

ASTRO develops, acquires and creates content, for the ASTRO multi-channel subscription television service and licenses this content. Through Celestial Pictures, ASTRO has acquired an inventory of Chinese language movies which is used to package a movie channel targeting principally Chinese audiences in Asia. The PANV Group is engaged in the development of animation programming on a contract basis for third party distributors. ASTRO also creates feature films for release in the Malaysian market through movie theatres, television broadcast and video release. These distinct elements form ASTRO's content business.

# **Television Production**

ASTRO operates an all-digital production facility, including full graphics facilities, audio and video post-production facilities, set and lighting design, art direction and complete programme production resources at the All Asia Broadcast Centre. Through these production facilities, ASTRO produces original game shows, variety specials, live sports and entertainment broadcasts, drama series, children's programmes as well as news. These productions are produced in multiple languages and are used to supplement the acquired content on ASTRO's vernacular channels.

ASTRO has produced top-rated in-house programmes, such as the Malay game show Roda Impian (a local version of the famous game show "Wheel of Fortune"). ASTRO has also produced other variety specials and beauty and talent shows such as Miss Malaysia Chinese International, and ASTRO Wah Lai Toi Talent Quest (with respect to which ASTRO has a partnership with TVB Limited such that participants in the competitions have the opportunity to participate in TVB competitions) and the Tamil programme Vaanavil Talent Quest. A recent production is Akademi Fantasia, a reality talent show, based on a licensed format from Mexico adapted to suit the local market which is ASTRO's first self-produced reality television programme. Akademi Fantasia was conceptualised as the signature programme on ASTRO RIA for 2003 and assists ASTRO's strategy to create further differentiation from terrestrial stations and in its acquisition of new subscribers. The format ran for nine weeks with over 50 hours worth of content. The programme depends purely on SMS votes to determine which participants stay in the Akademi Fantasia.

The quality of ASTRO's in-house television production is recognised both internationally and domestically. Over the four years since the inception of the in-house production operations in 1999, ASTRO has won both local and international awards for graphics, post-production, set and lighting design and content.

### 7. BUSINESS (Cont'd)

In fiscal year 2003, ASTRO produced approximately 715.8 hours of original television programming. Until fiscal 2004, the in-house production operation has produced 2,924 hours of programming. ASTRO has also started co-production with local production houses for dramas, which reduces programme acquisition costs and results in higher utilisation of ASTRO's equipment and facilities. ASTRO has budgeted RM79.7 million for fiscal 2004 for in-house and acquired programming cost.

To cater to the needs of the various ethnic groups in Malaysia, ASTRO has also developed the capacity to deliver multilingual offerings by voice-over dubbing and subtitling to broaden the audience of its major channel offerings. ASTRO provides approximately 3,400 hours per year of voice-over dubbing and subtitling. English and Malay subtitling, voice-over dubbing in the Malay language and dual language tracks are carried out by ASTRO.

### 7.7 Television Programme Distribution

Due to an expanding programme library, ASTRO established a programme distribution unit in August 1998 with the objective of recovering ASTRO's investment in programmes with sublicensing rights. These programmes consist of both in-house produced programmes which account for 70 per cent. of ASTRO's distribution library and acquired and commissioned programmes.

The distribution library has over 4,000 hours of programmes of various genres and includes Malay, Chinese, Tamil and English language programmes. ASTRO's programme distribution unit has licensed over 1,800 hours of programming.

Programme distribution clients include both local and regional television broadcasters as well as programme distributors. Programme licensing deals have been signed with all three local stations i.e. RTM, TV3 and ntv7, and licensing is still currently on-going especially for Malay programming namely Roda Impian, Idaman, Shaw Malay classic movies, tele-movies, dramas, movies and sports.

# 7.8 Filmed Entertainment

Film production and distribution is operated by ASTRO Shaw, which presents films produced by Tayangan Unggul. The former has a MSC status.

Tayangan Unggul produces films of a specific genre which appeal to young audiences and has been able to build a production team over the past three years and establish a brand identity among cinemagoers between 18-30 years old. ASTRO Shaw will generate the creative interest for future movies which will then be produced by Tayangan Unggul. In July 2003, TVBI Facilities Limited, a wholly owned subsidiary of TVB, entered into an agreement with ASTRO Shaw to provide consultancy services, including script and production advice, to ASTRO Shaw. Tayangan Unggul won eight awards at the 16<sup>th</sup> Malaysian Film Awards held in April 2003, including the award for best picture.

Under the current film production models, film budgets have been approximately RM1.2 million per movie. Revenues are from box office receipts and licensing. ASTRO also derives revenues from video, multi-channel subscription television and terrestrial television income, which covers between 50.0 per cent. to 60.0 per cent. of the total budget of a film before the film is released in theatres. Cost control initiatives have managed to achieve 42.0 per cent. cost reductions since 1998. One element of ASTRO's cost-control efforts is leasing equipment at below market rates instead of acquiring expensive production equipment and entering into long-term supply agreements relating to raw stock and laboratory costs.

# 7. BUSINESS (Cont'd)

Since 2000, Tayangan Unggul has released a total of four titles, including one in 2000, two in 2002 and one in 2003. ASTRO Shaw released one title in 1999. Total revenue generated by these five films through 31 July 2003 was approximately RM9.2 million, with total box office revenue ranging between approximately RM180,000 to over RM2.5 million per film. It is anticipated that for the years 2004 and 2005, four and five films will be released, respectively.

### 7.9 Celestial Pictures

In August 2003, ASTRO acquired a 100 per cent. interest in Celestial Pictures from the UT Group, as part of ASTRO's strategy to strengthen its content, aggregation and distribution capabilities outside of Malaysia.

Celestial Pictures owns the Shaw Brothers' Library, which ASTRO believes is the world's largest Chinese-language film library, consisting of 760 Chinese-language classics produced by the Shaw Brothers Studio. Leveraging its film library, Celestial Pictures has launched Celestial Movies, a Chinese-movie channel, in March 2003. ASTRO believes that it can achieve significant synergies through its ownership of Celestial Pictures through the coordinated acquisition and multi-territorial distribution of television and film content and the creation of multiple television networks and packages.

### Shaw Brothers' Library

Celestial Pictures acquired the Shaw Brothers' Library for HK\$480 million in May 2000. In addition, the cost of digitally remastering the Shaw Brothers' Library is HK\$120 million. The library includes many award-winning pictures, including popular classics such as The One Armed Swordsman, The 36th Chamber of Shaolin and The Five Deadly Venoms, which span every genre from martial arts to period drama to fantasy; and showcases the talent of some of the best known Chinese actors such as Jet Li, Andy Lau, Ti Lung, Lin Dai, Cheng Pei-pei, Stephen Chow, Maggie Cheung, Anita Mui and Chow Yun-Fat, and directors such as King Hu, Chang Cheh, Lau Kar Leung and Johnnie To. The entire library of 760 films, most of which have only been subject to limited exploitation on video or television around the world, is undergoing a digital restoration process, which produces high-quality video masters. ASTRO believes that these films are important sources of programming for Celestial Movies and present significant opportunities for revenue, including remakes and sequels, music publishing, merchandising for numerous proprietary characters, and for exploitation in new technological formats such as multi-media messaging on mobile phones. Celestial Pictures has reached an agreement with Miramax Films (a major U.S. film studio) under which Miramax Films has an option to produce English-language remakes of some of Shaw Library's titles. Celestial Pictures is in ongoing negotiations with several global and regional studios on other remake and sequel opportunities.

### Television Channels

Celestial Pictures launched its flagship channel, Celestial Movies, in Malaysia and Brunei on 3 March 2003; in Singapore on 15 April 2003; and in Indonesia on 15 May 2003. Celestial Movies provides premium Chinese and Asian movie content and targets medium- to high-income Chinese television households in Asian markets with substantial Chinese populations. Celestial Pictures currently plans to extend the presence of Celestial Movies in Hong Kong, the PRC and Taiwan. A second channel, Celestial Action Movies, which focuses on Asian action movies and targets non-Chinese markets, is planned to be launched in India, the Philippines, Australia, the U.S. and Europe. Celestial Pictures also intends to explore opportunities to launch a classic movie channel after the initial release of Shaw films on Celestial Movies.

# 7. BUSINESS (Cont'd)

Celestial Movies draws approximately one-third of its programming from the Shaw Brothers' Library and also acquires additional programming from major production houses in Hong Kong, the PRC, Japan, Korea and other Asian countries for the remaining two-thirds of its programming needs. Celestial Pictures has secured long-term supply contracts for new movies from regional production houses such as Shanghai Film Studio and Applause Pictures. Celestial Pictures has licensed the Golden Harvest films produced in the 1990's, and is in negotiations with other production houses to further enhance its sources of new programming.

#### Distribution Business

Celestial Pictures distributes the Shaw Brothers' Library films and other newly acquired rights in various titles purchased from Hong Kong and the PRC, and licenses these film rights for theatrical and video distribution, as well as to terrestrial, cable and satellite television networks and to other multi-channel subscription television operators for video-on-demand ("VOD") through its established distribution network. Celestial Pictures has signed video distribution agreements with distributors in many key territories, including Hong Kong, the PRC, Singapore, Taiwan, Thailand, Indonesia, Malaysia, Japan, France, U.K., Australia, Canada, and the U.S.. Since the fourth quarter of 2002, Celestial Pictures has released over 100 titles into the video market in the VCD and DVD formats throughout Asia.

#### Other Business Opportunities

Celestial Pictures intends to explore opportunities in broader revenue-generating activities, including VOD, sale of film remake rights, animation, audio and karaoke discs, as well as merchandise licensing opportunities, including video games, posters, comic releases, ring tones and multi-media messages for mobile phones.

ASTRO believes that Celestial Pictures is in a unique position to capitalise on the developing worldwide interest in Asian entertainment and to reap the potential presented by the fast-growing PRC market. Celestial Pictures aims to be a leading television content provider servicing the appetite of the global Chinese market for a Chinese language movie channel of the highest quality. Celestial Pictures' integrated business model also provides synergies for distribution and cross-promotional opportunities with other ASTRO businesses. ASTRO has enhanced its television-channel offering by including Celestial Movies as part of its Emperor Package, and ASTRO intends to make available other content owned by ASTRO, including animation rights from the PANV Group, for distribution by Celestial Pictures to international markets.

# 7.10 PANV Group

PASI was established by an affiliate of the UT Group in 1988 to serve as an animation house to North American and European studios. PASI is the leading animation provider in the Philippines and was reported to be one of the world's top animation service providers over the last two years. PANV, the holding company of PASI, was acquired by ASTRO in August 2003 from Worldwide Sports and Entertainment, Inc. ("WSE").

The PANV Group has animated a total of 404 half-hour animated programmes. Its animated shows have also won the following awards or nominations:

- Kampung Boy won the Best Animated Television Series at the 1999 Annecy International Film Festival;
- Bob and Margaret won the Best Primetime Animated Series at the 2001 World Animation Celebration; and
- Kong, the Animated Series was nominated at the 2001 seven d'Or Awards in France.

### 7. BUSINESS (Cont'd)

The PANV Group maintains a core group of approximately 50 regular artists and management staff that can organise and manage the production of up to 52 episodes of fully animated series and 26 flash animated shows annually. At peak production periods, the PANV Group taps into its regular talent pool of over 500 lay-out artists, animators and background artists, enabling the studio to produce a half-hour show within 12 to 14 weeks.

Following the reorganisation of its business in late 1999 and early 2000, the PANV Group has leveraged its animation production to build content through co-production and original content development at a low cost. The PANV Group continues to develop its animation service capabilities internally and evaluate new technologies in order to broaden its services to keep pace with changes in technology. In 2002, it trained 15 artists in flash animation and it expects to offer its flash animation services starting in 2003, having recently received its first flash animation contract.

The PANV Group identifies the television animated film market as its major target market. The production phase of television animated film is labour-intensive and is largely outsourced to overseas studios like PASI. The market for animation services has expanded dramatically over the last decade and is large and diversified. PASI's competitors are numerous and fragmented with no animation house producing more than 10.0 per cent. of the animation-based services market.

### 7.11 Publications

ASTRO's print and publication arm was established to complement the core multi-channel subscription television business, and to widen channels for advertising revenue. It currently publishes three publications. The ASTRO Guide is a non-commercial, complementary magazine for ASTRO's multi-channel subscription television subscribers, while V Mag (Chinese and English editions) is ASTRO's flagship magazine, which seeks to generate revenue through advertising sales, subscriptions and newsstand sales. In addition to the ASTRO Guide and V Mag, ASTRO is exploring the development of a Malay magazine.

# **ASTRO** Guide

ASTRO publishes and distributes the ASTRO Guide to all ASTRO multi-channel subscription television subscribers on a monthly basis. The magazine includes the latest schedules and details of the latest offerings and programmes available. Currently it is offered as a free circulation to all subscribers, and generates advertising revenue for ASTRO. The ASTRO Guide is segmented into three editions to increase advertising revenue: Dynasty Edition, Non-Dynasty Edition and Hotel Edition (that was launched in July 2003).

### V Mag

ASTRO publishes V Mag, a leisure and lifestyle magazine focusing on themes such as fashion, design, and lifestyle targeting urban, young adults with high disposable income. Established in March 2002 as a fortnightly Chinese-language magazine with average print-run copies of 35,000 per month, V Mag introduced an English-language edition in April 2003. Both Chinese and English editions have a newsstand price of RM8.00. V Mag is issued on a monthly basis and for the first half of fiscal 2004, had revenues of RM715,609.

ASTRO intends to increase the advertising revenue from the two publications. The Company believes that the introduction of the English edition of V Mag will provide a platform for joint promotions. A portion of the Chinese content is translated into English for the new English edition, resulting in cost sharing between the Chinese and English publications.

### 7. BUSINESS (Cont'd)

#### 7.12 Mobile Content and Services

As the mobile telecommunications industry moves toward 3G technology, ASTRO has begun positioning itself as a key partner in providing content and services for mobile telecommunications users. Through these services, ASTRO provides users with access to various content including:

- Entertainment: ringtones, horoscopes, jokes, cinema ticketing;
- News and information: shopping, foreign exchange, prayer times, traffic news and sports;
- Directory services: hotlines, restaurants and hotels; and
- Billing: payment of mobile bills, access to bank accounts to perform banking transactions.

3G spectrum has been awarded to UMTS. MBNS has the option, which must be exercised on a date on which Maxis and/or any of its subsidiaries except for AWT and UMTS, first commits to capital expenditure on the 3G network, whichever date is the later, to purchase up to a 25 per cent. stake in AWT, a wholly owned subsidiary of Maxis. AWT holds a 100 per cent. shareholding in UMTS.

ASTRO intends to capitalise on its access to content by developing and repackaging broadcast content for sale and use on 3G networks as they develop and become commercially available. ASTRO will focus on developing and providing content such as video clips for entertainment and sports news. Testing of these services and platforms are currently being conducted by Maxis in anticipation of the roll-out of 3G services in the near future. Maxis would be responsible for implementing the roll-out of 3G services and funding the necessary capital expenditures.

### 7.13 Talent Management

In September 2003, ASTRO launched MAESTRO as the platform for its talent management business. Through MAESTRO, ASTRO intends to identify, develop and promote entertainers, including actors, singers, announcers and other performers, to maximise their career potential and marketability to provide airtime and exposure to new artistes. As part of this strategy, MAESTRO will utilise ASTRO's various cross-media platforms. ASTRO believes that managing the careers of popular Malaysian and Asian entertainers will further enable ASTRO to develop and produce successful television, radio and other content. As of its launch date, MAESTRO expects to have 12 entertainers under its management.

#### 7.14 International Alliances

ASTRO has established alliances and business partnerships with internationally-recognised content, technology, distribution and system providers. ASTRO intends to enter into alliances with broadcasting, cable and other telecommunications platform providers in other Asian countries in order to expand the geographical reach of its satellite television, interactive and multi-media products and services.

# 7. BUSINESS (Cont'd)

#### Kristal-ASTRO — Satellite Television in Brunei

ASTRO has a 48.9 per cent. interest in Kristal-ASTRO, a joint venture that provides digital DTH pay satellite television and radio and proposes to provide interactive services in Brunei in the future. The joint venture partner is Kristal Sdn Bhd, a subsidiary of DataStream Technology Sdn Bhd ("DataStream"). DataStream is the sole operator of Brunei's multichannel satellite television services. It also operates mobile phone services and several other telecommunications-related businesses.

Kristal-ASTRO commenced operations in Brunei in January 2000 and ASTRO has invested approximately RM2.6 million so far in the joint venture. As at 31 July 2003, it had 17,528 residential subscribers in Brunei for ASTRO services, which uplink from the All Asia Broadcast Centre in Malaysia. The penetration rate for Kristal-ASTRO as at 31 July 2003 was 28.3 per cent. of residential subscribers. Kristal-ASTRO is currently profitable.

Kristal-ASTRO currently holds a licence to operate a television subscription service "DTH Satellite Services" in Brunei under the name Kristal-ASTRO. The licence, which expires on 31 October 2004, allows Kristal-ASTRO to provide nationwide subscription television services, international subscription television services, nationwide free-to-air radio services, international subscription radio services, audiotext services, videotext services, teletext services, video-on-demand and pay per view services and broadcast data services including Internet, e-commerce, distance learning and others.

# TVBPH — Print Publication, Film Production and Animation

MBNS (BVI), a subsidiary of ASTRO, has a 30.0 per cent. interest (including a 3.7 per cent. interest which will be paid up by 2005) in TVBPH, a joint venture with TVB, which has a 70.0 per cent. interest through iTVB Limited. MBNS (BVI) increased its holding in TVBPH from a 20.0 per cent. interest to a 30.0 per cent. interest by purchasing a 10.0 per cent. interest from HomeNet N.V. in August 2003. TVBPH engages in entertainment and media-related businesses and publishes a Chinese weekly magazine that focuses on entertainment news and information and lifestyle features through its subsidiary, TVB Publishing Limited. TVBPH intends to engage in Chinese language film production (including remakes and sequels of films), content development and become involved in film animation. TVBPH plans to work closely with TVB and Celestial Pictures. TVBPH is currently profitable.

# AENL - Television Programme Licensing and Development in Indonesia

In September 2003, AENL entered into an exclusive licensing agreement with TVBI Company Limited in respect of TVB's Chinese language drama serials for Indonesia. In addition, AENL entered into a further agreement to develop and aggregate drama serials in Bahasa Indonesia for the Indonesian and other Southeast Asian markets.

#### AMSI - FM Radio Services and Facilities in India

In addition to maintaining its leading market share in Malaysia, ASTRO also plans to selectively expand its radio business outside of Malaysia. In July 2001, ASTRO established a sales and marketing, consulting services and FM radio broadcast studio facilities business in India through its subsidiary, AMSI, together with local Indian partners. AMSI has entered into long term agreements with two Kolkata-based FM radio stations to provide a range of services that include airtime sales services, technical services and studio facilities. ASTRO's total investment as at 31 July 2003 in these India operations aggregated approximately U.S.\$4.2 million.

# 7. BUSINESS (Cont'd)

These two radio stations commenced transmission on 2 May 2003, one named "AAMAR" 106.2FM, targeting 25 to 39 year olds, with adult contemporary music, Bengali "folk", pop and rock, and Old Bollywood 1970s and 1980s music and the other is "Power" 107.8FM, targeting 12 to 24 year olds, with current hit music in "Indi" Pop, modern Bollywood 1990s and 2000s music, new Hindi pop and rock and English mainstream hits. These two new stations compete primarily with two other radio stations in the Kolkata market. Red, FM 93.5, is owned by India Today Group and appeals to listeners in the 18 to 35 year old demographic. Radio Mirchi, FM 98.3, is owned by Entertainment Network India Limited, a subsidiary of Times of India Group. Both of these competitors broadcast in a mix of English, Hindi and Bengali.

#### Internet Service Provider in India

AOL holds through its subsidiary, DSE, a 49.0 per cent. equity stake in ASTRO Network India. AOL also holds through its subsidiary, ASTRO E.Com Ltd, a 49.0 per cent equity stake in ASTRO E.Com India Private Ltd, an investment holding company which in turn holds 51.0 per cent equity stake in ASTRO Network India. ASTRO Network India has obtained an 'A' category Internet Service Provider ("ISP") licence which entitles it to provide ISP services to all territories in India. Currently, it has set up an international gateway for the provision of Internet services at Hyderabad and provides limited broadband services in the state of Andra Pradesh. ASTRO Network India intends to provide these services through wireless, wired and satellite-delivered direct-to-user solutions for corporate and individual users. ASTRO Network India is currently in the start-up phase and has not generated significant revenue to date. ASTRO's aggregate investments as at 31 July 2003 in ASTRO Network India totalled U.S.\$0.27 million.

# 7.15 Intellectual Property

AAAN believes that it and its subsidiaries either own or are licensed in respect of the technology and intellectual property currently used in its business.

ASTRO relies on a combination of trademark, servicemark and domain name registrations, copyright protection and contractual restrictions to establish and protect its brand names and logos, marketing designs and Internet domain names and its intellectual property in works eligible for copyright including broadcasts, films, sound recordings, musical works, literary works and artistic works.

- Trademarks and Servicemarks: Brand names and logos used in the operating businesses are at various stages of application for registration as trademarks and servicemarks in Malaysia for various classes of goods and services (primarily Classes 16, 25, 38, 41). Applications for registration as trademarks and servicemarks have also been made in other territories including Brunei, India, Singapore, Australia, Thailand, Philippines, Taiwan, Hong Kong, Laos, Cambodia, Vietnam, Korea and Japan. The most significant brand names and logos include ASTRO and the self packaged channels ASTRO RIA, ASTRO Prima, ASTRO Vaanavil, ASTRO Wah Lai Toi, ASTRO TVIQ, the FM radio channels ERA, Hitz.fm. Mix FM, MY FM, LIGHT & EASY, Tayangan Unggul and V Mag.
- Copyright: ASTRO's copyright relates principally to the works eligible for copyright
  in its filmed entertainment, magazine publications, in-house productions and
  commissioned programmes for its DTH multi-channel subscription broadcasting
  service, feature film and publications businesses.

### 7. BUSINESS (Cont'd)

Domain Names: ASTRO owns a number of internet domain names, the most significant of which are "astro.com.my", "era.fm", "hitz.fm", "my.com.my", "lightradio.com.my", "xfresh.com", "dvrplayer.com", "billcentre.com" and "vmag.my".

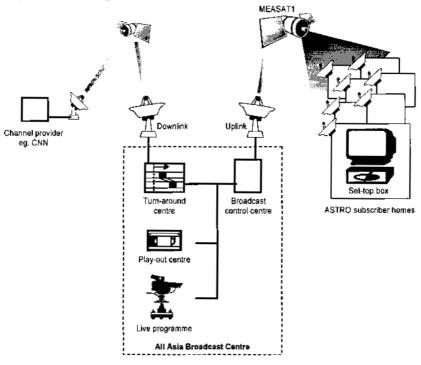
# 7.16 Technology

ASTRO estimates that it has invested approximately RM800 million in the All Asia Broadcast Centre's facilities, an approximately 350,000 square foot complex located at Technology Park Malaysia, about 10 km south of Kuala Lumpur. The All Asia Broadcast Centre houses seven television and 20 radio studios as well as facilities for post-production editing, graphics, dubbing, sub-titling and training. It is also equipped with an all-digital broadcast and transmission system that enables video, audio and other data signals to be received, processed, played-out, encoded, compressed, multiplexed, encrypted, modulated and transmitted to the satellite. All ASTRO's digital transmissions conform fully to the standards set by the European Digital Video Broadcasting Group and the European Telecommunications Standards Institute for digital satellite broadcasting. The All Asia Broadcast Centre is equipped with full emergency backup power generating equipment and an uninterruptible power supply to allow operations to continue without disruption in the event of a short or long-term power failure.

### **Satellite Television Operations**

ASTRO operates its DTH satellite broadcasting operation using the infrastructure housed at the All Asia Broadcast Centre. Production of ASTRO's own programming and retransmission of third party channels also takes place at the All Asia Broadcast Centre. From the All Asia Broadcast Centre, the broadcast feed is transmitted to a geostationary satellite called MEASAT-1 located 36,000 km above the equator at 91.5 degrees East longitude and then transmitted back down to individual subscribers across the whole of Malaysia and Brunei. A small dish (60 centimetres in diameter) mounted externally at subscribers' premises receives the signal. The dish is connected to a set-top box that decodes the signal and converts it into video, sound and data information. The steps in the process are illustrated as follows:

# Stages in the DTH process



# 7. BUSINESS (Cont'd)

International turn-around channels are received via 10 C-band downlink dishes, digitised and sent to the turn-around centre where certain of these channels can be modified in content either to add commercials and cross-channel promotional material, or to excise censurable programming content and replace it with an alternative. Locally packaged channels are played out using robotic cart machines and video servers and live programming is inserted as required. Channels from local terrestrial broadcasters are received via fibre-optic and satellite link and rebroadcast without modification.

These channels are then compressed, encrypted and multiplexed (combining a number of the channels together). The equipment required to carry out this process is collectively called the "headend".

The channels are broadcast via a high power satellite uplink at the All Asia Broadcast Centre to the MEASAT-1 satellite and then down to the subscriber's premises. ASTRO has four large diameter satellite dishes for uplinking signals. All uplinking to and downlinking from MEASAT-1 is at Ku-band frequencies (10.9-14.5 GHz).

Most of ASTRO's subscriber management activities, including a call centre and services activation/deactivation are done in-house. These operations are currently located at the All Asia Broadcast Centre, with a secondary call centre located in Ipoh, 200 km to the north of Kuala Lumpur.

# Satellite and Transponders

ASTRO leases four high-powered Ku-band transponders on the MEASAT-1 satellite, owned by BSS, to transmit the ASTRO signal across Malaysia and Brunei. The number of television and radio channels that can be broadcast to subscribers is dictated by the amount of transponder space available. Currently, ASTRO is using nearly all its available transponder capacity.

The four MEASAT-1 satellite transponders receive the video, audio and data signals transmitted from ASTRO's uplink facility, convert the frequency of the signals, amplify them and re-transmit them back to earth in a manner that allows individual subscribers to receive the signals using a small satellite dish. ASTRO additionally leases a fifth transponder designed to serve India, which is currently not in use.

MEASAT-1 was launched into orbit in January 1996 and is located at 91.5 degrees East. MEASAT-1 is a Hughes HS-376 satellite with a design service life of twelve years. BSS controls MEASAT-1 from a telemetry, tracking and control ground station located on Langkawi Island, in the north of Malaysia.

Although Ku-band signals are susceptible to rainfall and Malaysia is regarded as one of the highest rainfall areas in the world, the high power of the MEASAT-1 transponders combined with digital compression technology enables ASTRO services to be received with an overall availability of 99.5 per cent. over the 12 months ended 31 July 2003. In the majority of cases, services outage is confined to a small pocket of subscribers at any one point in time as the rainfall in Malaysia is mainly convective in nature and usually limited to individual cells of a few kilometres in diameter. MEASAT-1 can operate five Ku-band transponders in service at any one time. Three transponders are dedicated to Malaysia and Brunei, one is dedicated to India and one is switchable between the Malaysia/Brunei beam and the India beam. ASTRO currently uses all four transponders capable of covering Malaysia and Brunei. Use of the transponder serving India would result in a slight power reduction for the other four transponders serving Malaysia and Brunei. There are no plans to use the transponder serving India for the foreseeable future.

### 7. BUSINESS (Cont'd)

# Disaster Recovery Facilities

ASTRO currently relies exclusively on the broadcast uplink and downlink facilities, corporate offices and production facilities housed in the All Asia Broadcast Centre and transponder capacity on the MEASAT-1 satellite. See Section 5.1 of this Prospectus. ASTRO is in the process of establishing, through an agreement between ASTRO and BSS, certain back-up facilities. The first of these facilities at the BSS telemetry, tracking and control facility, on Langkawi Island, became operational in July 2003. This facility permits the emergency restoration of limited services, including broadcast of 10 television channels and five radio stations with an unencrypted signal. The Langkawi facility permits ASTRO to provide limited services during a disruption of services at the All Asia Broadcast Centre. This back-up facility is owned and operated by ASTRO's affiliate, BSS.

ASTRO is considering a proposal to retain BSS to develop a new facility in Cyberjaya, approximately 23 km from the All Asia Broadcast Centre. This facility, which is expected to become operational by early 2005, will be supplied to ASTRO who will use it as both a full disaster recovery facility and a hot-switch diverse uplink site. The Cyberjaya facility will be linked by fibre optic cable to the All Asia Broadcast Centre and will provide uplink diversity that will permit ASTRO to immediately switch all uplinking to the Cyberjaya facility in the event that heavy rain disrupts the uplink signal at the All Asia Broadcast Centre. To date, ASTRO has never experienced a significant failure of its entire network. ASTRO has a full business continuity plan in place should such a network failure ever occur.

# Set-Top Boxes

The ASTRO set-top box supplied to each customer receives and decodes the encrypted ASTRO signal. Philips and Nokia currently manufacture ASTRO's set-top boxes, produced to a custom ASTRO design. The set-top boxes contain hardware including 4MB of RAM for interactive applications, 6MB of flash memory for programme and operating system storage and a 50MHz processor. An internal modem provides the return path channel via the public switched telephone network and a front-mounted infra-red transceiver allows for a remote control and a wireless keyboard.

The set-top box runs a conditional access software called Mediaguard, a product of CANAL+ Technologies, using a chip-based smart card to uniquely identify each subscription to allow access to services that each subscriber is authorised to receive and to block access to unauthorised channels. This module decrypts the digital television and radio services according to control signals sent from the subscriber management system at the broadcast centre. In order to address piracy issues, MBNS has negotiated with CANAL+ Technologies to supply updated conditional access core software, both at the headend and in the smartcards on terms favourable to MBNS.

### 7. BUSINESS (Cont'd)

#### Information Technology Infrastructure

ASTRO has developed various information technology systems in order to provide the information that is relevant for its various business functions. In order to provide timely and meaningful information to its various business units, ASTRO acquires software, hardware and services from a variety of vendors and providers. In order to better serve the needs of the end users, the information technology application development function is currently being decentralised from the corporate IT department to the various functional areas, primarily Programming and Airtime Sales, Subscriber Management, Finance, Human Resources and Marketing. As part of this process, the IT function is implementing a new data warehouse system that is expected to provide users with more flexibility in preparing documents and analysing reports. The IT infrastructure, including all office automation services, is expected to be upgraded and rationalised during the second half of 2003. This will include the installation of a new IP-based corporate network using Gigabit Ethernet and the amalgamation of all company data storage onto a storage area network and the upgrading of ASTRO's national leased line private network into a fully managed and monitored fault tolerant network from a third party network service provider. Management believes that its systems are adequate to support the existing businesses and sufficiently flexible to remain able to permit accurate and timely reporting as the businesses continue to grow. ASTRO is also investing in a new broadcast business system that will help to reduce costs by increasing the integration and efficiency of the contract management and programme scheduling operation as well as automating airtime sales, billing and revenue reporting. ASTRO is currently setting up a remote data centre managed by a third party to minimise the business impact should the main data centre located at the All Asia Broadcast Centre become unavailable. All critical corporate data and business critical applications will be hosted at both locations. The third party remote data centre will be replaced by a backup data centre housed at the Cyberjaya facility when this becomes available in 2005.

### Subscriber Management Systems

ASTRO is in the process of upgrading its call-centre telephony system supporting its nationwide contact centre operation and expects to fully implement a new subscriber management system by mid 2004. These systems will enhance ASTRO's customer service and are expected to assist in reducing the number of abandoned calls as the new customer telephony system will provide more sophisticated call management functions and the new subscriber management system will permit customer service representatives to access relevant information and provide answers to questions more efficiently. Through its existing subscriber management system, ASTRO handles its monthly tracking and billing of subscriber accounts, posts payments, tracks late payments and auto disconnects delinquent subscribers, handles technical enquiries and problems, requests for disconnection, change of package, reconnection and relocation and authorises additional services upon request, including subscription upgrades and pay-per-view purchases. ASTRO's policy is to disconnect residential subscriber service if subscription fees have been outstanding for more than 70 days from the billing date.

# 7. BUSINESS (Cont'd)

#### Radio

All radio operations, including production, programming and broadcasting, are conducted at the All Asia Broadcast Centre. At the All Asia Broadcast Centre, ASTRO has 20 digital studios from which it broadcasts to most parts of Malaysia. ASTRO is able to broadcast specific content to four different regions in Malaysia to allow for localisation of the programming and commercial content in each region in Northern, Central, South and East Malaysia. Programme content is distributed throughout Malaysia to the regional transmitting stations via digital links which ensure CD quality audio is transmitted from the 60 operational FM transmitters at 12 transmitting stations. The digital links used for distribution are a combination of leased line fibre circuits, microwave transmission systems and satellite transmission systems. Having a multiple link infrastructure provides diverse paths and redundancy to ensure that transmission is still possible in the event of failure of any link in the system. With its existing infrastructure, ASTRO believes it can support significant growth of content production and broadcasting for both the domestic and international markets.

To improve service delivery, ASTRO also plans to upgrade its Radio Computing Services ("RCS") platform, a software suite including applications for music and commercial scheduling, audio and telephone recording, news preparation, music and commercial playout, local commercial insertion, and implement statistical performance tracking. These improvements are aimed at reducing down-time across all radio channels from approximately 0.3 per cent. to 0.15 per cent. of air time per annum.

To expand the reach of ASTRO's five terrestrial stations, ASTRO plans to expand its coverage to include up to eight more cities.

# 7.17 Competition

# Multi-channel Subscription Television

ASTRO is the dominant multi-channel subscription television provider in Malaysia. The ASTRO subscription satellite television service currently competes with terrestrial free-to-air television in Malaysia for audience and programming. ASTRO also competes with other forms of audio-visual, video and audio entertainment in Malaysia, such as cinema, DVD and VCD rental and sales operations, pirated DVD and VCD, radio and various forms of live entertainment. ASTRO believes that competition is primarily based upon price, programme offerings, customer satisfaction and quality of the system network. Of the three other licensees of multi-channel subscription television services in Malaysia, MegaTV, ceased operations in 2001, and the other two licencees (Network Guidance Sdn Bhd and Grafimatix Sdn Bhd) have not commenced operations.

There are currently no cable television or other multi-channel subscription television service providers in Malaysia, and management believes that the roll-out of cable services in Malaysia is likely to be slow due to the current lack of significant cable infrastructure. Nevertheless, as the multi-channel subscription television market develops, ASTRO could face competition from new entrants utilising cable or other emerging state-of-the-art technology not commercially available at this time. In addition, through joint ventures and other alliances, cable television and telecommunication providers may bundle their services together in competition with ASTRO. See Section 5.1.14 of this Prospectus.

### 7. BUSINESS (Cont'd)

ASTRO believes that, in Malaysia, the rental and retail DVD and VCD markets will continue to be the main competition for pay-per-view services, as research of the U.S. market shows that typically video rentals of movies become available sooner after cinema release than pay-per-view of those movies. ASTRO intends to accelerate its access to movies so that pay-per-view services will come to market during the same time window after cinema release as DVD and VCD retail and rental release for the same movies.

Historically, Malaysia has experienced a high incidence of piracy, increasing the availability of DVD and VCDs that compete with ASTRO's satellite television service. While the quality of pirated DVD and VCDs varies greatly, they are generally uncensored and cheaper than licensed DVD and VCDs.

ASTRO expects to meet these competitive challenges by continuing to refine its programme offerings to ensure content relevance, tailor its packages and pricing to target specific subscriber segments, invest in infrastructure to improve and enhance customer service while also maintaining its facilities and network, in order to provide compelling service at an attractive price.

#### Radio

Although ASTRO currently enjoys a leading position in the Malaysian radio market, radio broadcasting is competitive in Malaysia. ASTRO's radio networks compete directly for listeners and advertising revenue with other radio networks and stations in Malaysia. Competition is based primarily on programme content and on-air talent which appeals to a particular demographic group. Access to this market is primarily determined by the willingness of regulatory authorities to grant additional radio broadcasting licences. Other media, including broadcast television, cable television, newspapers, magazines and direct mail also compete with radio networks for advertising revenues. ASTRO believes that it can remain competitive both in attracting listeners and also in attracting advertising revenue based on the continued success of its format-specific strategy, its quality of service, the development and retention of its on-air talent and its on-ground and on-air promotional integration.

# Filmed Entertainment

ASTRO's film production companies face competition in Malaysia and South Asia from other film producers, alternatives to box-office screening, such as retail, rental and pirated VCDs and DVDs.

In Malaysia, nine film production companies are active although there are approximately 500 registered film production companies. Of these nine producers, seven produce one film every one to two years and another produces one to two films every year on average.

ASTRO typically releases a film with a one-month box office screening, followed by a DVD and VCD release followed by an ASTRO Showcase channel release. ASTRO provides an exclusive sales period to its two DVD and VCD sales distributors.

### 7. BUSINESS (Cont'd)

### 7.18 Suppliers

Set out below are the major suppliers of ASTRO for the six months ended 31 July 2003.

Suppliers	Length of relationship (years)
Philips Malaysia Sdn Bhd	7
Nokia Corporation	2
BSS	7
Buena Vista International	7
ESPN Star Sports	6
Tele System Electronic (M) Sdn Bhd	2
All Satellite Broadcasting Ltd	3
TVBI Company Ltd	7
HBO Pacific Partners	7
Turner Broadcasting System	5

# 7.19 Property

The All Asia Broadcast Centre is located to the south of Kuala Lumpur at Technology Park Malaysia, an area designated by the Government for the development of technology and technology-related industries. TPM has agreed to lease to Digicast, a subsidiary of AAAN, approximately 1.263 million square feet on which the All Asia Broadcast Centre is located ("AABC Land") for a period of 30 years ("Sub-Lease"). The AABC Land forms part of a larger piece of land ("Master Land") of which the registered owner is the Federal Lands Commissioner ("FLC"). The AABC Land has been leased to TPM by the FLC for a period of 99 years ("the Principal Lease"). The All Asia Broadcast Centre which has a total built-up area of 350,000 square feet is owned by Digicast. It was completed in September 1996 and obtained its certificate of fitness for occupation in May 2001.

The Sub-Lease when registered expires on 28 July 2025 with an option to renew for an additional 30 years. The total rental of the Sub-Lease is RM44.2 million, of which 20 per cent. has been paid, 15 per cent. is to be paid when the Sub-Lease agreement as between TPM and Digicast is executed ("Sub-Lease Agreement"), with another 15 per cent to be paid one year after such payment, and the balance of 50 per cent. (with interest at the rate of two per cent. per annum above the base lending rate of Malayan Banking Berhad), to be paid by annual instalments over the Sub-Lease term commencing two years from when the Sub-Lease Agreement is executed.

Currently the terms and conditions of the Sub-Lease are found in a series of correspondence dated 28 July 1995, 1 November 1996, 18 November 1996 and 31 March 1997 between TPM and Digicast. Both parties have finalised but not yet executed a formal agreement to sub-lease ("Agreement to Sub-Lease") based on the terms and conditions in the abovementioned series of correspondence. Appended to the Agreement to Sub-Lease is the form of the Sub-Lease Agreement. The Sub-Lease Agreement will be executed and registered upon the issuance of the Issue Document Title in respect of the AABC Land to the FLC ("IDT") and the registration of the Principal Lease.

# 7. BUSINESS (Cont'd)

Currently, Digicast does not have a registered interest in the AABC Land but has a contractual interest pursuant to the agreement by TPM to lease the AABC Land to Digicast evidenced by the series of correspondence mentioned above. The registration of Digicast's interest is pending the issuance of the IDT. Upon issuance of the IDT, TPM will execute the Sub-Lease Agreement with Digicast and this Sub-Lease Agreement will be registered in favour of Digicast. TPM has issued a written undertaking to Citibank Berhad, security agent for MBNS' group of lenders, undertaking to perfect the Sub-Lease Agreement to Digicast upon issuance of the IDT. Although ASTRO believes that registration of the Sub-Lease Agreement to give full effect to the Sub-Lease Agreement is a formality, ASTRO cannot guarantee the registration of the Sub-Lease under the National Land Code 1965. Non-registration of the Sub-Lease may consequently result in third parties having a competing interest in the land to which the Sub-Lease relates if such interest was obtained bona fide and without notice of ASTRO's prior interest. The legal opinion issued by Kadir, Andri Aidham & Partners on Digicast's interest on the AABC Land is set out in Section 25 of this Prospectus.

ASTRO through Digicast has also taken a lease on about 20 acres of land located at Bukit Kiara in Kuala Lumpur for future development as an alternative site for a television, radio and data media centre at a rental price of RM826,667 per annum. This lease agreement is for a term of 30 years commencing from 1 April 1997 with an option to renew for an additional 30 years. This lease has been registered in the respective land titles. Currently, ASTRO does not have formal plans in place for development of this land, and thus the capital expenditure for this development is as yet unknown.

# 7.20 Risk Management

ASTRO maintains insurance policies covering business interruption and property damage to ground broadcasting and transmission equipment, computers and other property material to ASTRO's digital broadcast satellite services, subject to customary limits, from damage due to natural disasters or similar events, with a level of coverage which ASTRO considers appropriate. ASTRO also maintains business interruption insurance for the total loss of the MEASAT-1 transponders where total loss is considered to be any situation where ASTRO has less than two transponders available for its Malaysian operations.

The business interruption insurance on MEASAT-1 is scheduled to expire on 31 March 2004. If MEASAT-1 or similar satellites experience anomalies while in orbit, the cost to renew the insurance may increase significantly or additional exclusions may be added. Renewal of adequate insurance cover is subject to market conditions, premium rates and capacity.

Citibank Berhad, as the joint security agent for the lenders under MBNS's syndicated private debt securities ("PDS") facility, syndicated foreign structured trade finance ("ECA") facility and the combined term loan and bank guarantee facilities, is named as first loss payee for the MEASAT-1 satellite transponder insurance and broadcasters' all risk policies.

ASTRO also carries insurance for professional liability, public liability and directors and officers liability.

# 7. BUSINESS (Cont'd)

### 7.21 Employees

As at 31 July 2003, ASTRO employed 1,831 persons on permanent and contract basis. None of these employees are unionised and ASTRO believes that labour relations are good.

As at 31 July 2003, ASTRO's permanent and fixed term contract employees are categorised as follows:

Malaysian Operations	
Corporate	71
Multi-channel subscription television	1,347
Radio	211
Feature Films	10
Publications	24
	1,663
Regional Operations	168
Total	1,831

The average number of years of service of the employees is approximately four years.

ASTRO recognises the need to ensure continuity in its management in order to maintain ASTRO's competitive edge over its competitors. The Board of Directors believes that the continued success of ASTRO depends, amongst others, on the support and dedication of its management personnel. ASTRO has in place human resource strategies which include, competitive compensation, fit-for-purpose recruitment and succession.

The loss of any key personnel of ASTRO could adversely affect ASTRO's performance. In view thereof, ASTRO has made efforts to motivate and retain its staff through performance based incentives, and to enhance their skills and competencies by providing training.

Towards this, ASTRO engages its employees continuously in conferences and training locally and overseas for them to acquire and enhance relevant skills and competencies (both functional and developmental) in line with its business objectives. On- the-job training is another significant approach of transferring knowledge from specialists to new or junior employees. The investment in human capital increases the competency of its existing employees. In addition, these development activities serve to groom the lower and middle management staff in career advancement to progressively assume the responsibilities of senior management.

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