ANNEX B

Infocomm Development Authority's Industry Highlights

ESTABLISHING SINGAPORE AS A CENTRE FOR THE MANAGEMENT AND DISTRIBUTION OF MEDIA SERVICES

To develop Singapore into a global Digital Media and Entertainment capital by offering innovative content, services and technologies through the use of infocomm is IDA's iN2015 masterplan for the IDM sector. With our robust infrastructure, Singapore can become a global node that provides core services for storing, trading and distributing digital assets.

IDA was instrumental in making available platforms for media and entertainment companies to create content and services through the following projects:

Asia's First Interactive Digital Centre

IDA worked with private and public organisations to spearhead the strategic use of infocomm to encourage innovation and research & development. Launched in November 2007, the centre at Temasek Polytechnic (TP) houses state-of-the-art 3D innovative technologies and laboratories for industry project development, training and research.

IDC Asia which will contribute towards Singapore's long-term vision of becoming a global interactive digital media capital will be spearheaded by TP and IM Innovations in the following areas:

- Provide leadership and be a focal point for the development of novel 3D applications, manpower capabilities, as well as technology integration and research in the emerging area of interactive 3D visualisation content and application creation.
- Champion the rapid adoption of innovative IDM solutions to help businesses enhance sales, marketing, education, training and support, so as to gain a competitive advantage in key industry sectors such as medical, education, transportation, aerospace, architecture, construction and engineering.
- Develop synergistic partnerships in Asia with businesses, universities and other organisations to offer new IDM tools, applications, training and professional services.

Asia's First Digital Cinema Hub and Network Operations Centre (NOC)

Thomson, through its Technicolor Digital Cinema business announced plans in Dec 2007 that they will offer digital cinema service and related management solution capabilities to the motion picture industry in Singapore and other Asia-Pacific regions.

Technicolor, with the support of the IDA, plans to construct an efficient and secure digital cinema hub and NOC in Singapore to offer digital cinema service and related management solution capabilities to the motion picture industry for the Singaporean territory and other Asia-Pacific regions.

Thomson's Singapore facility is expected to have the capability to support the following digital cinema services: physical and electronic forms of content delivery; Technicolor's key distribution and management systems; equipment monitoring; and 24/7/365 multi-lingual call-centre support, fully integrated with its premier operations in the U.S.

The build-out of the new digital cinema hub and NOC in Singapore is slated to begin in mid-2008.

DEVELOPING THE DIGITAL CINEMA AND GAMES HUB

Digital Cinema

Companies like Mega Media, Mega Films and Shaw Media Services are equipped with digital cinematic processing capabilities such as digital subtitling, encoding and water-marking. Technicolor, MediaCorp Technologies, Globecast and SingTel are capable of digital cinematic content management and distribution.

To date, there are about 25 screens at cinemas across major local movie chains which are equipped to screen digital cinematic content. Through efforts in developing the digital cinema industry, cinema exhibitors are able to bring in exciting alternative entertainment content like operas from *The Metropolitan Opera* and *Cinema Kabuki*, enabling local audience to experience new and exciting content in the intimacy of a cinema environment.

The Metropolitan Opera

For the first time in Asia, outside Japan, opera fans and music lovers enjoyed world-class opera on the big screen in August 2007. Golden Village Vivo City screened the Metropolitan Opera's new productions of Tan Dun's *The First Emperor* and Mozart's *The Magic* Flute in high definition (HD) digital format on the cinema screens. The two productions, which were staged live at the Metropolitan Opera House in New York City, have been shown in HD format at cinemas in the United States, Canada, Japan, Germany, the United Kingdom, Sweden, Norway, and Denmark, with spectacular success both from the media and public.

Cinema Kabuki

In April 2008, Cathay Cineplexes showcased Cinema-Kabuki, an exclusive Japanese Digital Film in Singapore for the first time outside of Japan. Performances from two different genres, namely dance and drama are showcased at The Cathay Cineplex:

- Dance Kyokanoko Musume Ninin Dodoji
- Drama Togitatsu no Utare (Noda Version)

Previously showcased live only in Japan, Paris and New York, it is being screened in Singapore between 12 – 20 April 2008, using the Sony SXRD CineAlta 4K Digital Projection System for unsurpassed audio and visual quality for the very first time outside of Japan. Cinema-Kabuki is the filming of a live Kabuki performance using high-performance, high-definition digital video cameras for showing in movie theatres. The use of high definition digital cameras for the live Kabuki performances marries tradition and technology beautifully.

Regional Games Hub

In 2006, a GXA member company, Activate Interactive developed a world's first cross-platform MMORPG (Massively Multi-player Online Role-Playing Game) that is playable on both the computer and mobile phones in real time for Nokia. This allows gamers to fight monsters, find treasures and meet new friends whether they were at home or on the go.

Home-grown companies such as Infocomm Asia Holdings has secured rights to manage and distribute top-tier massively multiplayer online game (MMOG) titles like *Granado Espada* and *Hellgate: London* to the region. In early 2008, AsiaSoft, the publisher of popular free-to-play MMOGs such as "MapleStory" and "CABAL Online", managed to clinch the rights to publish the much anticipated MMORPG "Mythos" in Southeast Asia.

Games Exchange Alliance (GXA)

An initiative of Infocomm Development Authority of Singapore, GXA is a network of companies that help games companies cross last-mile commercialisation hurdles to place titles into the hands of Asian gamers. This is in line with Singapore's intention to be a centre for the creation

and commercialisation of digital media and entertainment (DME) technologies. Since October 2004, GXA's network of companies across the games ecosystem in Singapore has grown about three times – from 12 companies to about 30 companies to date. Each member provides their respective strengths in games distribution, hosting, localisation and marketing, to shorten the time-to-market for game companies.

To strengthen Singapore as a games hub, GXA signed a Memorandum of Intent (MOI) with ten national games associations in the Asia Pacific during the Games Convention Asia last year. This marks the beginning of greater collaboration in areas such as games development, bill payment services and distribution. The associations are:

- Australia Games Developers Association (AGDA)
- China Games Publishers Association
- Hong Kong Digital Entertainment Association
- Japan Online Games Association (JOGA)
- Korea Entertainment System Industry Association
- New Zealand Games Developers Association (NZGDA)
- Games Developers Association of Philippines (GDAP)
- Taipei Computer Association (TCA)
- Thai Games Association (TGA)
- Vietnam Software Association Digital Content Business Club (VINASA)

Through the GXA network, alliance members such as games service providers, publishers, content developers and solutions providers are provided market access to over 13 key Asian countries, including China, India, Hong Kong, Taiwan, Japan and Australia.

ESTABLISHING SINGAPORE AS A TRUSTED AND SECURE DIGITAL MARKETPLACE

To position Singapore as a trusted and secure marketplace for businesses to store, aggregate, trade and distribute digital assets, a *Digital Marketplace* programme will put in place the infrastructure and services needed for the development of services to hub and trade digital assets for various distribution platforms. This marketplace will help to jumpstart the interactive and digital media sector.

We have also seen early efforts by the industry in building Singapore's capability as a global digital marketplace in line with IDA's iN2015 masterplan:

 1-Net Singapore set up a one-stop service platform NexMedia for managing content distribution across multiple platforms such as Video on Demand over Broadband, IPTV, Mobile and Wireless. These capabilities have in turn attracted collaborations with content owners such as MOBTV (MediaCorp), a leading UK media company, and corporations for webcasting services.

TRANSFORMING THE EDUCATION SECTOR THROUGH THE USE OF INTERACTIVE DIGITAL MEDIA

The use of IDM has also enabled engaged learning in the education sector. Through IDM, learning can be reinforced by using graphics, images and sound, and not just text, thus stimulating more senses. These can be easily integrated into the lessons and brought out at the right time.

- Schools are also exploring 3D Immersive technologies similar to the ones used in IMAX theatres. Students learn not just from what the teacher communicates verbally in school or from textbooks. They can also draw on digital content and online information to gain a deeper understanding of what is being taught in class. Whether stored in the student's PC or within an information network, such content allows their learning experiences to be replicated and repeated.
- In May 2007, five future schools in Singapore were announced. These schools will push
 for innovative transformation of the education experience in Singapore and lead the way
 for other schools in providing possible models for seamless and pervasive integration of
 ICT, such as IDM into the curriculum for engaged learning in schools.
- An example of a future school Canberra Primary School, teachers use Tablet PCs to develop their students' reading comprehension skills. They also engage their students through games and visual manipulation using Interactive White Boards.

REACHING INTERNATIONAL MARKETS

With strong support from government agencies such as IDA, MDA, and IE Singapore, games companies were able to reach out to international markets collectively to distribute their products and services. Strong presence at international events such as:

- Games Developers Conference (USA)
- Games Convention Europe (Germany) further enhances Singapore's position as the gateway to Asia.
- Notably, Singapore successfully hosted Southeast Asia's first regional games event, Games Convention Asia, in September 2007 which attracted more than 70,000 local and foreign visitors.
- With the popularity of computer and console games rising across the world and interest in
 events like the World Cyber Games at an all time high, IDA and GXA showcased 13
 Singapore software companies' products in the 1,600 square metre Singapore pavilion at
 the Electronic Entertainment Expo (E3).