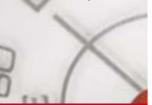


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行政總裁報告





## Delivering Digital TV Services in China

DVN provides to CATV operators comprehensive digital broadcast platforms over which content, services and applications to end-users may be delivered. DVN either sells the platform outright or leases the platform in high potential locations in return for a percentage of the subscription fees collected for the newly offered digital services.

> DVN's platform is inclusive of hardware, software and applications at both the headend and end-user levels that enable a service provider to run a digital broadcast business. CATV operators save significant costs from using a totally integrated, turnkey solution, designed by DVN. These significant savings and a short construction period allow the CATV operators to offer digital TV services quickly and at prices affordable to the Chinese level of economic development. As a result of its technically advanced yet cost effective end-to-end solution, DVN has become a key player in China's digital broadcasting industry that is delivering the digital promise to Chinese consumers.

> With ten platforms already commercially operable and more about to commence operation, the compatibility of DVN's technology to China's infrastructure and its operational effectiveness have been tested and proved. DVN's platforms are operational in ten locations with over 10 million analog subscribers in the catchment areas. Over DVN's platform, both basic digital and premium Pay TV services as well as financial and TV web data are offered. Basic services are generally satellite channel rebroadcasts from all over China and do not require a Pay TV license from China's State Administration of Radio, Film and TV ("SARFT"). Pay TV services to domestic audiences that show licensed, often imported content, on which royalties are paid, require a license from the SARFT and only Hebei, Shandong, Hunan and Henan Provincial Cable TV Networks as well as Shanghai Municipal Cable Network have received such licenses.

### 在中國開展數碼電視服務

有線電視營運商借助天地數碼的綜合數碼廣播平台,可向其終端用戶提供內 容、服務及應用程式傳輸服務。天地數碼或完全售出其平台,或在具有極大潛 力的地區出租其平台,以便從所提供的簇新數碼服務所收取之用戶費中分成。

> 天地數碼平台在前端及終端用戶層面,集硬件、軟件及應用程 式供應於一體,服務供應商可藉此一站式經營數碼廣播業務。 使用天地數碼設計之全方位綜合解決方案,有線電視營運商可 以節約大量成本。由於節約大量成本及建設期較短,有線電視 營運商可在短期內以適合中國經濟發展水平的相宜價格提供數 碼電視服務。天地數碼憑藉技術先進但價格相宜的端對端解決 方案,將發揮舉足輕重的作用,履行對中國用戶之數碼承諾, 帶領中國進入數碼新紀元。

> 通過十個平台已成功開展商業運作,與及更多平台即將開始營 運,都可肯定天地數碼之技術與中國的基礎設施相容,及其營 運效率毋庸置疑。天地數碼在十個地區的平台業務覆蓋逾一千 萬模擬電視用戶。透過天地數碼之平台,可提供基本數碼服務 及專業收費電視服務,以及財經、電視網頁及數據服務。基本 服務一般指轉播中國其他地區衛星頻道的節目,不需要獲國家 廣播電影電視總局("廣電總局")簽發收費電視牌照。收費電視 服務面向國內收視用戶,播放經授權的節目(一般為進口節 目),一般需支付版權費,並須獲廣電局簽發牌照,僅有河 北、山東、湖南及河南省,以及上海市的有線電視網絡已獲發 此牌照。

Entering China's digital broadcasting age <sub>攜手進入中國數碼新紀元</sub>

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### **Advanced Technology with Government Accreditation**

DVN's digital broadcasting technology in August received top-level accreditation from China's Ministry of Science and Technology ("MST") giving guidance to cable operators to use DVN's technology to upgrade their broadcasting systems. The MST not only awarded DVN's technology the highest rating within the communication category of the State sponsored high-tech initiative but also recommended that DVN's technology be promoted and distributed throughout China as soon as practical. As a result of this accreditation, cable operators now feel confident that DVN's technology is the right one to use to upgrade their analog systems and that digital services should be offered as soon as possible.

Upon receiving this accreditation, DVN began work immediately to completely digitize Suzhou Cable TV's network to prepare for basic digital services. Basic digital services were first introduced in November offering subscribers over 70 digital channels, largely rebroadcasts from all over China. This service has been very popular and a modified version of it was introduced in Zhongshan, Zhoushan and Yixing in December. DVN will work with its partners to introduce basic digital services in multiple locations throughout China. DVN wants to roll out basic digital services to cities in areas where DVN's platforms are already installed to maintain its first mover advantage and further strengthen the market's barriers to entry.

### DVN's Partners Receive First Pay TV Licenses to be Issued

DVN's partner cable operators in Hebei and Shandong received the first Pay TV licenses issued by the SARFT with three other CATVs, all of which have installed DVN's platform to broadcast Pay TV services, receiving permission within the latter half of 2001. Broadcasting of Pay TV services had until recently been a gray area. However, in December 2000, regulations were published outlining the procedures for receiving broadcasting licenses. Pay TV licenses provide the CATV operators with more latitude regarding the type of content allowed to be broadcast. This is as compared to areas that do not yet have licenses and are limited primarily to channel rebroadcasts from around China.

Permission was granted after a thorough review by the SARFT of the contracts between Hebei and Shandong Provincial CATVs and DVN. DVN has entered into similar contracts with other CATV stations where its systems are installed. Given that the SARFT has approved contracts with CATVs that all use DVN's platforms, DVN believes that its other partners are highly likely to receive approvals in the future.

### 尖端技術通過政府認證

天地數碼之數碼廣播技術於八月份通過中國科學技術部("科技部") 最高級別認證,此舉為有線電視營運商使用天地數碼技術更新其廣 播系統提供指引。科技部不僅將天地數碼之技術列為國家高科技通 訊領域之最高評級,而且建議在切實可行的情況下在全中國推廣及 分銷天地數碼之技術。由於此項認證,使有線營運商更有信心去選 擇天地數碼之技術以更新其模擬系統,以便儘快推出數碼服務。

於通過該認證後,天地數碼立即在蘇州的有線電視網推行全面數 碼化,同時推出基本數碼服務。基本數碼服務於十一月份首次推 出,主要透過逾七十個數碼頻道向用戶轉播全國各地的節目。該 項服務廣受歡迎,經改進後於十二月份在中山市、舟山市及宜興 市推出。天地數碼將與其夥伴合作,向中國多個地區推出基本數 碼服務,並計劃在已安裝天地數碼平台之各城市開展基本數碼服 務,以搶佔先機,進一步提高第三者進入市場的障礙。

### 天地數碼之夥伴獲簽發首面收費電視牌照

天地數碼於河北及山東省的有線電視營運商夥伴已獲廣電局簽發 首兩面收費電視牌照,另外三家有線電視亦在二零零一年下半年 獲發牌照,而這三家有線電視均已安裝天地數碼平台以播送收費 電視服務。收費電視廣播服務直至近期仍屬灰色地帶。然而,於 二零零零年十二月,政府頒佈法令,規定取得廣播牌照之程序。 與無須牌照要求、主要轉播中國各地節目的頻道轉播領域相比, 收費電視牌照顯然增加了有線電視營運商獲准許經營的播放內容 及服務範疇。

經全面審核,廣電局已批准天地數碼分別與河北省及山東省有線 電視簽訂的合約。天地數碼亦與其他已安裝其系統之有線電視台 簽訂類似合約。鑑於此,天地數碼相信其他夥伴也將有很大機會 獲得批准獲發收費電視牌照。 DVN's partner cable operators in Hebei and Shandong received the first Pay TV licenses issued by the SARFT with three other CATVs receiving permission within the latter half of 2001.

天地數碼於河北及山東省 的有線電視營運商夥伴 已獲廣電局簽發首面收費 電視牌照,另外三家有線 電視亦在二零零一年下半年 獲發牌照。 Annual Report 2001 年報

### Two New Partners that will Create an End-to-End Set Top Box Supply Chain

DVN, as of April 18, 2002, entered into a RMB90 million, 50:50 joint venture agreement with Jiangsu Hongtu High Technology Co., Ltd. ("Hongtu"), a Shanghai Stock Exchange listed company and one of China's largest consumer electronic manufacturers. Hongtu and DVN will each contribute RMB45million in cash to be used for marketing of digital broadcast services and equipment and for the purchase of relevant equipment from DVN. The focus of the JV will be to roll out basic digital TV services together with the local cable operators in locations where DVN's headend systems are already installed but commercial operations have yet to commence.

DVN in March of 2002 received a HK\$39 million investment from Zoran Corporation ("Zoran"), a Nasdaq listed chip supplier specializing in consumer electronic products. Together the three companies will create a total supply chain for digital set top boxes, with DVN providing the design and technology, Zoran the chip set and Hongtu the manufacturing. The collaboration of the three companies will provide to Chinese consumers high quality, tailor made, multi-functional set top boxes at cost competitive levels. It also enables fast response times to changes in the market and in consumers' taste and demands as well as manufacturing excellence.

### Access to China's Broadcasting Industry

Foreign companies, under the PRC's current regulations, are prohibited from directly investing in China's cable industry. Therefore, DVN does not invest in the cable network and is not involved in the operation of a cable station. DVN provides the technology, equipment, and support services that allow CATV operators to run a profitable digital broadcasting service, an arrangement that regulators have publicly and actively encouraged Hong Kong companies to get involved in. DVN either sells its system outright or leases it to CATV operators.

In DVN's lease contracts, DVN installs the headend equipment at the cable television station and provides all the applications required to run a digital broadcast business. In return, the cable television stations repay DVN's investment as a percentage of the incremental revenues generated over a period of 10-15 years. Therefore, DVN participates in the upside from all customers that subscribe to the new digital services, without having to make the heavy investment in cable infrastructure.

### 新增兩個合作夥伴,將建立端對端機頂盒供應鏈

於二零零二年四月十八日,天地數碼與江蘇宏圖高科技有限公司 ("宏圖")簽訂協議,建立一個投資額為人民幣九千萬元、雙方各佔 50%權益的合營公司,宏圖乃上海股票交易所之上市公司及中國 最大的消費電子產品製造商。宏圖及天地數碼將各自出資四千五 百萬元人民幣,用作數碼廣播服務及設備之市場推廣資金及向天 地數碼購買有關技術設備。該合營公司之重點是在已安裝天地數 碼廣播系統但仍未開始商業運作的地區,與本地有線營運商開展 基本數碼電視服務。

天地數碼於二零零二年三月自Zoran Corporation("Zoran")獲得三千 九百萬港元的投資,後者為納斯達克上市之消費電子產品之晶片供 應商。宏圖,Zoran與天地數碼三家公司將共同建立一個完整的數 碼機頂盒供應鏈,由天地數碼提供設計及技術研發,Zoran提供晶 片及宏圖進行製造。三家公司合作,能以具競爭力價格向中國的消 費者提供高品質、度身定制、多功能的機頂盒;同時,亦可對市 場、消費者品味及需求以及製造水平的變化作出最快的回應。

### 打入中國廣播事業

根據中國的現行規定,外商被禁止直接投資中國的有線電視廣播 事業。因此,天地數碼並未投資有線電視網路,亦沒有參與有線 電視台營運。天地數碼提供技術、設備及支援服務,令有線電視 營運商可以經營盈利性質的數碼廣播服務。監管當局公開認可這 種安排,並積極鼓勵香港公司進行參與。天地數碼將其系統集成 出售予或出租予有線電視營運商。

天地數碼之租賃合約中規定,天地數碼在有線電視台安裝數碼廣 播前端設備,並提供運行數碼廣播業務所需全部應用程式。而有 線電視台將其十至十五年內數碼增值收入按一定比例付予天地數 碼,作為其投資回報。因此,天地數碼既可從訂購數,碼服務的 用戶收入中分享增加的收入,卻毋須對有線基礎設施進行投資。 With the installation of 19 platforms in China, over 30 million subscribers will be able to access digital broadcasts.

在中國裝設十九套平台後, 逾三千萬用戶將可 使用數碼廣播服務。 Annual Report 2001 年報

### **Tangible Monetary Results**

With the installation of 19 platforms in China, over 30 million subscribers will be able to access interactive digital broadcasts.

DVN sold outright four digital broadcasting platforms in year 2001 and recorded HK\$41.8 million in sales. DVN has also entered into leasing agreements with 5 CATVs in total. This arrangement provides DVN access to the subscription fees collected by the CATVs for the provision of digital services. DVN has targeted for its leasing contracts the richest and most populous regions within China. The other installed platforms have been sold outright.

DVN also receives revenue from the sale of its set top boxes and the provision of content introduced by DVN and broadcast over the CATV's digital platform. In 2001, revenue from sales of set top boxes amounted to HK\$7.8 million.

DVN provides international financial and consumer data content through its group company, Dynamic Network Limited ("Dynamic").

In 2001, extreme effort was focused on streamlining operations and rolling out DVN's digital broadcasting platforms in China. Due to this as well as the absence of large provisions and write offs that were booked in 2001, DVN significantly reduced its operating losses from HK\$181.7 million for 2000 to HK\$33.2 million for 2001. DVN expects that with the continued roll out of digital broadcasting services in areas in which DVN's platforms are installed, operating losses will continue to diminish and DVN will soon reach break even.

### Springboard for Strong Revenue Growth

DVN is beginning to see the results of several years of hard work and patience. With digital services operating in ten locations throughout China and over 14,000 subscription fee paying subscribers as of March 31, 2002, DVN has begun to reap the benefits of the groundwork it has put in place. Roll out of digital services is expected in up to ten new cities in China and focus will be put on increasing the point of sales network in the locations where digital services are already offered to hasten the conversion from analog to digital. DVN will concurrently work to educate Chinese consumers on the benefits of digital broadcasting and its capabilities in order to upgrade a percentage of basic digital service subscribers to higher value added premium Pay TV services, which would include VOD, on-line stock trading and other T-commerce applications.

DVN also expects its return on invested capital to continue to improve, as its business model does not require the large investment that most cable business models require. DVN is not involved in the capital-intensive development and laying of China's cable infrastructure. Its primary capital expenditure is for the installation of headend platforms under its leasing contracts but this is partially offset through the sales of other platforms as well as of its set top boxes.

### 有形之財務資料

在中國裝設十九套平台後,逾三千萬用戶將可使用互動數碼 廣播。

於二零零一年,天地數碼售出四套數碼廣播平台,錄得銷售額 41,800,000港元。天地數碼共與五家有線電視台訂立租賃協議。 透過該等安排,天地數碼可分享有線電視營運商提供收費電視服 務所收取的用戶費。天地數碼之租賃合約以中國最富庶及人口最 多的省份為對象。其他已安裝的平台則採用銷售模式。

天地數碼亦從銷售機頂盒、提供內容及增值服務產生收入。於二 零零一年,機頂盒銷售收入達7,800,000港元。

天地數碼亦透過其集團公司Dynamic Network Limited("Dynamic") 提供國際金融資訊及數據服務。

於二零零一年,天地數碼致力精簡業務並在中國拓展數碼廣播平 台,加之並無大額撥備及撇賬。因此,天地數碼已將其經營虧損 由二零零零年181,700,000港元減低至二零零一年33,200,000 港元。天地數碼預計,隨著其數碼廣播業務進一步在中國展開, 其經營虧損將繼續減少,並可望在較短時間內達到收支平衡。

### 強勁收入增長之跳板

天地數碼數年持之以恆之努力初見成效。於二零零二年三月三十 一日,中國已有十個地區開展數碼服務的商業營運,付費用戶超 過14,000人。天地數碼已開始從其裝設的數碼廣播平台獲取收 益。預期於中國另外十個城市之數碼服務亦將啟動,側重在已提 供數碼服務的地區增加銷售網絡,以促進從模擬電視轉換為數碼 電視。同時,天地數碼將致力向中國顧客宣傳數碼廣播的優勢及 功能,以提高數碼服務用戶之比例,增加專業收費電視之增值服 務,包括視頻點播、在線股票買賣及其他電子商貿應用程式。

天地數碼之業務模式不同於大多數要求大量投資的有線業務模式,因此天地數碼亦期望其投入資本之回報能持續增長。天地數碼並未涉入資本密集型開發及中國有線基礎設施的安裝。其主要資本開支是根據其租賃合約安裝數碼廣播前端系統,但部份通過出售其他平台以及機頂盒抵銷。

DVN will focus on developing technology that addresses the trends and needs of Chinese consumers to maintain its leading market position.

天地數碼將致力發展切合中 國市場需求及有線電視走勢 的技術,以維持天地數碼在 市場的領先地位。



DVN endeavors to bring the highest quality content to the CATV operators to broadcast over the platforms. Quality content will not only provide CATV operators a marketing advantage and assist in the promotion of digital TV services but also increase the revenue potential of the CATV operators. DVN also plans to introduce interesting and desirable interactive applications over the platform that will turn the subscribers' TV into a point of sales terminal and concurrently generate a new revenue source for the CATV operators.

DVN will also continue to focus on developing technology that addresses the trends and needs of Chinese consumers and CATV operators in order to maintain its leading market position. DVN will continue to invest in research and development to maintain its cutting edge in digital broadcasting technology. DVN will also continue to focus on offering its end-users improved and more advanced set top box models that provide more processing power and better graphical resolution, such as that required for 3-d games. DVN has established three research and development centers in Hong Kong, Shanghai and Shenzhen staffed with over 140 people to focus on developing further cost efficient and technically advanced digital video broadcasting equipment and software applications. DVN maintains additional staff, also focusing on technology and application support, in Hong Kong, Shanghai, Beijing, and 7 other offices throughout China.

As DVN's system works on both one-way and two-way cable networks, requires no network upgrade or changes to the existing infrastructure as well as presents CATV operators an affordable solution to digital broadcasting, DVN's platform has been received favorably by CATV operators outside of China. DVN is following up aggressively these business opportunities and believes that such opportunities outside of the China market could contribute to its growth.

天地數碼致力向有線電視營運商提供高素質之內容,在數碼平台進行廣播。優 質內容不但可令有線電視營運商在市場推廣方面佔有優勢,並有助於推廣電視 服務,增加有線電視營運商的收入潛力。天地數碼亦計劃在其平台上引入新穎 及根據市場需求的互動功能,用戶可將電視機作為終端交易裝置,同時為有線 電視營運商帶來新的收入來源。

數碼天地將持續側重發展切合中國消費者及有線電視營運商走勢及需求的技術,以維持其市場領先地位。天地數碼將繼續投資技術研究及開發,維持其在 數碼廣播技術領域上領先的競爭優勢。天地數碼亦將繼續致力開發經改良及更 為先進的機頂盒型號,可提供更強處理能力及更好的如3D游戲所需之圖像分 辨率。天地數碼已在香港、上海及深圳建立三間研發中心,有工作人員逾140 人,集中發展更具成本效益、技術更先進的數碼廣播設備及軟件應用程式。此 外,天地數碼亦在香港、上海、北京及遍及中國的其他七個城市開設分公司及 辦事處,集中進行技術及應用服務支援。

由於天地數碼之系統適用單向及雙向有線網絡,故此毋須對現有基礎設施進行網路升級或作出更改,及為有線電視營運商提供價格相宜的數碼廣播解決方案。因此,天地數碼平台亦受到中國以外地區有線電視營運商的歡迎。天地數碼正積極 跟進這些商機,相信這些在中國市場以外之發展機會可推動業務增長。