

Operations Review

業務回顧

MAP showing DVN's penetration

天地數碼在國內滲透版圖



 DVN System Installed

Cable subscribers in DVN's Territory

天地數碼覆蓋範圍內的有線訂戶數目

Province/Municipality 售或租賃		Number of Cable Households (millions) (百萬)		Sale or Lease	
Suzhou	蘇州	0.3		Lease	租賃
Shandong	山東	6.0		Lease	租賃
Hebei	河北	3.0		Lease	租賃
Zhongshan*	中山*	0.8		Lease	租賃
Zhejiang**	浙江**	4.0		Lease	租賃
Shen Li Oil Field	勝利油田	0.12		Sale	出售
Shanghai	上海	3.4		Sale	出售
Foshan	佛山	0.6		Sale	出售
Henan^	河南	4.0		Sale	出售
Shaanxi^	陝西	2.5		Sale	出售
Hunan**	湖南**	3.8		Sale	出售
Hubei**	湖北**	4.5		Sale	出售
Tianjin**	天津**	1.5		Sale	出售
Guangzhou***	廣州***	1.2		Sale	出售
Total	總數	35.72			
<p>* Signed in 2001 ** System installed, pending finalization *** Under negotiation ^ Installed in 2000 but to be commissioned in 2001 * 2001年簽署 ** 已安裝系統，待最後確定 *** 談判之中 ^ 2000年安裝，將在2001年可投入使用</p>					

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Customers

DVN had installed, by December 2000, digital broadcasting platforms in eight locations throughout China, giving DVN access to over 19 million existing cable subscribers. In 2000, DVN had sold outright three digital broadcasting platforms, one to its strategic partner and two directly. Another two platforms were installed on behalf of DVN's strategic partners but will not be commissioned until 2001. DVN had also entered into leasing agreements with three CATVs under which it will receive technology support and equipment fees from the additional income derived by the CATV from the use of DVN's systems. This arrangement provides DVN access to the subscription fees collected by the CATVs for the provision of interactive pay TV services.

Leasing Contracts	Sale of Platforms
<ul style="list-style-type: none"> • Suzhou • Shandong • Hebei 	<ul style="list-style-type: none"> • Shanghai • Shen Li Oil Field • Foshan • Henan* • Shaanxi* <p>* To be commissioned in 2001</p>



客戶

截至 2000年12月，天地數碼已在中國八處地點安裝了數碼廣播平台，令天地數碼平台覆蓋超過1900萬用戶。在2000年，天地數碼已一次過出售三套數碼廣播平台，一套售予策略性夥伴，兩套為直接出售。另外兩套為天地數碼之策略性夥伴安裝，但要到2001年才將會啟用。天地數碼亦已和三家有線電視經營商達成租賃協定，天地數碼可從他們的額外收入中收取技術支援及設備費。這項安排，可使天地數碼得以分享有線電視經營商提供互動電視而收取的訂戶費。

租賃合約

- 蘇州
- 山東
- 河北

出售平台

- 上海
- 勝利油田
- 佛山
- 河南*
- 陝西*

* 將在2001年投入使用



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Shanghai



Shanghai

In October, DVN signed a contract to sell a digital broadcasting platform to Shanghai Broadcasting Bureau's Technical Center ("SBBTC"). The completion of the platform's installation and all related tests have been performed to date.

SBBTC is a wholly owned subsidiary of Shanghai Broadcasting Bureau, which among other things regulates all broadcasts in the Shanghai region. The purchase of DVN's platform is to upgrade Shanghai's broadcast network from analog to digital in order to improve the quality of the broadcasts and the usage of the cable bandwidth. The three main broadcasters in Shanghai: Shanghai TV Station; Oriental TV Station; and Shanghai Cable TV Station, will all use the platform to broadcast their programs over Shanghai Cable TV Network. SBBTC will be responsible for the day-to-day management and operation of the system. The three broadcasters will be responsible for marketing the platform's services and the STBs to the end-users.



上海

上海

2000年十月份，天地數碼與上海廣電局技術中心簽署了一份出售數碼廣播平台合約。平台之裝設及所有相關之測試已按時完成。

上海廣播局技術中心是上海廣電局之全資附屬公司，負責監察上海地區的所有廣播事務。購入天地數碼平台後，可把上海的廣播網絡由模擬制式提升為數碼制式，改善廣播質素及有線頻寬的應用。上海三個主要廣播機構：上海電視台、東方電視台及上海有線電視台，將利用這個平台通過上海有線電視網絡播放節目。上海廣播局技術中心將負責系統的日常管理及營運；三大廣播機構則負責向終端用戶推銷平台服務及機頂盒。

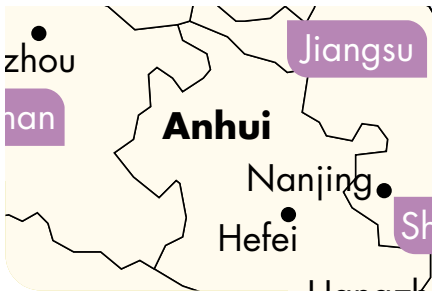


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Hebei & Shandong

Suzhou



Suzhou

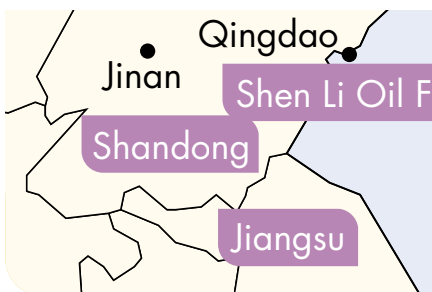
DVN in October 2000 finalized the leasing contracts with Suzhou Cable TV Network Company ("SCTV"), the commercial arm of the local broadcasting bureau. The contracts lay out the terms for the 10-year lease of DVN's interactive TV platform to SCTV. Sales of the STBs and roll out of the service did not begin until December 2000.

Suzhou has over 400,000 existing cable TV subscribers receiving analog broadcasts. A premium service, targeted at expatriates stationed in Suzhou, is currently on offer. A standard service, targeted at local people, will be offered in the near future and will provide real time financial data and news broadcasts. DVN received its first technical and support fee from subscriptions collected in December.



Hebei & Shandong

DVN's contracts with the Hebei and Shandong Provincial CATVs and their terms and conditions therein are similar to those signed with the Suzhou CATV operator. Video and near video on demand broadcasts were delayed due to licensing procedures promulgated by China's broadcasting bureau at the end of year. Roll out of interactive pay TV services in Shandong and Hebei has been limited to on-line news and financial information as well as local broadcasts.



DVN's partner, Hebei Provincial CATV, received, in March 2001, the first such license to be issued allowing commencement of full pay TV services in its province. Hebei Provincial CATV is working with four municipal CATVs to begin roll out of the new interactive pay TV services. Shandong Provincial CATV expects to receive its license for pay TV services within the first half of 2001 and will begin roll out of its interactive pay TV services as soon as practicable.



蘇州

河北及山東

蘇州

天地數碼於2000年10月，與蘇州廣電局旗下的蘇州有線電視網絡公司最後確定租賃合約。根據合約之條款，天地數碼互動電視平台將租予蘇州有線電視網絡公司，為期十年。到2000年12月，機頂盒開始銷售，服務也隨即推出。

蘇州目前逾40萬有線訂戶是靠模擬技術接收廣播。現時，派駐蘇州工作的海外人士已獲提供此項優質服務。以本地人為對象的標準服務也會在短期內推出，包括提供即時財經資訊及新聞廣播。天地數碼也已從12月的訂戶費中，收取了首筆技術及支援費。

河北及山東

天地數碼與河北及山東省有線電視經營商簽訂的合約及條款，與蘇州有線電視經營商簽訂的大致相若。由於中國廣播局於2000年底制訂發牌程式，因此視訊隨選(VOD)廣播服務受到推延。因此，目前在山東及河北省有線電視台推出的數碼收費電視，只限於線上新聞、財經資訊及地區性廣播。

天地數碼之夥伴——河北省有線電視——已於2001年3月獲得首個此項牌照，開始在該省經營全面的收費電視服務。河北省有線電視正與四個市級有線電視合作，著手推出新的互動收費電視服務。山東省有線電視預期可在2001年上半年獲得發牌，並會盡快推出互動收費電視服務。



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Year at a Glance 大事年表

12.2000

Sold head end to Shanghai Broadcasting Bureau and received the first payment installment in January 2001.

New digital pay TV licensing procedures promulgated by China's SARFT

Began commercial roll out of premium interactive pay TV services in Suzhou; received first payment from subscription fees.

出售網絡連接系統予上海廣電局，並在2001年1月收取首筆分期付款。

中國國家廣播電影電視總局制訂新的數碼收費電視發牌程序。

在蘇州之優質互動收費電視服務開始作商業運作；收取第一筆客戶收視月費。

Employees and Offices

As of March, 2001, DVN had 285 employees, including 103 in engineering and product development. DVN has offices in Beijing, Shanghai, Suzhou, Jinan, Zhongshan, Hangzhou, Shijiazhuang, Baoding and Shenzhen. Subject to discussions with DVN's partners, DVN may open more offices during 2001, in order to provide technical and operational support to the local CATV operators.

HiTV Disposal

In December, DVN disposed of a 24.3% stake in HiTV out of a total 36.4%. DVN received as consideration for the sale of its interest HK\$30 million, the rights and licenses to a film library valued at HK\$17 million and the cancellation of HK\$34.2 million in debt owed by DVN to HiTV. By year-end, DVN had sold its remaining interest in HiTV.

After the restructuring of DVN's business operations earlier in the year, it became clear that the business focus of HiTV, media and content programming, lay outside DVN's primary business focuses. However, as the major shareholder in HiTV, multiple demands were placed on DVN. It was believed that by disposing of its interest in HiTV, DVN would be better able to concentrate its efforts on its core business proficiencies, digital media transmission systems. The disposal allows DVN to maximize its marketing efforts and not be distracted by businesses outside its primary business lines.

員工及辦事處

截至2001年3月，天地數碼共有285名員工，包括103名工程及研發人員。天地數碼在北京、上海、蘇州、濟南、杭州、石家莊、保定及深圳均設有辦事處。待與各省市夥伴洽談後，天地數碼可能在2001年內多開設辦事處，藉以為當地有線電視經營商提供技術及運作支援。

出售HiTV股份

在12月，天地數碼出售手持的HiTV 36.4%股份中的24.3%。天地數碼所獲得的收益，包括出售HiTV權益價值3000萬港元，電影庫的權益及牌照價值1700萬港元，並抵償天地數碼拖欠HiTV之債項共3420萬港元。到年底，天地數碼已出售手上餘下的HiTV股權。

天地數碼年初進行業務重整後，明確把HiTV的業務焦點，即媒體及內容製作，與天地數碼的主體核心業務重點區分出來。不過，作為HiTV之最大股東，天地數碼也要承受各方各項的要求。相信在售出HiTV之權益後，天地數碼更能集中力量在核心業務——數碼媒體傳輸系統。出售股權使天地數碼的市場推廣能力發揮至最大，而不致偏離至基本業務以外的商業活動。

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Competitive Advantages

- Offers CATV operators the most complete digital broadcasting system using the most advanced technologies at the lowest price.
- A pioneer of digital video broadcasting technology in China. Fully owned and developed systems by DVN include the broadcast control system, conditional access system, subscriber management system and bank billing system.
- Enjoys first mover advantage in the market.
- Established network of strategic alliance partners with a strong base of subscribers.
- An effective billing system for subscription fee collection and T-commerce.
- Strong research and development team in the forefront of DVB technology.

Future plans and strategies

In year 2001, DVN will focus on rolling out interactive pay TV services in conjunction with their partners in Jiangsu, Hebei, and Shandong Provinces. DVN will also assist its other partners in obtaining the necessary license to broadcast pay TV services. DVN will work with its strategic partners to penetrate additional provincial markets and provide support where necessary with the sale of its STBs.

DVN continues to install its platforms in new locations throughout China. As of March 31st, 2001, DVN had signed one new contract and was negotiating another to install its systems through long term leases and had entered into arrangements for the sale of four platforms to one of its strategic partners, giving DVN access to a further 1.5 million CATV subscribers.

DVN also continues to endeavor to bring the highest quality content to the CATV operators to broadcast over the platforms. It is the Management's belief that quality content will not only provide CATV operators a marketing advantage and assist in the promotion of premium pay TV services but also increase the revenue potential of the CATV operators. DVN is considering introducing real-time international financial data for broadcast over the digital platform to its Chinese partners as the China market opens up and investors are able to invest outside of China. DVN also plans to introduce interesting and desirable applications over the platform that will turn the subscribers' TV into a multi-media home terminal and concurrently generate a new revenue source for the CATV operators. DVN is already in discussions with major securities firms to install the application software necessary to trade stocks over the digital platform. .

競爭優勢

- 天地數碼以最低廉的價錢，為有線電視經營商提供最完備及科技最先進的數碼廣播系統。
- 由天地數碼完全擁有及研發的系統，包括廣播監察系統、有條件登入系統、用戶管理系統及銀行結算系統。天地數碼是國內數碼影像廣播技術的先驅。
- 天地數碼在市場內佔有捷足先登的優勢。
- 天地數碼已和策略夥伴建立聯盟網絡，擁有龐大的客戶基礎。
- 天地數碼擁有一套可收取訂戶費及進行電視商貿活動的有效結算系統。
- 天地數碼擁有強大的研發隊伍，走在數碼視像廣播的尖端。

未來計劃與策略

在2001年，天地數碼將集中力量，聯同江蘇、河北和山東省的夥伴，推出數碼互動收費電視服務。天地數碼亦將協助其他夥伴取得經營收費電視服務必要的牌照。

天地數碼也會聯同策略夥伴，開闢更多省級市場，提供出售機頂盒所需的支援服務。

天地數碼將繼續在中國其他地區安裝平台。截至3月31日止，天地數碼已簽署壹份新合約，及壹份長期租賃合約，並安排銷售四套平台予其中一個策略夥伴，令天地數碼之平台可多加覆蓋1500萬有線訂戶。

集團也致力為有線電視經營商提供最高質素的內容，並利用天地數碼平台播放。管理層相信，具有質素的內容不單為有線電視經營商提高市場推廣的優勢，也有助推動增值收費電視服務，更可增強有線經營商的盈利能力。隨著中國開放市場，投資者可在中國以外的地區投資，天地數碼正考慮利用數碼平台，為國內夥伴引進實時國際金融數據廣播。天地數碼也計劃利用數碼平台，引進各方感興趣的應用功能，把訂戶的電視機變作多媒體家庭終端站，為有線經營商開闢新的收入渠道。天地數碼正與一家大型證券商洽談裝設應用軟件，利用數碼平台在電視機上進行線上股票交易。

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DVN will continue to invest in research and development to maintain its cutting edge in digital broadcasting technology. In the first three months of 2001, DVN has established a new research and development center in Shenzhen staffed with 40 people to focus on the development of miniature digital video broadcasting systems for community networks. This is in addition to DVN's research and development centers in Shanghai and Hong Kong.

DVN is also exploring potential sales of its platform to CATV operators outside of the PRC, in particular Southeast Asia where the cable infrastructure is suitable for DVN's platform.

Risk management

DVN's exposure to China's broadcasting industry results in a multitude of risks that could impair its business. However, DVN has structured its business to minimize these risks. DVN will closely monitor changes in the market and will adopt a prudent and adaptive approach in order to continue to minimize its risks as well as maximize shareholders' value.

Due to the newness of digital broadcasting technology and its capabilities, China's regulatory environment and the broadcasting industry's structure is evolving. It is possible that future policy changes could impede DVN's operations.

DVN has structured its involvement in China to fall within the rules and regulations regarding foreign involvement in the broadcasting industry. The trend in China, as promoted by the SARFT, is to upgrade China's broadcasting industry from analogue to digital and DVN's technology supports this switch. In addition, DVN's leasing contract and its related payment terms has been vetted by the SARFT under Hebei Provincial CATV's license application and a Pay TV license was issued to Hebei Provincial CATV using DVN's platform to broadcast interactive Pay TV services.

There is no guarantee that all of the CATV operators, which have installed DVN's system, will receive the necessary license for pay TV broadcasts

DVN's leasing contracts with its other partners have the same terms and conditions to the contract already vetted by the SARFT under Hebei Provincial CATV's license application. As such DVN believes that its other partners should be able to obtain the required broadcasting licenses without much trouble. In the meantime, in provinces where DVN's platforms are installed, but the required pay TV licenses have not yet been received, limited digital services will be offered over the platform which will include real time and personalized news and financial information services.

As new technologies are involved, there may be delays in the implementation and roll out of the digital broadcast services

DVN's system has been fully tested and is now operational in Suzhou and Foshan. As such even though there may be minor installation difficulties in other locations, DVN does not expect any major obstacles.

天地數碼也會繼續投資在研究和開發上，以維持數碼廣播的技術優勢。在2001年首三個月，天地數碼已在深圳開設了一間有40名人員的新研發中心，集中發展社區網絡所需的小型數碼視像廣播系統。此外，天地數碼也在上海及香港設有研發中心，並已在深圳成立工程中心。

天地數碼亦在中國以外的地區，尤其是在有線基礎設施適合使用天地數碼平台的東南亞地區，探討銷售其平台的機會。

風險管理

天地數碼參與中國的廣播事業，帶來不同程度及可能會嚴重損害其業務之風險。為此，天地數碼已重組其業務模式，盡量減低這些風險。天地數碼將謹慎及務實的措施繼續減低風險並為股東爭取更大的利益。

數碼廣播科技一日千里，中國對數碼廣播之監管環境也在不繼改變之中，並可能會對天地數碼的業務構成妨礙。

天地數碼已重整其國內業務模式，以求符合外商參與廣播事業的法規和條例。國家廣電總局目前在全國推動的廣播潮流是全面從模擬廣播轉向數碼廣播。天地數碼擁有的技術正是站在潮流之上，十分有利。此外，在河北省有線電視申請牌照時，天地數碼之租賃合約及相關之付款系統已經通過國家廣電總局的審核。另一方面，河北省有線電視亦已取得收費電視經營牌照，使用天地數碼提供的平台提供互動收費廣播服務。

所有裝設了天地數碼系統之有線電視經營商皆無法保證可以取得經營收費電視廣播之必須牌照。

天地數碼與其他夥伴締結之租賃合約，與河北省申領牌照時經國家廣電總局審核過之合約條款相同。因此，天地數碼認為，其他夥伴也應可在無大困難下取得必需的廣播經營牌照。與此同時，在一些已安裝天地數碼平台，但仍未能獲發收費電視經營牌照的省份，將仍可利用平台提供包括，實時及個人化的新聞及財經資訊服務等有限度服務。

在涉及新技術時，推動和推出數碼廣播服務可能會受到阻延。

天地數碼之系統已經全面測試，目前已在蘇州和佛山運作。即使在其他地區可能出現輕微的安裝問題，天地數碼預期不會出現重大障礙。