

New Era of Telecommunication Infrastructure 電訊基建新時代

Towngas Telecommunications Fixed Network Limited 名氣通電訊固網有限公司



To embrace the new business opportunities created by the “Big Data Era”, “5G Wireless Networks” and “the Internet of Things”, Towngas Telecommunications Company Limited (TGT), as a wholly owned subsidiary of The Hong Kong and China Gas Company Limited (Towngas), the largest energy supplier in Hong Kong, aims to be a leading and pioneering company in the telecommunications industry and develops advanced optical fibre network.



What are Glass-In-Gas (GIG) and Glass-Along-Gas (GAG) technologies?

TGT has been installing optical fibres within gas pipe with the Glass-In-Gas (GIG) technology, while maintaining the reliability and sustainability of premium services to clients by inserting optical fibre cables into small protective polyethylene (PE) casing pipes underground to prevent external interference. Meanwhile, TGT



名氣通是香港最大能源供應商香港中華煤氣旗下的全資附屬公司。為迎接大數據時代、5G無線網絡及物聯網所帶來的新商機，名氣通致力成為電訊業的領導及先驅，發展先進光纖網絡。

甚麼是煤氣管道光纖技術（GIG）及同溝共建技術（GAG）？

名氣通一直致力運用煤氣管道光纖技術（GIG）在輸氣管內安裝光纖，並將光纖管道區隔於具保護性的聚乙烯管層內，深入地底，使光纖網絡不容易受外界環境影響，為客戶提供優質服務，並維持服務的可靠性及可持續性。同時，名氣通亦同步採用同溝共建技術（GAG），在鋪設煤氣管道的同時鋪設電訊管道。

憑藉GIG及GAG技術，在煤氣管道及聚乙烯管層內安裝光纖網絡，使光纖網絡不容易受外界環境影響，亦可增加保護以維持數據傳輸的穩定性。煤氣管道光纖技術亦是一種非常環保的技術，可減少安裝時間及對環境造成的污染（例如挖掘、對環境滋擾、對海床干擾等），同時亦可為客戶減低安裝電訊基建的成本。

全港長達3,600公里的地下煤氣管道不單為住戶提供燃氣，同時組成本港的電訊網絡，使用戶可以瀏覽互聯網、在電話上閒聊、或傳送短訊予海外朋友。作為本地主要電訊供應商，名氣通為本地及國際電訊營運商、數據中心、互聯網服務供應商、酒店、政府、大學及各企業提供優質服務及綜合方案。名氣通採用密集波分技術，提供不同類型的傳輸服務，滿足各客戶的應用需要。

has also been adopting the Glass-Along-Gas (GAG) technology simultaneously, laying the telecommunication duct with gas pipes.

With the use of GIG and GAG Technology, optical fibre is laid inside gas and casing pipes which prevents external interference and strengthens physical protection of optical fibre for maintaining stability of data transmission. At the same time, GIG technology is also a highly eco-friendly way to install optical fibre by minimising installation time and environmental pollutions (e.g. trench digging, surrounding nuisance, seabed disturbance, etc), while saving customers the cost of network infrastructure installation.

As a result, the 3,600km of Towngas pipes laid underground in Hong Kong not only distribute gas to households, but also form part of the city's telecommunications network. The network allows thousands of residents to surf on the Internet, chat on mobile phone or text their friends overseas. As a major wholesaler in the telecommunications network market, TGT provides quality network connectivity and comprehensive solution to local mobile phone operators, fixed network operators, international carriers, data centres, internet services providers, hotels, governments, universities and corporations. With the use of dense wavelength division multiplexing technology, TGT has been able to provide different types of data transmission service in order to satisfy customer needs.

With its 15 joint-ventures in China, TGT is ambitious in contributing to the mainland telecommunications industry. Riding on the advantage of the advanced GIG technology from Europe, TGT focuses on penetrating IT infrastructures and spreading GIG technology in mainland China. Last year, TGT has successfully applied for the patent of GIG and TGT'S Standard of "Technical Specification for Cable Conduit in Gas Pipe" approved by the China Gas Association.

TGT, as an industry pioneer, has also been devoting itself to drive industry development by advocating innovative applications for telecommunications industry and gas industry. To fully utilize the valuable optical fibre cable and further promote the implementation of this technology in mainland China, TGT fosters partnership with Towngas China Company Limited to launch "the Pilot Project of Laying Fibre Casing Pipe in Gas Pipeline". The project aims at establishing the first technology implementation, teaching and training demonstration base in mainland China. It also lays a foundation of technical and applied research on safety monitoring of gas pipeline.

TGT offers a broad spectrum of services in telecommunication infrastructures for companies of any size. With synergy of advanced GIG and GAG technologies, TGT has been able to provide customers with quality and reliable fibre connection with dedicated bandwidth services through gas pipe network which ensures unrivalled connectivity and more success in your business in the future. TGT not only aims at providing a better life to its clients but also to the whole society. With our leading role in telecommunications, we aim to drive our business and industry forward with our innovative ideas and applications. ■



名氣通在內地擁有15間合資公司，並致力為內地的電訊業作出貢獻。建基於歐洲先進的GIG技術優勢，名氣通集中在內地投入資訊科技基建及宣揚GIG技術。去年，名氣通成功為煤氣管道光纖技術（GIG）申請應用專利，而名氣通的「燃氣管道穿放光纖套管技術規程」團體標準更成功獲得中國燃氣協會審批。

名氣通作為行業先驅，在推動行業發展同樣不遺餘力，為電訊業及燃氣業推動創新應用。為充分利用極具價值的光纖網絡，以及進一步推動GIG技術在內地實行，名氣通與港華燃氣有限公司正式展開「國內首個燃氣管道穿放光纖套管技術」之合作，打造國內首個技術實施、教學及示範基地，為後續燃氣管道安全監測等技術及應用研究奠定基礎。

名氣通為各公司名企業提供一站式電訊基建服務。憑藉先進的GIG及GAG技術，名氣通透過燃氣管道網絡，為客戶提供優質及可靠的頻寬整合方案及光纖連接服務，以確保無可比擬的連線能力，令客戶的業務更勝一籌。名氣通不單為客戶的生活籌謀，更為整個社會謀求福祉。作為電訊業的領導者，名氣通的目標是利用我們的創新理念及技術推動業務及帶領整個行業向前。 ■