talia

communicate without boundaries





The company

Talia is a market-leading teleport, satellite, and terrestrial network operator, providing global IP communications.

Experts in satellite, voice, video, broadcast and secure data communications, Talia provide global network coverage, enabling enterprises, PTTs, mobile carriers, and broadcasters to connect to the largest global meet me room, and linking the major regional telecoms hubs around the world.

With headquarters in the UK, Talia operate their own teleport facility in Germany, and have support and sales offices in Iraq, Italy, Nigeria, South Sudan, Uganda, UAE, and the USA, making Talia ideally positioned to meet the demands of today's global market.

Talia is an ISO9001 registered company and a member of the World Teleport Association. We provide solutions for enterprises, media companies, NGOs, and government agencies.

Talia solutions include:

- Data communications
- Video contribution and broadcasting services
- Dedicated Internet and private networks
- Teleport uplink and downlink services
- Virtual Network Operator (VNO)
- Managed network services
- Mobile (GSM) backhaul
- System integration
- Turnkey solutions

The Talia Teleport

Talia operate a world class teleport, located in Raisting, Germany. The Talia Teleport operates 24/7/365, providing reliable services to our partners.



Communication solutions

Satellite experts

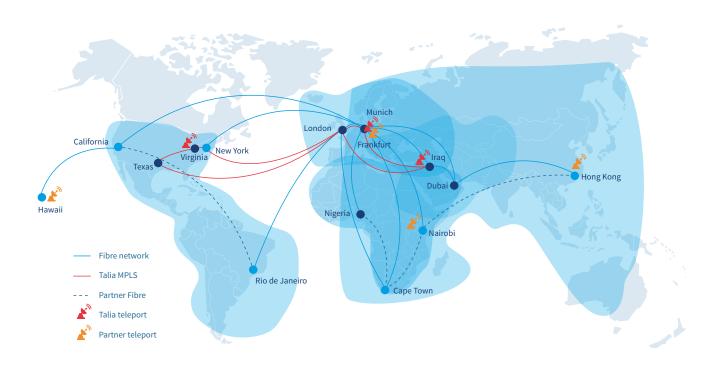
Powered by iDirect, Comtech,
Newtec and other satellite (VSAT)
technologies, Talia offers vendorneutral solutions, enabling network
access to urban and rural locations –
areas where DSL and other terrestrial
services are unavailable, unreliable,
or simply insufficient.

Satellite coverage

With connectivity across five continents, Talia's satellite coverage offers a flexible and robust network to customers. Through the Talia teleport, a state-of-the-art facility, with access to C, Ka, Ku, and L bands, Talia covers the majority of the developing and developed world from a single location.

Talia takes pride in the research and development of new technologies and services, further opening the satellite market to a broad range of users and providing partners with fast and reliable services. A key component of Talia's success lies within the highly skilled men and women who work in the company. Their expertise and experience enables Talia to understand international and local markets, whilst providing our partners with superior levels of customer service.

Our help desk is based in Germany, with second-level support in London. Talia's help desk operates 24/7/365 via email, live chat, web and telephone.



Telecommunication

Developments in IP networking and the Internet have created the perfect environment where telephony providers no longer have to rely on Publicly Switched Telephone Network (PSTN). By combining satellite technology with Voice over IP (VoIP), providers have the freedom to provide end-users with dependable services. VoIP based telephony provides versatile solutions for customers with remote locations who require unified communications.

Mobile communication

of mobile communications solutions. Our partnership provides a complementary

> by extending connectivity.

The Talia Portable Satellite Internet system is easily transported and deployed by one person to provide high speed, WiFi connectivity with bandwidths up to 5Mbps downlink and 2Mbps uplink from any location.

Terrestrial connectivity

As a leader in VSAT network integration, Talia has experience providing terrestrial voice and data services, building a reputation for designing and creating hybrid networks that deliver communication systems for all business requirements.

Most global networks will include a hybrid mixture of satellite communications for remote locations and terrestrial services where in-country infrastructure exists. Talia can select the correct technology for each requirement, providing the highest levels of reliability, availability and scalability across the entire network.

Talia terrestrial connectivity services offer:

- Integration with VSAT networks
- Connectivity to worldwide PSTN, national and international carriers
- One stop solution for network design, implementation, and support
- Centrally managed from the Talia teleport



Data solutions

The Talia teleport

Talia operate a world class teleport, located in Raisting, Germany. The Talia teleport operates 24/7/365, providing reliable services to our partners.

Talia provides uplink and downlink services, including:

- Cable head end delivery via satellite
- Domestic and international video/ audio data solutions
- Point to multipoint distribution
- Secure data and voice services
- Virtual Network Operator (VNO)
- Mesh and private networks

Multifunctional teleport

- Access to geostationary satellites
- Satellite-to-satellite traffic switching
- Retransmission of broadcast channels
- Operational network monitoring
- 24/7/365 customer support

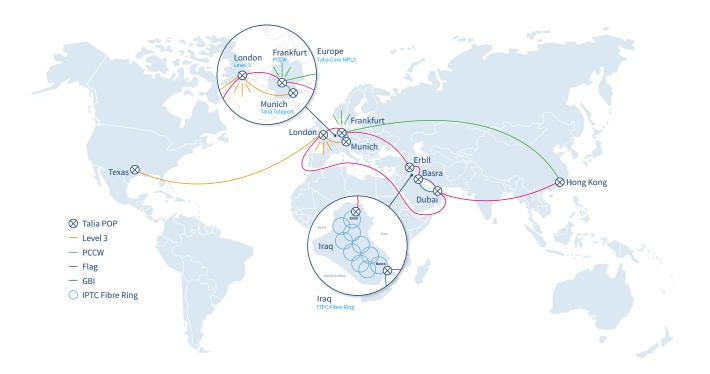
Partners are able to manage their own network, or instruct Talia's in-house engineers to manage networks on their behalf. Talia provides real time support services from the Network Operations Centre (NOC).

Advantages of using the Talia teleport

- Universal Access:
 Enable urban and rural users the same level of coverage.
- Immediate Deployment:
 Instant access to VSAT technology,
 eliminating a need for a costly
 infrastructure.
- Multicasting:
 Satellite communication provides
 the most cost effective way to
 multicast data, audio, and voice.
- Redundancy & Reliability:
 Talia's teleport is equipped
 with redundancy for all key
 components, providing fast
 fail-over for guaranteed levels
 of up-time and service quality.



Network Operations Centre The NOC is operated 24/7/365 and provides real-time support and monitoring services to our partners.



Talia MPLS Network

One significant development in technology at Talia is the creation of our Multi Protocol Label Switching (MPLS) network. The cloud is becoming increasing congested, but development in MPLS and vMPLS mean a greater control on traffic prioritisation across both satellite and terrestrial infrastructure.

Talia's Multi Protocol Label Switching (MPLS) is ideal for companies with multiple sites and remote workers across the world, whether in cities or more isolated rural locations. As an ultra-secure network it allows you to safely connect people in different locations to work together seamlessly and efficiently, improving productivity and communication.

With MPLS, customers can tie all of their locations together, creating one single carrier-neutral network, eliminating carrier hardware and removing the need for firewalls at each site, reducing cost and simplifying the network.

Managed Networks

Talia provides robust, versatile, managed network services for contribution and distribution of data, voice, and video content. Managed network services help simplify network management and enable everyday operations to run more efficiently.

Managed network services include:

- Content aggregation and encoding on a large number of satellites to our teleport in Germany
- Robust facilities with complete redundancy and fail-over switching
- Continuous investment to maintain state-of-the-art facilities
- 24/7/365 performance monitoring applications

Broadcast and media solutions

Broadcast professionals

Talia's advanced transmission, production and broadcast facilities are available for scheduled, occasional, or one-off events, enabling organisations to deliver regional media content to global audiences. Solutions include: Internet Protocol Television (IPTV), occasional use capacity, contribution feeds, and playout solutions.

Broadcasting and media

Talia broadcast communications solutions enable media organisations to quickly connect satellite news gathering (SNG) units with distribution centres, to broadcast news and events as they happen, wherever they happen.

Talia ensure broadcast continuity through fully managed playout solutions using our state-of-the-art teleport, and diverse connectivity to broadcast and switching centres. Programs can be delivered to for playout from studios, on CD, over fibre links, via the Internet, or via satellite links.

In the highly competitive world of broadcast media, timeliness, access to information and the accuracy of messages are essential. Talia's broadcasting solutions allow reliable delivery of media content to global audiences.



Broadcast Solutions

Ensure broadcast continuity with professional media solutions for playout, turnaround and occasional use from Talia.

Internet Protocol Television

Talia's IPTV solutions give cable, satellite, and telecommunication providers the opportunity to take regional content and offer it globally to end-users via the Internet.

Talia's end-to-end IPTV solutions deliver:

- 'Triple Play' compatible service
- Broadcast quality television and radio
- Personalized TV channels, that learn from viewing habits
- Integrated widget-based Internet services including shopping and gaming
- · Video on Demand (VoD) services
- Greater parental control
- Our IPTV solutions have been designed with the scalability, reliability and bandwidth efficiency levels that operators require to offer end-users new services and applications, whilst remaining competitive.

Broadcast and IPTV

Talia has the distribution capacity and systems to deliver a wide range of broadcast material across a worldwide network. Talia offers contribution, playout, and IPTV rebroadcast from dedicated, redundant systems at the Talia teleport.

Solution Highlights:

- Standard definition (SD) and high definition (HD)
- Full playout systems for major satellite broadcast positions
- Video contribution links with downlink to fibre or to partner teleports
- End-to-end solution for broadcast TV and VoD services over IP
- Customization and integration with existing operating systems
- Teleport services, with performance monitoring applications



Technology solutions

With strategic global locations,
Talia Technology is able to directly
support and deliver services to our
end customers locally. Our local
staff, are all trained and managed by
highly experienced personnel from
other countries around the world.
This business model is designed
to develop local talent, provide
knowledge transfer to our staff,
whilst providing career opportunities
for the future and contribute to the
economic growth of the region.

Procurement services

Our office in Dubai provides the procurement and logistics to supply the region with leading technologies from top tier distributors within the Middle East. We also have the capability to pre stage equipment for factory acceptance testing to support EPC projects in country.

Products and services

Talia provides a real alternative to expensive in-house resources by offering a high level of practical experience, know-how, contacts, and confidentiality. Clients know that working with Talia means a professional, high quality customer driven service.

Cisco network solutions As a Cisco Partner, Talia delivers layered architecture solutions for routing, switching, unified communications and telepresence.

Microsoft back office Design, installation and managed on-site support services for Microsoft's client, server and collaboration technology platforms.

Radio communications Delivering leading edge solutions, using carrier grade equipment, for wireless, microwave and handheld radio/tetra infrastructures.

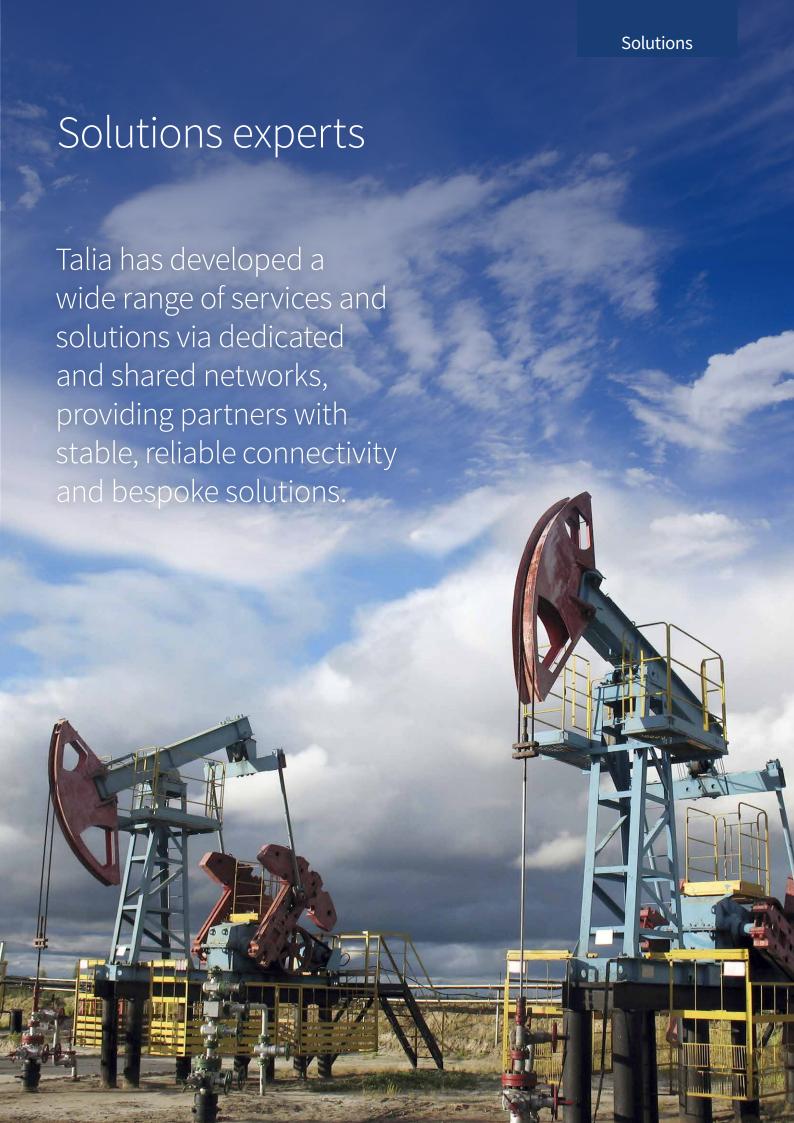
Fibre and VSAT Internet Delivering licenced terrestrial fibre services via two routes from Iraq and four routes from East Africa, as well as providing global VSAT and MPLS solutions.

Unified communications Tailored solutions for VOIP, IP PBX and video conferencing/telepresence.

Structured cabling and fibre
Design, modelling and installation
of structure cable and fibre
infrastructures, including national
fibre laying solutions.

Electronic security Design, installation and support for CCTV, PIDS, PAGA, ACS and fire alarm systems.

Custom services Fully managed IT support, network and Internet services, project management, individual procurement solutions, leasing and spares, tower surveys for safe to climb certification.



Solutions experts

Oil and gas

As the global demand for energy increases, oil and gas producers, rig owners, operators, and service companies are moving to more isolated and remote locations.

Talia's oil and gas solutions enable essential contact between remote facilities and corporate headquarters, and also allows crew to remain in contact with friends and families back at home.

Mining

As exploration continues to take mining companies further into remote areas, VSAT technologies begin to play a more critical role with the success of these operations. Mining contractors, operators, and speciality companies require reliable methods of communications, to successfully run operations, and serve as a lifeline to employees.

Engineering and construction

Petrochemical plants, natural gas terminals, large-scale developments, and infrastructure projects are often located in hard-to-reach and isolated areas. In these areas, communication infrastructure is often unreliable or not readily available, making VSAT-based networks the only viable alternative for providing critical communication links back to corporate headquarters and regional offices.

Advantages and benefits:

- Increased business availability through network monitoring and management
- Single point of management for both terrestrial and satellite-based network equipment
- Seamless, reliable, and mobile satellite communications
- Multiple sites can be monitored and analysed simultaneously





Remote locations

Reliable video conferencing, Voice over IP, corporate networking, and Internet access enable management of routine logistics and provide a critical link back to civilization.

NGOs

VSAT solutions play a vital role in minimising the damage created by disasters. The sooner humanitarian organisations are able to collect and analyse critical information, the more effective the response becomes, and the more lives are potentially saved. Due to limited availability of infrastructure in rural areas, NGOs rely on VSAT technologies not only to share information with headquarters and other relief agencies, but also to and improve the efficiency of relief and development efforts.

First responders require immediate access to reliable communications links in the midst of a disaster.

Satellite networks can also used as a powerful tool to help establish new field offices, improve local development, and support direct post disaster relief.



Government

Talia has developed a portfolio of technologies, which allow government departments and agencies to deliver secure and confidential information across diverse frequency bands in both commercial (C, Ka, and Ku) and government-only (X) frequencies. The same capacity can also be used for Talia business continuity solutions.

Talia's government solutions provide secure, on-demand connectivity supporting mission-critical operations to defence, intelligence and government organisations.

From the battlefield to the briefing room, the command centre to the first responder, Talia provides government approved VPN solutions over satellite networks with guaranteed performance and support of real-time applications such as VoIP and streaming video.

Advantages and benefits:

- A wide range of voice and network applications, including voice over IP, email, Internet, video conferencing, and content delivery
- Global security management and worldwide asset tracking systems
- Traditional and IP-based communications networks
- Seamless networking through dedicated hubs and terrestrial POPs
- Flexible and adaptable bandwidth agreements
- High levels of security including IP and radio encryption



Government Solutions

Talia's government solutions provide secure, on-demand connectivity supporting mission-critical operations to defence, intelligence and government organisations.

Training Academy

VSAT Training

Empower your team with a solid understanding of VSAT Technology, installation and maintenance.

As an approved Global VSAT Forum (GVF) training partner, Talia provides local or online accredited training for VSAT field technicians and engineers, or indeed anyone who wants to get a solid grounding in Satellite Communications Technology.

Talia can provide the full range of access to on-line GVF training as well as certification. Certification can take place in Germany, Iraq or London.

Courses include:

- iDirect VSAT Training for Installers
- Comtech SCPC VSAT Training for Installers
- Introduction to Satellite
 Communications, Edition 2
- Core Skills for VSAT Installers
- Satellite Communications Fundamentals
- Practical Techniques for Installers
- iDirect Remote Terminal Installation, Edition 2
- Fundamentals for Marine VSAT Operators
- Operating the Seatel Marine VSAT
- Operating the Seatel IMA Marine VSAT
- Operating the Spacetrak 4000 Marine VSAT
- Core Skills for Mobile Satellite Terminal Operators
- Access Procedure Skills
- Core Up-linking Skills





Talia Limited (Head office)

19 Nassau Street London W1W 7AF United Kingdom

T: +44 (0)20 3318 1500 E: sales@talia.net

Talia GmbH (Germany)

Mitterweg 36 D-82399 Raisting Germany

T: *49 (0)89 22 06 1186 E: teleport@talia.net

Talia Italy Srl

Via Claterna 3 Rome RM 00183 Italy

T: +39 (0)694 806 359

Talia International Inc (USA)

11951 Freedom Drive Suite 1300 Reston VA 20190 USA

T· +1 703 552 5908

Talia FZE (UAE)

Executive Suite, Z3-55 UAE, P.O.Box 122082

T: *971 (0)4 501 5452

Talia Limited (Erbil)

Villa No. 203 English Village Gullan Street Erbil, Iraq

T: +964 (0)751 230 0189

Talia Limited (Baghdad)

House 49, Road 11 Area 601 Al Amirat AL Mansour Baghdad

Tel: +964 (0)780 182 2887

Talia Limited (Basra)

Zubair City Al Zubair Basra Iraq

Talia Limited (Uganda)

Reja House Bukoto Kampala Uganda

Tel: +256 (0)782 146 668

Talia Limited (Nigeria)

29 Olowu Street Ikeja Lagos

T: +234 (0)803 425 4587

Talia Limited (South Sudan)

Sedeco Business Center Block No 16 1st Floor, Suite 104 Tongping Juba, South Sudan

T: +211 (0)956 482 984











