TASHKOO Limited

Telecom System Integrator

- **TURNKEY Projects**
- **Basic and Front End Engineering Designs (FEED)**
- **Detailed Design**
- **System Built**
- **Field Works (Installation & Commissioning)**
- **Project Documentations**
- **Training**

TASHKOO Limited
Hertfordshire
United Kingdom
Tel: +44 (0)1923 518589
www.tashkoo.com
info@tashkoo.com

TASHKOO key personnel have more than 20 years of experience in turn-key projects involving telecommunications, fire and security systems.

TASHKOO is proud to announce its new identity as a global player in the Telecommunication, Electrical and Control system markets. TASHKOO engineers have been engaged in design, manufacture and installation of advanced technology products and systems and have integrated , supplied and installed equipment for operation all over the world including environments as diverse as the Sahara desert , the Offshore platforms and FPSOs.

TASHKOO has a professional project engineering and management team with strengths in Studies, Design, system built, Field works including Installation and Commissioning and all of the contractual and financial aspects of total project management.

TASHKOO can offer value added services which will save your money, resources, and headaches - and smoothly get your communications, electrical and control systems up and running in a shorter time. We can simply customize our offers to suit your need experience and resources.

INTEGRATION

Telecom System Integration

TASHKOO specializes in providing professional telecommunication system integration (TSI), IT and security systems engineering and management resources.

Our main field of project supply is Telecommunications, IT and Security systems.

TASHKOO has the capability to design and integrate complete systems and solutions in the form of Turn-Key solutions. These services starts from site visit to complete system commissioning and maintenance. Many other technology suppliers only supply a portion of our services , this is our role to integrate the required system and equipment from leading manufacturers and add our values of technical assurance , system built and design and supply a final working solution to our customers.

An international and structured project management methodology would be used during project management. Many governmental and large organization prefer PRINCE2 method to match their own in house project management method.

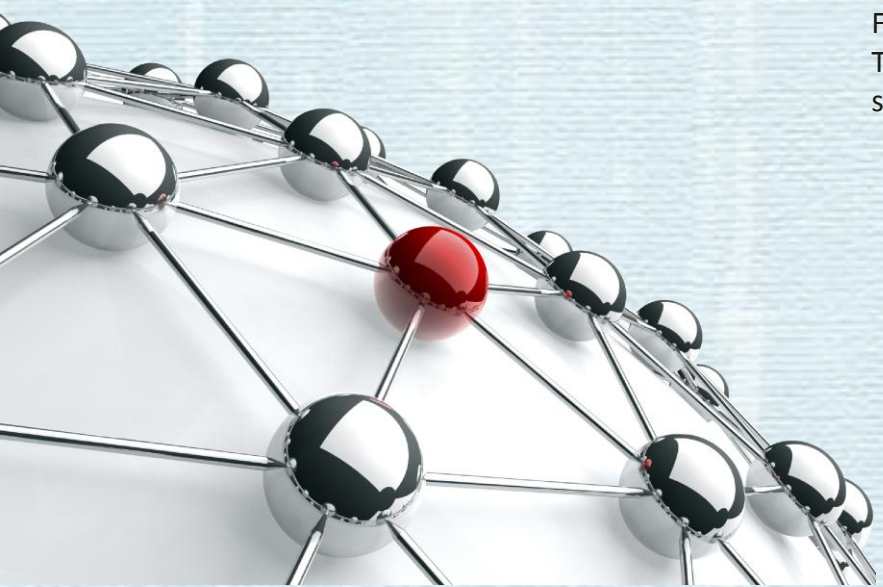
PRINCE2 is also TASHKOO preferred management method the principles of PRINCE2 are as follows:

- Continued Project Justification
- Learn from experiences
- Define roles and responsibilities
- Manage by stages
- Manage by expectation
- Focus on products
- Tailor to suit the project environment

TASHKOO directors and project managers are PRINCE2 certified and can assigned in different project positions.

Following services are also part of our Telecommunication System Integrator services:

- Basic and Front End Engineering Designs (FEED)
- Detailed Design
- System Built
- Field Works (Installation & Commissioning)
- Project Documentations
- Training



RADIO NETWORK

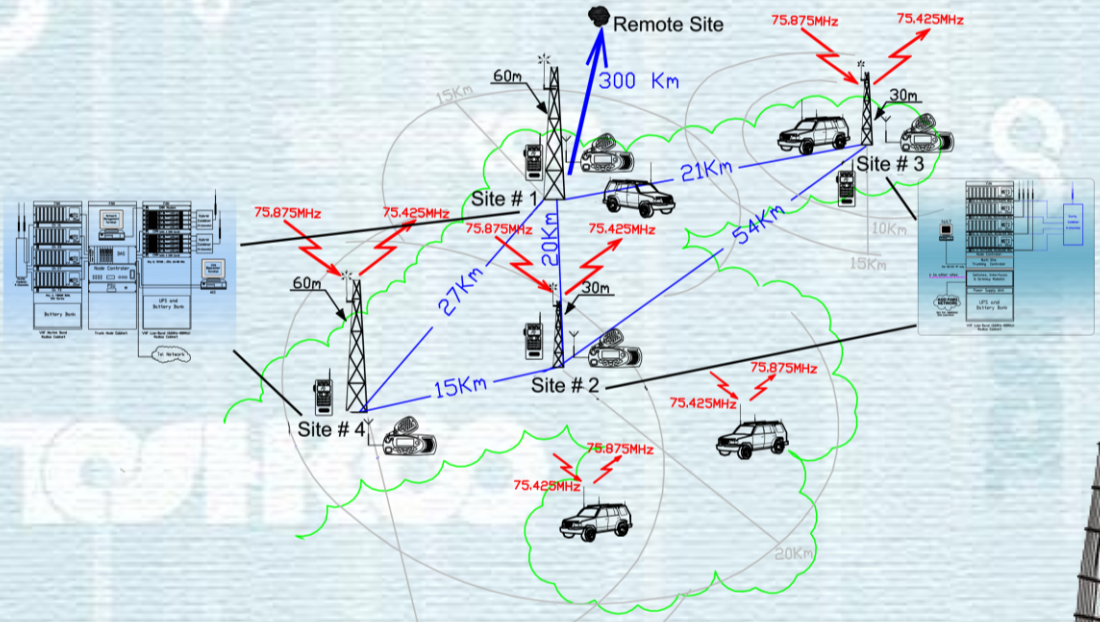
VHF & UHF PMR Systems

TASHKOO engineers are fully experienced designer for radio network planning for the most cost effective solution in order to balance network investment and performance.

With TASHKOO design service, the parameters for network architecture fulfill the project specific requirements and the sites environmental and location situations in terms of capacity, coverage, cost and quality of service.

TASHKOO network design and optimization services is a key ingredient in ensuring that networks are able to handle the high level of voice and data traffics.

TASHKOO system designs will be based on the available customer information, for more complex projects, additional information would be required to be collected during a site survey and technical meetings with the operators and users of the required system.



Different elements of a Radio network system can be designed, supplied and installed by TASHKOO engineers. For Oil & Gas or Hazardous areas , we supply radio systems with right certifications. This applies generally to Handheld radio equipment.

Vehicle mounted, mobile fix radios , repeater and base stations are other systems which can be supplied for a radio communication network.

RADIO NETWORK

TETRA Radio Systems

The UHF TETRA Radio System is a TErrestrial-TRunked-Radio - a digital trunked radio system that incorporates GPS based Vehicle Tracking. The UHF TETRA system is a computer-controlled Two-Way Radio system that allows sharing of Radio Frequency channels among a large group of users. TETRA users are assigned to a "talk-group" instead of being allocated one radio channel.

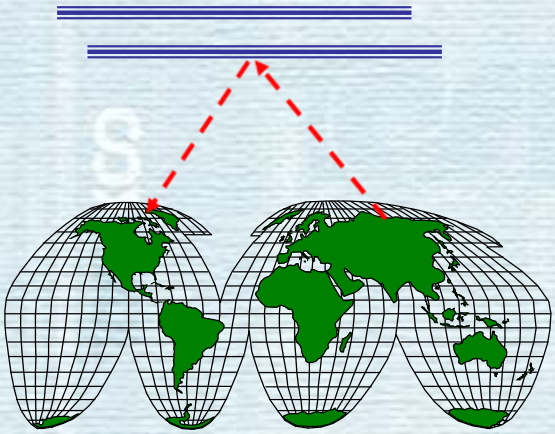
TASHKOO engineers have the experience and knowledge to design custom made TETRA network solution based on project specific requirements, TASHKOO designed systems provide reliable and efficient communications to meet the needs of different projects. Stability, Reliability and Flexibility are the key features of the TASHKOO designed TETRA networks.

TASHKOO can offer both TETRA Base Stations and radio terminal equipment (i.e. desktop radios, vehicular radios and handheld radios). A site survey, propagation study and coverage calculations will be conducted (if needed) prior to any estimation on the number and locations of base stations (normally inter linked on the Ethernet/TCP-IP backbone network) and systems parameters such as height and gain of the required antennas. To ensure that the System will provide the radio coverage specified studies will be provided supported by field surveys, calculations and coverage tests to prove that there will be adequate radio coverage between handheld radios at all locations, including within buildings/ shelters/enclosures.

A radio signal coverage map will be produced indicating the resulting radio coverage from each individual radio base station showing the coverage area that is available for each type of field unit such as desktop, vehicular and handheld radio.

RADIO NETWORK

HF-SSB Radio Systems



HF-SSB radio systems are primarily used for long-range communications. HF (High Frequency) is that portion of the radio spectrum between 3 and 30 MHz. SSB (Single Side Band) is very energy efficient modulation technology for HF communication.

HF SSB radios for long ranges use of the ionosphere – a layer of ionised gases that resides between 60 and 500 Kms above the earth's surface, provides efficient, cost effective communications over short, medium and long distances – without the need for expensive re-transmission devices, such as the VHF or UHF repeaters and satellites, all of which have on going operational costs and a reliance on a physical infrastructure.

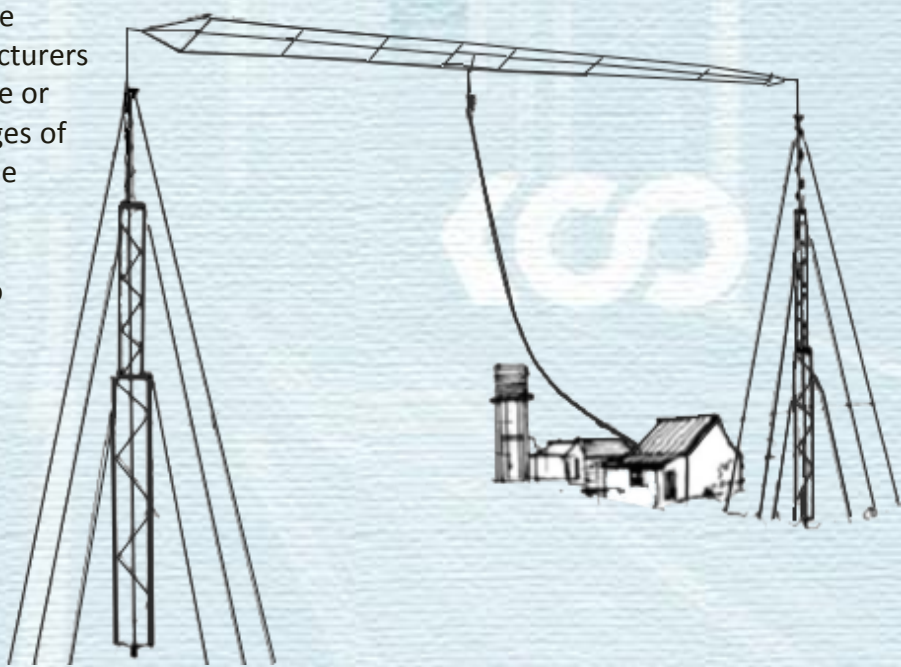
When HF/SSB radio waves are generated by the radio transceiver there are usually two components:

(i) The Ground or Surface Wave, which travels directly from the transmitting aerial to the receiving aerial following the contours of the land or surface of the sea.

(ii) The Sky Wave, which travels upward and at an angle from the aerial, until it reaches the ionosphere and is refracted back down to earth at a distance from the transmitting aerial dependant on the angle it is refracted by the ionosphere.

TASHKOO offered HF-SSB radio systems are designed by international leading manufacturers and can be used either as stand alone voice or date communication systems for long ranges of can be interconnected to either or all of the following systems:

- PABX system- to enable HF SSB radio users to make or receive telephone calls.
- PMR VHF or UHF radio stations – to enable HF SSB radio users to be interconnected to local PMR network.



MICROWAVE

Microwave Links

A microwave link is a communications system that uses a beam of radio waves in the microwave frequency range to transmit information between two fixed locations on the earth, distance between the microwave stations can be from just a few feet or meters to several miles or kilometers apart. Also a Microwave network can be in the form of Point to Multipoint communication is often abbreviated as P2MP, PTMP, or PMP.

TASHKOO engineers are able designs, the most cost effective Point to point or Point to multi-point microwave radio systems width different link capacities based on customers requirements.

Microwave links work based on Line of Sight (LOS) communication, TASHKOO experts are professional in calculation of Microwave links budgets and fade margin in order to determine system parameters such as transmit power, modulation, antennas' heights and gains and beam width.

TASHKOO Microwave system designs for Point to Point or Point to Multipoint solutions can be implemented in Licensed, Semi-licensed or Unlicensed frequency bands depending on the specific application.

In modern digital IP connectivity Microwave links are widely used With capacities up to 3Gbps and beyond, a modern Microwave Link network can deliver bandwidth in a reliable, cost-effective and flexible manner – without need for digging up streets and avoiding costly leased-line alternatives.

A Microwave link typically features a radio unit and a parabolic antenna, which may vary in size from 30cm up to 3m or 4m diameter depending on required distance and capacity. The radio unit is generally either a "Full Outdoor", "Split Mount" or "Full Indoor" design. Microwave links typically use Frequency-division duplexing (FDD) which is a method for establishing a full-duplex communications link that uses two different radio frequencies for transmitter and receiver operation. The transmit direction and receive direction frequencies are separated by a defined frequency offset.

AVIATIONS

Non Directional Beacon

TASHKOO Ltd. has engineering experiences and knowledge to design, integrate and install NDB systems for different land or offshore application. Our commitment is to provide our customers with the best technical and cost effective solutions.

TASHKOO Ltd. supply and install NDB transmits in medium frequency band (190-650 kHz) and with RF transmit power of 25 W, 50W, 125W, 250W, 500W and 1000W.

A Non-Directional Beacon (NDB) is a simple radio transmitter operating slightly below the AM broadcast band, or in the Long-wave band. It sends out a continuous signal, a "carrier," which is often modulated with the station's identification, in Morse code. This code helps the pilots confirm that they are tuned to the right frequency. The pilots have on their flight deck an instrument called the ADF or Automatic Direction Finder, which simply consists of a needle which points toward the NDB. Thus, the pilots can locate and track towards one.

This is very useful for a place, which during inclement weather can often be very hard to visually pinpoint.

Using this information along with the magnetic compass and the NDB receiver, the pilot could determine the aircraft's bearing from the NDB.

Antenna is a very important part of NDB transmitter system installation. Different antennas will be used for NDB systems based on offshore or onshore installation or limitations is space and area needed for the installation of NDB transmitter.

To tune the antenna to transmitter , an Antenna Tuning Unit (ATU) should be installed between antenna and NDB transmitter.

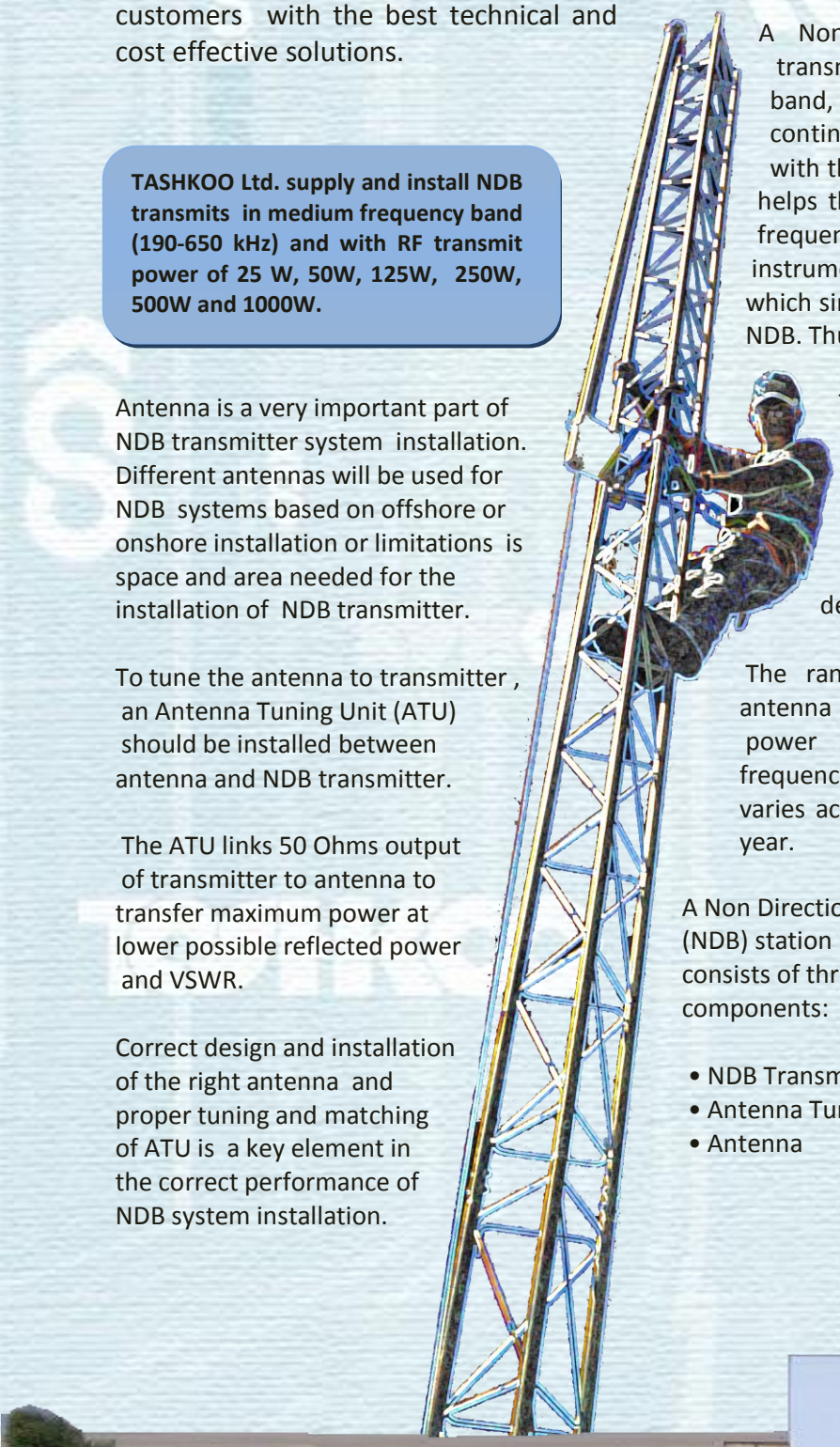
The ATU links 50 Ohms output of transmitter to antenna to transfer maximum power at lower possible reflected power and VSWR.

Correct design and installation of the right antenna and proper tuning and matching of ATU is a key element in the correct performance of NDB system installation.

The range of the beacon depends on the type of antenna used, the location of the installation; the RF power supplied to the antenna, and the operating frequency and ground conductivity. Effective coverage also varies according to the time of day and the season of the year.

A Non Directional Beacon (NDB) station normally consists of three main components:

- NDB Transmitter
- Antenna Tuning Unit (ATU)
- Antenna



AVIATIONS

Ground to Air Radios

TASHKOO is a Turn-key Contractor of VHF/AM and UHF/AM base stations. Incorporating the latest technology, TASHKOO provides users with the best tools for safe and easy Air - To - Ground communication to suit the majority of airport applications.

TASHKOO has extensive experience in providing various types of remote control units for both VHF and UHF radios. The units are capable of handling audio and data over a distance, including a remote control unit that makes it possible to control and monitor the radios via a windows based PC-program.

TASHKOO offers the most complete line of VHF equipment for aeronautical ground-to-air communications. This can be simple VHF-AM radios or sophisticated VHF Multimode airports network with remote control units.

TASHKOO offered VHF base radio unit covers the 108 to 137 MHz frequency range and has a maximum output power of 50 watts (programmable to a lower power).

TASHKOO GTA radios incorporate the technology required for tomorrow's demands for digital data transmission modes, including full voice over IP functionality.

The unique modular architecture offers the most compact radio system configuration possible, with increased reliability and simplified installation, inspection and maintenance.

AVIATIONS

Automatic Weather Station

TASHKOO Automatic Weather Station (AWS) system measure the precise atmospheric parameters within the localized area and report in near real time or save the data for later recovery. TASHKOO provide a fully operational AWS complete with all the required field and local equipment, hardware, software and all other materials and accessories.

The data-logger is the heart of the Automatic Weather Station. In TASHKOO offered weather station, the data-logger is designed by the leading manufacturers to have the solution which is perfect for meteorological clients. The main function of a data-logger are:

- **Measures:** the data-logger collects the information of each sensors and archive it.
- **Calculation:** the data-logger processes most of the meteorological data for the users (avg, min, max...).
- **Data storage:** the data-logger saves all the data either on it own memory or on uSD memory card.
- **Power supply:** the data-logger manages the power supply of the Automatic Weather Station such as solar panel.
- **Communication:** the data-logger does manage the communication protocols with the remote server. The different communication protocols are usually GSM, GPRS,

TASHKOO AWS is an automated version of the traditional weather station, either to save human labour or to enable measurements from remote areas. AWS typically consist of a weather-proof enclosure containing the data logger, rechargeable battery, telemetry (optional) and the meteorological sensors. The specific configuration may vary due to the purpose of the system.

Most automatic weather stations have:

- Thermometer for measuring temperature
- Anemometer for measuring wind speed
- Wind vane for measuring wind direction
- Hygrometer for measuring humidity
- Barometer for measuring atmospheric pressure
- Ceilometer for measuring cloud height
- Present weather sensor and/or visibility sensor
- Rain gauge for measuring liquid-equivalent precipitation
- Ultrasonic snow depth sensor for measuring depth of snow
- Pyranometer for measuring solar radiation

MARINE

Marine Radio Systems

TASHKOO offers a wide variety of marine communications and navigation products and systems.

Boats and ships traveling on long rage voyages need to have reliable radios and navigation equipment. This also applies to coastal stations and offshore platforms.

TASHKOO supplies a wide range of radio and navigational equipment needed for safe voyage. We have the in house knowledge and experiences to supply and install equipment needed from the leading international manufacturers.

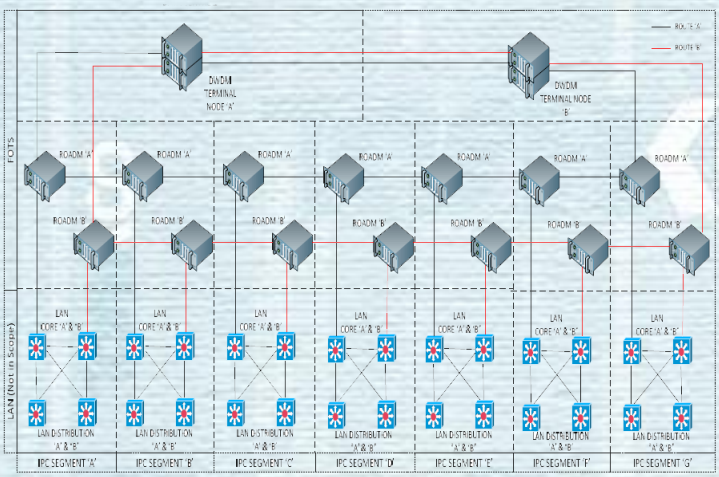
The GMDSS enables a ship in distress to send an alert using various radio systems. These systems are designed such that the alert has a very high probability of being received by either shore rescue authorities and/or other vessels in the area. Equipment performing GMDSS functions must be simple to operate and (wherever appropriate) be designed for unattended operation.

Distress Alerts must be able to be initiated from the position from which the ship is normally navigated.

EPIRBs are should be installed close to, or capable of remote activation from the position from which the ship is normally navigated.

FIBRE OPTIC

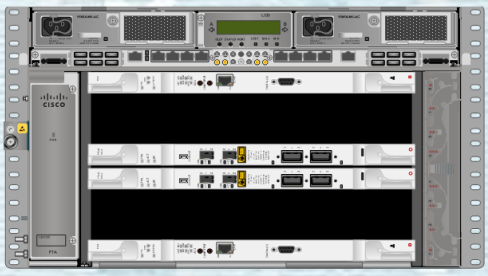
Fibre Optic Transmission

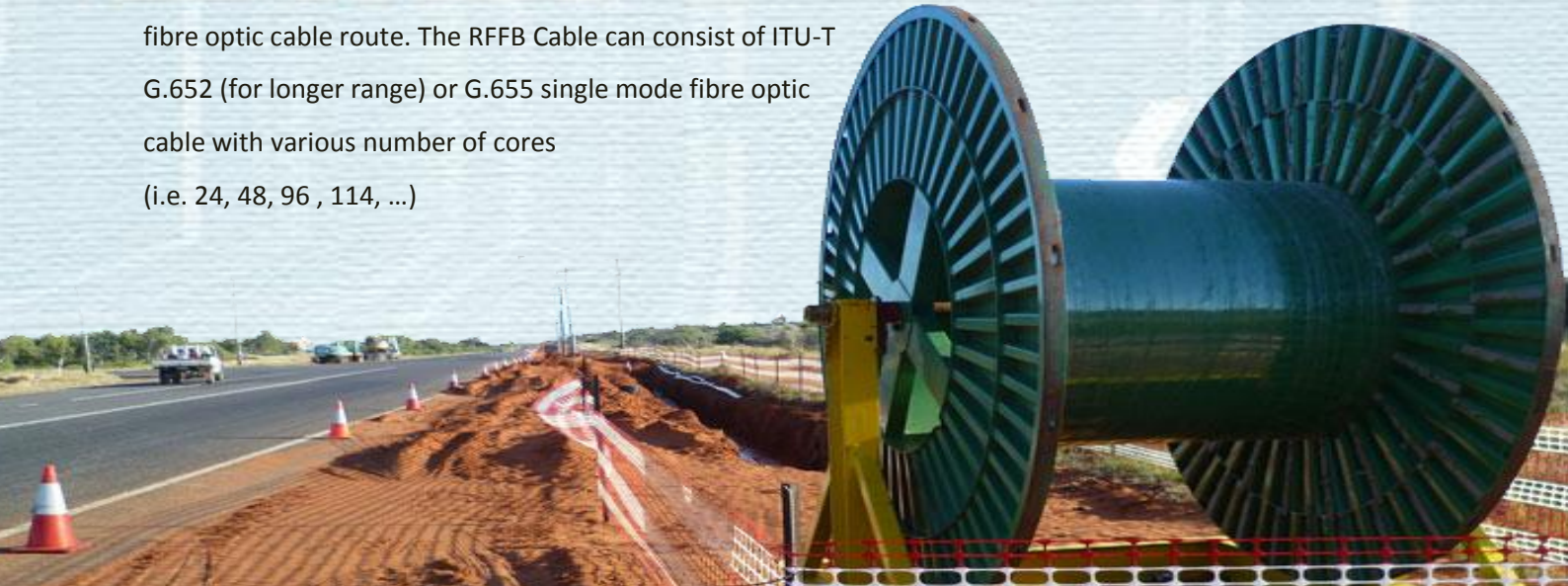


TASHKOO Fibre Optic Transmission Systems (FOTS) provide the Multiservice Transport Platform (MSTP) for the distribution of telecommunications systems and networks applications. The FOTS support Fast Ethernet, Gigabit Ethernet and 10 Gigabit Ethernet transport, with layer 1 and 2 capabilities: VLAN, QoS, multicast and video broadcast. TASHKOO designs, integrates and supplies a broad range of high performance fibre optic termination equipment and systems for the optical network.

TASHKOO designs, integrates and supplies a broad range of high performance fibre optic termination equipment and systems for the optical network . Our proposed products enable emerging and leading communications equipment to deliver optical networking systems to the rapidly growing long haul, metropolitan and last-mile access segments of the communications network.

The Fibre Optic backbone is envisaged to provide the connectivity between the major facilities in an industrial complex. Each facility will be equipped to provide a transport layer for several independent data network through the field and will be nominated as a Fibre Optic Transmission System (FOTS) node. In critical applications when a high reliability is needed, each FOTS node will have full equipment redundancy with geographically diverse fibre optic cable route. The RFFB Cable can consist of ITU-T G.652 (for longer range) or G.655 single mode fibre optic cable with various number of cores
(i.e. 24, 48, 96 , 114, …)

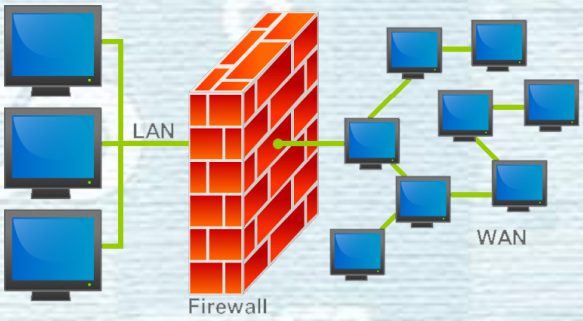




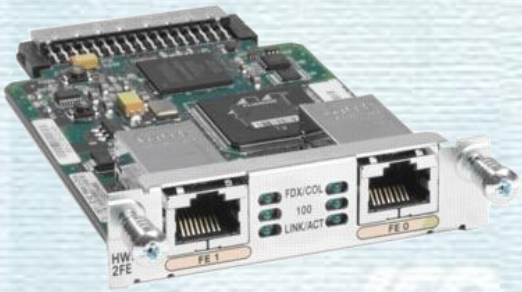
COMMUNICATIONS

LAN / WAN Networks

TASHKOO Designed LAN and WAN systems provide user connectivity to converged network services (voice, video, and data).There are several different types of computer networks. Computer networks can be characterized by their size as well as their purpose.



The size of a network can be expressed by the geographic area they occupy and the number of computers that are part of the network. Networks can cover anything from a handful of devices within a single room to millions of devices spread across the entire globe.

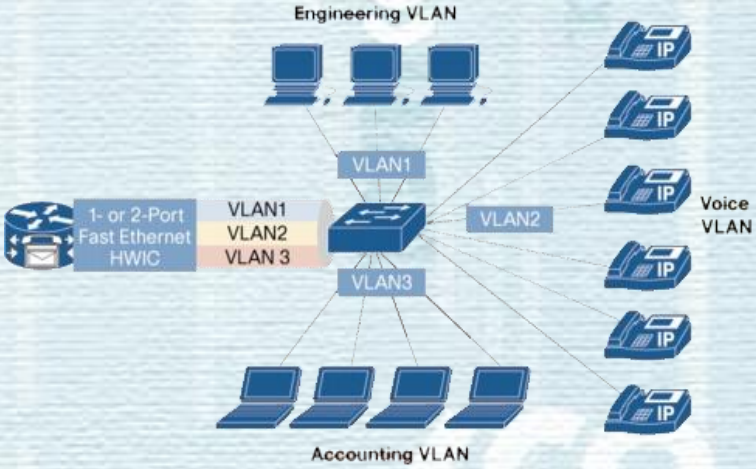


Some of the different networks based on size are:

- Personal area network, or PAN
- Local area network, or LAN
- Metropolitan area network, or MAN
- Wide area network, or WAN

In terms of purpose, many networks can be considered general purpose, which means they are used for everything from sending files to a printer to accessing the Internet. Some types of networks, however, serve a very particular purpose. Some of the different networks based on their main purpose are:

- Storage area network, or SAN
- Enterprise private network, or EPN
- Virtual private network, or VPN



COMMUNICATIONS

Public Address General Alarm (PAGA)

Public Address and General Alarm System (PAGA) is a Safety-Critical' electronic system that is used to alert personnel of dangerous and hazardous situations during any site incident and/or emergency. PAGA system would be used for notifying personnel of the appropriate actions to take during a 'Safety-Critical' hazardous situation and particularly for a site evacuation. The system is also used to broadcast routine voice messages. PAGA system should broadcast alarms to all zones of the site simultaneously. The system should comply with BS EN 60849 and IEC 60268.

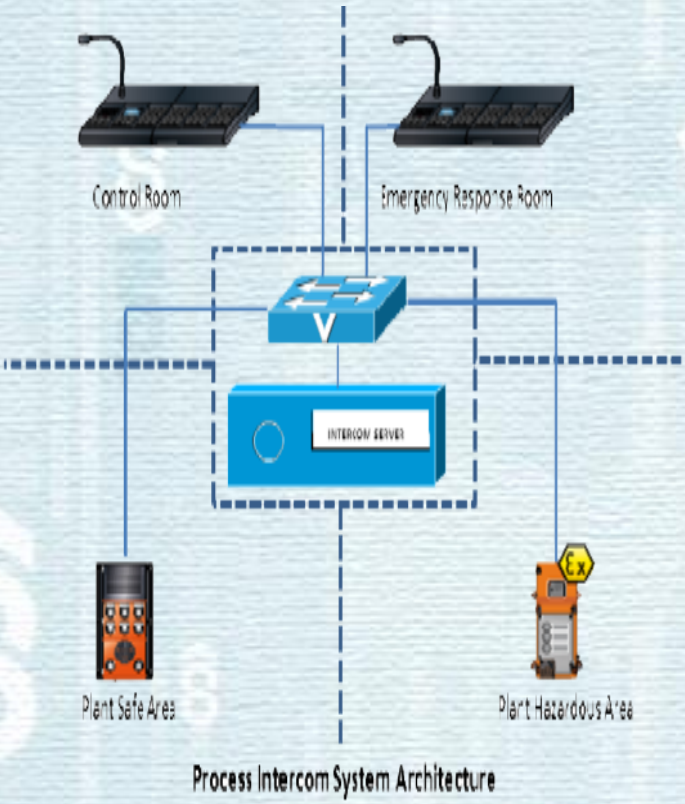
TASHKOO typical Public Address and General Alarm System uses microphones, sound amplifiers and alarm tone generators for the manual and automatic distribution of voice announcements and audible/visual alarms to loudspeakers and flashing lamp beacons.

TASHKOO design also include a coverage study and a sound/alarm coverage map for each room and site layout showing locations of loudspeakers and flashing lamps. The map shows: (i) the ambient sound noise level, (ii) the minimum (Sound Pressure Level) SPL achievable from loudspeakers and (III) the illumination levels delivered by flashing beacons rating.

For industrial sites and applications, the PAGA system shall be designed as a fully redundant system so full coverage is afforded if either the A or B system is isolated or non-functioning. In addition, a failure on the A-system shall not reduce the performance of the B-system and vice versa. No single failure in systems, equipment or cabling networks or any single localised event shall cause a reduction of audio and flashing beacon coverage to any area.

COMMUNICATIONS

Intercom and Hotline Systems



Process Intercom System Architecture

TASHKOO Intercom stations will be designed for ease of use. Each Intercom station will be fitted with an in-built loudspeaker and a noise cancelling microphone. Intercom stations shall be fitted with an "in use" indicator. They shall be functionally fully independent of each other ensuring that failure of one Intercom station does not affect others.

The Intercom System is a Safety Related /Critical System that provides a voice communications between two or more fixed locations within the plant site with selective calling of individual Intercom stations without the call setup dialling/ringing delays that are usual for standard switched telephone calls. They can also be used for long duration open connections. Intercom System allows selective calling of individual Intercom stations, or group calling.

TASHKOO Proposed Intercom systems are both analogue and also based on VoIP technology using a dedicated LAN infrastructure. Each Intercom System comprises of central equipment, central control unit and Intercom stations in forms of consoles and outdoor call stations.

TASHKOO Intercom & Hotline Telephone System provide simple operation direct duplex point-point and conference call /point to multipoint telephone calling between selected locations within the fields. Intercom & Hotline Telephone System normally are in control rooms, safety and emergency response rooms and the guard houses.

A Hotline Telephone System is a collection of point to point duplex voice communication facilities that each use dual telecommunication speech channels and single action calling.

In Oil & Gas industries, the Hotline Telephone system is also known as Fire Telephone System.

TASHKOO offered systems include echo cancellation, silence suppression and voice activity detection (VAD) features.

HAZARDOUS

Ex Telecom Equipment

TASHKOO Engineers have many years of work experiences in the Oil & Gas Onshore/Offshore industries and delivered products and services to the industries throughout the world. TASHKOO stands out as one of very few partners in its field, which can offer a complete scope of supply and take total telecom project responsibility. TASHKOO is a specialist company supplying all required Communications Systems for Onshore and Offshore Oil and gas platform and complexes.

TASHKOO designs, integrates and supplies a diverse range of communications solutions to Hazardous Area applications. TASHKOO proposed equipment provide one safe, flexible, economical, and efficient system for every area of an industrial site.

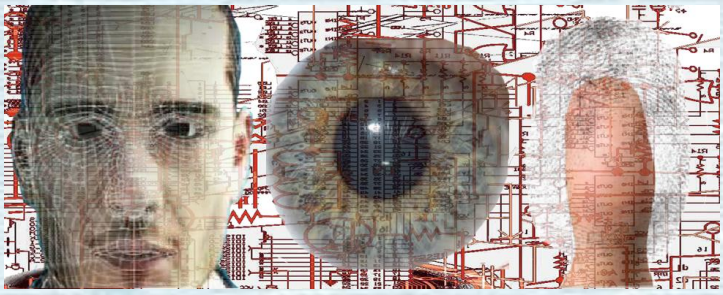
Historically, communication in potentially hazardous environments has been a struggle between safety and effectiveness. Naturally, safety always won. TASHKOO hazardous environment equipment ends the trade-off by providing unquestionably safe yet highly effective communications. Our hazardous area equipment gives you safety, quality, reliability, flexibility and capabilities all in one system - without compromise.

TASHKOO is able to provide the following systems and services for the hazardous areas:

- Intrinsically Safe Industrial Telephone
- Ex Loudspeakers Talk Back Systems
- Ex Junction Boxes & Pressurization Equipment
- Platform Equipment
- Alarm Annunciations
- Sounders and Beacons

SECURITY

Access Control System



An Access Control System (ACS) is an electronic security system that controls electromechanical locks at entrances and exits at site facilities. The ACS prevents physical access by unauthorized personnel to specified areas of the facilities, by controlling and monitoring entry and exit of personnel through perimeter wall or fence turnstiles and gates, interior and exterior building and room doors, in accordance with operational requirements. This will include each of the authorized personnel being allocated a personal identification and/or access card. Relevant personnel information will be stored into the ACS system's database along with details of the controlled areas that may be accessed, and the assembly point at which the individual would be expected to register in the event of an assembly being called.

In a typical industrial complex the ACS consists of the following main items of equipment:

a) ACS Main Equipment/Servers
b) ACS Workstations.
c) ACS Field Equipment - non-hazardous areas.
d) ACS Field Equipment - hazardous areas.

All ACS components are designed to prevent tampering with the any of the circuitry. All ACS components and internal circuitry shall be obscured to prevent direct view and inspection of any internal components from the exterior.

The ACS operator workstations displays the system status of all ACS controlled entrances/exits in real-time and shall generate incident alarms if a monitored turnstile/gate or door is forced open or held open for too long after being unlocked. The offered ACSs comply with BS EN 50133 (European Standards on Access Control Systems). The system will be designed around an open standard platform based on Ethernet TCP/IP to facilitate future expansion and integration and can be integrated with the Integrated Security Management System (ISMS)

SECURITY

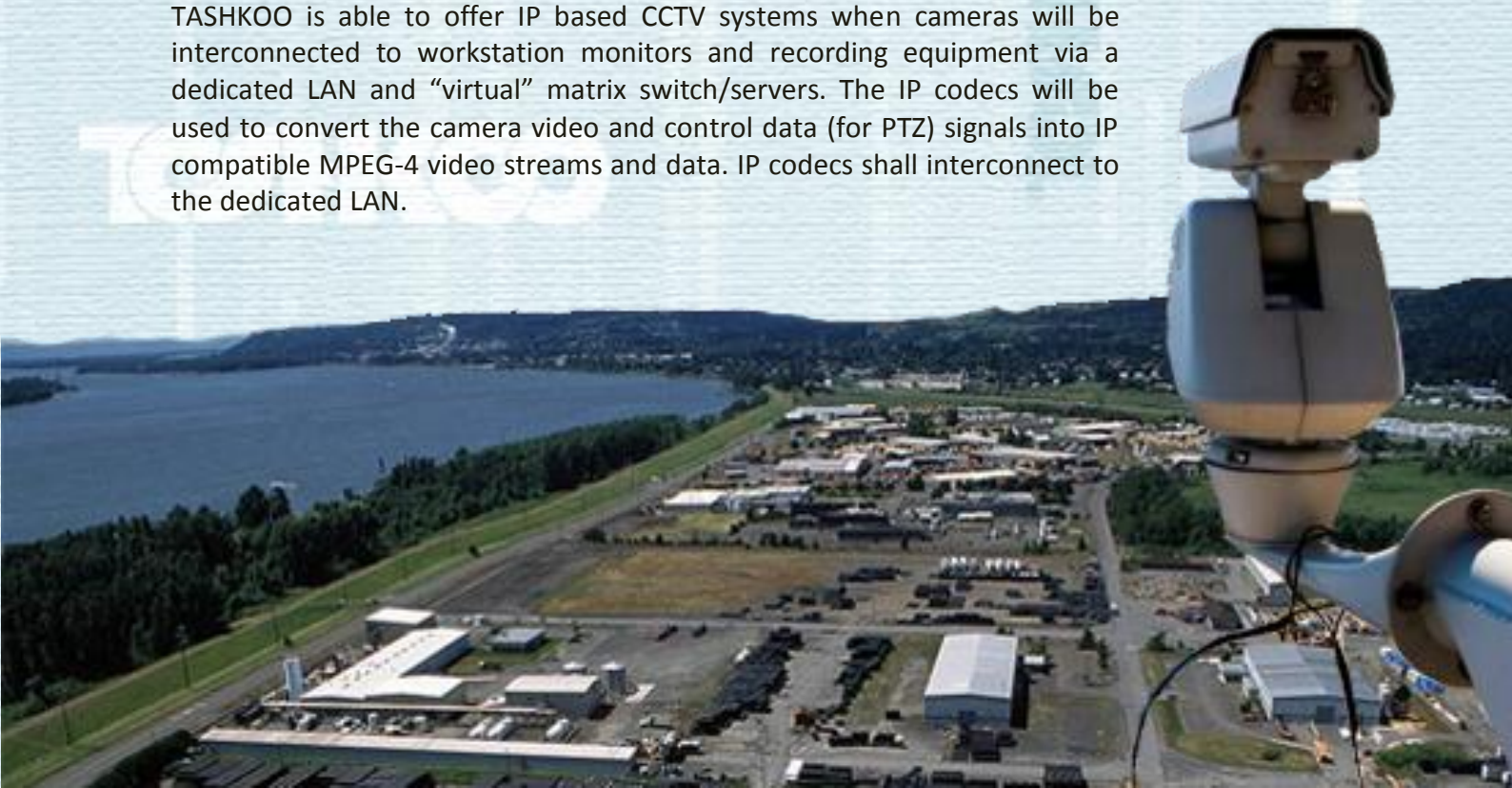
CCTV Systems

Closed Circuit Television (CCTV) System is a private TV system ('closed system') used for the visual supervision and observation of certain critical Production/Process areas and operations.
A CCTV system consists of strategically located fixed and PTZ cameras/lens, video signal analysis control and switching equipment/ monitors and video recorders and storage, virtual matrix switching /control equipment and workstation monitors.

In an industrial complex the CCTV systems will be used for Process and Security purposes. The main objective of a process CCTV system is to enable Plant Control Rooms to monitor all essential production process areas such as unmanned machinery, critical equipment rooms, critical operations, flare areas, and personnel movements. The security CCTV is used for observations at main site entrances and gates, viewing along and adjacent to perimeter fences/walls, at entrances to buildings, within buildings in halls and room entrances and provides a visual record of all activities within a facility at all critical locations wherever rigid /robust security control is required.

TASHKOO offered CCTV systems will be designed, installed, and programmed in a manner to allow for ease of operation, programming, servicing, maintenance, testing, and upgrading of the system. The CCTV systems will be designed, engineered, installed, and tested to ensure all components are fully compatible as a system and can be integrated with all associated security subsystems, whether the system is a stand-alone or a complete network.

TASHKOO is able to offer IP based CCTV systems when cameras will be interconnected to workstation monitors and recording equipment via a dedicated LAN and "virtual" matrix switch/servers. The IP codecs will be used to convert the camera video and control data (for PTZ) signals into IP compatible MPEG-4 video streams and data. IP codecs shall interconnect to the dedicated LAN.



SECURITY

Intrusion Detection Systems

A Perimeter Intrusion Detection System (PIDS) is used to prevent access and deter, detect and delay intruders.

TASHKOO offered Intrusion Detection Systems consist of electronic sensing /analytical equipment and software to automatically detect and raise warning alerts / alarm signals whenever there is any un-authorised access, movements, vibrations, flexing and cutting of the site perimeter fence and associated gates by uninvited/prohibited persons and/or other physical/mechanical devices. This system complies with Grade 4 and Class 4 Intrusion alarm systems as defined in BS 4737 and CENELEC 50131.

The PIDS provide surveillance of industrial or governmental site perimeter wall/fence including all entrance gates and exits. The offered IDS will be able to function as a standalone system or as an integral component of a centralized security system. The system operates normally during the day and night, in all weather conditions, including sand storms.

TASHKOO engineers are able to design and provide an engineering solution to ensure all components environmental conditions are fully compatible and the system and can be integrated with all associated security systems, whether the system is a stand-alone or designed as a larger network.

TASHKOO PIDS use optical sensor cable technology. The system detect attempts at digging under, cutting through, climbing over or lifting up the fence or gates. This will ensure that there is a warning and response from the security personnel to minimize threat, damage or theft. In these systems processor unit send short laser pulses into the fibre and analyze the time-distance related reflections with regards to frequency and amplitude of the desired scattering effect so strain or temperature profiles along the fibre can be created. These fibers, can also measure several physical effects with high local resolution along cable stretches of up to 20 or even 30 km.

Technology suppliers only supply a portion of our services , this is our role to integrate the required system and equipment from leading manufacturers and add our values of technical assurance , system built and design and supply a final working solution to our customers

Basic and Front End Engineering Designs (FEED)

A site survey and calculations of systems parameters is needed for many industrial projects prior to any formal request for proposal. TASHKOO system designs will be based on the available customer information, for more complex projects, additional information would be required to be collected during a site survey and technical meetings with the operators and users of the required system. a Functional Design Specification (FDS) document with complete survey report will be prepared and served to customer. this is specially applies to complex network communication systems such as multi-site PMR , fiber optic system, Data Networking , PAGA systems and Telephone systems

Detailed Design

During the Detailed design individual block diagram and interconnection diagram will be generated, also detailed design specifications would be generated using the FEED documents and project philosophy documents for telecom and related systems. Detailed design documents will be completed by incorporating customer and supplier comments. Alternative solutions and design may be concluded from the technical interaction of TASHKOO engineering team with customer and suppliers technical team during detailed design process.

TASHKOO have access to a professional and experienced engineers for detailed design process, AutoCAD drawings will be provided when needed.

System Built

Systems will be built and tested in manufacturer workshops, TASHKOO engineers supervise different stages of the integration and tests to assure the production process complies with project approved documentations. on the completion of system built a formal Factory Acceptance Test (FAT) can be arranged with the attendance of customer representatives, if this was required.

Field Works (Installation & Commissioning)

TASHKOO has a team of engineers for system installations and commissioning, for many projects manufacturers installation technicians and engineers will be also part of the team.

Project Documentations

Specification and drawings generated during detailed design will be modified and upgraded to generate As-Built documents and would be part of project final dossier (PFD).

Training

Customer engineers training will be conducted by TASHKOO in manufacturer or customer premises. For some of the offered systems TASHKOO engineers have enough knowledge and are accredited by the principal manufacturers to provide the training courses.