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Message From Market

1. Telecommunication Industry



For last 20 years, continuous technical transformation and information waves have driven high growth in the telecom industry. However, an age with saturated telecom penetration is coming and industry is facing a brand new situation. Top 4 disruptions that will drive the most changes in telecommunications by 2020 are as follow:

IoT: The first major trend that will impact is the explosion of connected devices. This will add billions of new connected data sources globally by 2020. The upswing of all of these devices will be an astronomical growth in data volumes; we will quickly push through Exabyte volumes and enter the world of zettabytes per year.

Mobility: Growth of mobile connectivity is far outpacing fixed line connectivity. This makes sense, as most growth is occurring in the developing world and amongst poorer populations. For these people, mobile are cheaper, convenient, and more useful, even when landline connectivity is an option.

Market Saturation: Elder population as they retire will enter retirement communities and assisted living facilities which are fully digitized in order to be as efficient as possible. Older population will be forced into using these technologies by the world around them and will likely consume vastly more bandwidth than they, or their carriers, ever imagined. As this occurs, the last remaining percentages of market penetration will be achieved,

and the market will be thoroughly saturated.

Security: As custodians of the networks, carriers play a pivotal role in fighting the new threats that are emerging. Customers will begin to expect, and then demand, more proactive protection from the entire internet value chain, and carriers will be expected to support these expectations with a range of technical and operational innovations. The desire for greater security may be a boon for carriers, if they embrace the need.

Going along with this fast-moving industry Monenco has recently assigned groups of professional individuals in order to develop fields of engineering services in Iran and oversees telecom markets.

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New Field



2. Water and Waste Water Automation

One of the major issues affecting the water industry is to reduce water consumption due to the shortage of water resources within the country. Nowadays, the population growth, development of agriculture, expansion of industries, limited amounts of annual rainfall and reduced aquifers in many countries has made the supply of reliable and high quality water to one of the main national challenges. In this regard, the role of an integrated, centralized and modern control system to enhance safe water supply networks

and water supply reliability, in an extensive water network with vast number of stations is inevitable.

The term SCADA system can be used to describe a multitude of computer-based control systems that enable operators and facility personnel to monitor and control a facility's equipment either locally or remotely. SCADA makes possible to avoid costly passive alarm call-outs since a SCADA system can indicate the nature and degree of a problem significantly, to reduce operating costs while improving system performance and reliability, to continuously data record that operators do not have to manually read and record meter readings on a daily basis, to keep track of hundreds of log sheets and download and access at operators convenience and to be accessed remotely through an internet connect on your office computer or laptop, and even your cell phone or tablet. Relying on our expertise in telecommunication and SCADA systems and being the only engineering firm with the first Grade Certificate in Dispatching & Automation in Iran, paved the way for us to become the winner of the Tehran Water and Wastewater Telemetry tender with the highest technical score in 2014. The project was scheduled to be implemented within 2 years. Currently, the first year's projects which were mainly engineering projects are finished, the basic design and tender documents are delivered and within the current year second group of projects are started and supervision on tender process and evaluation of the EPC bidders for first year's projects are being carried out.

Sample Projects



3. Damavand Extension Power and Steam Generation Project

Start date: 2015

Client: Mapna Special Projects Construction and Development Co.

Main Client: Pars Petrochemical Company

Location: Asalouyeh, Iran

Description:

The project includes 12 gas units and 10 HRSG. In the first phase 2 gas units (160 MW) with HRSG have been implemented. However, in the second phase, only 2 gas units will be implemented. In this phase, LCC building (container) will be replaced by actual building. The required fuel of the plant includes gas and gasoline which gas is considered as the main fuel and gasoline as the alternative fuel. Therefore, Monenco Iran is responsible to render basic and detail design of building and electric, mechanic and instrumentation installations of two gas units and modification of construction documents.



5. Kowsar Yazd Smart City FTTx Infrastructures High Level Design

Start Date: 2015

Client: Kowsar Yazd Organization

Location: Yazd, Iran

Description:

Considering the increase of telecommunication services and end users' needs to high bandwidth and in order to have different services on an integrated network, access to high speed and high bandwidth network is inevitable.

As FTTx network design in Iran is a new and emerging network, Monenco, by using its valuable experiences, is pioneer in design of wideband networks in Iran.

Therefore, Monenco is responsible to gather data and provide database, basic & conceptual design, providing technical specifications of used equipment and LOM list, preparing tender documents to specify needed equipment and materials.



6. Isfahan Refinery Project (Package C)

Start date: 2015

Client: Neyerpars

Main Client: Isfahan Oil Refinery Company

Location: Isfahan, Iran

Description:

The purpose of this project is to increase gasoline production capacity and improve the quality of refined petroleum products without increasing the amount of input crude oil. This project led Monenco to enter in design of mega refinery project including basic and detail for utility units of mega oil & gas plants.

Therefore, Monenco is responsible for endorsement of basic design documents and project technical specifications, basic design, detail design of all utilities and offsite facilities in all engineering disciplines, detail design of all industrial and civil structures, civil design, procurement engineering services, site supervision and design review of all vendors documents and Preparation of all QC documents.





7. Engineering Services of Romila Combined Cycle Power Plant

Start date: 2015

Client: Mapna - Tosee 2

Owner: Shamara Holding Company

Location: Iraq

Description:

Romila Combined Cycle Power Plant is located in Iraq, nearby Basra City. The project includes 6 combined cycle blocks with the capacity of 3000 mw which will be implemented in 4 phases. In the first phase design of 6 gas units will be implemented. The type of 6 gas units is V94.2 each with the capacity of 170 mw and 3 steam units each with the capacity of 160 mw. The required fuel of the plant includes gas and gasoline which gas is considered as the main fuel and gasoline as the alternative fuel. Also the cooling system is ACC.

Therefore, Monenco is responsible to render basic and detail design of building electric, mechanic and instrumentation installations of Romila power plant buildings and modification of construction documents.



4. Larsen & Toubro Strategic Marketing Plan

Start date: 2015

Client: Larsen & Toubro Oman LLC

Main Client: Larsen & Toubro (India)

Location: Iran

Description:

Larsen & Toubro is a major technology, engineering, construction, manufacturing and financial services conglomerate, with global operations. L&T addresses critical needs in key sectors-Hydrocarbon, Infrastructure, Power, Process Industries and Defence-for customers in over 30 countries around the world.

L&T seeks in conducting a comprehensive exploring study for its business initiation in Iran in fields of Construction of Overhead Transmission Lines and EHV Substations as EPC contractor and to seize untapped business opportunities in Iran based on its capability strengths. In this regards Monenco as one of the world's leading engineering consulting companies has been assigned to propose Strategic Marketing Plan for L&T to initiate its business activities in Iran.

Therefore, Monenco scope of work are as follow:

- Client Analysis and intention to work in the T&D market in Iran
- Market assessment and target market recommendations
- Assessment, Analysis and introduction the optimum way for Mode of Entry
- Recommendation on the best fitted Strategic Themes for success



8. Study, Design and Site Supervision for OPGW passive and active Equipment Installation

Start Date: 2015

Client: Bakhtar Regional Electrical Company

Location: Lorestan, Markazi and Hamadan - Iran

Description:

Bakhtar Regional Electrical Company conducted a tender for selecting the qualified consultant to study, design and site supervision for OPGW active and passive equipment installation on transmission lines and associated substations in Lorestan, Markazi and Hamadan provinces.

More than 400 km transmission lines will be used for installation of OPGW and more than 15 substations will have fiber optic connection with this plan. It should be noted that with refer to the transmission lines' routes, other substations in the route will have the capacity of fiber optic connection.



9. Events

■ 8th Electric Power Generation Conference & Exhibition

On 16-17 Feb 2016 Damavand Power Generation Management Company held the 8th Electric Power Generation Conference at Niroo Research Institute. In this conference, the most recent international experiences and achievements in the field of power plants were provided and experiences have been exchanged between industry professionals, researchers and other experts in this field.



Monenco attended in the exhibition of the conference while having its own stand.

Mr. Falahatian, Deputy to Energy Minister visited the exhibition on the first day of the conference.

■ 6th Thermal Power Plants Conference & Exhibition

6th Thermal Power Plants Conference was held on 19-20 January 2016 in Iran University of Science and Technology with cooperation of Mapna Group. In this conference, the most recent international experiences and achievements in the field of planning and construction of thermal power plants were provided and experiences have been exchanged between industry professionals, researchers and other experts in this field.



Monenco attended in the exhibition of the conference while having its own stand. President of Mapna Group and President of the university visited the exhibition on the first day of the conference.

10. Clients Perspective Iran Ministry of Energy



Iran is ranked among top 17 in the world in electricity industry infrastructure.

On the hand, benefiting from high qualified young engineers is another advantage of power industry in Iran.

Since Iran is located in the energy corridor in Middle East, it is considered as a unique path for electricity transit between neighboring countries.

Accordingly, to be able to benefit of all these advantages, both for home land country and neighboring countries, it will be needed to acquire a consulting firm to study, analyze and finally prepare a road map for more integrity in the region with respect to electricity sector as well as environmental aspects. For this purpose, I'm honored that we have Monenco as our consultant for doing that important task which I do believe that the outcome of Monenco studies will be a major help for more cooperation and friendship in the region.

Bahram Nezam Almulki
Director General
Center of Export Promotion and Support Services of Water & Power Industries

Reader Support

If more information is required about the topics, easily indicate the number of the title in the following table and send it to the address below or info@monenco.com.

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