

Final Statement and Recommendations

International Operations and Maintenance Conference in the Arab Countries

Cairo, 18th – 20th November 2018

Under the patronage of H.E. the Prime Minister, Minister of Housing, Utilities and Urban Communities, Dr. Mostafa Madbouly, the Arab Council of Operations and Maintenance (OMAINTEC) organized, with the effective participation of the Saudi Ministry of Defense - the General Directorate of Military Works, and the Holding Company for Water and Wastewater In Egypt, and with the support of several regional and international bodies and organizations, the 16th International Operations and Maintenance Conference in the Arab Countries, under the theme of “Managing Maintenance within Industry 4.0”, held on November 18-20, 2018, in Cairo.

The Conference addressed the following topics:

1. Operations & maintenance of electricity facilities
2. Operations & maintenance of desalination plants
3. Building maintenance
4. Transportation & municipal facilities
5. Telecommunication & electronic systems
6. Management of maintenance material
7. Consultancy in maintenance work
8. Training and rehabilitation of personnel in the field of maintenance
9. Intelligent maintenance, Artificial Intelligence and Cyber Security

The Conference program included two panel discussions, the first one was entitled “Greek Experience in Maintenance” and the second one was about the experiences of the Saudi Ministry of Defense, the Egyptian Holding Company for Water and Wastewater, and Saudi Aramco.

The Conference also included the convening of an international seminar on “Global Trends of Maintenance Education and Training and Qualification of O&M jobs”.

The Conference included 15 workshops in the field of operations and maintenance, which dealt with the following topics:

1. Evaluation and Improvement of Company Maintenance Management
2. Transforming the FM & Energy Industry in the Middle East
3. Key Steps to Implementing Condition Monitoring.

4. CAPEX Cost Avoidance - Right Maintenance Balance.
5. Unleashing the Power of Battery Storage Systems (BESS) in Electricity Networks.
6. Delivering Asset Optimization Performance in Water Utility Sewerage Treatment Facilities through Effective O&M Partnership.
7. Role of Analytics to Optimize Maintenance and Replacement Decisions.
8. How to Select Appropriate Monitoring Solutions Using Reliability Centered Maintenance (RCM).
9. CMMS for Buildings - Classification Standards for Costs, Assets and Spares.
10. Crisis Communication in Public Transportation.
11. Utilizing Online Monitoring to Optimize the Management of Electrical Sub-Station Assets.
12. Risk Assessment in Maintenance Activities.
13. Planned Preventative Maintenance (PPM), Effective Asset Management and Energy Management.
14. Proactive Obsolescence Management.
15. Improving Operation and Maintenance of Substation Equipment using Operational Data from IED's.

The opening ceremony of the Conference included speeches given by Dr. Zohair Al-Sarraj, Secretary General of the Conference and Dr. Mohamad Al-Fouzan, Chairman of the Arab Council of Operations and Maintenance, as well as by guests speakers, H.E. Dr. Issam Sharaf, Former Prime Minister of Egypt, and Dr. Ahmed Al-Fahaid, Governor of the Technical and Vocational Training Corporation in Saudi Arabia. Furthermore, the sponsors and collaborators were honored, and the Arab Operations and Maintenance Award was presented in the Ceremony.

The participants in the Conference expressed their gratitude and appreciation to the Prime Minister of the Arab Republic of Egypt for his kind patronage of the Conference.

The participants also expressed their gratitude to the collaborators and the supporters for their distinguished role in supporting the organization of the sixteenth session of the Conference, as well as to all the bodies, organizations, companies, the organizing committee and the scientific committee who have made great efforts to support the success of the Conference.

The participants would like also to thank ExiCon International Group, the Organizing Partner and to express a special thanking to the Saudi Ministry of Defense – the General Directorate of Military Works, and the Holding Company for Water and Wastewater in Egypt.

The participants and speakers at the Conference pay tribute to the achievements of the Arab Council of Operations and Maintenance and wish the Council success in its ~~business~~ Works and Activities.

According to the recommendations contained in the worksheets, and according to the discussions that took place at the Conference sessions and workshops, the participants make the following recommendations:

First: General recommendations

1. Develop the legislative aspect in the operation and maintenance procedures and Unification of O&M Standards and also performance methods and contracts. A Call on to the Arab Council of Operation and Maintenance to put more attention into financing of a joint-work in this regard.
2. Focusing on the use of modern technologies in maintenance practices and extrapolation of equipment and its condition, and intelligent systems, development systems and tripartite modeling. Also providing information, reducing costs and increasing the lifecycle of systems, equipment and facilities and heeding the establishing of remote response centers, especially in electricity networks.
3. Adopting the concept of comprehensive facilities, assets and property management to achieve a balance between the performances of different elements of services in public utilities, and hiring facilities Management Directors along the lines of Construction Project Managers, and giving a greater role to consultants in supporting the operation and maintenance supervision, especially in performance-based contracts.
4. Call the Arab Council of Operations and Maintenance to prepare a standard reference manual for the classification of maintenance functions in order to promote the idea of mandatory professional classification and accreditation for maintenance personnel, in preparation for reaching cadres capable of comprehensive management of facilities and assets. Establishing a mechanism for the creation of a professional classification system for maintenance personnel, and the preparation of frame work a guidelines to the development of training strategies in maintenance sector.
5. Call the Arab Council of Operations and Maintenance to develop a guidebook and a guidance approach to be a reference to the process of ~~using~~ handing over

projects, facilities and buildings when completed and delivered to the departments of operation and maintenance to ensure the smooth and clear data, documents, records and coding for the cadres of operation and maintenance of facilities, equipment and systems therein.

6. Consider the issue of raising maintenance awareness for society, employees and officials.
7. The importance of adopting strategies based on artificial intelligence and intelligent systems and techniques to examine and maintain of transport facilities, roads and infrastructure.
8. Expanding in the use of Internet of Things (IOT) and intelligent systems applications in maintenance and utilization of analysis mechanisms and the use of Big Data.
9. Call for revision of building codes and global maintenance in preparation for laying the foundations for the creation of an Arabic Maintenance Code and call for the formation of a working team among the Arab Council of Operations and Maintenance to achieve this.
10. Taking care of the use of innovative maintenance technology.

Second: Special Recommendations

1. Given the suffering of many establishments and facilities in most Arab countries from the deterioration in their condition due to lack of following Best practices in the application of maintenance rules, which became a big strain on the economies of countries, the Arab Council of Operations and Maintenance and the participants in the Conference recommend that the Arab governments adopt a national project in each Arab country entitled "The National Project for the Operation and Maintenance Management of Government Facilities" to be as a road map for the steps necessary for the correct implementation to raise performance levels in facilities, establishments and infrastructure in an efficient economic manner. The participants are grateful for the Arab Council of Operations and Maintenance for its willingness to support countries when adopting such a project.

2. Send a Gratitude letter to H.E. the Prime Minister, Minister of Housing, Utilities and Urban Communities, Dr. Mostafa Madbouly for sponsoring the Conference.
3. The Arab Council of Operations and Maintenance is to set up a mechanism to activating the implementation of the recommendations and communicating them to the Arab countries and with the help of The League of Arab States to achieve this.

God Bless

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