Engineering Association of Mediterranean Countries

2017

Smart Cities

shape a better life for Mediterenean Countries

Action plan for EAMC Technical Committees

This document was prepared for EAMC by the presidents of the EAMC Technical Committees

Walid Al Baba	TC of Energy and Renewable Energies
Mohammed Al Nemr	TC of Environment
Alfredo Squartzoni	TC of Engineering Education and Professional Qualification
Nick Zygouris	TC of Infrastructure and Construction

Document Information

Filename	Printing Date	Pages
2017.06.09 EAMC SmC_001_Proposals and Action Plan_nz_001	10-Jun-17	6

Revision Table

Version	Comments	Date	Prepared
0	First Issue	10-6-2017	NZ

Table of Contents

1 Introduction

During the General Assembly of EAMC meeting held at Rethymno (Greece) on May 2017, future actions of the Technical Committees of EAMC were discussed.

It was clearly stated the Technical Committees may act independently and work on individual projects but in order to be unified approach and to motivate more members in EAMC there must be one **Flag Project** that will be worked by all Technical Committees.

The **Flag Project** must meet at least the following criteria.

- It must be within the general scopes of EAMC
- It must be innovative or at the edge of engineering technology
- All Technical Committees must have a role and be able to contribute
- It must promote the idea of engineering along the Med Countries
- There must be a possibility for funding

Having all the above in mind and after a long discussion, all the presidents of the Technical Committees proposed to the General Assembly (and was accepted) that the **Flag Project** may have the title "**Smart Cities**".

Following the decision of the General Assembly, the Technical Committees must to develop an Action Plan for the implementation of the certain **Flag Project** that will be presented to the next General Assembly.

2 What is a Smart City

Every city in the world has schools, libraries, transportation systems, hospitals, water supply networks, waste management and other services. All of them are called **City Assets**.

In parallel, each city has many fields such as economy, mobility, environment, people living, government etc. that need to be developed and improved.

A city is defined as **Smart City** while it is trying to improve the quality and to enhance the performance and interactivity of the community services by the use of **Information and Communication Technology** (ICT).

In a **Smart City** the citizen plays a central role and has the chance to gain a better contact with the city authorities while the use of ICT leads to cost reduction and resource consumption.

The developed applications allows the monitoring of the condition of the city infrastructures, gives information how the city is evolving and how a better quality of life could be achieved.

3 Objectives of the flag project

The **Smart Cities** as **flag project** is definitely within the scopes of EAMC and all Technical Committees may have a crucial role for its implementation.

The objectives of the flag project are the followings

- To explore the level of the implementation of Smart Cities allong the countires of Med region.
- To investigate if the implementation of the **Smart Cities** really improves the quality of the citizen's life.
- To compare the level of use of **Smart Cities** applications depending on the Educational Level of the citizens of a city.
- To give EAMC the chane to gain recognition as organization throughout Med countries for promoting subjects that improve the sustainability and the human life.
- To bridge the engineers and the scientists of Med countries and give then the opportunity to work together.

4 Expected outcomes

There are numerous expected outcomes of the project, the most indicative of them are outlined below.

1. The project of **Smart Cities** tries to bring in touch the majority of the Med countries and to motivate them to work together in order to promote the sustainability and improvement of human life.
2. The project reveals that the engineering science can bridge different cultures, ethics and religions.
3. EAMC bocomes a key player in Med region since it will become a leader to such kind of projects.
4. The project will try to combine the existing engineering experience with fresh ideas which will come through the participation of students and universities on several issues.

5 The role of Technical Committees

The role of each **Technical Committee** for the implementation of the **Flag Project** is crucial since the development of the global idea of **Smart Cities** has to do with the Education, Energy, Environment, Construction and Infrastructure as described bellow.

5.1 Educational Issues

To be filled by Alfredo

5.2 Energy Issues

To be filled by Wallid

5.3 Environmental Issues

To be filled by Mohamed

5.4 Construction and Infrastructure Issues

To be filled by Nick

6 Leadership and Working team

The leadership of the project will be carried out by the four chairman of the **Technical Committees** who will have the responsibility to work within the limits of EAMC and to present the progress of the project to the **General Assembly**.

Since the subject is very wide and at the top of engineering edge, the working team will be enhanced by experts from all Med countries.

7 Main idea of the project

As stated above, the basic idea is the research and the possibility of the implementation of Smart Cities in Med countries.

The initiation of the project will be a extensive research of the Smart Cities applications and its implications to the citizens. At this point various case studies will be examined and compared.

In the perspective of the project will contain the comparison between one city where the Smart City applications have been installed and another city without them.

The main idea is to investigate what the Smart City gains in comparisson with the others and how it has improved the life of its citizens.

8 Action Steps

For the implementation of the project the following steps are proposed.

1. Define the project framework
2. Set up a working plan and award responsibilities
3. Set up a time schedule
4. Study of existing Literature – Case Studies
5. Set up of researches
6. Set up the criteria for the selection of the pilot cities
7. Select the pilot cities
8. Gather the data related to the pilot cities
9. Make research on the pilot cities
10. Write a preliminary report
11. Write the final report – proposals
12. Enxtend the research for the cities of the future

Between the action steps there must be workshops with presentations.

9 Schedule

A time schedule will be fixed after the working plan and the responsibilities have been awarded. The time schedule must include the annual meeting of EAMC General Assembly in order to have a presentation concerning the progress of the project.

10 References

- **Wikipedia** the free Encyclopedia, “Smart City”
- **Giffinger et al**, “Smart cities–Ranking of European medium-sized cities”, Final report, October 2007
- **Department for Bussiness Inovation and Skills UK**, Smart cities – background paper
- **BIS Research Paper No. 135** “International Case Studies on Smart Cities”, October 2013