CALL FOR PAPERS “QUEST FOR QUALITY - PROFESSIONALISM IN PRACTICE”

www.icec2012.org.za

The ICEC Executives extend a special invitation to Quantity Surveyors and Cost Engineers and Project Managers across the globe to attend the 8th ICEC World Congress on 23-27 June 2012.

Hosted by the Association of South African Quantity Surveyors (ASAQS) and held at the prestigious International Convention Centre in Durban, South Africa, the conference will provide delegates with an opportunity to meet, network and promote professional excellence.

The theme this time is 'Quest for Quality' and brings together respected professionals from Quantity Surveying, Cost Engineering, Project Management, Architecture and Engineering disciplines.

The main focus of the Congress is on the three professions of Quantity Surveying, Cost Engineering and Project Management. Topics may include:

- Cost Efficient Design and Engineering
- Facilities Management
- Property Development
- Sustainability and the Environment
- Value Management
- Risk Management
- Construction Management
- Knowledge Management
- Innovative Practices
- Creative and Best Practice and Ethics
- Information Technology
- Continuing Professional Development
- Professional Responsibility and Employer Authority
- Occupational Health and Safety
- Education, Training & Knowledge Transfer & Management
- Dispute Resolution
- Cost Management

Note: the above topics are merely a guideline. All topics within the broad spectrum of the Built Environment professions as well as Construction Industry and Property Development will be considered.

We encourage you to visit the congress website www.icec2012.org.za and we look forward to meeting you in Durban.
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ICEC Office Holders 2010-2012

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Assistant Secretary - Chris Kinney (United States)

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Region 2 Director - Andrej Kerin (Slovenia)
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Region 3 (Africa)
Region 3 Director - Kwadwo Osei-Asante (Ghana)
Assistant Secretary - Egon Wortmann (South Africa)

Region 4 (Asia-Pacific)
Region 4 Director - Teoh Wooi Sin (Singapore)
Assistant Secretary - HH Kwan (Malaysia)
**ICEC 8th World Congress Programme**

**INTERNATIONAL COST ENGINEERING COUNCIL
8th WORLD CONGRESS**

*“QUEST FOR QUALITY – PROFESSIONALISM IN PRACTICE”*

**Quantity Surveying, Cost Engineering, Project Management, Cost Efficient Design & Construction**

**ICEC 2012**

**20.09.2011 V7**

**PROGRAMME AT A GLANCE:**

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<td>All Day 09.00 – 16.45</td>
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<td>09.45 – 10.15</td>
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<td>10.45 – 11.15</td>
<td>Workshop Session 2</td>
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<td>Workshop Session 7</td>
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<td>13.30 – 14.15</td>
<td>AAQS Council Meeting Workshop Session 3</td>
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<td>Evening</td>
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**Should you have any questions about the International Cost Engineering Council, we invite you to make contact with the ICEC Secretariat or the member association in your country.**

*The ICEC Secretariat is located in Australia and may be contacted either by email at secretariat@icoste.org, telephone on + 61 3 9654 5279, or mobile + 61 401 145 611 and skype: annapappalardo99*
We are again witnessing mixed signals in the world financial economy in parts of the world in the midst of recovery in other parts. There are also environmental disasters resulting from floods and weather in some parts of the world. These are uncertainties we have to continue to live and thrive on during this difficult period whilst the world political, technologists and economic leaders and other experts develop or find solutions to ameliorate them.

In the last five months, I have represented ICEC at the Regions 1 (North & South America), 3 (Africa) and 4 (Asia-Pacific) Council meetings. I attended Region 1 Council meeting on 21st June 2011. It was held during the AACEI 55th Annual Meeting and Exhibition at Anaheim, USA, June 19-22, 2011. A key decision reached at the meeting was for ICEC to collaborate with the International Standards Organisation (ISO) and PM International Organizations such as the IPMA to develop a cost management section as a specialty subset in the expanded ISO 21500 Project Management standard. The ISO standard is not a certification program but provides a basis for International cost management standards.

In a separate meeting, the AACEI Executive Board showed a lot of enthusiasm in the development of ICEC and provided suggestions which included the need to clarify aspects of the objectives and goals of ICEC that will assist in promoting the growth and development of member associations, the strategic plan and website development.

The Region 4 meeting was held on 24th July 2011 in conjunction with the PAQS Board meeting at the 15th PAQS Congress at Colombo, Sri Lanka, 23rd -26th July 2011. The issue of Central Product Classification (CPC) was brought to the fore with a template already prepared by ISM [now Royal Institution of Surveyors of Malaysia (RISM)] as a basis for further action by Cost Management professional organizations. It was also an opportunity to congratulate the new RICS Global President, Mr Ong See Lian – a Past President and Fellow of RISM as well as Past Chairman of PAQS, who had commenced his one year tenure in July 2011.

The ICEC Region 3 meeting was held in Mombasa, Kenya on 26th August 2011 in conjunction with the 5th AAQS General Assembly 24th-27th August 2011. The meeting generated a lot of discussions on the CPC scheme and the ISO/Cost Management Standard initiative as a welcome development for the Cost management community worldwide.

On behalf of ICEC , I hereby thank the Regional Directors, ICEC Executive members within the Regions visited, delegates, leadership of Regional bodies, hosts, meetings/congress organizers for their support, invaluable contributions, time and resources the for the successful programmes.

The meeting for Region 2 (Europe and the Near East) Council will be held at the end of October 2011 in London. The arrangements are going on smoothly for the ICEC 8th World Congress on Quantity Surveying, Cost Engineering and Project Management on 23rd -27th June 2012 in Durban, South Africa. I wish to encourage you all to participate fully in all the events as they provide an invaluable opportunity to learn, share knowledge and network with your peers.

At all the Regional council meetings, it was established through formal, informal and networking events that the certification, educational and CPD programmes of several member societies are now well established with efficient systems and procedures. The programmes are also monitored by PAQS and AAQS. In particular, the QS profession is regulated by law in several countries. The AACEI Certification programmes are well established and recognized by the industry. These recent organizational developments of some member associations suggest the need for adjustment of some of the objectives and goals of ICEC for the mutual benefit of all ICEC stakeholders.

On the whole, there is a need for ICEC to focus on a few key areas for collaboration between the member associations, Regions, Regional bodies and other similar professional bodies. These include the CPC scheme of the World Trade Organisation (WTO)/ Economic and Social Council (ECOSOC) of the United Nations; development of a cost management section as a specialty subset in the expanded ISO 21500 Project Management standard; Coordination of Research & Development for Educational, Professional and Practice Development as an element of the ICECS UN Strategy; Website development to promote robust and efficient information sharing, amongst other things.

ICEC serves all Cost Management Professionals and it was therefore a welcome development that all the meetings held were productive and provided the opportunity to engage members in ICEC development issues and the Strategic plan for the continued support and sustainability of the Cost Management profession worldwide.

Murtala Oladapo
ICEC Chair
Welcome to the October 2011 ICEC International Roundup Newsletter. This newsletter is published twice a year in March and October. I would like to encourage all member associations and their individual members to contribute articles and other relevant information for each newsletter. It provides a good opportunity to promote congresses, seminars, forums, projects and other activities of your association.

ONG SEE LIAN – RICS GLOBAL PRESIDENT 2011-2012

On behalf of the ICEC community I would like to congratulate Mr. Ong See Lian on being elected as the RICS Global President for the 2011-12 term. His inauguration is a historic event as he is the first non-British President in the 143 year history of the RICS.

Ong See Lian is past President of the Institution of Surveyors Malaysia (ISM) and past Chairman of the Pacific Association of Quantity Surveyors (PAQS). The ISM is a long-standing member of ICEC and ICEC continues to develop a strong relationship with PAQS.

This is a very prestigious appointment for Mr. Ong See Lian and recognises his tremendous work and international standing in the global quantity surveying & cost engineering fields.

ICEC Chair, Mr. Murtala Oladapo, will present Ong See Lian with an ICEC Certificate of Recognition during the event and will present the ACostE with an ICEC Certificate of Recognition.

ACOSTE 50TH ANNIVERSARY MEETING

2011 represents the 50th Anniversary of the Association for Cost Engineers in the United Kingdom (ACostE). ACostE are a founding member of ICEC and have provided valuable support and contribution to the development of ICEC for over 30 years. The ACostE will hold their anniversary celebrations during their 2011 Conference in Coventry on 2-3 November. ICEC Chair Murtala Oladapo will attend the event and will present the ACostE with an ICEC Certificate of Recognition.

ICEC REGIONAL MEETINGS

Four Regional ICEC Meetings have been held this year. They were held as follows:

REGION 1
Region 1 Meeting in conjunction with the AACE International’s 55th Annual Meeting 19-22 June 2011, Disneyland Hotel, Anaheim, California

REGION 2
Region 2 Meeting in London on 29 October 2011

REGION 3
Region 3 Meeting in Mombasa, Kenya on 26 August 2011 in conjunction with the African Association of Quantity Surveyors (AAQS) General Assembly.

REGION 4
Region 4 Meeting in Colombo, Sri Lanka on 24 July 2011 in conjunction with the Pacific Association of Quantity Surveyors (PAQS) 15th Congress

I would like to thank everyone who was involved in the organising of these meetings and providing the venue and services for these meetings.

ICEC WEBSITE

The next stage of the ICEC Website development is due to commence. This stage will include modernising the ‘look’ of the site and providing a more distinctive section on global cost management standards/practices/publications. I would welcome the views and suggestions from ICEC members on this development.

ICEC FORUM ON AACE INTERNATIONAL WEBSITE

Steve Revay, Immediate Past President of the Association for the Advancement of Cost Engineering International (AACE International) in the United States has offered to establish an ICEC Discussion Forum on the AACE International website. Steve is also the ICEC delegate for the AACE International.

This is a very positive development and will help to raise awareness of ICEC amongst AACE International individual members. The Discussion Forums on the AACE International website are very extensive covering a large number of topics relevant to the cost engineering field. They are generally very active and well supported. ICEC members are able to join and participate in most of these forums. They can be accessed at:

It is hoped that the ICEC forum will go live on the AACE International website in the near future.

LINKEDIN – ICEC DISCUSSION SITE

Professor Gianluca di Castri, President of the ICEC member association AICE (Italian Association of Cost Management) has also developed an ICEC Discussion Forum in ‘LinkedIn’ titled:

Total Cost Management – Project Controls - ICEC 2014 Group

This discussion forum has now gained considerable momentum and provides a good vehicle for sharing information and discussing key issues.

If you would like to become a member of this discussion forum please email Professor di Castri at gdc@ideaconsult.it
8th ICEC World Congress
23 - 27 June 2012 in Durban, South Africa

INVITATION TO DURBAN

We are delighted that the International Cost Engineers Council decided to select South Africa as the host country for the 8th World Congress of Quantity Surveyors. The Association of South African Quantity Surveyors will ensure that this congress lives up to the best traditions of previous congresses, incorporating an interesting and topical scientific program, fascinating accompanying person tours and an excellent social program, allowing delegates the opportunity to network with their overseas colleagues.

South Africa is a magnificent and beautiful country, and offers tourists unique value for money. This year, the pre and post congress tours will be a major attraction for delegates to come to South Africa. Durban, in KwaZulu Natal, is a vibrant multi-cultural city with magnificent beaches, easily accessible game parks, theme villages and a moderate winter climate making it an ideal tourist destination.

We urge our colleagues throughout the world to use this opportunity to get a glimpse of the continent’s rich and fascinating wonders and to enjoy the hospitality of their African friends.

We look forward to welcoming you in Durban in 2012 and will provide more detailed information on the official website as our planning develops further.

Your sincerely,

Rob Powell
Congress Director ICEC 2012

ASQAQ

The Association of South African Quantity Surveyors (ASQAQ) was inaugurated in 1908 and recently celebrated its centenary year. The ASQAQ has formed to achieve and maintain the following goals and ambitions for the profession and:
- Advance and promote the science and practice of the quantity surveying, cost engineering and project management professions and cognate matters
- Uphold the dignity of these professions
- Watch over, promote and protect the interest of its members
- Afford opportunity for the interchange and recording of the body of knowledge and experience of these professions
- Promote the highest standards of professional competence and integrity

From its earliest beginnings, the ASQAQ has grown to include professionals from every area of the construction industry, from private practice, government and state government to construction companies.

The ASQAQ initiates, establishes and maintains international ties with various organisations for the purposes of networking and creating global links and opportunities. This includes ongoing contact with ICEC, ASQAQ and PAGQ, amongst others.

The ASQAQ will be the hosts for the ICEC World Congress 2012 in Durban and we look forward to extending our warmest South African hospitality to all participants.

Academic Programme

The Academic programme will take place over two and a half days and will highlight the latest advances in:
- Quantity Surveying
- Cost Engineering
- Project Management

Professional speakers from around the world will address the meetings on relevant topics that will provide exceptional content for all participants.

South Africa

GETTING THERE: There are numerous direct flights from all parts of the world to South Africa and Durban boasts the largest New King Shaka International airport. Durban, South Africa’s warmest place has much to offer the visitor to the country. The city has beautiful beaches, parks and gardens, museums, theatres, excellent sports facilities and world class shopping malls. Modern beaches are located in close proximity to the International Convention Centre and a superb air and land infrastructure exists.

A variety of organized tours will allow visitors to view our rich and diverse cultural, historical, geographical and natural attractions. Outstanding wildlife game reserves, mountains and amazing world heritage sites are within easy reach of the city centre.

The accompanying person’s programme will provide exciting activities and excursions. You and your companion will be given a taste of Africa’s warm and wonderful hospitality.

Register Your Interest

Yes, please keep me informed by placing my name on the mailing list.

Title
Initials
Surname
Institution
Address
City
Zip Code
Country
Telephone
Fax
Email

Social Events

- Opening Ceremony & Welcome Reception
- Traditional South African Entertainment
- Pre & Post Congress Tours
- Accompanying Person’s Activities & Excursions
- Wildlife Safaris
- Congress Dinner

Post to The Congress Organisers
ICEC 2012
PO Box 1573, Durban, 4000
South Africa
or fax to: +27 31 3692623
or email to: info@icec2012.org.za

This form is also available online
www.icec2012.org.za

info@icec2012.org.za | www.icec2012.org.za

“Quest for Quality”

8th ICEC World Congress
Project culture
Italy, as well as the majority of continental European countries, belongs to the group of countries where the legal system is based on the Civil Law (also called Romanist German System). This is different from the legal system based on the Common Law and dominant in English speaking countries.

In the majority of Common Law countries, Cost Engineering and Project Management have had a separate development, like two fully independent disciplines. The relevant professions are separate, like in England, in the majority of the Commonwealth countries, in the United States of America.

In countries belonging to the Civil Law group of countries, the profession of Cost Engineer, Planning Engineer and Project Manager have had a common and sometimes confused development. This can also be understood from terminology; in English speaking countries we have different definitions for Cost Engineering, Project Management, Planning Engineering, Quantity Surveying, in Latin countries the overall term of Ingegneria Economica (Ingeniería Económica, Financiera y de Costos) has been used since the beginning. This overall concept has been accepted in 1998 also by ICEC, as Total Cost Management, the meaning of which corresponds to that of Ingegneria Economica, as far as the different languages will allow the correspondence.

Total Cost Management (Ingegneria Economica) is a discipline that integrates cost engineering, contracting, construction economics, planning, scheduling, controlling, engineering and project metrics. The related professions are: Project Director, Project Manager, Project Controller, Planning Engineer, Cost Engineer, Contract Engineer, Contract Manager, Programme Manager, Project Monitoring Consultant, Project Auditor.

It is worth pointing out that, besides being involved in Project Controls, the main field of Total Cost Management is evolving towards lifecycle or capital asset management, investment decision making, profitability and business planning. Therefore studying the difference between project management and project controls actually does not cover the full range of activities of Total Cost Management, which is wider.

Then the above graph should be updated as below (subject to further improvement and integration):

Some semantics
It is worthwhile considering the different translation of some words relating to our profession in several languages:

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<tr>
<th>English</th>
<th>Italian</th>
<th>Spanish (costillan)</th>
<th>French</th>
<th>German</th>
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<tr>
<td>Total Cost Management</td>
<td>Ingegneria Economica</td>
<td>Ingeniería Economica</td>
<td>Gestion des coûts</td>
<td>Kostenmanagement</td>
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<tr>
<td>Cost Engineering</td>
<td>Ingegneria dei Costi</td>
<td>Ingeniería de Costos</td>
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<tr>
<td>Project Management</td>
<td>Gestione di progetto</td>
<td>Control del proyecto</td>
<td>Management (gestión) de proyecto</td>
<td>Projektsteuerung</td>
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<tr>
<td>Project Controls</td>
<td>Monitozine del progetto</td>
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<td>Project monitoring</td>
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The following must be noted:

1. Ingegneria Economica in Italian has a wider meaning than the English "Total Cost Management".

2. The term "Cost Engineering" is usually translated in Italian as Ingegneria dei Costi, however, this term is difficult to explain to Italians and its actual meaning can be unclear for many.

3. On the other side, Project Finance is normally translated in Italian as Finanza di Progetto or Finanza Strutturata while the term Ingegneria Finanziaria seems to have a negative meaning due to how the term has been used in the media.

4. Project Controls in English has a wider meaning than controllo in Italian and contrôle in French, which is somewhat like word maîtrise.

5. The correct word monizione for "monitoring" is uncommon in Italian, however, we find the word monitoraggio, which is borrowed from the Latin word through an English translation, to be commonly used.

Furthermore, there is some confusion between the term used for "professions" and the terminology denoting "disciplines", as well as for the components of our body of knowledge and for the competencies that are needed for the profession itself. The terms "project" , "controls" , "manager" , "director" and others are not semantically equivalent in all languages. For instance:

- the Italian "controllo" and the French "contrôle" have a restrictive meaning if compared to the English "controls";

- the Italian "progetto" does not mean "project" but "design plus engineering";

- in military terminology, even in English, “command” and “controls” have a different meaning.

Then the first challenge should be to issue a multilingual glossary in the main languages (not only European).
We could start from the work already performed by AFITEP in 2000; further works on terminology have been done by private companies such as FIAT, Snamprogetti (belonging to ENI group), PM Forum, PMA Europe Ltd. and others. Those works could be used for reference, together with the glossaries (in English) of the AACE International, of the PMI and others.

The work done by AFITEP is quite complete in French, German, English, Spanish and Portuguese; it needs to be updated and should be also completed with other languages, such as Italian, Arabic and Chinese. We shall propose a joint ICEC and IPMA project for a common glossary, where each national association could take responsibility for the relevant language. And since we are speaking about future challenges ……in Latin we could have said:

• OPERIS GESTIO (project management)
• OPERIS GUBERNATIO (project controls)
• INPENSARUM GUBERNATIO (cost control)

PROJECT MANAGEMENT AND CONTROLS: DEFINITIONS

A definition of project management could be “application of knowledge, competences and methodology to the management of a complex project, in order to keep the project within the given limits (scope, time, resources or costs)”. On the other side, project controls is defined by the AACE International as “management action, either preplanned to achieve the desired result or taken as a corrective measure prompted by the monitoring process”. Project controls are mainly concerned with the metrics of the project, such as quantities, time, cost, and other resources; however, also project revenues and cash flow can be part of the project metrics under control.

In detail, to keep a project under control we should make a sound monitoring on the technical side (actual progress, planned progress; workload standard, planned, actual) as well as on project economics (BCWP, EV, BCWS) and accounting (ACWP).

Traditionally controls were limited to a comparison of planned to actual, with any deviation managed by exceptions. The modern view is based on calculation of the progress through standard workloads, earned value and monthly overall calculation of the expected time and cost.

To have a sound project management and controls is not enough, you also need a good project manager or competent controlling staff. It is necessary for the whole organization to be at the appropriate level of maturity and it is important that the environmental characteristic and the legal framework are considered. It is worthwhile noting that a sound PM & C is costing 2% to 5% of the total capital cost, but allows savings of about 10% in time and 10 to 15% in costs

TYPES OF PROJECTS

For “hard projects” the whole organization is oriented to the task, we have a considerable number of people working at different levels, the workload can be calculated based on standard production data. For “soft projects”, we have less people of higher professional level, sometimes small groups of highly qualified persons, the organization is oriented to human relations. Workload can be calculated using production data definitely higher than the standard. However, in most cases, project metrics are less defined.

Roughly, in the first case the problem is “management” of the various processes and activities that are part of the project, while in the second case the focus is on “leading” the people involved.

In the example above the hard projects are military and construction, soft projects are information technology and research; other projects are some way in the middle.

ORGANIZATION, PRACTICE & METHODS

In major, international engineering and construction companies the projects are organized as follows:

• The Project Director, whose responsibility is normally extended to several projects, is part of the senior management of the company and, in most cases, is part of the Directing Committee (namely to the higher committee of the management) or of the Board of Directors. To be noted that some confusion can be due to the use of the word Director, whose Italian equivalent (Direttore) has a meaning equivalent to Top Manager, while the members of the Board are identified with the title of Amministratore.

• The Project Manager, one for each project, is normally part of the middle management but can be a top manager in case of a major project.

• The Project Office or Project Team is made up of the following sections (basically, each section can have one or more people according to the size of the project itself):
  o Project Engineering,
  o Planning & Project Control,
  o Project metrics (identified with several different terms, such as quantity surveying or, in Italian, contabilità lavori, which means bookkeeping of the works)
  o Contract Management,
  o Cost Engineering.

All Project Controls are, in continental Europe, not considered an independent function, while they are part
of the Project Management. In some companies, however, project controls can be centralized or present at both levels, under the General Management as well as under the Project Manager. In minor companies the situation is more confused, the Project Management or Co-ordination being considered part of the Engineering or Construction Department (Technical Project Management). In theory, the project directing function should belong to the Owner or to the Employer, where different from the Owner.

In its organization there should be a Project or Programme Director with its Project Monitoring Office. This Project Director should be part of the senior management of the Owner’s organization, for projects considered of primary importance for the Owner itself, while for minor projects or maintenance and refurbishing project a middle manager could suffice.

HUMAN FACTOR

The career path, in major engineering and construction companies, starts with Engineering or Site responsibilities at a minor level, such as Planning Junior Engineer, Cost Junior Engineer, Site Junior Engineer, Design Junior Engineer, and so on. In general, only after having some experience as a full Engineer, the person can obtain a secondary responsibility as Project Coordinator or as Assistant to the Project Manager. This should be at lower management level.

The further step is the full Project Manager responsibility, at management or high management level, depending on the size and complexity of the project. Consultants are working as project management consultants or as specialists in contract and claim management.

PROJECT MANAGEMENT AND CONTROLS

Management must have some unity, while controls can be performed by different actors, sometimes at different levels in the organization or in different organizations. If we refer to a ship, we can make a comparison between its trips and an engineering project:

**STRATEGY**
- The Owner decides the scope, namely where the ship has to go, when to leave and what to carry
- MANAGEMENT
- The Captain brings the ship there and leads the crew
- CONTROLS
- The Pilot (navigating officer) takes under control the course, the speed and deviations if any – The Engineers takes under control the fuel consumption (local level)
- The Owner’s Control Centre takes under controls costs and revenues (central level)

- Maritime or Traffic Control Centre take under control the course and the movement of the ships (traffic control level)

The same applies for engineering and construction projects; the previous example was a typically deterministic project, while the example of a stochastic project could have been when Queen Isabel of Castile said to Cristoforo Colombo “go westwards to see whether you can find Cathay…or something else”.

In reality, no project is fully deterministic or fully stochastic: a real project can be positioned in a continuous range from 100% deterministic to 100% stochastic. During the life cycle, a project starts in the strategic phase as a quite totally stochastic project when it is still possible to decide whether to perform the project or to cancel it. Afterwards, in the operation phase, when we have decided to perform the project and we have budgeted in terms of time and costs, the situation is quite fully deterministics. However, some long term projects still have an high percentage of stochastic activities; the project quoted above (discovery of America) had a higher percentage of stochastic activities than the project for sending the man to Mars in XXI century.

The traditional view relevant to the relationship of managing and controlling was given by Henry Fayol (1841-1925), who defines the functions of management as:
- forecasting
- planning
- organizing
- commanding
- coordinating
- monitoring (French: contrôler: in the sense that a manager must receive feedback about a process in order to make necessary adjustments).

With more detail, he defined the “Principles of Management”
as follows:

- Division of work. This principle is the same as Adam Smith’s ‘division of labour’. Specialisation increases output by making employees more efficient.

- Authority. Managers must be able to give orders. Authority gives them this right. Note that responsibility arises wherever authority is exercised.

- Discipline. Employees must obey and respect the rules that govern the organization. Good discipline is the result of effective leadership, a clear understanding between management and workers regarding the organization’s rules, and the judicious use of penalties for infractions of the rules.

- Unity of command. Every employee should receive orders from only one superior.

- Unity of direction. Each group of organizational activities that have the same objective should be directed by one manager using one plan.

- Subordination of individual interests to the general interest. The interests of any one employee or group of employees should not take precedence over the interests of the organization as a whole.

- Remuneration. Workers must be paid a fair wage for their services.

- Centralisation. Centralisation refers to the degree to which subordinates are involved in decision making. Whether decision making is centralised (to management) or decentralised (to subordinates) is a question of proper proportion. The task is to find the optimum degree of centralisation for each situation.

- Scalar chain. The line of authority from top management to the lowest ranks represents the scalar chain. Communications should follow this chain. However, if following the chain creates delays, cross-communications can be allowed if agreed to by all parties and superiors are kept informed.

- Order. People and materials should be in the right place at the right time.

- Equity. Managers should be kind and fair to their subordinates.

- Stability of tenure of personnel. High employee turnover is inefficient. Management should provide orderly personnel planning and ensure that replacements are available to fill vacancies.

- Initiative. Employees who are allowed to originate and carry out plans will exert high levels of effort.

- Esprit de corps. Promoting team spirit will build harmony and unity within the organization.

A recent view (Luigi Pojaga, 1994) focuses on the distinction between the strategic level (stochastic methodology, planning) and the operation level (deterministic methodology scheduling).

EXTENSION OF PROJECT MANAGEMENT

The first point to be considered is that, for every project, there are several stakeholders impacting on the project itself, with difference in powers and rights to interfere. Between them we must consider the owner, first of all, which sometimes is not a single organization, end user and employer. Furthermore we must consider the banking system and other money lenders, the investors, the Government and other Authorities as well as the public in general.

The picture below shows how projects relevant to the same owner can be integrated in the whole life cycle, as well as between them in multi-projects, programmes and portfolios. In recent times, Engineering and Construction projects are changing (“soft” projects are evolving as well). The main changes are:

- Involvement of more complex organization, extension to other stake holders.
- Extension of the «project» horizontally (programme, portfolio) and vertically (life cycle).
- Several controlling or monitoring organizations, from different parties, interact with the project management.
- Systemic view, new project metrics to measure size and complexity.
- New criteria to measure progress, performance and productiveness, id est to say to measure effectiveness and efficiency.

The terms “project”, “programme” and “portfolio” are defined in the glossaries of the PMI and of the AACE International. The glossary of the AFITEP only defines “projet” and “programme”.

For Engineering and Construction Companies, the problem is integration between several projects. The Employer needs to integrate the different phases of the life cycle. The Government or other territorial Authorities have to integrate all projects that are insisting on the territory itself.
INSIDE ICEC

In 2014 AICE will organize in Milano the ICEC world congress; this will be the right time to answer some questions:
- What will the future of the ICEC from 2014 onwards be?
- Why is ICEC different (to IPMA and PMI)?
- Why Region II is different (from other ICEC regions)?

All the information noted in the following pages has been extracted from the websites of ICEC and IPMA associations in 2010 and already presented to the meeting of the delegates of the ICEC region 2 in Copenhagen, November 2010.

As it is known, the ICEC divides its worldwide activities into four regions and the member associations into three categories: cost engineering, project management and quantity surveying (construction economics). T

Some association are belonging to both federations, ICEC and IPMA, as shown below:

<table>
<thead>
<tr>
<th>Region</th>
<th>Association</th>
<th>ICEC only</th>
<th>ICEC + IPMA</th>
<th>ICEC + IPMA %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - America</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>II - Europe and Near East</td>
<td>20</td>
<td>8</td>
<td>12</td>
<td>60.0%</td>
</tr>
<tr>
<td>III - Africa</td>
<td>9</td>
<td>9</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>IV - Asia Pacific</td>
<td>14</td>
<td>13</td>
<td>1</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

If we, however, refer to “continental Europe” only, we find that out of 17 associations, 12 of them, namely 70.6% belong to ICEC and IPMA, it appears that belonging to both ICEC and IPMA is typical of continental European associations.

We must then define the peculiarities of the ICEC towards IPMA and PMI, the main criteria seems to be the following:
- Project controls vs project management
- Life cycle costs vs. EPCC costs

The path to be followed shall be:
- Define and update a common body of knowledge for the ICEC associations
- Improve this body of knowledge towards a body of competence
- Compare with IPMA and PMI and define boundaries and overlapped areas
- Extend the body of competence to life cycle costs, cost management in PPP and other items to be defined
- Improve and update standards and best practices
- New standards for cost management in public private partnerships
- New standards for project controls in public works
- New standards for LCC.

CERTIFICATION

We should try to compare the levels of ICEC and IPMA certifications, that for the time being can only be represented in a qualitative table. An effort to measure seniority and then quantify and compare levels of certification should be welcomed, where reference could be made to the levels of PMI, NVQ or to the GAPPS.

In Italy the AICE has two levels for certification accredited by the ICEC:
- Expert (EIE / ICEC A)
- Practitioner (PIE/ICEA)

We must find a way of measuring professional seniority, such as the “time span of discretionality” can measure the level of a role and of the relevant work in any organization.

The picture shows how seniority is composed by academic background and professional background. However, a third dimension relevant to personal skills and qualities should be also considered.

Probavably, project management and project controls have quite the same body of knowledge, while differentiation exists in competencies and their application to the profession.

Project controls has more to do with project metrics, such as:
- measuring site and complexity of the project,
- find the right parameters for such measuring (workload in standard man-hours or equivalent units, location factors and other indicators) and controlling (progress, time and costs, find proper indicators for quantity and complexity),
- find the metric way to identify the completion of the various phases such us mechanical completion, running and reliability test completion, substantial completion, preliminary and final handing over),
- identify the metrics for contract and claim management and so on.

THE CHALLENGES FOR THE XXI CENTURY

As far as companies in general, as well as the whole economy are concerned, the challenges of the XXI century can be summarized as:

GLOBALISATION
- Extend the market (new clients, new partners, new suppliers)
- Focus on effectiveness (performances), not only on efficiency (costs)
- Major organizations can go by themselves, minor organization must form networks
- Investment needed in innovation, medium-long term versus short term
- Capability of creating value strictly related to innovation.
- Money that does not create value is generating inflation
INNOVATION

- Increasing efficiency, reducing costs and structure.
- Increasing effectiveness: new products, new construction methods, new processes and procedures.
- Controlling the creation of value.
- Medium-long term planning and forecasting at global level (social, political, economy), market level, and company level.
- Find suitable clients, partners, suppliers.
- Find proper finance.
- Controlling risks.
- Managing change.
- Professional education, developing competencies.

INTEGRATION

- Interaction between projects or processes requires integration.
- Systemic view.
- Project Integration Management (as defined by PMI and AACE Int.)
- Integration guarantees:
  - efficiency,
  - effectiveness,
  - no redundances.
- Integration:
  - At project and process level, inside and outside the company.
  - In planning, scheduling, controlling.
  - Information and reporting, integrated data base and engineering, management, planning, scheduling and controlling standards.
  - Standard workload - Cost standards.

In Engineering and Construction, we should be able to optimize the total life cycle cost, including costs due to contingencies and uncertainty. This can be done by means of:

- Integrated data management
- Use of physical data together with economics: resource metrics, workload
- Contracts based on association between parties

Speaking about integration, we must consider the different points of view. A Construction Company has the problem of cross controlling contracts and working sites, controlling subcontractors, integrating planning, scheduling and controlling of all contracts in order to manage and control the whole company.

The General Contractor should focus on:

- Integration of all parties cooperating to each project
- Integration of engineering, standard and procedures
- Integration between projects

The Owner has to refer to the integration of execution to operations as well as to market to production integration, sometimes also to the integration between projects, the Bank or in general the investor or money lender thinks about comparing risks and integrating credit criteria and their management.

For the first time in centuries we can collect, file, organize, manage and send huge quantities of data and information. In a project this effects the whole life cycle, contract and document management, integration of technical data base (drawings, bill of quantities, workloads) to economics and financial data, integration of time to costs, etc..

In our profession, eventually, our focus should be on:

- Integrated data and information management
- Life cycle integration and risk analysis
- Integration on education, BOK, competencies, professional certification
- Integration of costs from standard to “real time”
- Integration of contract to project management, metrics in contract management
- Integration with H & S and environmental sciences
- Integration and metrics in organization and manpower planning
• Networking
• Contracts through association
• Reduce life cycle costs and construction time
• Planning at medium-long terms (instead of short term plans)

We need to shift from a short term vision (financial cycle, electoral terms) to a medium or long term vision (whose reference is human lifetime and more)

Today we have the tools for integrating and improving management and controls at all levels as well as to face long term problems in a rational way.

APPENDIX: THE ICEC WORLD CONGRESS 2014 IN MILANO

GENERAL

AICE (Italian Association for Total Cost Management) has been put in charge by the ICEC Region II meeting in Roma on November 2008, to organize the world congress in Milano for year 2014.

The original proposal, submitted at that time, was revised at the Region II meeting in Paris on October, 2009, where AICE submitted its proposal for a research project on the body of knowledge of our profession, in order to verify similarities and discrepancies between the body of knowledge of the various ICEC association as well as to carry on the corresponding check between ICEC and other project management associations such as IPMA and PMI.

This is because we feel, at least in Latin countries, that the bodies of knowledge and competence of project management and project controls are going towards further assimilation, and therefore we would like first to understand if such feeling corresponds to reality, second if it is a peculiarity of some countries or if it is a general tendency and eventually to try making some assumptions on the future of our profession, to be as a guide for the next generation.

The general ICEC council in Singapore has eventually confirmed the assignment for the congress in 2014 to the AICE.

AICE

AICE is the Italian Association for Total Cost Management, founded in 1978 and member of the ICEC ever since; accreditation of certification procedures was granted for the “expert” level since 1992 and for the practitioner (entry level) since 2000. As it is now, AICE has about 200 individual members; out of them, 92 members hold the “expert level” certificate and 53 the “practitioner level” certificate.

In 2007, AICE began a process of diversification. Alongside the historical relationship with Bocconi University and Bocconi Business School (SDA Bocconi), AICE started to be connected with other universities, such as the LUISS (Social Studies University and Business School in Roma), the “Universus” Business School in Bari, the Catholic University in Piacenza. The purpose of such connections is to start with formation courses, as per body of knowledge accredited by the ICEC, in several parts of Italy, since we feel that there is a strong need for formative paths in our profession.

Furthermore, as well as being member of the ICEC, the AICE has become member of two federations, namely:

COLAP, a coordination body of professional associations. This is because in Italy the structure of all professions shall be subject to new laws and regulations, that will modify the old structure based on “professional orders” that are actually semi-public bodies incorporated in the Ministry of Justice to a new structure that, besides keeping the orders untouched, will give a formal acceptance to private professional associations such as the AICE. Therefore AICE has been already registered in the CNR (National Council for Scientific Research) roster and is waiting for the registration at the Ministry of Justice.

• FAST (Federation of Scientific and Technical Associations) where AICE has its new postal address. Founded in Milan in 1897, FAST is an independent, nonprofit organization, legally recognized by the Minister of Scientific and Technological Research and Universities, operating on national and international level, directly, or through its associated organizations. The Federation brings together, the most qualified and representative scientific and technical associations in Italy with a total of over 50,000 members.

THE NETWORK

By the end of 2009 the AICE proposed to the ICEC association a network together with universities and business schools either for specific formative courses in total cost management or for other courses of wider scope, provided that they be in some way related to total cost or project management, project controls, life cycle costs.

The purpose could be to organize an international course, to be
held in English language, aiming at giving to people already certified or in the way of certification a deeper knowledge of international procedures, laws and standards, etc..<br><br>The project could be done in network with European or extra European Universities, in some way related to ICEC associations. Therefore the AICE requested from other ICEC association some preliminary information on this topic, namely:<br><br>• Existing partnership or cooperation agreement with universities or business school that could take part to the project.<br>• High profile lecturers that could be invited for a lecture in Milano or other Italian towns.<br>• Existing case histories to be used in the courses.<br><br>The same network can be the starting point for the work to be done on body of knowledge: during 2010 the AICE will request to all ICEC association, as well as to other association connected to the ICEC such us IPMA, RICS, etc. a copy of their updated body of knowledge in order to start with comparison and further analysis and consideration. This research project has been already approved by ICEC and a group of interest is already working on it.<br><br>THE CONGRESS<br><br>The congress shall be held in Milano, at the premises of Bocconi University, unless we think advisable to move to other, prestigious location also taking into consideration the foreseen number of attendees.<br><br>Besides the usual aim of all ICEC professional congresses, we aim at increasing the visibility of AICE as well as of the profession as a whole, this will benefit all the ICEC association; for doing so, we are planning to propose, in the years from 2010 to 2014, a research and knowledge management project to update and integrate the body of knowledge of the ICEC and to move from a simple BOK to a real body of competence.<br><br>The main topic will be to investigate how this body of knowledge could be a requisite for the business development in a sustainable way. Other research paths will be relevant to validity and SWOT analysis of the certification, compared with other related certificates such as IPMA, PMI, etc.,<br><br>BIBLIOGRAPHY<br><br>Papers<br><br>GIANLUCA DI CASTRI<br><br>• The road to ICEC 2014 congress in Milano (ICEC Round-Up, October 2010)<br>• AICE and Bocconi University joint venture for the ICEC world congress (with A. Biffi – ICEC Round-Up, March 2010)<br>• Project Culture and Total Cost Management: the Italian case (interview for La Cible, 2000)<br>CARSTEN WREDSTRØM<br><br>• My vision for ICEC in the coming years (ICEC Round-Up, March 2010)<br>BOOKS<br><br>• A guide to the Project management Body of Knowledge (ANSI/PMI 99-001-2004)<br>• Skills & knowledge of Cost Engineering (AACE Intl, 1999)<br>• Oberlender – Project Management for Engineering and Construction (Mc Graw Hill, 2000)<br>• Hackney, Humphreys – Control & management of Capital Projects (AACE Intl, 1997)<br>• Industrial Engineering Projects (Spon, 1997)<br>• Lezioni di Project Management (ANIMP, Etas Libri, 1992)<br>• Patrone, di Castri – Lineamenti di Ingegneria Economica (Alinea, 1999)<br>• Gianluca di Castri – Project management per l’edilizia (Flaccovio, 2009)<br>• AFITEP – Dictionnaire de Management de Projet (AFNOR, 2000)
The Quantity Surveyor in changing economic, technological and political environment

Public-Private Partnerships in Infrastructure development; the role of the Quantity Surveyor and Cost Engineer

Murtala Oladapo

Whilst public funding supported by public borrowing will remain the main source of financing infrastructure development, private financing supported by private investment will become a major tool for sustainable economic development through Public-Private Partnership (PPP) procurement. PPPs require various transaction advisors and consultants for the realisation of the developments. These include Economic and Financial, Technical, Legal, Environmental, and Project Management Advisors. One major characteristic of PPP transactions involving infrastructure developments and buildings in particular is the perceived decline in the importance of the skills of built-environment professionals involved in the construction element of these complex long-term services contracts. Quantity Surveying and Cost Engineering (QS & CE) expertise and skills in project, procurement, cost management, contract documentation and management are central for the role of PPP Technical and Project Management advisory services. This presentation provides an overview of infrastructure development by PPP and the role of the QS & CE in the transaction and procurement process.

Keywords: infrastructure development, public-private partnership (PPP), quantity Surveyor, cost engineer, cost management, technical advisor, project management advisor.

WHY PPPS? INFRASTRUCTURE GAP & ECONOMIC DEVELOPMENT?

Many studies (World Bank and other MDBs) have demonstrated that in order to enhance growth and development in developing economies, to enable them to participate in and benefit from the process of globalization and liberalization, investment in infrastructure is an imperative need to close the infrastructure gap.

The “infrastructure gap”, defined as the difference between available resources and the amount of investment required to meet a country’s core infrastructure needs, has a negative impact on economic growth and job creation.

A strong association exists between the availability of certain infrastructures and per capita GDP, the attainment of MDGs and sustainable development. Infrastructure is the single most important factor for both sustainable industrial development and foreign investment.

Closing Africa’s infrastructure gap is essential for reaching the MDGs.

The worldwide projected Infrastructure investment needs (gap) is presented in Figure 1.

WHY PPPS? PPP WORLDWIDE GROWTH 1999-2006

PPPs have emerged as an important tool to bridge the infrastructure deficit/gap which can provide a number of specific benefits to the public as be illustrated by international interest in PPPs recorded between 1999 to 2006.

INTERNATIONAL INTEREST IN PPP 1999
INTERNATIONAL INTEREST IN PPP 1999

The diagram in Figure 2 indicates that the vast majority of governments are still at early stages in PPPs where their use is infrequent and uncommon.

Indeed moving up the maturity curve is not automatic and PPPs have proved difficult to implement in many countries.

The main reason for this is the need to develop institutions, processes, and procedures to deliver PPP projects.

PPP DEVELOPMENT AND RESOURCE SLIR

This establishes the Legal Institutional and Regulatory Framework for Government PPPs projects and should provide the Government Ministry, Agency, Corporation or body to grant concessions for the financing, construction, operation or maintenance of any infrastructure.

The law usually goes further to spell the do's and don'ts that govern Concessions and sets up a Commission to regulate these Concessions and established the structure for PPPs.

GENERIC STRUCTURE FOR PPPS

- Private Party establishes a Special Purpose Vehicle (SPV) to provide public infrastructure under a long-term contract with a public sector body
- The private sector party usually agrees to undertake the following:
  - Design and build or upgrade the public sector infrastructure
  - Assume substantial financial, technical, and operational risks (through Risk Allocation Matrix)
  - Provides equity (shareholders funds)
  - Source for Loans/Debt through Project Finance.
  - Receive financial return through payments over the life of the Project Revenue or from the public sector, or from a combination of the two
  - Return the infrastructure to public sector ownership at the end of the contract (in some cases the private party may retain ownership of the asset).

GENERIC STRUCTURE FOR PPPS MATRIX OF CONTRACTS

- To accomplish the PPP, a matrix of Contracts for project implementation, operation & maintenance are
established and includes;
- PPP Contract Agreement (Public Body/SPV)
- Sub-Contract Agreement(SPV/Sub-Contractors)
- Finance Agreements (5 or more)(SPV/Lenders)
- Escrow Account Agreement(Public Body/SPV/Lenders Agent)
- Lenders Direct Agreement(Public Body/SPV/Lenders Agent)
- Shareholders Agreement, ETC

MODELS OF PPP

PPPs can be characterised by three generic models:
- Model 1-the provision of an asset and maintenance for specific use e.g. schools, prisons, hospitals, housing for the military, roads and government offices, where the supply of customers/users and the operation of the asset remain with public sector staff or the government;
- Model 2-the provision of a service involving the construction of an asset e.g. power stations, water supply and sewerage services, gas distribution, telecommunications, IT, military support services, airports, and some municipal services, where the asset is operated by the private sector; and
- Model 3 - combination of the above e.g. railways, mass and urban transit systems, air traffic control, ports, toll-roads.

THE PPP PROCESS

Project Development

Project Initiation and Identification
- Preliminary Project Appraisal
- Environmental Impact Assessment
- Value for Money (VfM)& Affordability Analysis
- Preparation and approval of Outline Business Case (OBC) for Approval of appropriate Government authority

Procurement

Establish Project Team & Management Structure
- Identify suitable Bidders/Developers
- Market Sounding Expression of Interest (EoI)/Prequalification Questionnaire(PQQ)
- Project Information Memorandum(PIM)
- Evaluation of EOs and selection of suitable Bidders

Competitive Procurement Process; Bid Evaluation,

Negotiations and Contractual Agreements with Preferred Bidder
- Prepare & issue Request for Proposals Documents(RFP) (Bid Documentation)
- Output Specifications & Requirements
- Risk matrix
- Financial Model parameters
- Draft PPP Contract Agreement, ETC
- Full Business Case(FBC) for Approval of appropriate Government authority for award of contract

THE PPP PROCESS MATURITY

Transfer (Handover) or Contract Termination
- Assets Inventory Condition Survey or establish Remaining life
- Assess Future Needs and options for further procurement if appropriate.
- Finalise New Arrangements
- Establish PPP Contract close
- Record lessons learned

TRANSACTION ADVISORS IN PPP

- All In transaction Advisory services (All–in Service: embracing all advisory services), or
- Project Management Advisor
- Management of Advisers
- Economic/Financial Advisor
- Legal Advisor
- Technical Advisors
- Environmental Advisor, ETC

- Economic/Financial Advisor
Advise and support the development of the financial aspects Project Finance and PPP issues associated with the development

- Technical Advisor
Advise and support the development technical, engineering, architectural, cost management issues associated with all stages of the PPP process.

- Legal Advisor
Advise, assist and develop all legal and contractual matters and related issues and documentation associated with the PPP project.

- Environmental Advisor
Examine the potential environmental impact of the project, identify the potential risks & consider the mitigation of such risks and the impact on the scope and design of the project.

THE QS/CE ROLES IN PPP

COST MANAGEMENT

- Development Appraisals
- Cost Modelling
- Cost Planning
- Estimating
- Whole Life-Cycle Costing
- Post Contract
- Administration and Financial Management, ETC

QS/CE

PM
**CASE STUDIES (2) DISTRICT INFRASTRUCTURE PPP DEVELOPMENT**

PPP Contract Agreement Management (5-7 Years)

- The establishment of the administration structure, systems & procedures;
- Partnership relationship and Project delivery Environment scanning/Risk management;
- Project Financing arrangements management
- Compliance with requirements the PPP Law, ETC

**CASE STUDIES (3) 4 NO DISTRICT INFRASTRUCTURE PPP DEVELOPMENT**

Comprehensive Engineering Infrastructure development Services based on the National PPP law and process-40% completed

- Project Management
- Cost Management
- Knowledge of Project Finance and PPP through trainings

**ABOUT THE AUTHOR**

Mr. Murtala Oladapo is a PPP, Project, Procurement, Cost Management, Management & Training and Capacity Building Consultant with over 35 years of experience in construction and infrastructure development in a variety of large and varied projects in capacities as PPP Transaction Advisor, Project Partner and Project Management Consultant. He is the Founder and Chief Executive/Managing Consultant of Murty Associates (Construction & Cost Management Consultants) & Murty International Limited (PPP & Project Management Consultants).

He holds a Bsc (Hons) degree in Quantity Surveying from Ahmadu Bello University Zaria, Nigeria and an MSc degree in Project Management obtained from the University of Reading in Reading, U.K. He is a Certified PPP Specialist. He a member of several major national and international professional associations.

Has attended several workshops and seminars in and outside Nigeria and also has presented several publications, papers and speeches at several national and international forums, workshops, conferences and seminars on Construction Project, Procurement, Contracts and Cost Management, PPP Procurement and Infrastructure Development.

He has been actively involved in the promotion of cost engineering, quantity surveying and project management professions in Nigeria, Africa and worldwide. Mr. Oladapo is the current Chairman of the International Cost Engineering Council (ICEC), having been a member of the Executive since 2000. He was President of the Nigerian Institute of Quantity Surveyors from 1996 – 1998 and 1998 – 2000.

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Those attending the ICEC 2012 World Congress are encouraged to make the most of their journey. The country is large and consists of a number of interesting areas, ranging from the business hub of Johannesburg (the centre of the world’s largest gold mining industry during the 20th century), Cape Town (with a feeling that is reminiscent of parts of continental Europe along the Mediterranean), and Durban – the venue for the ICEC 2012 International Congress.

The modern city of Durban dates from 1824, when a party of 25 men arrived from the Cape Colony and established a settlement on the northern shore of the Bay of Natal, in an area which was generally occupied at the time by the Zulu tribe. One of the settlers, an adventurer named Henry Francis Fynn was able to befriend the Zulu King Shaka by helping him to recover from a stab wound he suffered in battle. As a token of Shaka’s gratitude, he granted Fynn a “30-mile strip of coast a hundred miles in depth.” During a meeting of 35 European residents in Fynn’s territory on 23 June 1835, it was decided to build a capital town and name it “d’Urban” after Sir Benjamin d’Urban, the then colonial governor of the Cape Colony, which at the time was under British rule. The Zulu name for the city metropolitan area is eThekwini (meaning ‘the bay’).

The British established a sugar cane industry in the 1860s. Farm owners had a difficult time attracting Zulu labourers to work on their plantations, so the British brought thousands of indentured labourers from India on twenty five-year contracts.

Durban is a cosmopolitan city with a population of approximately 4.5 million, therefore being the largest city on the East coast of the African continent, as well as the busiest port in Africa. Durban is ethnically diverse, with a cultural richness of mixed beliefs and traditions. Zulus form the largest single ethnic group. The city’s demographics indicate that 38% of the people in Durban are under the age of 19 years. It has an extremely high rate of HIV/AIDS at 32%. As a result of the importation of Indian labourers, Durban has the largest Hindu population outside India.

The region has a mild sub-tropical climate. The congress is being held in the Southern Hemisphere mid winter – however, average daytime temperatures in June are 23°C (73°F), whilst average nighttime lows are 11°C (52°F). There is a very low likelihood of rain during the period when the congress is being held.

Why not take the time to see as much as possible of this exciting region? As a start, visit the Congress website (www.ICEC2012.org.za) and browse through the incredibly diverse list of tours that are available for delegates and partners. It is just not possible to choose a ‘favourite’ amongst the many interesting options.

However, a few ‘other’ options that may interest you are also worthy of consideration. For instance, although the costal area both North and South of the city beaches are famous for their warm water surfing and swimming opportunities, it is also recognised as having a large shark population – what about learning about these fascinating creatures in the safety of a ‘cage dive’ at the Ushaka Marine World or the more adventurous scuba diving off the famous Aliwal Shoal. Alternatively, time permitting why not travel North along the Dolphin coast to Kosi Bay or Sodwana Bay for diving amongst coral reefs off super-white beaches renowned for the loggerhead and leatherback turtles. Another fascinating ‘secret’ is to take an early morning boat trip from the harbour to service the shark nets off the city’s beaches and possibly to return to the KwaZulu Natal Sharks Board offices afterwards where research on these wonderful animals is conducted.

For the sports-minded, indulge yourself in one of the many tremendous golf courses in the area. Golf fanatics tend to spend a week or so ‘trying out’ the varied layouts in the area – from championship courses such as Royal Durban, Durban Country Club, Prince’s Grant, and Zimbali, to others such as San Lameer and Cotswold Downs.

For those who like to independently explore the city, try out a ‘Bunny Chow’ or a Roti at ‘Johnnies’ or whilst visiting the Victoria Street or Warwick Street Markets. Alternatively, indulge yourself in any one of the many superb restaurants in the city – ask a local for their recommendation – just be prepared for a difficult choice – the options available are extensive!

After the congress – don’t fly home straight away! Rather give consideration to a ‘diversion’ of a few days and take one of the options below on your way back to Johannesburg (the international hub that you are most likely to use for entry / departure from the country).

**Option 1**
Hire a car in Durban and drive along the excellent road system to Johannesburg, taking time to visit the mighty Drakensberg Mountains on your way. Stay at any of the many comfortable and reasonably priced lodges in the Cathkin and Champagne Castle Valleys, ensuring that you visit the San / Bushman paintings at Giants Castle. If you are lucky, you may be there at a time when you can attend a performance of the renowned Drakensberg Boys Choir : a heart-warming experience. Other
places to relax in the area include Cathedral Peak and the Royal Natal National Park under the imposing Amphitheatre. If you do this trip take warm clothing – remember it will be wintertime and the peaks are likely to have a fair covering of snow.

On the other side of the freeway, take the time to visit some of the fascinating battlefields of the not-so-long-ago past. Knowledgeable guides are available to take you to legendary places where they explain the details of each conflict, discussing the strategies used, the numbers who died, and the medals and rewards won by participants. Walk in the footsteps of warriors such as Shaka Zulu, Dingane and Winston Churchill at places whose names are engraved into military history such as Ladysmith, Amajuba and Colenso (South African / Anglo Boer Wars of 1880 – 1881 and 1899-1902); Blood River (Voortrekkers / Zulu conflict of 1838); Rorke’s Drift from the Anglo / Zulu War of 1879) whereafter 11 Victoria Crosses were awarded for gallantry – the most ever awarded for a single military engagement, and Isandlwana. The Zulu Victory Song, sung after this event typifies the experience you will have:

Thou great and mighty chief! - Thou who has an army - The red soldiers came - We destroyed them. - The mounted soldiers came - We destroyed them. - The mounted police came - We destroyed them - When will they dare - To repeat their attack?

Option 2

Most tourists have heard of the Kruger National Park – however, the area just North of Durban offers equally (many would say superior) exciting wildlife areas that are more competitively priced and are within a few short hours drive. Once again, hire a car in Durban but this time drive North, once again along very good freeways. Along the way, you may wish to ’chill’ and spend some time experiencing typical southern African flora and fauna at one of the Ezemvelo KwaZulu Natal wildlife reserves such as Amatikulu, 1 hour outside Durban. Imagine sleeping in a well-appointed / serviced tent on a raised platform and waking up to the call of a fish eagle or the sniffing or a bushbuck below your ‘apartment’. After a self-catered breakfast, take a stroll amongst the resident herds of giraffe, zebra, waterbuck and smaller antelope – a surreal experience.

Continue your drive for another 2 hours and you will arrive at the St Lucia village which is situated on an estuary amongst the world’s highest vegetated dunes. No problems with accommodation here and a real ‘gem’ in the iSimangiliso Wetland Park, now declared a World Heritage Site. Near the mouth of the estuary you will find a large ‘pod’ of hippo’s, as well as large numbers of Nile crocodiles lounging on the exposed sandbanks. The hippos do sometimes stray into town at night but this is rather rare and your safety is pretty well ensured.

Another 45 minute drive takes you to the Hluhluwe / Imfolozi Game Reserve – either use St Lucia as a base and enter as a ‘day visitor’ or alternatively, book accommodation within the reserve (generally self catering but a restaurant is at Hilltop Camp in Hluhluwe Reserve). Winter is the best time for viewing (don’t forget to take along a good set of binoculars) and you are virtually assured of seeing plenty of the ‘Big 5’ (lion; leopard; buffalo; elephant; rhino) within a day. However, the attractions go well beyond these – 300 species of birds, impala, kudu, warthog, blue wildebeest, zebra, giraffe, cheetah, hyaena, jackal, African wild dogs and a host of ‘small’ animals. A particular highlight is the availability of guided walks through the bushveld – a truly humbling experience.

If you are a wildlife aficionado, you may even want to travel a bit further to the reserves of Mkhuze, Ndumo or Ithala – all providing an extended range of diversity of animals and topography. Be aware that a visit to the area where these reserves are found requires you to take precautions against malaria.

Once you have become exhausted in viewing the ‘passing parade’ of wild animals, you may either proceed to departure by taking a scheduled airmight from the nearby town of Richards Bay; returning to Durban International airport along the freeway; or, should you have the time, drive to Johannesburg via the battlefields discussed in Option 1 (a viable, but tiring option at the end of your trip).

The Congress is going to be good – however, the choice of venue opens up an opportunity for you (and your family / partner to see and feel Africa in its most natural form – a ‘once in a lifetime experience’ not to be missed!
The theme of the 2012 World Congress is very relevant to the modern day cost management professional.

For each of the questions below, check your response as ‘Yes’ or ‘No’.

1. Are you generally satisfied with the performance of design professionals with whom you are required to work – particularly when you do not compile the ‘team’?
2. Do you believe that performance standards of design professionals are improving?
3. Do you feel that those persons entering your profession reflect a degree of technical competency in basic activities that one can reasonably expect at that stage of their careers?
4. Are clients reflecting improved confidence in the cost engineering performance of our professional disciplines?
5. Are the professional fees you receive commensurate with your input, and is the distribution of fees amongst the professional team equitable?
6. Have corruptive practices within the construction / property sectors improved within the past 10 years?
7. Do tertiary education institutions providing qualifications for future professionals within the built environment cover necessary material adequately?
8. Can you trust contractors to produce work of the prescribed standard without significant oversight?
9. Can you identify at least two ‘new’ innovative practices of significant importance that have been developed, and generally implemented by practices within your discipline in the past 10 years?
10. Has government in your region significantly improved support for the built environment professionals in the past 10 years?

Whilst the above is admittedly a random set of questions which could be replaced with others considered by some to be more pertinent, should you have answered ‘No’ to more than 3 of them, you should be at ICEC 2012 in Durban, South Africa to discuss with others of a similar disposition what should be done to improve matters!

This event promises to be a ‘no holds barred’ experience, intended to challenge the complacency which is often prevalent in our business sector. The implied criticism of current quality / performance standards in the title of this congress is reflective of the ambiguity, tension and change inherent in today’s professional world. Despite decades of scholarly studies of professionalism, we are no longer able to identify what was clear to all in the mid 1900’s. Part of the meaning of professionalism of those days is now obscure or lost. Some of the ideals of that past era can perhaps still inform much of professional education and practice, because some vestiges do remain. However, times have changed and those ideals which apply to concepts of society, clients and practitioners no longer match much of Twenty-First Century reality – indeed, the question must be asked as to whether some of them ever did.

The programme for the congress is wide-ranging and provides ample opportunity for involvement at various levels. The pre-congress weekend consists of two days of meetings (ICEC Council and Africa Association of Quantity Surveyors in separate groupings), as well as a number of practical workshop sessions of variable content and length. Full details of the topics etc will be made available well before the congress starts – it is intended to have ‘Working in Africa and other developing regions’ as one of the primary themes of the workshops. It should be noted that the congress registration fee does not cover attendance at these sessions. For those that wish to spend some time relaxing / socialising prior to the main activities which starts on the Monday morning, the conference organisers will be happy to advise on the best ways to spend their time (golf courses, sightseeing tours, restaurants etc). Registration for delegates will be possible at the conference venue throughout the weekend, culminating in a ‘welcoming’ event with a local flavour and entertainment on the Sunday evening for all delegates.

The congress starts with an opening session on the morning of Monday, 25th June 2012 in one of the large auditoriums, seating the anticipated audience of 500 delegates. Once again, the opening ceremony will be a ‘razzmatazz’ event to remember – don’t get there late! The first plenary session will take place after the opening session with one of the ICEC World Regional representatives delivering a paper on the theme of “Facilities Management, including Property Development, and Project Management”, to be followed by breakaway presentations in four venues.

On the Monday afternoon, an ICEC World Regional representative from a different region will start the proceedings on the theme of “Professional Responsibility and Employer Authority”. This will fill the rest of that day. The evening has been left available for delegates to use as they wish – to provide a ‘breathing space’ in the fairly hectic organised schedule.

On the Tuesday, there will be two themes (one in the morning and the other after lunch). The morning session deals with “Value Management”, incorporating Quantity Surveying and Cost Engineering inputs; whilst the afternoon session provides delegates with an opportunity to consider the present status, and future objectives for Education and Training in the built environment. The format of each session will follow that describes above. Each morning and afternoon there will be refreshment breaks, whilst a buffet-style lunch will be available in the adjacent hall where a trade exhibition will be in place throughout the congress. Intimate ‘lounges’ will be created in the exhibition centre as well as a free internet café being available for the duration of the congress.

The evening of Tuesday, 26th June 2012 promises to be another memorable one, with the Gala Dinner taking place in the main auditorium of the International Conference Centre. As has been the case at previous World Congresses, this will be a high-class function with lots of entertainment and excellent cuisine.

Hopefully we will feel strong enough to participate fully in the last plenary and breakaway sessions on the morning of Wednesday, 27th June 2102. The theme for this part of the programme is “Knowledge Management” which incorporates the associated topics of Innovative Practices and Best Practice Guides. The president of ICEC will close the formal academic / scientific programme at midday, to be followed by lunch for all delegates who will then make their own arrangements with regard to any possible post-congress activities or their departure plans. The closure of the programme at this time will permit delegates the greatest possible flexibility with regard to such arrangements, whilst still encouraging them to attend the closing ceremony.

Board members of the Association of South African Quantity Surveyors will meet after the closure of the ICEC congress.

All-in-all the event promises to be one where strong links can be forged between delegates who will be encouraged to participate actively in all sessions, whilst also being given ample opportunity to network with friends both old and new.
MEMBER ASSOCIATION HIGHLIGHTS

USA

AACE International Mentoring program launched

AACE International formally launched its comprehensive Mentoring Program at its Annual Meeting June 19-22, 2011, in Anaheim, CA. The Mentoring Program evolved from a joint pilot program conducted by the Diversity Task Force, Women in Project Controls Committee and the Young Professionals Task Force in 2010. Building upon the initial success of the pilot, the AACE Mentoring Program employs a self-guided model that has gained wide acceptance among professional associations sponsoring mentoring programs. Earlier this year, the AACE President Steve Revay appointed Logan Anjaneyulu as chair of the Mentoring Advisory Committee. Joining Anjaneyulu on the committee are Marina Sominsky, Roy Wong, Jaimin Mehta, Rendy Tendean, Michael Vargas, Josh Rowan, Julie Owen, Kristy Kastner and Tanner Courrier. The Mentoring Advisory Committee’s major emphasis for the coming year will be in actively recruiting qualified mentors and explaining the importance of mentoring to various constituencies and stakeholders.

“Our structured, self-guided mentoring program promises to be a great opportunity for AACE International to accelerate the growth of the next generation of Association leaders while increasing the diversity of our profession and membership,” observed Anjaneyulu. “We have partnered with two leading organizations, the Center for Coaching and Mentoring and Boxwood Technologies, to create an exceptional support system for our mentoring program participants. We encourage AACE members to explore the mentoring orientation presentation now available online. We need all interested and qualified members to become actively involved to achieve this program’s full potential.”

For more information about AACE’s Mentoring Program, please visit: http://www.aacei.org/career/mentor/.

ICELAND

Iceland’s Cost Engineers Inspired by the Crash

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One of many immediate results of the steep crash of Iceland’s economy in the autumn of 2008 was a prolonged delay or total halt of most capital investment projects which were in the pipelines at the time. As the wheels of industry and construction slowly start turning, evidence show that the massive down-turn has motivated the country’s investors, project owners and contractors to brush up on tools and methodologies used to develop cost estimates and business plans for projects.

One may state that one of the more valuable side-effects of the deep crisis, which has shaped the country for the past 3 years, is the increased demand for professionalism, standardisation and transparency of project planning, estimating and control, along with general cost awareness and use of Project Management tools and methods. Therefore, in the aura of the situation described above, the Project Management Association of Iceland decided to emphasize on Cost Engineering when implementing their annual Autumn Conference.

The event was held on September 22nd on the top floor of Reykjavík’s tallest building; a prosperous monument to the construction boom in the capital area during the years leading up to the crash. The keynote speakers on the project management conference were cost engineering experts from Germany, Netherlands and Iceland.

Ko Des Bouvrie of Cost Engineering B.V. opened the conference by briefing on the rising trade of cost engineering, and the important role of the cost engineer on technical investment and often neglected maintenance projects. The audience was left with several good advices on tools, methods and approaches of estimating and controlling project cost and outcome. Later during the conference Ko Des Bouvrie was again welcomed to the speaker’s podium to discuss labour norms standards issued by the Dutch Association of Cost Engineers (DACE). On this topic Mr. Des Bouvrie concluded that based on DACE’s approach to scoping construction tasks and defining productivity, the developers have the ambitions for the labour norm standard to become globally accepted for owners and contractors of the construction industries.

Dr. Thomas Rieckmann of Cologne University of Applied Sciences spoke on the topic of capital cost estimates and sensitivity analysis by the Monte Carlo approach. Dr. Rieckmann discussed the application of Lang and Hand factors and various cost indices, and how the cost engineer may use a combination of methods to achieve the most accurate results. A particular attention was brought to the Monte Carlo method of sensitivity analysis and how a tornado analysis can help the cost engineer to identify the strongest relation between single input parameters and the projected results of the estimate, e.g. payback period, fixed capital investment or production cost.

Jón Pór Gunnarsson of Mannvit, Iceland introduced an approach of combining cost estimates with a standardized documentation of the basis of the estimate, as developed within the framework of Mannvit’s project management system, MaPro. Jón Pór concluded that the basis of estimate is a low cost and powerful tool to increase the quality of the estimate and bring all important stakeholders up on the same page when it comes to reviewing, interpreting and using the project cost estimate.

The host of the conference, The Project Management Association of Iceland was founded in 1984 with the aim of promoting project management in Iceland. The association provides a vivid platform for the development and discussions on project management methodology for individuals and organisations interested in the topic. It also represents the International Project management Association as a national IPMA certification body. Almost 700 professionals have to date been certified as project managers by the Project Management Association of Iceland.
**UK**

Project Controls Festival
29 November 2011 - London

The IET and the Association of Cost Engineers Project Controls Technical and Professional Network take pleasure in inviting you and your guests to a

PROJECT CONTROLS FESTIVAL

On Tuesday 29th November 2011, from 5.30pm
At the IET Riverside Dining Hall, 2 Savoy Place, London WC2R 0BL

THERE IS NO CHARGE FOR THIS EVENT

Project Controls affects all of us within the Engineering, Design, Manufacturing, Building and Construction sectors.

Your Project Controls Technical and Professional Network have arranged a festival of Project Controls for your information, understanding, participation and enjoyment.

You can choose which events that interest you. These will include:

- Networking with colleagues from other organisations and industries
- Presentation on Project Controls Accreditation
- A Masterclass in Stakeholder Management
- Information Zones, including: Women in Project Controls, and the Online Project Controls Community
- Lessons Learned and Risk Management webcasts
- Opportunity to discuss future events with the Project Controls Technical and Professional Network, Executive Team
- Join us for a drinks and snacks reception

To attend please contact Anne Fairless at Anne@acoste.org.uk giving your Name, Organisation and Email address

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**Australia**

The AIQS has launched an Emerging Leaders program. The Institute recognises that our future lies in attracting and capturing the young people entering the profession and giving them the tools and opportunities to expand their skills and capabilities.

The emerging leaders program was conducted very successfully in NSW last year with 30 people attending. Feedback from them has been very positive and I encourage firms and individuals to take full advantage of this opportunity.

Participation in the AIQS Emerging Leaders Program is the first step towards attaining Chartered Status, provided it is accepted by IP Australia.

The following is an example of the topics that will be covered.

Marketing Your Firm and Your Profession

Quantity surveyors need to understand how to be involved in internal marketing discussions and understand the key principles of marketing and communications.

Developing New Business Opportunities for Your Firm

Identifying new or leveraged business opportunities will be a must have skill in a fast changing world. Firms that stand still can be outflanked by competitors or new players. This unit will include practical experience in economic and construction business forecasting.

New Technologies and Materials

This subject will assist quantity surveyors to work with other construction and design professionals; smart applications and new materials are cost issues that every QS needs to know.

Life Cycle Costing/Assessment

This is a critical skill that helps you provide comprehensive advice to investors, ensuring that quantity surveyors can be part of the leadership group in any project.

Disaster Recovery

There will continue to be disasters in our country and our region. QSs can be part of the leadership teams that have methodology to prepare for and cost the

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**Hong Kong**

Hong Kong Institute of Surveyors
Annual Conference 2011

The HKIS Annual Conference was successfully held on 17 September 2011. The theme was “Central Business Districts in Hong Kong: Today and Tomorrow”. The Secretary of Development officiated the conference and gave a stimulating opening speech. There were more than 200 participants and they all enjoyed the inspiring ideas, creative proposals and wide ranging experiences shared by various well known speakers from both the private and public sectors.

Opportunities for Surveyors in Development of Qianhai, Shenzhen, China

With the proximity with Shenzhen, China, there are great opportunities for surveyors in the development of the Qianhai District, the big piece of land at Shenzhen next to Hong Kong. HKIS’s delegate met the representatives from the Bureau of Housing and Construction of Shenzhen Municipality on 16 August 2011 to discuss and explore this unique opportunity.

Raising Quantity Surveyors’ Profile and Status, Singapore and Hong Kong

With the proximity with Shenzhen, China, there are great opportunities for surveyors in the development of the Qianhai District, the big piece of land at Shenzhen next to Hong Kong. HKIS’s delegate met the representatives from the Bureau of Housing and Construction of Shenzhen Municipality on 16 August 2011 to discuss and explore this unique opportunity.

The President and QS Council members of HKIS met the representatives from the Building and Construction authority (BCA) of Singapore in Hong Kong on 29 August 2011. The purpose of the meeting was to find out a more effective way to raise the profile of QS profession and how to attract enough quality graduates into the profession. It was agreed that career prospect, social status, job satisfaction and wages were key elements in attracting the high flyers into the surveying degree programs of universities in Hong Kong and Singapore.
ICEC’s International Network

Founded in 1976, the International Cost Engineering Council (ICEC) is a not for profit organisation that promotes cooperation between national and multinational cost engineering, quantity surveying and project management organisations around the globe.

ICEC member organisations or “societies” are located in more than 40 countries, and have chapters or sections in other countries. Collectively, ICEC members total 120,000 in more than 120 different nations.

Delegates from each member society attend regular meetings where subjects of common interests are discussed and explored. Each member society has one vote on the Council.

International Framework

ICEC is a global group of cost engineering, quantity surveying and project management societies which acts to promote worldwide exchange of project cost management information and experiences. The organisation is divided into geographical regions, namely:

Region 1 North and South America;
Region 2 Europe and the Near East;
Region 3 Africa; and
Region 4 Asia Pacific.

A Region Director is appointed to oversee ICEC’s activities within each region. Through our regional structure, and as an organisation as a whole, ICEC endeavours to:

- Encourage the conduct of regional and worldwide congresses, meetings, forums, and seminars;
- Promote co-operative research and technical activities among the member societies;
- Promote development of standards for accreditation and recognition of cost engineering (CE), quantity surveying (QS) and project management certification programs offered by the member societies;
- Encourage national and international networking among the members of all ICEC societies; and
- Develop international standards for terminology in CE, QS and project management.

ICEC’s Accredited Certification & CPD Program

ICEC Member Associations may seek ICEC accreditation of Cost Engineering, Quantity Surveying, and Project Management certification and continuing professional development programs (CPD), provided that these programs meet ICEC’s standards for recognition.

People qualified under any of these accredited programs are entitled to use the International Cost Engineering Council name and logo and the post-nominals ICECA to designate their achievement.

In order to obtain ICEC accreditation for Project Management programs, the applicant organization must demonstrate that their programs fully meet the standards adopted by the International Project Management Association (IPMA).

For further details please refer to the ICEC website at:

http://www.icoste.org/accred.htm

ICEC Member associations desiring accreditation of certification and continuing professional development programs may apply on-line. Member association should address any questions to Peter Smith, ICEC Secretary-General.