Project Management & Project Controls

Challenges for the future

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Note: this paper has been first presented to the IPMA & ICEC International Research Forum, Portoroz 2011 and has been included in the proceedings of the ZPM congress. After that, the paper has been updated, actually with minor modification, according to the result of further research whose main steps have been a joint AICE-IPMA Academy forum in Italy and a dedicated group on LinkedIn.

PROJECT CULTURE AND TOTAL COST MANAGEMENT

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

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In recent years, his consulting activity has been mainly relevant to Cost Management, Project Management and Controls, Contract and Claim Management; furthermore he is lecturing in the said disciplines at Bocconi University in Milano as well as at LUISS University in Roma. He is author of more than fifty papers as well as of two books: “Project Management per l’Edilizia (2009)”, “Lineamenti di Ingegneria Economica (1999)”. In 2005 has been elected President of the AICE (Italian Association for Total Cost Management), after having been for more than ten years member of the Directive Board of the AICE as well as ICEC Delegate. He has been re-elected in 2008 and his term is due to expire by the end of 2011.

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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: while 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 (Ingenieria Económica, Financiera y de Costos)* has been used since the beginning. This overall concept has been accepted in 1998 also by the ICEC, as **Total Cost Management**, whose meaning is corresponding to the meaning of *Ingegneria Economica*, as far as the different languages will allow the correspondence.

The 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 Comptroller, Planning Engineer, Cost Engineer, Contract Engineer, Contract Manager, Programme Manager, Project Monitoring Consultant, Project Auditor.

**It is worthy to point 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, that is wider.**

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

```
                Total Cost Management
                  /                        /
    Engineering  Cost Engineering  Planning  Lifecycle asset  Profitability  Investment
    Project Metrics Contracting Construction Scheduling Controlling management and business decision making
                                 /                     /
                Project Controls  Project Management  Strategic  Asset life cycle
                                    /                          /
                                      Project and Programme Management
```

(subject to further improvement and integration)
Some semantics

It is worthy to make some considerations about the different translation of some words related to our profession in several languages:

<table>
<thead>
<tr>
<th>English</th>
<th>Italian</th>
<th>Spanish (castilian)</th>
<th>French</th>
<th>German</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost Management</td>
<td>Ingegneria Economica</td>
<td>Ingeniería, Económica, Financiera y de Costos</td>
<td>Gestion des coûts</td>
<td>Kostenmanagement</td>
</tr>
<tr>
<td>Cost Engineering</td>
<td>Ingegneria dei Costi</td>
<td>Ingeniería de Costos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management</td>
<td>Gestione di progetto</td>
<td>Ingeniería de proyecto</td>
<td>Management (gestión) de proyecto</td>
<td>Projektleitung</td>
</tr>
<tr>
<td>Project Controls</td>
<td>Controllo di progetto</td>
<td>Control de proyecto</td>
<td>Maîtrise de projet</td>
<td>Projektsteuerung</td>
</tr>
<tr>
<td>Project monitoring</td>
<td>Monizione del progetto</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 normally translated in Italian as *Ingegneria dei Costi*, however this a term difficult to explain to Italians, 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 television and other media.
4. Project controls in English has a wide meaning than *controllo* in Italian and *contrôle* in French, where it would be probably more suitable the word *maîtrise*.
5. The correct word *monizione* for “monitoring” is not common in Italian, while is used the word *monitoraggio* that is actually a loan of a Latin word through the English language.

Furthermore, there is some confusion between the term used for “professions” and the terminology relevant to the “disciplines”, as well as for the components of our body of knowledge and for the competences 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 year 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 & 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 controls 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 a good project manager or a competent controlling staff. It is a must that the whole organization is at the proper level of maturity, also the environmental characteristic and the legal framework have their importance. It is worthy to note 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**

In a so called “hard projects” the whole organization is oriented to the task, we have a considerable amount of people working at different levels, the workload can be calculated based on standard production data. In “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 involved people.

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, he 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 composed by the following sections (useless to say, each section can be formed of one or more people according to the size of the project itself):
  - Project Engineering,
  - Planning & Project Control,
  - Project metrics (identified with several different terms, such as quantity surveying or, in Italian, contabilità lavori that means bookkeeping of the works)
  - Contract Management,
  - Cost Engineering.
All Project Controls are, in continental Europe, not considered as an independent function, while they are part of the Project Management. However, in some companies the 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 Coordination being considered as 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 be enough.

**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 & Controls**

The 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 take under control the fuel consumption (local level)
- The Owner's Control Centre takes under control 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 & construction projects; the previous example was a tipically 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 deterministic. However, some long term projects still have a 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:\footnote{http://en.wikipedia.org/wiki/Henri_Fayol}:

- **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) is focusing 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 differences in powers and rights to interfere. Between them we must consider the owner, first of all, that sometimes is not a single organization, so we have to distinguish between owner properly so said, 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 & Construction projects are changing («soft» projects are evolving as well). The main changes are:

- Involvement of more complex organization, extension to other stakeholders.
- 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 & 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 THE ICEC

In 2014 the AICE will organize in Milano the ICEC world congress; this will be the right time to answer some questions:

- Which the future of the ICEC from 2014 onwards?
- Why ICEC is different (from IPMA and PMI)?
- Why Region II is different (from other ICEC regions)?

All the information quoted in the following pages have been extracted from the ICEC websites of the 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). The results are shown in the table below:

<table>
<thead>
<tr>
<th>Region</th>
<th>No. of associations</th>
<th>CE</th>
<th>PM</th>
<th>QS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - Americas</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II – Europe and Near East</td>
<td>20</td>
<td>5</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>III - Africa</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>IV – Asia Pacific</td>
<td>14</td>
<td>3</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Region</th>
<th>Associations</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>
<tr>
<td>Total</td>
<td>48</td>
<td>35</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

However, if we refer to “continental Europe” only, we find that out of 17 associations, 12 of them namely 70.6% belong to ICEC and IPMA, it seems 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:
- Practitioner (PIE / ICEC A)
- Expert (EIE / ICEC A)

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.

Probably, 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 organization 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
  o at global level (social, political, economy),
  o at market level,
  o at 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
  o efficiency,
  o effectiveness,
  o no redundances
• Integration
  o At project and process level, inside and outside the company
  o In planning, scheduling, controlling
  o Information and reporting, integrated data base and integrated data management
  o Engineering, management, planning, scheduling and controlling standards
  o Standard workload - Cost standards
In Engineering & 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, me 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 through 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)

![Diagram showing short, medium, long, and permanent time horizons with labels for financial cycle, electoral cycle, investment cycle, and human life.](image)

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

The AICE (Italian Association for Total Cost Management) has been preliminarily 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.

The AICE

The 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, the AICE has about 200 individual members; out of them, 92 members hold the “expert level” certificate and 53 the “practitioner level” certificate.

Starting from year 2007, AICE has begun a process of diversification; besides the historical relationship with Bocconi University and Bocconi Business School (SDA Bocconi), AICE has 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

3 From Paris minutes:

9.0 ICEC World Congress 2014
AICE presented their feasibility study about the World Congress in Milan 2014. The location will be the Bocconi SDA [Management School of Bocconi University], a milestone planning was presented leading to a timely finish of the organization. The years from 2010 to 2014 will be used for 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, which will be the leading subject of the congress.

Agreement/Action No 6/2009
Region 2 will support the proposal of AICE in Singapore to be awarded the organization of the world congress in 2014.
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, besides being member of the ICEC, the AICE has become member of two federations, namely:

- The 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 the 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.

- The FAST$^4$ (Federation of Scientific and Technical Associations) where the AICE has its new postal address. Founded in Milan in 1897, FAST, the Italian Federation of the Scientific and Technical Associations, 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.. 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:

- Existing partnership or cooperation agreement with universities or business school that could take part to the project
- High profile lecturers that could be invited for a lecture in Milano or other Italian towns.
- Existing case histories to be used in the courses

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$^4$ [http://www.fast.mi.it](http://www.fast.mi.it)
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 the ICEC and a group of interest is already working on it.

**The congress**

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.

Besides the usual aim of all ICEC professional congresses, we aim at increasing the visibility of the 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.

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.,
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