Monograph of next issue (October 2008)

"Innovation Driven by ICT Users"

(The full schedule of **UP**GRADE is available at our website)

UPGRADE

The European Journal for the Informatics Professional
http://www.upgrade-cepis.org

Vol. IX, issue No. 4, August 2008

Advanced Experiences in Italy:
EUCIP as a Shared Model in the ICT Community

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The following article describes some of the most interesting cases of the application of EUCIP-based services. All the case studies refer to the "EUCIP Services for Organizations" described in another article in this monograph.

Keywords: Case Studies, Competence Assessment, EUCIP, EUCIP Based Services, EUCIP Core, EUCIP Professional, International Certification, IT Certification, IT Standard, Ministry of Economy, Personalized Training Plans.

Case 1: Central public administration – Ministry of Economy

The Central State Account (CSA) is part of the Italian Ministry of Economy. In recent years, in order to meet the increasing demand for reliable and timely solutions for the monitoring of public finance, CSA became increasingly aware of the importance of having a leading edge ICT System. The responsibility for updating the ICT System was given to a specialized ICT Function (ICTF).

The ICTF Manager decided that ICT personnel needed to have an appropriate update in many areas of ICT and, in particular, in security and risk analysis, business analysis, systems and network architecture, and in evaluation techniques for ICT project investment management.

Those competencies (some of which were quite new) are now fundamental to guarantee the development of an Information System compatible with the need to manage expenditure while remaining coherent with the requirements of Public Administration.

There has been a demand to promote training paths which, while defined for various professional activities, could be aimed at a large number of human resources with the aim of strengthening ICT competencies within the ICT Function using an organic model.

The main reasons the EUCIP standard was chosen were:

■ Firstly, the training paths are structured on two levels, of which the first (Core) level aims to strengthen core competencies and the second is specifically developed for the professional level. The Core level was considered appropriate to disseminate a shared ICT and similar culture for the fundamental elements of planning, building and operating Information Systems. The EUCIP Professional level was chosen because it was considered to be appropriate for creating and developing specialist profiles on the basis of organizational needs.

■ The second reason for choosing the EUCIP model is

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its vendor independence. The training paths are not tied to specific technologies and do not impose the use of particular training providers.

The first project, "the development and certification of Core competencies", was in response to ICTF's need to consolidate and standardize the ICT competencies of 21 internal professionals. After a test performed in order to check the starting competencies of the personnel, a training course (based on the three Core modules, Plan, Build and Operate) lasting a total of 24 hours for each module and combined with a final week of training at the end, led to the EUCIP Core Certification examination. 13 of the 21 candidates passed the exam within the 70% threshold and 8 passed the exam within the 60% threshold. All of them achieved EUCIP Core Certification.

Between the first and the second project the candidates were tested with an assessment of their EUCIP Professional "Elective" competencies. The results of the assessment were very useful as they gave candidates the opportunity of having a clear frame of reference on which to develop a training path to obtain EUCIP Professional certification for the profiles defined by management: Business Analyst, IS Analyst, and IS Project Manager.

Having obtained the EUCIP Core certification and, on the basis of the assessment results and of their curriculum vitae, all of the 15 professionals which started the training paths can expect to achieve the EUCIP Professional Level (Full or Associate) Certification specified by the general management. The differentiation between Associate and Full Level Certification is not determined by competencies (which could be identical) but by years of experience.

In addition, a third project is also underway, in which the consultant provides guidance to help ICTF's staff deliver EUCIP Core training paths to colleagues.

EUCIP Services used for the CSA Case:
- EUCIP Core test.
- Validated assessment of current competencies.
- Design of needs-based training paths.
- Design of personalized certification paths.
- Training delivery and monitoring of results.
- Guidance for ICTF's staff to teach their colleagues.

Case 2: Insurance Company
The Information Systems Management decided to plan the training paths of its ICT Specialists in the competencies required by the EUCIP standard, following the following criteria:
- Participation in the project will be funded in full by the company but the decision regarding whether or not to participate will be totally voluntary for employees. The company will give some "training vouchers" and the staff will be asked only to reach the end of the training paths, which are defined on the basis of the assessment of the gap between the competencies defined by the standard and the competencies of the employees themselves, and to achieve certification.
- For those employees lacking the necessary compe-

tencies for the EUCIP standard, training courses will be provided to enable them to acquire the competencies defined by the framework.

The company's goals are:
- To give its staff an opportunity for personal development, which will allow them to obtain an international certification which is recognized in the ICT industry.
- To improve staff motivation and internal relations by the introduction of a competence scheme. The competencies obtained with EUCIP Core in this case are also considered useful for developing a "culture of excellence" in the company.
- The company may also ask their suppliers to adopt a similar scheme of human resources qualification in projects carried out together. In this way they will be sure to have well qualified external resources.

This particular project was a great success: 41 people (as opposed to the 15 that the company expected before starting the project) out of 45 decided to take the assessment.

The project has various phases: the first is to give the ICT specialists of the company the opportunity to use the ECCO EUCIP tool in order to check their competencies by self-assessment. The evaluation is carried out in multiple sessions in order to permit small groups to work together. Afterwards, every participant is given one week to re-think their evaluations and to change them on the tool.

On the basis of the first indications emerging from the assessment, each specialist participates in an hour long individual counselling session with the EUCIP consultant in order to analyse their evaluation and in some cases modify or confirm it. The EUCIP Consultant only confirms the evaluation after having verified that the candidate has a real understanding of the items. At the end of the session the Consultant shares the result of the assessment with the participant and it is decided which EUCIP Profile the participant is to acquire as a personal development target. This forms the basis for the input in the following stages of the personalized training paths and for recommendations given as to the degree of commitment.

In the third phase of the project, on the basis of all the information collected from the validated assessment and from the individual conversation, and also considering the operational context in which the specialists work (type of company, of business, of IT systems, of projects in which they are involved...), the EUCIP Consultant works to develop 2 different products for each specialist:
- To find the best personalized training path for covering the gaps, by considering the availability of EUCIP training offerings (the training path must be achievable).
- To formalize what emerged from the work by setting it out in a personal letter which will be given to the specialist in a sealed envelope.

Every personalized letter has the following content:
- Competency gaps with EUCIP Professional target profile and the list of the competencies to be acquired.
- Suggested EUCIP training modules/courses.

- Suggested practical work experiences.
- Suggested books for possible certification.
- Indications of the path to certification.

For 75% of the specialists analysed, a complete training path has been defined, capable of covering all the competency gaps towards the EUCIP standard. The project activities by which each specialist could complete competencies they have already gained have also been defined. The EUCIP standard does in fact give credits for certification and work experiences compliant with the target EUCIP Professional Profile.

The project was closed with a Synthesis Report with the following indications:

- The list of the training modules/accredited EUCIP compliant courses, with their scores.
- The total number of training/development days per specialist and in total.
- The number of specialists per training module and in total.
- Possible other courses and examinations which will give each specialist the certification score necessary to be admitted to the certification examination. For this target the gaps on the Core level (Plan, Build, and Operate) have also been considered.

In conclusion, the project was closed with the following considerations:

- Highly active participation of all the specialists who wished to be involved.
- Personal/company level consulting through a complete screening of competencies and profiles.
- Development of the relationship between the company and the employees (Corporate Social Responsibility).
- Structured Report with final recommendation for the company.

EUCIP Services used for the Insurance Company:

- Validated assessment of owned competencies.
- Design of personalized training paths for each employee.
- Personal and reserved recommendation for each employee.
- General Training Plan for the company, anonymous.

Case 3: Work Intermediation Agency

Among the thousands of workers which it places every year, the Work Intermediation Agency also places a large amount of ICT workers. The selectors' problem is that they do not know much about ICT and even less about ICT professions. To support the work of the selectors, AICA suggested two kinds of actions:

- Some time spent on updating selectors on the differences of the ICT sector, based on the EUCIP standard.
- The use of the ICT assessment tool, populated with the EUCIP standard syllabus, which allows for the identification of the 21 EUCIP Professional Elective profiles, IT Administrator and EUCIP Core level competencies.

The Agency accepted the proposal for each of the three activities of selection and placement of specialized ICT personnel listed below:

- In its activities as a temporary work **administration** agency, working with thousands of low profile candidates, using an "industrial process" which allows them to obtain the greatest efficiency both for the agency and for the workers themselves.
- In its activities as a traditional selection agency, always based on a commitment from a client company, in order to search for and select a specialist for a **steady** position.
- In its activities of re-qualification of personnel to be **out placed**, again based on a commitment from a client company for the qualification and orientation of workers to be reinserted in the market with new competencies.

EUCIP Services to be used for the Work Intermediation Agency Case

- Self-assessment of current competencies by the candidate.
- Validation assessment for the candidates selected after the first screening.
- Training Plan and Delivery for the personnel responsible for selection.

Case 4: Airport Services Company

The Information Systems Department (ISD) of the society recently reached an agreement with the Trade Unions to develop and organize career steps for ICT sector employees.

That agreement now has to be reviewed and the ISD thinks that the time is right to consider the standard of EUCIP competencies.

The proposed project deals only with technical ICT competencies; the other behavioural competencies will be assumed by the company's Human Resources Department.

The main company goals for the intervention based on the EUCIP standard are:

- To improve the employee motivation and internal relations by adopting a scheme based on competencies and responsibilities.
- To start a new kind of management in which **competencies are a company asset**, consisting of people's "ability to do".
- To have an organizational tool which could also be used in the future to meet the demand for change which characterizes the ICT sector.

EUCIP Services to be used for the Airport Services Company Case:

- Guidelines for the definition of contractual terms based on competencies.
- Validated assessment of current competencies and target competencies for each employee.
- Recommendations for the contractual terms of the employees based on competencies and target profiles.

Case 5: Software House

The Technical Director of the company usually hires dozens of graduates each year in order to meet the demand for software developers in the Java environment. Firstly they receive an internal training course and, at the end of the course, the Technical Director thinks it would be useful to compare the newly acquired competencies with those present in the EUCIP standard, starting from EUCIP Core, in order to plan other possible training interventions or change the training of the newly engaged graduates.

With the requested project, the company aims to raise the quality of its employees in order to improve the products/services it provides and also to improve the motivational factor of its human resources. The company wishes to have the opportunity to benchmark their competencies against an international framework and to select people to be eligible for EUCIP Professional Elective certifications.

EUCIP Services to be used for the Software House Case:

■ Validated assessment of current competencies and of the target profile for each employee.

■ Design of the company's training paths for all the human resources involved.

■ Design of certification paths for critical human resources.

■ Training allocation and monitoring.

■ Guidance for the certification of critical human resources.

Case 6: Service Company of a Large Insurance Group

The Service Company of the Insurance Group (SCIG) found out about AICA through the AICA web site and, after exploring the main features of the EUCIP standard themselves, decided to get in contact with AICA in order to solve the problem of "how to introduce a systematic qualification of its ICT Services suppliers". The aim of the project is to optimize the effectiveness of the ICT-based services deployed for the Insurance Group. The employees involved are 150 project managers and thousands of ICT specialists, some of them employed within the group and some employed by external suppliers. The project for SCIG is articulated in 3 sub-projects, all based on services referring to the EUCIP standard. These sub-projects are:

■ A general informative Workshop.

■ Guidelines to map the suppliers' profiles against the EUCIP standard.

■ Assessment of the suppliers' personnel and management of project turnover.

The scope of the described project aims to give project managers the opportunity to reach the EUCIP competence level required to manage effectively the professional resources of suppliers in the acquisition phase and during project management, if project turnover is involved.

1) General Informative Workshop. The main goals of this sub-project are:

■ To disseminate the EUCIP standard among the 150 project managers who manage the relationship with the professional resources provided by suppliers and with consulting services.

■ To illustrate how the EUCIP Standard recognizes some professional profiles used by SCIG's suppliers.

The most difficult part of this first sub-project is the analysis of ten professional profiles used by the suppliers in order to create a matrix showing the cross-reference to the EUCIP standard: this matrix needs to be approved by SCIG before it is presented to the Project Managers.

2) Guidelines to map and manage the consulting services. The main goals of this sub-project are:

■ To develop an internal manual for the purchasing office and SCIG's Project Managers with regard to suppliers, able to support the management of all the professional profiles offered by their suppliers. This matrix will complete the one used in the informative workshops of project number 1 above.

■ To describe in detail how to manage the profiles mapped in the matrix in relation to each individual external supplier.

The most difficult part of this sub-project is the development of profile management guidelines in projects involving external resources: in particular it will be necessary to understand how to use the service "Competence Assessment and gap analysis towards the EUCIP Standard" by using the ECCO-EUCIP tool.

3) Supplier's specialist assessment of the personnel and introduction of possible EUCIP Certifications. The goals of the sub-project are:

■ To give SCIG's Purchasing Office the opportunity to start agreements with each supplier on the basis of the guidelines developed in project number 2.

■ To give SCIG's Project Managers the tools to manage the resources to insert in the various projects in a structured way, helping them to monitor project turnover and the variation of the resource's value.

The most difficult part of this sub-project is the introduction and management of the assessment service of the specialist resources provided by the suppliers, while taking into consideration the cost of professional resources and the changes which inevitably arise during long projects.

EUCIP Services to be used for the SCIG Case:

■ Training Project Management on the main features of EUCIP. Guidelines on the mapping and management of the professional profiles provided by the suppliers.

■ Validated assessment of the competencies held by the suppliers compared to the target profiles required by the purchasing company's projects.

Case 7: ICT Central Competencies Body of Public Administration Case (CCBPA)

CCBPA[1] is the Public Administration Organization

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[1] Although this case is based on reality, to safeguard confidentiality the organization's name we have used is fictional.

which provides guidelines and controls the specific projects of the Central Organizations of the Italian Government; it gives binding advice on all ICT agreements of the Central Public administration.

EUCIP was presented to CCBPA by the ICT Industry Association, which was interested in having a European reference for the qualification and acquisition of ICT supplies for Public Administration projects. CCBPA asked AICA to define specific guidelines on the quality of ICT goods and services for the definition and governance of supply contracts in Public Administration, as well as update the 8 handbooks on ICT supplies lifecycle and the 37 supply clusters developed in collaboration with the main ICT companies and sector associations.

The projects required by CCBPA in reference to the EUCIP Standard are:

■ To integrate EUCIP profiles into the guidelines (37 supply clusters).

■ To define the specific professional profiles of the Public Administration based on the EUCIP framework.

■ To translate EUCIP documents into Italian.

■ To communicate and promote CCBPA project results.

In particular, in the operational handbook of each of the 37 supply clusters, AICA and EUCIP will contribute to the "description of the professional profiles involved" and will also develop the responsibility matrix activities/profiles.

With this project CCBPA and AICA think that the EUCIP framework will achieve widespread dissemination throughout the Public Administration as a reference for the development of internal resources and, also throughout Public Administration ICT suppliers, as a reference for the technical profiles and technical competencies offered.

EUCIP services to be used in the CCBPA case

■ Guidelines on the mapping and the management of the professional profiles of PA suppliers.

■ Design of an assessment process of current competencies by the resources of the ICT suppliers of the Public Administration towards the target profiles required by the various Organizations of the Central Public Administration.

Case 8: Borsa Lavoro Case

At the beginning of 2007 the Italian Ministry of Labour developed a new system for the online management of employment, called Borsa Lavoro[2].

Borsa Lavoro is a national system of online services which works on 2 levels: by direct access through the Web or through provincial employment agencies. It aims to put those in search of work in contact with those offering work: it is a system created for any type of job category and employment sector so it has to manage a large complexity when defining and matching the professional profiles of those searching for and offering work.

For this reason, after the implementation of an initial phase in which various ways of describing professions had been proposed, either by attempting to realign them on the basis of contractual declarations or, more successfully, by using less significant classifications (like ATECO codes or ISTAT codes), the Ministry decided to continue with a second phase which went into the descriptions of professions in greater depth. The ICT sector was chosen as a pilot professional sector in order to adopt descriptive models of competencies that would be more suitable for a successful match between work searches and offers of work.

After a detailed analysis of the definition models of ICT professions, the Ministry chose the EUCIP framework, promoted in Italy by AICA.

Borsa Lavoro provides a general framework for the ICT sector with specific information, tools and services able to give the 1.3 million Italian ICT professionals the opportunity to familiarize themselves with and to update themselves in the ICT sector scenario.

The Italian Ministry of Labour has signed an agreement with AICA who will contribute with Borsa Lavoro to draft content for the ICT Sector of the Borsa Lavoro and keep it up to date.

EUCIP services used in the Borsa Lavoro Case

■ Information on the world of ICT competencies and professions, with reference to the EUCIP Standard.

■ Simplified self-assessment offered to all visitors to the Borsa Lavoro website.

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[2] Borsa Nazionale del Lavoro <http://www.borsalavoro.it>.