SKILLED STAFF – THE SECRET TO MODERNISING STATISTICS

UNECE WORKSHOP ON HUMAN RESOURCE MANAGEMENT AND TRAINING

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**Marie Creedon and Eilish O'Sullivan
CSO Ireland**

Abstract

The environment in which the Central Statistics Office (CSO) Ireland operates has changed dramatically over the past few years due to reduced resources and increasing, more complex demands. The CSO has been proactive in meeting this challenge by introducing a large change programme (CSO2020) designed to ensure the Central Statistics Office can meet these demanding challenges.

The focus of Human Resource Management (HRM) involved with this change process is on how we can ensure that our staff are skilled, competent and working to their full potential. We are doing this by implementing a continuous staff development programme and involving all our staff in influencing change in the Central Statistics Office.

We have introduced a Skills Register and Continuous Professional Development (CPD) for all staff in the Central Statistics Office Ireland.

This will give us a baseline evaluation of skills across the organisation and provide for more focused training interventions going forward in order to ensure that our staff are skilled and competent to meet and influence change in the Central Statistics Office and in the wider statistical community.

Introduction

The CSO has around 650 permanent staff located in its Cork, Rathmines and Swords offices. About 100 field-staff are deployed throughout the country to conduct the continuous household surveys and passenger inquiries at airports and seaports. The CSO faces similar resource pressure to all other National Statistical Institutes (NSI).

As part of large scale changes in the Human Resources Management (HRM) functions in the Irish Civil Service, the Central Statistics Office (CSO) in Ireland has moved much of its administrative HR functions to a centralised administrative centre. This process has allowed the CSO to re-evaluate its existing HRM function in light of the challenging environment in which it now operates and to assist in meeting the increased demands and expectations of our customers both nationally and internationally.

HRM in the CSO is now in a transition phase, as it moves from an administrative function, with the focus shifting to aligning workforce more closely to business objectives. The increased use of HR metrics will help inform decisions, monitor capability and ultimately improve delivery of our service. This is vital as HRM must have comprehensive information available to measure performance and capability against business objective on a real time basis.

As the first stage of this process, the CSO has designed and implemented a bespoke skills register for the organisation and following on from that, the introduction of CPD. These elements have provided the CSO with valuable information on existing skills and have helped to identify skills gaps within the organisation. Moreover, the next stage of the process, integrating the skills register with the CPD databases will provide important information and trends in skills development in the CSO. This will help inform talent management in the organisation in areas such as recruitment, performance management, succession planning, workforce planning and learning management.

1. CSO2020

The CSO has developed a collective vision for how we will provide a continuous improvement in service.

Figure 1: CSO2020

The environment in which the CSO operates has changed dramatically over the last number of years. The primary challenges facing the CSO include:

- An increased demand for statistics from EU and national users;

- An increase in the range, depth and complexity of the data requests;

- An increased level of level of scrutiny on our statistics and underlying processes over the past two years as a result of the economic downturn and the events in a number of EU member states;

- An increased availability of data and the expectation this creates of National Statistical Institutes in using this data for official statistics - the phenomenon of "Big Data" and the so-called "Data Deluge"; and

- Diminishing resources.

We have faced many of these challenges previously; however we have never endured a period when we have encountered all of them at the same time. This is the challenge we face today and represents a significant "driver for change".

The CSO2020 comprises 8 key projects:

1. Quality Management Framework (QMF)
2. Customers and outputs
3. Engagement with the International Statistical Community
4. Access to Microdata for Researchers
5. Engaging with broader statistical community
6. Continual Professional Development (CPD)
7. National Accounts IT
8. Household Survey Development

All these projects are centred around the same values and this highlights the commitment of the CSO to embracing change as displayed in figure 2. One of the main projects is CPD, which includes the development, introduction and the integration of CPD with the Skills Register. The main focus of CPD is to create a skilled and competent staff resource working to its full potential.
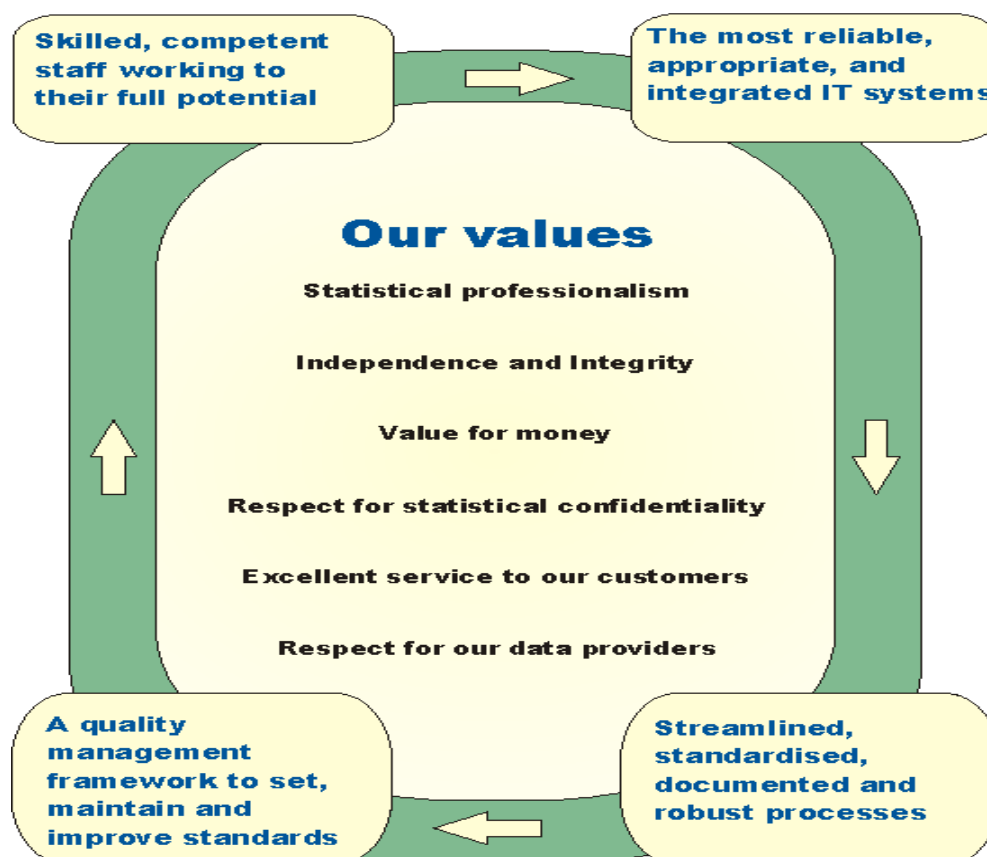

Figure 2: our values

2. **Skills Register**

Background

It was important that any skills register designed for the CSO measured the skills required for a modern Statistical Institute. This register would aim to measure statistical skills based around the Generic Statistical Business Process Model (GSBPM), while at the same time it would also measure skills required by statistical staff, administrative staff and management and leadership skills associated with leading and managing change in a complex environment. The table below sets out the ratio of staff in each of these areas (figure3):
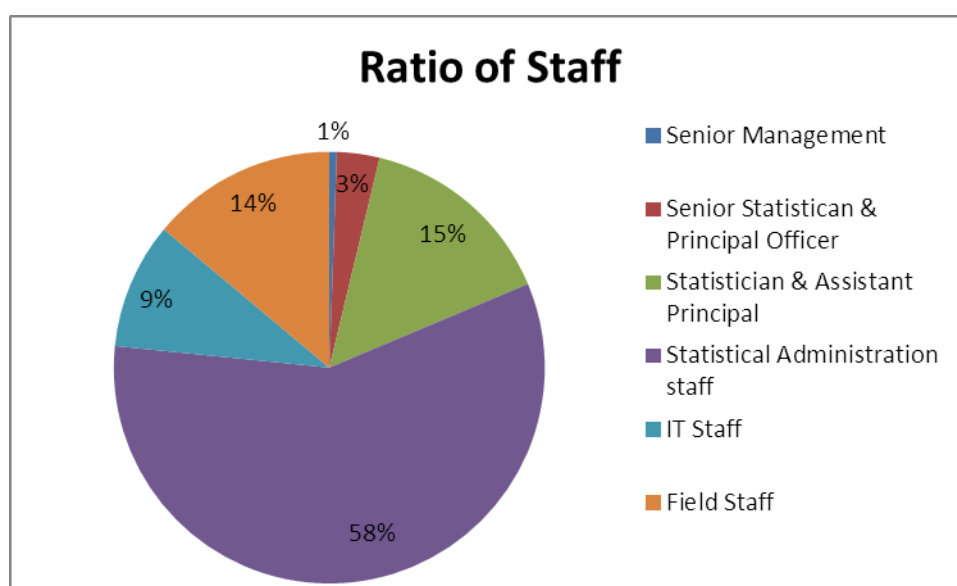

Figure 3: ratio of staff

Skill areas

The CSO identified five high level skill areas that encompass the generic skills requirements for the organisation. These headline areas are generic enough to allow the CSO to add/remove subsets but still keep the overall skillset analysis at an appropriate level.

The identification of the skills subsets was a complex process involving much research within the organisation and in the wider Statistical and Public Sector. Various skills were identified under each high level area and these were distilled into manageable groups through consultation and discussion with various interest groups and the Senior Management Group in the CSO. The table below (figure 4) outlines the five high level skill areas and the associated skills subsets:

Skills Register Headings & Sub-Headings

Statistical
Survey Design
Register Management
Sampling
Data Collection
Use of Administrative
Sources
Validation/Edits
Classification and Coding
Imputation
Aggregation
Seasonal Adjustment
Statistical Report Writing
Visualisation
Data Management
Quality Management

Managing & Leadership
Performance Management
Team Management
Workload Management
Training and development
Leadership Skills
Project Management
Risk Management/Disaster
Planning
Strategy Formulation
Change Management
Financial Mangement
Underperformance

Business Skills
Design of Business Processes
Business Process
Improvement Methodology
Work Metrics
Audit Skills
Budget Management
Accountancy
Procurement
Economics
Legal

Communication
Presentation Skills
Media Skills
Customer Service
Telephone Skills
Report Writing
Effective Meetings
Networking
Negotiation Skills

Technology
Web Data Collection
Electronic Data Capture
Blaise
DMS
SAS
Excel
Other Microsoft
Products
Lotus Notes
Web and Social Media
Dissemination
Geo-Spatial/Post Code
Data Usage
Printing/Typesetting
Web Design

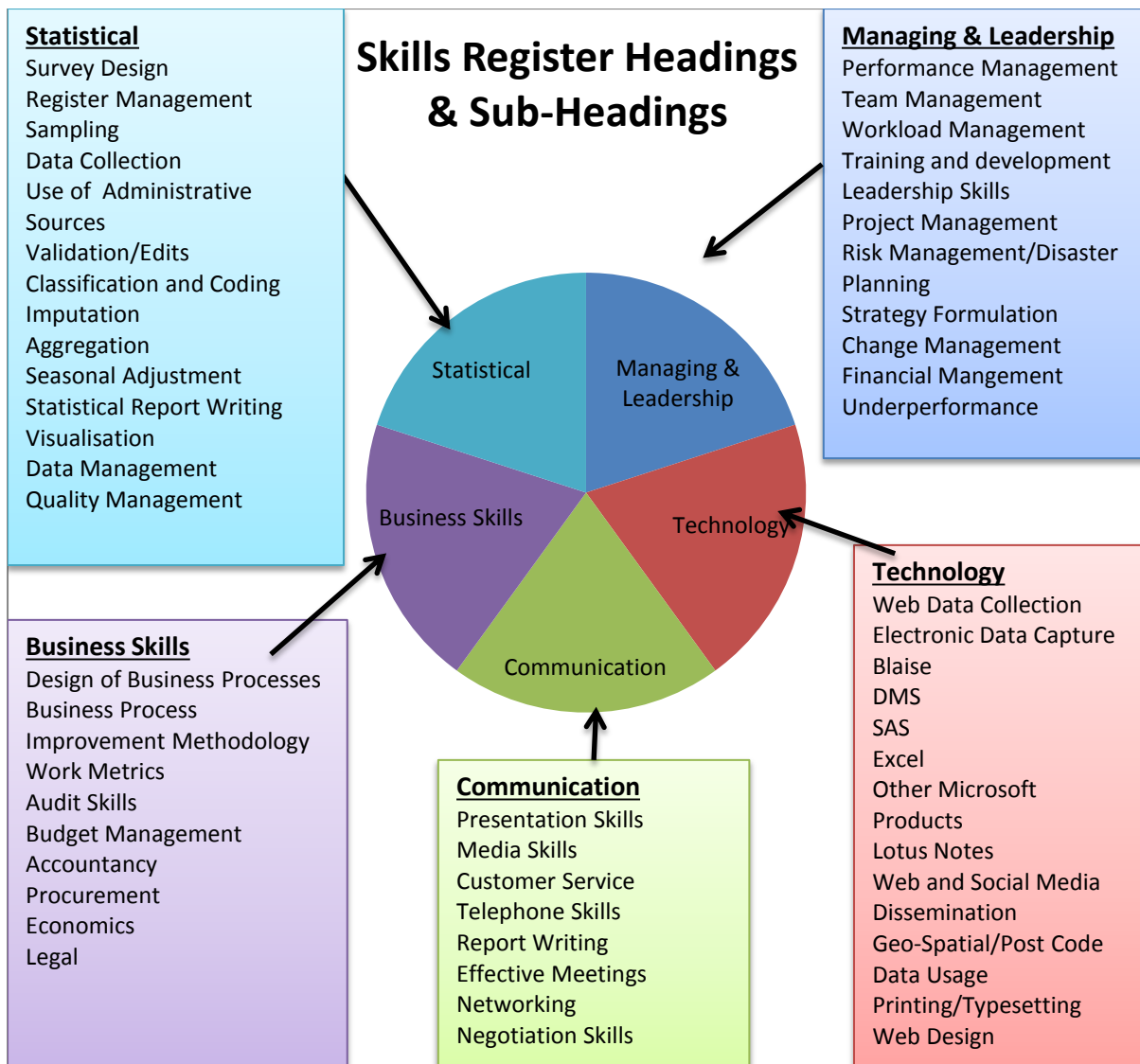*(Pie chart segments: Statistical, Managing & Leadership, Technology, Communication, Business Skills)*

Figure 4: skills register heading and sub-heading

Skills Gap Analysis

The CSO has been collecting data using this skills matrix since 2013. This data has been collected using a lotus notes application and the staff identifier is the individual email address. This is then linked to a database containing the organisational structure thus allowing the organisation analyse the data in a number of ways.

HRM analysed the 2013 data at Head of Division (HOD) level and produced an output for each of the Senior Managers at this level. Following the distribution of this data, HRM arranged to meet with each of these Managers in late 2013 and discussed the data under the following headings:

1. What skills deficiencies are identified for staff at all levels?
2. What skills areas will need further development in the short term (12 months) & medium term (1-3 years)?
3. Taking the strategic direction of the organisation into consideration, what existing skills need to be developed and what new skills are needed?

HRM also met with the Senior Management Committee and discussed the results of the overall survey in the organisation but concentrated the discussion with this group on the Leadership and Management skills and possible requirements in this area.

Following these discussions, HRM produced a report outlining the skills gaps in the CSO and are currently working on providing and examining training/educational options to meet these requirements. Some of the gaps that were identified and have been addressed in the office include:

- Visualisation
- Business Process Improvement
- R Training & SAS Training
- Institute of Public Administration – Professional Diploma in Official Statistics for Policy Evaluation
- Interview Techniques
- Electronic Release and End User Training

3. CPD

Background

CPD is part of the broader CSO 2020 strategy to up-skill staff and improve customer service. The Chartered Institute of Personnel Development (CIPD) defines CPD as a process by which individuals take control of their own learning and development by engaging in an ongoing process of reflection and action. Work on CPD for the CSO commenced in early 2013 and will work in conjunction with Skills register and workforce plan. The CPD is directed at all CSO staff to help develop and safeguard the professional competence underpinning all CSO activities. Consciously updating knowledge and skills under the umbrella of a CPD framework should lead to significant benefits, both for individuals and the organisation. CPD should contribute in a positive way to job satisfaction, motivation and further promotion of professional pride. Engaging in CPD can help refine skills and enrich career development along with empowering individuals to take responsibility for their own development.

Aim

The aim of CPD is to embrace the development of statistical, technical and general skills. CPD is regarded as an ongoing activity throughout the year for all members of staff. It is the responsibility of each individual to participate in the CPD process and keep their log up to date in order for both the organisation and the individual to receive the benefit.

The focus of CPD process is to:

- Continuously develop knowledge and skills of all CSO staff;
- Set standards for managing and monitoring skills development across the CSO;
- Set a minimum requirement for the number of 'learning' hours a staff member should devote to CPD each year;
- Provide a process for recording and endorsing personal & professional development throughout an individuals' career; and
- Ensure a common approach to CPD is adopted across the CSO.

Key principles

The policy is based on the following 6 principles:

Principle 1: Coverage

The policy applies to all staff members of the CSO.

Principle 2: SMC Support

CPD is endorsed by the Senior Management Committee (SMC) as a vital tool. This will ensure that staff will have the opportunity to acquire and retain the necessary skills required to effectively perform throughout their career. Head of Divisions (HOD) are responsible for the implementation of the policy in their specific areas.

Principle 3: Scope

CPD is regarded as underpinning an individual's overall development and accordingly effort should not be targeted at a particular competence in isolation. CPD is created and tailored to reflect differing stages of the individual's career development as well as detecting skills that are required for specific development. This is in line with best practice and the approach commonly applied by other Governments and professional organisations and institutes. Four different categories apply to CPD within the CSO.

 (1) Work Based Learning,
 (2) Professional Activity,
 (3) Formal/Education,
 (4) Self Directed Learning.

Participants also registered the type of skills they have learnt. These are the same as the skills register including: managing & leadership, technology, statistical, business skills and communications.

A key requirement of CPD activities is that effort should be geared at providing new insights, competences or learning. It should not simply repeat existing knowledge or skills learning but it can of course cover any effort to refresh or augment old or existing knowledge.

Principle 4: Hours

Staff are expected to complete a minimum of 30 hours CPD per year. This can be averaged out over a 3 year rolling period, a total of 90 hours over any three year period. Of the 30 hours, half (15 hours) should be amassed from work based learning activities. The work based element is a compulsory minimum requirement each year. The balance of the CPD hours can be met across any of the other categories over the 3 year cycle, as it is recognised that in some years more focus may be needed in a particular category i.e. Formal Education. All categories have been assigned a weighting in relation to calculating CPD hours. Minimum hours are set on a pro-rata basis for staff job sharing or participating in the shorter working year scheme. The numbers of hours will not be considered as part of any promotion process, the knowledge and skills acquired should be regarded as career enhancing.

Principle 5: Managers Role

Managers are involved in the planning and appraisal of CPD. They are also responsible for incorporating CPD into their regular performance management development discussions with their staff. Staff seek advice from their manager or a senior member of staff on what skills or competencies to develop and how best to achieve the desired outcome. The individual works in conjunction with the learning and development department to create the best training possible for their requirements in order to develop higher skills.

Heads of Division will have some flexibility in deciding how best to facilitate CPD in their divisions but will be responsible for ensuring that all staff members have appropriate arrangements in place. Line managers will be expected to recognise CPD as a requirement and provide assistance to their staff in order to accomplish learning objectives.

Principle 6: CPD Log

A standard CPD log has been designed to ensure consistency of CPD recording across all locations, divisions, sections and grades. CPD activity and 'learning' hours must be recorded and assessed on the standard CPD log. Individual members of the CSO are responsible for maintaining their own CPD records. Individuals are able to view a record of all past CPD entries, a summary to date of their inputted information and CPD information from their log.

The CPD cycle

CPD can be viewed as a cycle based on the three standard principles - 'Plan, Do, Review'. These principles should be applied in conjunction with the skills registered. The components of the CPD cycle are as follows:-
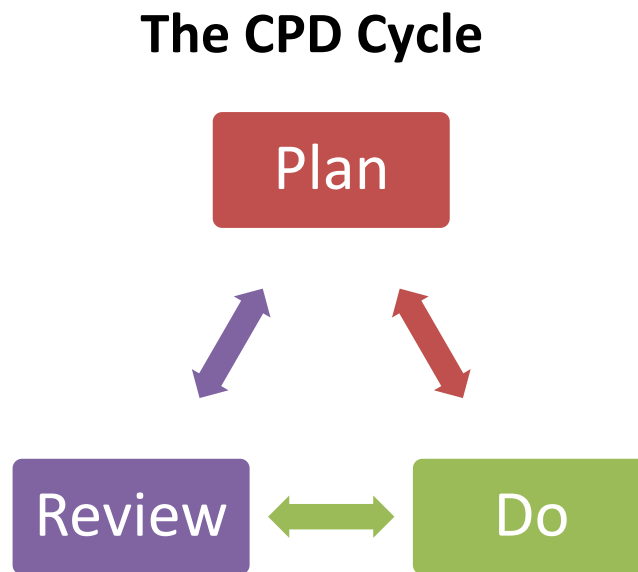
The CPD Cycle

Figure 5: CPD cycle

Plan -   Each individual needs to develop and create a plan to meet their required needs. When planning any personal development, it must be linked to CPD activity. CPD will provide an excellent opportunity when the individual holds mid-year or annual reviews with their managers regarding their future plans.

Do -   Individuals then perform the activity they have planned. The CPD log is updated as development of skills are completed. Both planned and unplanned skills development should be registered on the CPD log.

Review -   The learning outcomes are then examined and evaluated in order to see how new skills and competencies can be applied in day to day work and built on. This can be done by the individual or in conjunction with the managers to review their overall development.

4. Integration of Skills Register & CPD

Background

One of the key deliverables of the introduction of the skills register and CPD is an integrated system which allows staff members input data to the CPD logs and the skills register on an ongoing basis. The combination of both aspects will create one dashboard for all information regarding CPD and Skills Register. The integration of CPD and skills register correlates with the overall strategy and goals of CSO2020.
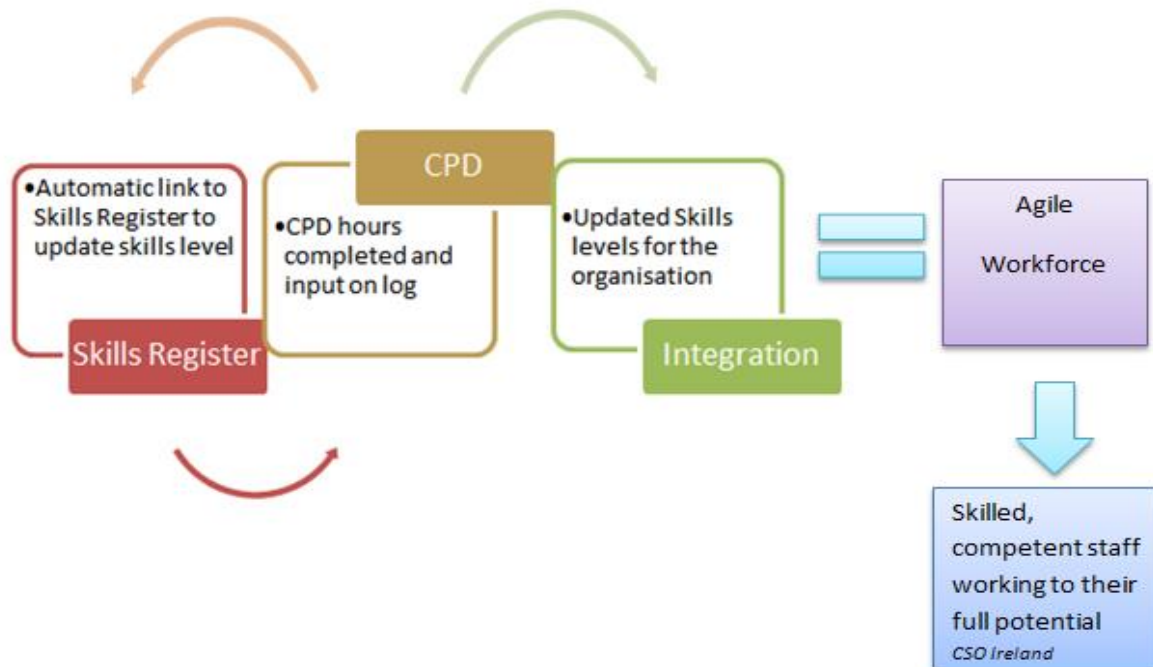

Figure 6: Intergration cycle

Individual staff members are responsible in setting up a CPD Log and keeping it regularly updated. When entering a CPD entry staff are required to enter the CPD category and the type of skills that has been developed or improved. This is then connected automatically to the skills register where the staff member has the opportunity to update their skills register based on their learning. This will give the organisation the ability to view the learning outcomes and the updated skills levels in each skills area.

The introduction of this system is at initial rollout stage and the CSO is very conscious that staff buy-in is critical to this project and to the overall change agenda. Staff within the organisation have been involved since the inception of this project through involvement in focus groups, participation in committees, completion of surveys etc. The success of staff participation from an early stage has been reflected in the high completion rates for both the skills register and CPD.

The integration of the skills register and CPD in the CSO will provide benefits for the individual staff members and the organisation as a whole.

Individual staff members can track their own training through their individual analysis of the skills register and CPD logs and use it as part of performance management discussions. They can also use their personal data to support applications for promotions or mobility moves within the organisation. Staff members are also encouraged to identify their own skills gaps and to up skill as required.

The data available from an integrated system will be invaluable at organisational level. As part of the modernisation agenda, the CSO will be in a position to identify critical skills and match this against the data provided from the integrated system. This will allow the organisation identify and provide more focussed and just-in-time training to staff as required. The delivery of this more focussed training will enable the Learning and Development area evaluate training more accurately against organisational objectives.

This data will also be a critical element of successful workforce planning, critical work segmentation, succession planning and talent management in the CSO. The advantages to the office going forward will include:

- Higher workforce Performance
- Higher skilled staff
- Development linked to need of organisation
- Improve morale and staff motivation
- Access information
- Self-assessment can be completed at ease
- Increase professionalism
- Track own training
- Creates agile workforce

5. **<u>Conclusion</u>**

Strategic agility is crucial in the evolving environment in which we now operate. A key component of this is the ability to anticipate talent needs and optimise a talented workforce to deliver change as required. An important element in the successful delivery of strategic agility is an understanding of skills levels within the organisation. This will be informed through the introduction of an integrated system combining a skills register and CPD as outlined above. The data from such a system will inform decisions at organisation level and ultimately lead to an agile workforce who will be positioned to deliver an excellent service in this modern fast moving environment we operate in.