Change Management in Electronic Re-governance: Re-Engineering the Pensions Department in Sri Lanka

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Abstract

In the context of e-governance, the challenges faced by developing countries in harnessing the full potential of IT are significant. Harnessing the full potential of IT requires more than just installing a fully functional system − sensitivity to the environment in which the technology must be managed and applied is essential. The required management knowledge is often gained through experience of the deployment of existing technologies and methodologies. Without practical technologies and methodologies, institutions can suffer technical and social problems, leading to slow integration of the system and potential system failures. While technical issues will need to be resolved, change management will also be necessary to ensure that the organizational entity is able to cope with the ensuing change without unnecessarily alarming the stakeholders. Change management will be needed throughout both the planning and execution phases of the project to encourage a smooth and painless transition. This article details the multifaceted nature of change management in electronic re-governance based on the authors' experience, gained through their practical involvement with the e-pensions system in Sri Lanka.

Introduction

In the context of e-governance, there are significant challenges faced by developing countries in harnessing the full potential of information technology (IT). Employment of information technology involves more than just installing a system and its peripherals − rather it needs the sensitive management of the technology and its application within its environment. The required management knowledge is often gained through experience of the deployment of existing technologies and methodologies. Without such experience, the organization undergoing the change may suffer from amplified technical and social problems, leading to slow integration of the system and possible system failures.

This article lays out the findings and experience that was gathered during a pilot project at the Department of Pensions (DoP), Sri Lanka, upon an assignment by the Sri Lankan Information Communication Technology Authority (ICTA) which was funded by United Nations Development Program (UNDP). The ICTA had never performed the transformation of a public organization of such size and importance and so there was no model to follow. It was therefore a challenge of unprecedented nature in the context of how government business in Sri Lanka is carried out. The DoP is one of the largest public organizations in Sri Lanka, catering for the pension-related needs of around two million pensioners, both inside and outside Sri Lanka, in more than six different categories. While Sri Lanka boasts a reasonably high literacy rate, that rate is significantly lower for pensionable citizens; pensioner computer literacy is particularly low.

In order to assess the situation on the ground and the real issues involved, we undertook a detailed field survey and interviewed a large number of functionaries from within the DoP, ICTA, district offices, and pensioners. As our team was asked to design a change management regime for the DoP as it changes from a paper-based century-old pension system to a digital pension system, we needed detailed information about the current system before designing any change management regime. This pilot project afforded us a deep and thorough understanding of the issues, challenges and opportunities before we designed a change management regime to allow a painless transition.

The project was begun as a university-to-society initiative involving university change management teams comprising academics and researchers from management and information technology clusters of Ritsumeikan Asia Pacific University, Beppu, Japan. The team assumed the task of attempting to devise and install a change management regime through various phases of the transition from the present system at the DoP to an e-pensions system, in collaboration with ICTA of Sri Lanka. The information from the field survey led us to conclude that, while dealing with technical issues would require a holistic approach, change management would be needed to ensure that the organizational entity was able to cope with the ensuing change without unnecessarily alarming the stakeholders. Change management would be needed throughout both the planning and execution phases of the project in order to promote a smooth and painless transition.

IT and Change

When devising a change management plan, IT systems are typically analyzed using the following categories:

- *Technology management issues:* Building a prudent IT infrastructure, enterprise-wide and inter-organizational application integration.
- *Strategic management issues:* Developing an information architecture, long-term IT planning, business process re-engineering.
- *People management issues:* Retaining IT human resources, organizational learning, keeping senior management educated in, and supportive of, IT.
- *Systems development and information management issues:* Data integrity and quality assertion, supervisory and assessment support).
- *End-user issues:* Automating workflow and facilitating knowledge and training and group collaboration etc.

In a situation where the environment is to change from known to largely unknown, the general principles or theories governing the issues outlined above cannot alone create a successful transformation. First, a careful study of the transformation and how it will cater for the needs of the people most affected by the change is required to provide the information for a customized approach to the transformation. Macredie and Sandom (1999) argue that "an improvisational perspective may be useful for hierarchical organizations which introduce new technology as the local improvisations which can occur may be leveraged for advantage". As DoP is a hierarchical organization, it seems that customization would be useful and necessary, particularly if the type of organization is taken into account.

The needs and designs of change management plans will differ between developing and developed countries, because in developing countries the awareness and desire for the change may be significantly lacking. Dadashzadeh (2002) described the possible pitfalls and triumphs in the implementation of IT regimes into the structure of a developing country. His study provides interesting insights and strategies to allow a smooth adaptation of information technologies into developing countries. Jorgensen et al. (2008) found that achieving project success does not depend primarily on technology but that the success depends largely on people. Change can only be successful with the complete acceptance by employees at all levels of any organization. LaClair and Rao (2002) stressed that "managing change is the responsibility of everyone in the corporation - from senior managers on down". Below we briefly outline the change management needed at DoP and recommend a strategy to cope with the requirements of change management.

Change at the Department of Pensions

Change in the milieu of the e-pensions project at the DoP encompasses a set of processes to be executed within the Department of Pensions designed to manage the IT-oriented

system installation, training and work assignments, enhancements, updates, incremental fixes and patches to pensions systems, which include:

- ➢ IT systems infrastructural changes (servers, cabling, routers, firewalls, etc.)
- ➢ OS upgrades (applications, operating systems, databases and other software)
- ➢ Employees' roles ascertainment, and possible revisions and training
- ➢ System functionality assessment apparatus establishment (data integrity, security and conformance to privacy policy etc.).

Change or transition is seldom smooth and painless for organizations who attempt to move from old business procedures in a new direction. Mastering the machinations and complexities of the systems, and the need to customize the technologies and methodologies to the relative environment, requires detailed situational analysis in addition to environmental and operational analysis. In the DoP's case, many stakeholders interact such as the pensioners, government offices, Regovernance (ReGov) handlers like Information Communication Technology Authority (ICTA), DoP executive level staff, middle managers, lower line functionaries, developers, IT operations staff, and auditors. Moreover, the e-pensions project is the first large-scale e-government transformation endeavor in Sri Lanka, and its implementation carries enormous challenges. However, these challenges are not reason enough for DoP not to undertake the transformation, given the problems within the present system, such as the large number of application rejections and the long time it takes for a pensioner to receive a check after the first application.

The Change Regime

In the context of the DoP environment, stable, reliable and efficient organizational transition would require that the implementation of change be predictable and repeatable. The change should follow a controlled process that is defined, monitored and enforced. In the case of the DoP, we can say that:

- ➢ The nature of the e-pensions business requirements drive the need for a high degree of IT system uptime (availability) while regulatory requirements such as e-pensions manuals (including regulations and parameters set by parliament and other government bodies) drive the need for controls to ensure the confidentiality and integrity of information.
- ➢ Establishment of a stable and managed IT-based DoP environment would require that changes be implemented in a predictable and repeatable manner.

- IT personnel implementing changes will need to follow a controlled process that is defined, monitored and enforced, in tandem with guidelines laid down by the change management team after approval by relevant authorities at ICTA and DoP.
- It is important that the preventative controls (segregation of duties) and detective controls (supervisory) are put in place in combination.
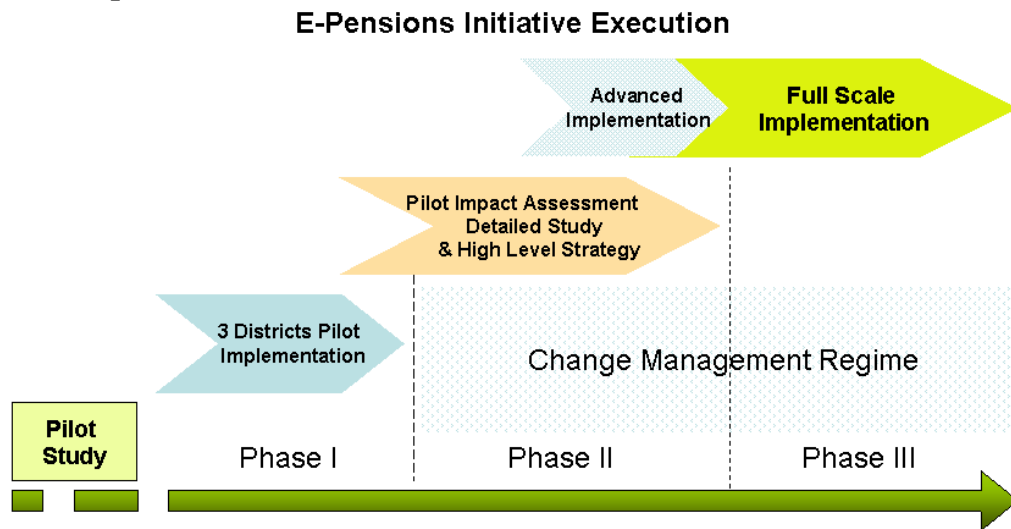
On the technical side it is important that:
- The system specification and initial deployment status is understood
- IT staff are identified and trained to deliver new capabilities specified by the new e-pensions system
- IT staff resources are reallocated as needed to "put out fires"
- Handlers ensure that less time is spent on unplanned IT work
- There is less system downtime
- Critical patches can be installed with minimal disruption.
- There is preparedness to face contingency situations.
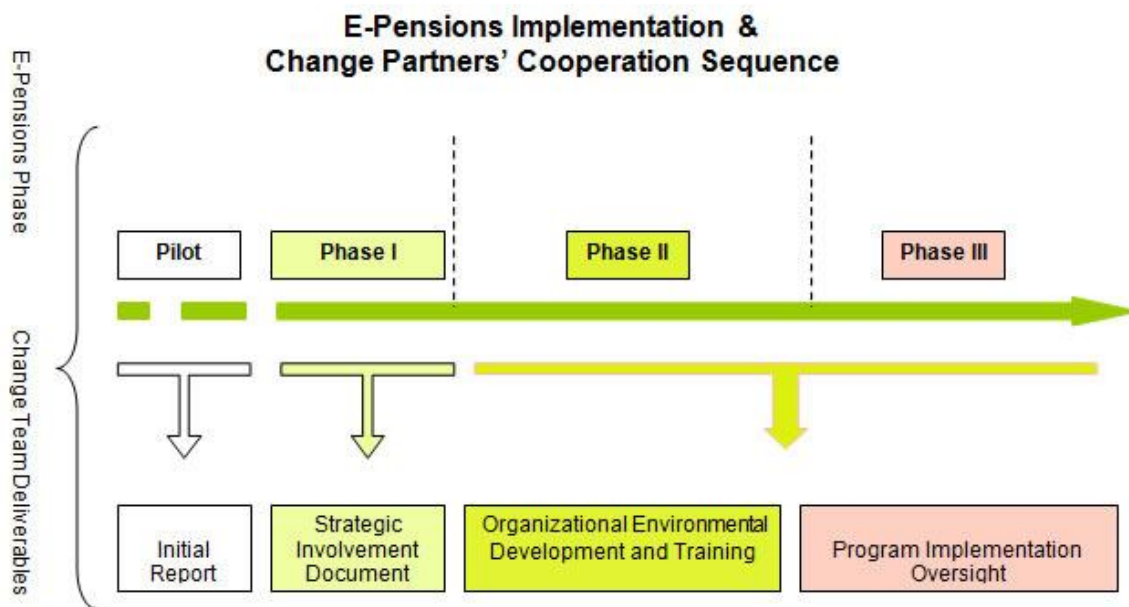
Implementing the Change Regime

The change management process at DoP would require a phase-out strategy as normal operations at DoP cannot be terminated even for a single day due to the scale and nature of the business. However, running a full-scale change management regime at the DoP without a prior test run can put the entire DoP operation in jeopardy and cause unease and discomfort to its around two million pensioners. Hence, a pilot run would need to be carried out before a full-scale implementation of the e-pensions regime and accompanying change management regime. Luckily, IT system vendors have already agreed to go ahead in a phased-out manner, by installing a test run on three district secretariats and then expanding it to the entire department. So, as a change management team, we were able to design and suggest a change management regime that works on the same timeline. It will help the change regime begin without hampering any of the departmental operations or the installation timeframe of the IT infrastructure needed for e-pensions project. Also, this timeline will ensure that all organizational and personnel readiness is in place as and when it is needed, neither earlier nor later.

Figure 1: E-pensions Initiative Execution

Source: Author

Figure 2: E-Pensions Partners Cooperation Initiative for Change Management

Source: Author

Change Management Scope and Phases

The change management team's tasks for the e-pensions project included understanding and elaborating on:
- ➢ what exactly change in DoP would mean for all the stakeholders
- ➢ the vision and fallacies about the change in DoP
- ➢ describing the change
- ➢ identifying specific changes
- ➢ who was going to control the change
- ➢ recognizing resistance to the change process
- ➢ what may cause resistance to accepting the change
- ➢ losses, if any, from the change
- ➢ identifying the phases of change transition
- ➢ defining change transition strategies through different phases
- ➢ how to manage each phase
- ➢ how to handle communication about the change
- ➢ how we can turn change avoidance into acceptance
- ➢ how we can incorporate rules for not stifling innovation and reform within the change process.

We recommended that the work mentioned above be divided into project phases and carried out in a fashion explained in the change partners' cooperation sequence in the chart below.

Change Management Partners

With our early involvement in the project and liaison with the DoP and ICTA, we were able to develop the understanding and capacity to cultivate a strong change management partner team from functionaries at ICTA and DoP. The team found a number of promising persons at both the departments who showed the enthusiasm to dynamically partake in the change process and be effective change agents, and whom we hope some day will emerge as change leaders. As the change management regime moves into the next phases of the e-pensions project, these change partners at the ICTA and DoP will be vital in carrying out the change management tasks at the strategic and functional levels. The partner teams will ensure:
- ➢ Development of an organizational environment suitable for the change
- ➢ Availability of requisite financial and human resources
- ➢ Employee awareness and involvement in the process
- ➢ Deployment of needed training programs at executive and staff levels

➢ Employee morale at all levels
➢ Set program success and sustainability parameters.

Strategic Initiative

To lay out a clear strategic framework for the change management team's involvement with potential change partners, a strategic involvement plan was developed for implementation in phases. The strategic involvement framework would comprise a comprehensive training and advisory regime to prepare the DoP for forthcoming change. The rolling out of the strategic involvement framework followed the implementation of the pilot phase as mentioned in the earlier timeline in Figure 2. The strategic plan also spelt out the change management team's initial findings and the tasks that would need to be performed on behalf of the ICTA of Sri Lanka in relation to the e-pensions project in the DoP of the government of Sri Lanka.

In the coming sections, a brief analysis of the proposed e-pensions project is presented to explain the possible issues and the proposed mechanism to deal with such issues regarding the proposed e-pensions project in Sri-Lanka.

The Issues
The change management team identified various resistance (conflict) points at the DoP as listed below:

1. Conflict between both old and young employees in accepting the change
2. Conflict between the urban and rural (outstation Divisional Secretariats and/or Government Departments) working cultures after the change
3. Conflict over the types of incentives to motivate workers to accept the change
4. Conflict between the paper-based culture and digital culture of the entire organization
5. General scepticism about the suitability of this project
6. A feeling that the new system would automatically evolve
7. Psychological perception of loss of power/benefits e.g. in the filing department, after the change
8. Feeling of lack of participation by certain employees, and
9. The potential danger of aggravating the above resistance/conflicts by any possible initial state of deployment that does not address the core requirements for smooth/stable system operation. (Here, the initial system condition encompasses hardware, software, working environment, and work force setup etc.)

The following is a brief outline of some potential barriers to the implementation of the e-pensions project and the ensuing change process.

1. *General scepticism about the suitability of the project, especially from*
   - ➢ Officers who are accustomed to and highly value the current paper-based system
   - ➢ Officers who are satisfied with the existing system, in the context of the infrastructural and cultural set-up in Sri Lanka
   - ➢ Officers who doubt if the new system will actually work in the country's pension system
   - ➢ Officers having a sense of uncertainty about the new system (due to the slow progress experienced with the proposed e-pensions project in the past few years).

2. *Resistance to technological change, especially from*;
   - ➢ Officers with low IT knowledge; officers whose mindset does not permit them to easily embrace technology; or those who are not confident about being able to master the technological usage and function effectively
   - ➢ Old officers who are already accustomed to the old system may not want to engage in the new system
   - ➢ Officers in rural offices will show more resistance, as their current workload might not be as complicated and they may see little benefit in computerization.

3. *Resistance to change in the working culture, involving:*
   - ➢ Change in the working environment
   - ➢ Change in the working manner
   - ➢ Change in report channels and responsibility.

4. *Fear of loss of power, personal benefits and responsibility:*
   - ➢ Especially from higher level officers who have been enjoying high self-esteem through direct interaction with the stakeholders in the paper-based system
   - ➢ From some officers in rural offices, who might have been benefiting from the sluggish paper-based system
   - ➢ Possible illegal money opportunities in the paper-based manual application process
   - ➢ Not reporting or reporting very late a reduction in the number of pension receivers to cover under-performance.

5. Fear about job security and future promotion opportunities

Although life-time employment is assured at the DoP– the fear of changes in job contents and re-allocation of responsibilities may bring about fears towards the proposed e-pensions style.

6. Effect of initial system deployment state

In the initial deployment of large IT systems, it is unavoidable that there is a considerable gap between the initially deployed system and the system required at the state of stable operation. A considerable number of amendments and additions in terms of hardware, software and system configuration need to take place over time before the system becomes stable. However, it is important to understand in advance the core requirements for smooth operation and, more importantly, to foresee the potential critical problems before the initial deployment.

The Challenges

1. Among the key challenges, the change management team identified important *human resource* related challenges such as:

   ➢ Breaking the polarized working style associated with bureaucracies and functional thinking, acting on self-interest
   ➢ Developing team-based work groups based on greater interaction and better communication.

Fears related to job security among older and rural officers will arise because the e-based system will be perceived to better suit young, urban officers. Conflict will appear in the higher echelons with perceived loss of psychological and real power associated with computerization of operations. The flatter organization style will require empowering middle and lower ranked officers and greater involvement of directors.

2. The change management team also identified the need to conduct a System Readiness Verification Test (SRVT) before the initial deployment of the e-pensions system. The potential problems in the initial deployment stage may amplify the human resource issues mentioned above.

Change Management Readiness Recommendations

We propose a detailed training regime with the following objectives in mind:

   ✧ The strengthening of human resources to retrain, introduce team-based work groups and re-evaluate the compensation and incentive system.
   ✧ Communication to all stakeholders of examples of similar change cases in other developing countries.
   ✧ Creation of workshops to retrain officers in their new job roles with greater

concern for older and rural officers.
- ✧ A forum where participants can discuss the merits and demerits of the new system and make their suggestions for improvements.
- ✧ Advertisement of the benefits of the computerized system.
- ✧ Identification of directors and leaders/agents of positive change, and the use of a small wins strategy to mobilize other officers.
- ✧ Understanding of the modifications required for the new e-pensions system at the initial deployment stage as well as in its evolution towards a stable state.

Change Management Project (CMP) Training Regime

As a result of our detailed findings and deliberation, our team recommended comprehensive change management training regime described below. Following is the suggested menu and schedule of the change management training regime spanning 36 weeks.

Table 1: Change Management Project Work Flow / Flexi-Scheduling Gantt Chart

	Training Item / Week	1~4	5~6	7~8	9~10	11~12	13~14	15~16	17~18	19~20	21~24	25~36
	Change Management											
1	CMP Training Preparation	█										
2	Preparation of Manuals	█	█									
3	TEXT Training			█	█							
4	NEXT Training				█	█	█					
5	PET (TEXT & NEXT)			█	█	█	█	█				
6	CEGW Training							█	█			
7	DCW Training									█	█	
8	CMP Evaluation Reports					█		█		█		
9	CMP Continued Consultancy	█	█	█	█	█	█	█	█	█	█	█

Source: Author

Top Management Training - Methodology, Selection and Evaluation

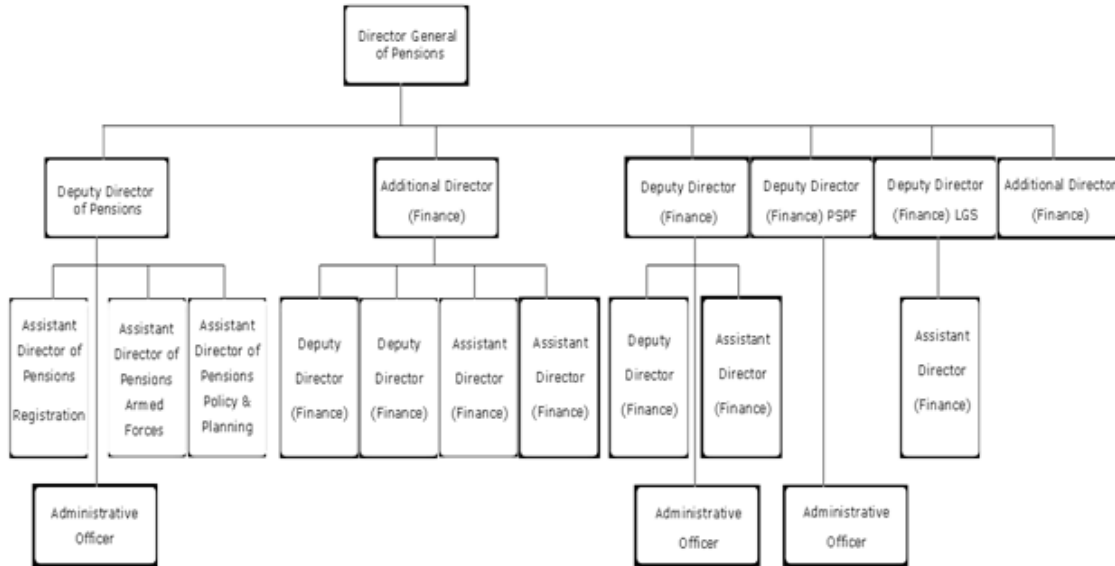We proposed two-tier change management training for top and senior executives of DoP as follows:

◇ Top Executive Training (TEXT)
◇ New Executive Training (NEXT)

The selection criteria are to be based on objective segmentation of the top and second layer executives based on their responsibility and function. Starting at the top, the director general is the obvious first top executive to be selected for top executive training. It is important that connectivity and continuity of functional and executive responsibilities are ensured; hence a second layer of executives to replace top executives will be included in the TEXT training, in case the office of director general is vacated during or after the CMP is complete. The trainee segments are dissected from the organizational structure of the DoP given below. Officials connected by the red bold line are candidates targeted for TEXT training.

Officials connected by the network of blue lines and boxes are targeted for inclusion in the first batch of NEXT training, whereas officials connected by the green line are targeted for inclusion in the second batch of NEXT training. The batch selection has been made with the following important aspects in mind:

1. Top-Down approach in training assumption flow
2. Minimum disruption in the organizational workflow
3. Role prioritization
4. Seamless inwards and outwards personnel movement
5. Organizational level sensitivities.

Figure 3: Organizational Segmentation for Text & Next CMP Training Regime

Source: Department of Pension, Sri Lanka, http://www.pensions.gov.lk/org_main.php#

All participants will be given an arrival and departure psychometric evaluation test (PET). The results of the PET will be uploaded on the CMP website in modular form and will be accessible to the authorized stakeholders of the information.

General Staff Training - Methodology, Selection and Evaluation
Based upon the potential issues identified and broad suggestions made above, we identified a need for comprehensive and broad-based awareness training to be carried out within the country, named inland training (ILT). Most ILT can be carried out in Colombo. All participants will be given an initial and completion PET. The results of the PET will be uploaded on the CMP website in modular form and will be accessible to the authorized stakeholders of the information.

We proposed carrying out workshops to achieve ILT objectives in two formats as follows:
- ✧ Colombo Electronic Governance Workshops (CEGW)
- ✧ District Connectivity Workshops (DCW).

Colombo Electronic Governance Workshops
Keeping in mind the overall staff strength at DoP, we proposed holding regular CEGWs for the training of general staff at DoP headquarters. With a capacity of 100 people in each batch, we proposed that a three-day workshop should be held every month. By rotation, we hope to train around 600 employees in six months. CEGWs will remain

intact even after the DoP training needs are met, as a forum for retraining as well to accommodate similar training requests from other government departments that ICTA may refer to it.

With the involvement of top SLAs and SLACs, we propose the CEGWs to be a forum for awareness and training workshops for all DoP staff down to the level of pension officers and management assistants. The contents of these CEGWs will briefly be as follows:

1. Change Forecasting and Adaptation
2. Psychological Calibration
3. Opportunity Identification
4. Role Adjustment
5. Digital Environment Training
6. Customer Perception Handling

To transfer know-how and expertise, we proposed that NEXT should be integrated with a CEGW training orientation. As part of two weeks' NEXT training, we proposed to train future workshop leaders to perform CEGWs with minimal outside expert involvement. Essentially these people will be trained to conduct monthly CEGWs utilizing training manuals; while change management experts will be on hand during the CEGWs for consultation, expert advice and training.

District Connectivity Workshops

District Connectivity Workshops (DCW) are proposed and designed to cater for the training needs of the people who are out in districts or who are to be deployed in districts to carry out the DoP functions. Initially we propose carrying out three workshops simultaneously, though separately, with CEGWs to train related staff on the ensuing change in the DoP headquarters and its impact on their day-to-day work, as well as the long-term implications thereof. We propose that each DCW be a three-day workshop with one day devoted to a central connectivity immersion (CCI) visit to DoP headquarters for field functionaries and a field connectivity immersion (FCI) visit as outbound training for transferable staff.

The contents of these CEGWs will briefly be as follows:

◇ Remote Functionality System Awareness
◇ Central Connectivity Requirements
◇ Remote Team Immersion

◇ Unitary Change Adaptation

◇ Customer Perception Handling.

Trainers will utilize predesigned training manuals for DCWs, CCI and FCI at DCWs. We hope at least 300 staff will be trained through these DCWs.

A workshop candidate identification exercise will be carried out by SLAs and SLACs in consultation with change management experts from the CMP core team. We assume some candidates will be selected for dual workshop training; hence the execution of a training order to avoid scheduling conflicts and delays would be important.

Follow-up Ongoing Consultancy Service
The CMP team's role also involves the provision of remote and site consultancy throughout the project as is obvious from the flexi-schedule given in Table 1. Consultancy will be important to ensure a ubiquitous connection between various stakeholders of CMP. Regular scheduling and assumption and disposal of various program-related activities is also necessary. The CMP team will ensure the smooth functioning of the CMP web portal meant for ubiquitous program connectivity.

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