

Office of the CGDA
Ulan Batar Road, Palam Delhi Cantt-110010

No: - EDP/960/IT/Road Map-2015

Dated: - 15.10.2015

To,

All PCsDA/ CsDA / PIFAs/ IFAs / PCAs (Fys) / CFAs(Fys)

(Through CGDA website)

Sub: Information Technology Systems-Planning and Implementation: -
A Roadmap for Defence Accounts Department.

An IT system Road Map for the department, outlining major work areas and IT initiatives and plans therein has been prepared.

2. It is requested to kindly offer your comments / suggestions on the proposed IT Road Map by 30th October, 2015 at email IDs (cgdanewdelhi@nic.in & kavtiag@nic.in) so that final decision can be taken at HQrs Office in this regard.


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Information Technology Systems – Planning and Implementation

A Roadmap for

Defence Accounts Department

DAD was one of the pioneer in adoption and implementation of Information Technology in Government functioning. Different aspects of work were automated through software by use of best IT tools available at that point of time. Of late, the IT drive/initiatives in the department failed to keep pace with the changing IT Scenario. There is a strong need to not only play catch up but also to align our initiatives with the fast changing IT world. The need is felt even more in the present scenario where government as a whole is putting renewed thrust on digitization and service delivery through IT as part of e-governance.

Given the work profile of the Department, our IT initiatives and accordingly roadmap for the same can be broadly categorised in the following areas –

- i. DAD Personnel Management
- ii. Office Automation for Payment and Audit function
- iii. Ordnance Factory Accounts Offices automation
- iv. Pension sanction and disbursement system
- v. Dolphin system for PAOs and Pay audit system for CDA offices
- vi. E-ticketing project
- vii. Infrastructure and security
- viii. Manpower and training

Adoption of an appropriate technology is a critical element in the whole process of system development. Technology should be robust, sustainable and futuristic also. As far as adoption of technology is concerned, it will be ensured that the present systems developed in-house will be aligned to latest technologies available in respect of platform on which these have been developed. For system development in future, adoption of technology will be decided after considering various aspects including the platform of the Services with which the system is proposed to be linked, nature of the project under development, the advice of the consultant engaged, if any, and consultations with experts within and outside the department.

DAD Personnel Management System

There is an urgent need for a comprehensive ERP like package covering all activities – Pay & Allowances, TD moves, LTCs & Permanent Transfers, Training management, maintenance of Service Book, APAR initiation and finalisation, Leave etc – in respect of DAD personnel. This will be based on a Personnel Information System database wherein each individual will have a unique ID which will be valid for entire service career.

Some of the above utilities are already available in Tulip system – an in-house system developed by IT S & DC, Secunderabad on Java platform, which is presently being run on pilot basis in some Delhi offices. Other utilities are to be developed shortly.

Office Automation

Tulip system is on pilot run in CDA Secunderabad and CDA (R&D) Bangalore. After stabilisation in these offices, the system will be implemented in other Regional Controller offices and R&D offices. Customisation for other Controllers' offices will be done after this implementation and stabilisation of the system. This will bring uniformity of office automation system in the department.

Automation of work in AO, GE offices has been carried out under Project Vishwak. In BSO offices, automation has been carried out under Project Bhawan. These systems are working in isolation. These activities will be developed under Tulip to ensure an integrated working. For effective working of these systems, integration with the MES system will be required, so that basic data of contracts and assets could be ported on-line.

Further, the office automation system (Tulip) will be linked to the compilation system so that expenditure data is ported on the latter in a seamless manner and without manual intervention.

The OA system will also have facility to receive bills data on-line from units so that data entry is avoided. For the purpose of authenticity, this could be with digital signature.

For dak diary purposes, new utilities which allow compression of all relevant information in a single code which could be printed on the document itself will be considered.

OA system and Compilation system will be linked to Financial Information Systems of the Services in a manner that effective information interchange can take place.

Ordnance Factory Accounts Offices Automation

The need for replacing the legacy systems – Labour, Inventory and Costing – is paramount. However, development of these systems in isolation would not serve any purpose. An effective integration with the OFB system will be required, so that data analysis and MIS thereof is equally effective for both sides. Integrated development of such a system with necessary rights and responsibilities should be the right course of action. PCA (Fys) and Member Finance, OFB may take necessary actions. In-principle approval for outsourcing of consultancy services to study the present systems and advise on the further development of appropriate systems and their linkage to the OFB system has been given.

Pension sanction and disbursement system

For seamless processing of pension claims, pension sanction and pension disbursement as well as future grievance handling, an integrated system covering all these activities is required at this stage. With the government considering centralised pension disbursement for all defence pensioners, need for such a system with suitable databases and security systems is more pronounced. Such a system can be developed through outsourcing only. Process for engaging a consultant to study the work flow, BPR required and the process at all stake holders – Record Offices, PAOs, PSAs, PDAs, Service Centres (under CPDS) – and to advise on the integrated system has been initiated.

Dolphin System and Pay Audit system

Dolphin system for PAO working is being run in a decentralised manner with databases residing in the Servers available with the PAOs themselves. This arrangement is sub-optimal from security aspect as well as from the aspect of manpower required for managing the servers. Centralisation of PAO databases with adequate connectivity for smooth functioning through secure log-in is a better solution. Pilot run for the same is being initiated.

Further, linkage with the Services' system will need to be brought about sooner so that required data (mainly DO II data) could be ported in the system seamlessly and rejections are avoided.

Audit of Pay bills in a CDA office presently is being done in manual mode. This is a repetitive exercise and hence can be more effectively carried out through IT system. For this purpose, integration with the Client system will be required, so that monthly pay data can be received on-line. Normalised and uniform database, audit through system, maintenance of DHR, error-free maintenance of fund accounts etc are some of the activities which could be ensured under the proposed integrated system. Effective monitoring, better customer

satisfaction, elimination of DID schedules and detailed MIS will be some of the benefits which could be achieved.

E-Ticketing

Rail Travel system for the Services has been stabilised. Air Travel Module has also been developed and implemented. The system provides for cashless booking for duty related journeys for the govt employees. DRDO, OFB, Coast Guard and BRO have also been requested to start using the system, as it will allow better control and monitoring. Accordingly, infrastructure of the project will also need to be adequately augmented.

The information available in the system will be utilised to develop TA module for on-line submission of adjustment claims by individuals.

Infrastructure and security

For successful implementation of IT applications, availability of adequate hardware is a must. Controllers (PCDA/PIFA/CDA/IFA/CFA (Fys)) will plan procurement of Computers in the ratio of 1 : 1 (i.e. one computer for one individual) for all sections working on the LAN-based applications in their offices and in the ratio of 1 : 2 (i.e. one computer for two individuals) for other sections/offices. Subject to availability of funds released by HQrs office for this purpose, they will approve procurement of computers with latest specifications (HQrs IT division to lay down broad specifications and guidelines) by following due procedure. Printers and UPS should be procured for a cluster of computers so that optimal utilisation is ensured. At the same time, review of printing requirements shall be carried out and to the extent possible, documents/reports should be forwarded through email/zimbra mail. Separate power line for computer network should be ensured for better management of servers and modems. Maintenance of assets also is to be ensured preferably through appropriate AMC.

For the security of IT systems, appropriate anti-virus should be installed in the LAN Server and all stand-alone machines. Proper access control systems including password policy implementation should be ensured. Periodic security audit of website and LAN system should be carried out. Policies and guidelines issued by HQrs office should be followed and compliance report should be submitted on 6-monthly basis to HQrs office.

With more and more applications being designed to run in a centralised environment, the department needs a data centre of its own. To study the requirement in detail and to advise on various aspects of hardware, security, fire-control mechanisms, bandwidth etc., process to engage a consultant has been initiated.

A secure and adequate Wide Area Network (WAN) is a pre-requisite for smooth running of all WAN-based applications. CGDA WAN is in the process of upgradation with higher bandwidths and Managed Networking services with BSNL. Controllers should liaise with local BSNL for providing Optical Fibre connectivity to their offices so that WAN could be on OFC. To study the structure of WAN and ensure its security including traffic control through a gateway, consultancy services are being engaged.

Manpower and Training

There will be a general categorization of EDP resources as Developer at centralized location, Programmer having understanding of the project for maintenance of the system at field locations and end-user. First two categories will be the manpower with EDP specialisation.

Development of integrated systems in collaboration with all stake-holders with appropriate and system-based backward and forward linkages will be the norm in future and as such requirement of in-house development of stand-alone IT applications will be minimised. Development of such integrated systems will be carried out through outsourcing. Accordingly, manpower requirement for development work will be reduced. However, for maintenance of the systems, manpower will be required who will be trained on the system by the concerned service providers/developers. Their basic training on computers will be at the respective RTCs on regular basis. Specialised training on higher IT issues – networking, security, higher languages (Java etc.) – will be planned by IT Division of HQrs office in consultation with IT S&DC and carried out through outsourcing with specialist training institutions.

Transfer Policy and Incentives for the EDP personnel are to be in accordance with the requirements of the systems on which they are working.
