III.'INNOVATIV USE OF TECHNOLOGY IN e-GOVERNANCE'

General Information:

Name of the Project	Intranet Prahari Project (IPP)
Execution Company	NIIT Technologies Limited
Name and contact details	BSF Force Headquarters DIG-IT Block 10, CGO Complex, Lodhi Road New Delhi
Current Status	Commissioning Completed on 5 Jan 2012, All infrastructure and application is live and in use. The project has 7 years of O&M phase which includes 2 years of warranty and 5 years of AMC. Currently project is under 1ST year of AMC.

1. **Coverage- Geographical and Demographic** (Comprehensiveness of reach of delivery Geographical and Demographic Spread of delivery centers.)

- All BSF establishments up to Battalion Headquarters (total 237 locations are connected through IPP, as per details given below :
    - BSF DG Office (7 different locations in Delhi)also known as Force head quarter(FHQ)
    - BSF (SDG)HQrs (2 Locations, one at Chandigarh & one at Kolkata)
    - BSF Frontier HQrs in 10 different states (Jammu & Kashmir Meghalaya, Nagaland, Mainpur Tripura and Mizoram etc)
    - Mini Computer Center for giving the access to the under command Office in 35 different locations in northern & eastern States.
    - BSF Sector HQrs(Shq)(39 Locations)spread across the countries Eastern, Western and Southern States.
    - BSF Battalion (Bn)HQrs (157 Locations) located at all along Border States of India.
    - BSF Major Training institutions (3 Training institutions located at Gwalior, Indore & Hazaribagh).
    - BSF Subsidiary Training Centres(STC)(11 training Centers in 11different

Cities of India).
  o BSF Signal Training Schools (STS)(2) located in Delhi and Bangalore.
  o BSF Arty Regts(7) located in 7 different border towns.
  o BSF Hospital located in 10 different cities of the country.

2. Situation before the initiative

o Small isolated applications developed in house were being used by different HQrs in Standalone mode. Since all BSF HQrs are scattered across the country especially along the Eastern & Western borders of the country, transfer of data, its consistency and consolidation of the same was a very big challenge.

o Since most of the locations were remotely located there was not much IT infrastructure except for one PC at BSF Frontier HQ locations located at border cities of the country. All information about Sectors & Battalions was being consolidated by their respective Frontiers HQrs by collecting manual information through regular dak. Same process was being followed by FHQ also.

o The process of inventories, service record management etc was being done manually.
o No decision support system was readily available at FHQ level for decision making by senior Officers.

o Getting correct data & detailed information from BSF field formation to FHQ and vice versa was a very cumbersome and a big challenge

o Getting totals matched for inventory items, Manpower, locations and deployment was a big challenge.

o BSF Pay Roll was in batch processing in COBOL. It's processing, printing, packaging and dispatching was one month job.

3. **Scope of Services/ Activities Covered** (Relevance of choice of
Application for client/ agency, Extent of e-enablement in terms of number of
Service, Extent to which step in each service have been ICT-enable#)

- Intranet Prahari Project is essentially an Enterprise Wide legacy Application Software of Border Security Force (BSF) to automate all office Procedure & functioning, where –in all major office processes such as Finance, Inventory Management , Operations and HR management including pay roll & allied systems for 2.5 lacs BSF employees Scattered across the country have been automated and integrated to act as a robust and quick decision support systems for consolidated view of data By *higher echelons* for various analyses.
- Under this project, BSF has set up two Data Centers(DC), including the Main Data Centre in the CGO Complex, New Delhi, a DRC(Disaster Recovery Data Centre) in Bangalore(in a different seismic Zone), and 10 mini Data centers at the frontier headquarters. Sufficient cyber security measures to ensure network security and to prevent data loss or pilferage have been incorporated. It has mainly following module:-
- HR & Training
- Operation Management
  -Incident Management and Border Access Management
- Intelligence Management
- Provisioning Management
  -Including different type of inventories (Arms ,Amn, Defence store, clothing and motor transport fleet)
- Finance & Budget
- Account & Pay Roll
- Hospital & Patient Management
- Work Flow Management
- Training Management
- Grievance Management
- Report Management
- Mail Massaging
- Role Management & Administration

Infrastructure-
- State of the art *Data Centre*(DC) and *Disaster Recovery Centre*(DRC) Setup including Building Management system (DG Set, UPS, CCTV, ACs etc.)

- Setup of 10 Mini Data centers at frontier Locations.
- Setting up WAN and LAN for all sites mentioned in Coverage Section. (including Earthing and lightning arrestors)
- Procurement and commissioning of all the peripherals(Desktop, Laptop, Printers, Scanners etc.

Infrastructure Management-
- Building Management
- Directory Service Management
- Network Management
- Enterprise Security Management
- Asset Management & Tracking management
- Compliance Management
- Server Management

Data-
- Scanning of service records of more than 2.5 Lac employees
- Data entry of complete HR data , inventory (Item Master) and finance (Accounts Master) records.

Application-
Design, development and implementation :-
- Development and deployment of integrated application software portal in ASP.net of Complete HR, Inventory & provisioning , Finance & Payroll, Operations & Intelligence, Workflow & SR and Document management system.
- Setting up email (Exchange Server)

Technology-
- Database- SQL Server
- Frontend-ASP/.NET
- Reporting tool-SSRS
- Portal-Share point

Training-
- Training to more than 30000 BSF employees.
- 170 persons were trained in DBA, Networking & messaging.
- 1079 persons were trained in computer operations.
- 28735 persons were trained in data operation & application
- 16 application trainers posted at key locations for continuous training.

Support-
- 75 professionally trained resources have been deployed as follows
- Dedicated team for application improvement/new development and

> maintenance at Delhi.
> - o Dedicated team for infrastructure maintenance of DC and DRC posted at Delhi and Bangalore.
> - o 24 Infrastructure support personnel posted in field for support.
> - o From, 31st Dec 2011. Project is in operations phase for 7 years

4. **Strategy Adopted:**

> - o After facing the bottleneck and challenges in consolidating data for decision making at FHQ level, it was envisaged that BSF may get and integrated system to automate all office functionality pertaining to HR, Accounts, Finance, Inventory and Operations etc. Since, the Requirement of Bn HQrs, SHQrs, Ftr HQrs and FHQ were different, the complete requirement Analysis for the system was done by calling officials pertaining to the above mentioned Subject from each Headquarters.
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> - o All HQrs were informed to conduct the sight survey to the location and the block Diagram of the layout of the HQrs were consolidate to work out the complete hardware Requirement.
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> - o Since technical manpower is readily available at state Capital, BSF planned to setup State of the art Data Centre at Delhi. All essential Hardware & Software etc was planned to be deployed. Since BSF personnel were required to use & maintain the infrastructure & Further it was necessary that the technology should be simple, economical and easy to use, as such, window based platform with Net technology with hub and spoke architecture were used. In any IT initiative, the training of the users and Data Entry to run the system is always big challenge, as such, conduct of Data Entry of inventory of SR, creation of document management system, scanning and tagging the document and training of BSF personal at all locations were made part of the implementation plan.

5.**Demonstarte innovative use of ICT for Development**(Give details about use of new and emerging technology, innovative usage of ICT for Process change to improve quality of the life/organizational effectiveness, Relevance of technology to provide the service#)

- o Turnkey project, Single vendor for smooth functioning.
- o A Centralized portal to log all activities during project implementation at 237 sites to monitor progress.
- o Historic data, Master data entry and scanning of documents by vendor resulted in ready to use feel for users. One time (Huge) data entry Bottleneck eliminated.
- o Workflow based solutions for al modules, to provide feeling of no change
- o In functioning of users, removes another bottleneck.
- o Tailor made application provides flexibility of easy to use screen and Reports.
- o All employees can view their service details, APAR details, monthly pay
- o Details, GPF/CPF details & all other information.
- o Information and decisions which were earlier kept pending due to non availability of the official at a given location can now be taken by seeking Approvals online across all BSF Locations.

6. **Adaptability and Scalability** (Give details about local language support, Ability to leverage shared Government infrastructure, Standardization of Technology used (hardware, software, application etc. #)

- o Centrally deployed Application architecture so it can be extended to more locations including 1400+ Border out Post (BOPS) of BSF in the next phase.
- o Storage, Blade severs and other components are scalable.
- o Process of data digitization and training with content is already available and can be extended to new raising battalions/Establishment.

7. **New Models of service Delivery (**Give details about type of partnership Model use, links to /Supported by public/private Organization links provided to Relevant websites etc. #)

B-O-T(Build-Operate-Transfer)delivery model with following
- o Email hosting for approx. 2.5 Lac personnel.
- o Service book digitization for approx. 2.5 Lac personnel.
- o Complete Automation & delivery of pay, GPF, Income tax, CPF Related information & reporting of approx. 2.5 Lac BSF employees.
- o DC/DRC setup and 10 mini data centers with high end & State of the Art Technology.
- o Creation of an enterprise-wide WAN Laying of approx... 800 KM of fiber

8. Efficiency Enhancement (Give details about any significant change in process
That has led to efficiently improvement in terms of time or cost for citizens or
Agency, improve agency efficiency, facility for audit trails etc. #)

- o Assured the following attributes of information thereby Quick Decision making:-
- o Timely information
- o Complete Information
- o Correct information
- o Decision Support System
- o All Employees access Personal Data(salaries, arrears, pensions, family Pensions, etc.)anytime anywhere
- o Online Sitreps & its consolidation.
- o Analysis of operational data for quick decision making
- o A move towards paperless office
- o Integration of Multi-Service Voice/Video/Data Network to manage Information flow within the organization
- o Robust multi-Tier network enabled higher uptime.

9. User Convenience (Give details about Access points, Comprehensiveness
Of information provided, Accessibility, ease of transaction, distance required to
Travel etc. #)

- o Single sign on
- o Customized screens and reports
- o Application trainer availability at site
- o Al employees access personal Data(salaries, arrears, pensions, family Pensions, etc.) anytime anywhere
- o Email hosting for 2 Lac + personnel
- o Web based application enabled users to access anywhere across Prahari Network

10. Sustainability (Give details about sustainability w.r.t. technology
(Technology used, user privacy, security of information shared- Digital

Encryption etc. #), Organization (hiring trained staff, training etc.#), financial

- o (Scope for revenue generation etc.#)Single vendor for 7 years support, ensures accountability and
- o Successful rollout.
- o Leveraging domain expert knowledge to provide "the best & faster"
- o Solution.
- o Training to more than *30000 BSF employees*.
- o 170 persons were trained in DBA, Networking & messaging.
- o 1079 persons were trained in computer operations.
- o 28735 persons were trained data operation & application.
- o *16 Application trainers* posted at key locations for continuous Training.

11. **Result Achieved/Value Delivered to the Beneficiary of the project**

- o Near paperless office.
- o Quick decision making system with centralized database.
- o Complete transparency & Accountability in workflow with data & time stamp
- o Easy access to personal information like pay, GPG etc. by individual.

12. **Extent to which the objective of the project is fulfilled**:

A G 2 G project. Complete objective fulfilled. Almost 2.5 lakhs personnel of BSF are benefitted with this project

13. **Accountability.**

- o Tracking/ Monitoring of workflow at all level. DG monitoring at force level &respective IG's monitoring at Ftr level.
- o Date & Time stamp fixed in every noting/ file and hence accountability for delay in work flow can be easily fixed.
- o Individual can view/track pendency of request of his request/application and the intermediate remarks can neither altered nor changed thus streamlining the transparency.

14. **Communication and dissemination strategy and approach:**

- While implementing the project, one officer was made the incharge of project, one officer was made responsible for the development and implementation of each software module pertaining to Ops, Inventory, HR, Finance & Accounts, Document Management, work Flow & mail messaging. One officer was made in charge for monitoring of project of Data entry and training at all BSF location. One officer was made in charge for monitoring Implementation of LAN & WAN setup including all hardware at all BSF location.
- Each officer was assist by two to three assistants. At Ftr HQrs level, DIG(Comn) along with DC(IT) of the respective Ftr and OC(IT) of the respective Training Institution were made responsible for implementation of the project at Ftr HQrs and all its under command SHQrs & Bn HQRs. In addition to this one project manager of the vender was also send to each location.
- At FHQ level. Project plan was made and details were sent to all DIGs (comn) and OC (IT). Weekly meeting progress of the project with present project Manager of vender & his team. Weekly video conference was held by DIG (IT) with all DIGs (Comn)/OCs (IT) of the field formations /HQrs and training institutions to get the progress from the ground level and resolve all issues faced by them.

15. **Other distinctive features/accomplishments of the project**

1. e-Note Sheet
2. Mail messaging
3. Document management system
4. File Tracking and Audit trail
5. My document -serving provision of creating online briefcase as database for storing data at individual level
6. My e-Profile -serving all individuals related information and inter phase for each BSF person to interact.
7. Directory service -serving 2.5 lakh employees

8. Implementation of personal dashboard
9. Robust document management providing data stores for unstructured data
10. No inter-phase to Internet only BSF Intranet
11. Appointment and Role based access to information system
12. Electronic situation report
13. Online salary of 2.5 lakh personnel
14. USB disabled on entire network
15. Management of access and rights at Screen and field level
16. ISO 2700:2018 certified for ISMS