

State, Home Information for Enforcement of Law and Defense **(SHIELD)**

Executive summary

The proposed solution targets to counter homeland security threats, reducing vulnerability to terrorist threats, reduces crime, minimizes the damage and recovery from attacks that do occur. This solution will focus and integrate our collective efforts on solving homeland security issues, this means intensive data sharing analysis, which can be targeted at short term emergencies such as responding to an attack or national disaster or at ongoing issues such as monitoring suspicious people or activities.

The plan for the development and integration for this solution will be indigenously developed in India along with United states Technocrats. This solution plans for a joint venture program with the State/Central IT Departments to a successful completion.

Preface

Crime is increasing everyday and today we do not make best use of the technology which could help in looking back and guide us in better decision making to counter the threat.

Homeland security efforts require considerable investments in security screening, data gathering, and integration (for the merging of data and systems) and analysis technologies. The objectives of these investments are to improve information access and identify potential threats. Key technologies include sensors and surveillance equipment, wireless and hand held mobile devices, biometrics, databases, network infrastructure, and new applications and Web services focused on integrating existing data sources and systems. Geographic information systems (GIS) that integrate multiple data sources and display the data as map overlays are a popular solution, particularly for justice and public safety organizations.

SHIELD – A brief summary

India's system today is manual and currently all data available is in fragmented fashion. The data volume is tremendously high and is manual, and there is no way of data sharing between different law enforcement support agencies. These are few challenges for our government to act faster and in an organized fashion. What we need today is a centralized repository, encrypted and secured data with a cost effective real time system to work efficiently for homeland security. SHIELD would try to help reduce these challenges faced by the government today. The following would be a high level outline that will be targeted for the system (caution: – a detailed system study by the team can add/change more functionality to the system and the proposed plan) :

- **Identity Management system (Similar to SSN/ Unique Identification Number in other countries)**

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The idea is simple—shift the burden of compliance to a secured centralized repository for public SSNs and minimize the required changes to the existing legacy applications. The key enabling technology for this transition is Universal Identification Master, which includes rich capabilities for safeguarding and actively managing any Identification. Universal Identification Master becomes the centralized hub for any ID management that generates a Universal Unique ID (UUID). This UUID becomes the enterprise identifier used in all interactions across all channels.

Approx Cost Rs300 Cr to Rs500 Cr. Time 5 years to 7 Years.

- **Complaint Management System**

Complaint management enables information to be easily shared within and between the agencies with the type of complaints and its seriousness. The Complaint Management will have the following goals:

- ✓ Enable complaint management data to be shared within and across agencies.
- ✓ Improve effectiveness and efficiency of law enforcement, investigation, civil and criminal litigation complaint management processes.
- ✓ Identify common complaints management processes across components and agencies that will drive system and function consolidation.
- ✓ Address immediate and long-term complaint management needs and opportunities within federal agencies.
- ✓ Provide guidance for future complaint management across the government.
- ✓ Deliver insights on complaint trends for better planning and resource utilization and build infrastructure.
- ✓ Issue can be resolved at very early stage before it proceeds to a criminal activities.
- ✓ Common people can get justice and they can speak out their grievances.

- **FIR Management/Case management**

FIR/Case Management provides powerful tools for law enforcement to manage incoming incidents, tips, leads, grievances, or crime complaints from the general public. FIR/Case Management collects, manages, dispositions and analyzes large volumes of reported information to more efficiently conduct and conclude large, complex, and/or politically sensitive investigations. These are the sub-systems that would be part of this—

- ✓ FIR/Case Management System
- ✓ Lead/Tips Management System
- ✓ Incident Tracking Management System
- ✓ Offense/Offender Tracking Management System
- ✓ Suspect and Victim Tracking System
- ✓ Evidence Management System
- ✓ Universal Case Inbox
- ✓ Investigative Analytics Module

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- **Crime Investigation module**

Investigative and enforcement agencies typically consist of multi-disciplinary case resource personal, all needing to access and use of common source of candidates and case information. While Crime investigation such information will be available and will have sensitive data in a cryptic fashion just for investigation agencies and key personnel :-

- ✓ A history of agency interactions with the candidate, including appointments, meetings, e-mails, faxes, phone calls etc.
- ✓ Address history of real property deals
- ✓ Information on asset and income information
- ✓ Employment history if any.
- ✓ Relationship mapping to other case players and link charting
- ✓ Accumulated evidence in document and other file formats such as voice mails, faxes, photographs etc.
- ✓ Other key reference information

- **Criminal Profiling**

Criminal profiles will be available and could be updated regularly with status. This could be shared across organizations. Data security tool would be implemented accordingly via Shield tool.

- **Police Vehicle Management**

Police vehicle dispatch and their details would be part of this section of the application. It will be a complete Vehicle Management System like scheduling ,tracking, Routing ,Inventory etc.

- **Evidence Management/Crime and Forensic analysis**

This section of the application will be linked with crime management wherein all the evidence and forensic analysis will be available for investigation agencies and act upon it.

- **Witness Management System**

In the witness management, whether the witness is an evidence or person and how that could be managed before getting into the judiciary system and after will be in this part of the application.

- **Informant Management System**

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If the informant in the investigating system or judiciary system, whether it is a paid informant or unpaid informant and their details along with the information for a case will be part of this application.

- **Personnel Module**

The personnel information of the organization and their people with their roles and responsibility will be part of this application.

- **Audit module/Quality assurance**

This part of the application will be of a third party, independent agency making sure the audit/quality is checked time to time on the data within the system and their usage by the authorities/users and verify their integrity.

- **Prosecution Module**

This will be a part of the application beyond the judiciary system where the prosecution been granted. This will keep track of the business process of the system between the judiciary system and the prosecution case handling agency.

- **Judiciary Module System**

This is one of the major section of the whole enterprise system wherein along with the below mentioned information will also have a Justice eHUB which will get the information integrated with courts, prosecutor, law enforcement, public defender, corrections, parole/probation, emergency management, and citizens. The following information will be available in this section.

- ✓ Case Initiation and Indexing
- ✓ Docket Management
- ✓ Scheduling
- ✓ Document processing; e-filing capable
- ✓ Calendaring
- ✓ Hearings
- ✓ Case Closure and Disposition
- ✓ Execution- civil
- ✓ Compliance functions criminal
- ✓ Interface to Accounting functions
- ✓ File, Document Management
- ✓ Evidence Management
- ✓ Security and Data Integrity

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- ✓ Audit Capabilities
- ✓ Analytical Reports

- **Crime statistics/Analytic module**

This will have crime statistics and will also provide reports on analysis of it's trend.

- **Resource Allocation module**

Resource allocation for an organization by task will be tracked here.

- **Disaster Management**

Managing an ongoing disaster or predicted disaster will be monitored and managed in this section of the application.

- **Shield Administration and Shield Tool.**

Roles and responsibility and the application administration will be part of this section. It will be highly secured zone where multilevel security will be enforced and data will be replicated and secured in an encrypted formats.

- **Arms and Ammunition Module**

Details about arms and ammunition and it's licensing details of arms and ammunition.

- **Licensing Module**

Licensing for drugs, alcohol and other various control products etc..

- **Publicity/ Media Reporting /Press Releases Module**

Uniform , Controlled news for all the licensed /Govt Approved media houses.

Media Houses can get the latest update on any cases/ issues from the shield.

- **Award and Performance Management System**
- **Library and Museums Management System**
- **Security Training Module**

- **Integration Hub module / Open Interface Module**

Very critical for the whole enterprise application where integration will happen and the integration will have in multi-level as mentioned below-

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- Hospital module
- School integration
- Bank/ Financial Institute Integration
- Passport Agency
- Driver Motor Vehicle agency
- Income tax department
- CISF
- BSF
- CRPF
- RPF
- Shipping Port/Cargo
- Airport
- Customs
- Immigration
- State/sub agencies
- Interpol/Similar agency
- Geographical information system (GIS) Integration
- Prison Info Integration
- Integration with other ERP systems, e-governance systems and legacy systems

● **Technology Business intelligence/Reports**

This is a business intelligence and reporting place where there will be tons of reports and business intelligence will be available for users. Some of the examples are -

- Job verification report
- Daily critical evidence indicator
- Criminal report
- First incident reports
- Summarized and detailed reports
- Customized reporting

● **Threat Manager**

Threat level for homeland security with their respective threat details will be available here. It will be an interactive web based planning, decision support and collaboration application that will support identifying and accessing threats, analyzing threats, analyzing vulnerabilities of assets/critical infrastructure, and planning/evaluating vulnerability reduction and threat reaction.

Some of the available details will be Graphical and text reporting on threat levels, Geo-spatial map analysis and reporting, robust data access and analysis, automatic e-mail notification, document

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management and collaboration.

Approach plan:

We advise to approach in three phases – Time-line will depend on support from all departments and final predicted schedule will be provided after business analysis and with project plan. Pricing will depend on volume of data and predicted schedule based on real time system analysis.

Phase I – Central lab Implementation & Pilot Project (Selected modules only) – Rs.150 Crores (Approx)

Phase II – Integration with other departments/modules – Rs 1000 Crores (Approx)

Phase III – Enhancement and fixes – Subject to need and number of years of support

Benefits

It address the following issues that of today -

- How do we collect, integrate, analyze, and share sensitive information across public- and private-sector organizations?
- How do we coordinate the numerous detection, prevention, preparation, response, and recovery activities designed to shield Indians from future threats?
- How do we ensure the integrity of information and at the same time balance public interest relative to individual rights to privacy?
- How do we construct our Homeland Security processes and management infrastructure to address today's realities, while ensuring flexibility to move rapidly to address future requirements?

The application will benefit in -

- **Ease of use** – Being web based it will help in the use of this application anywhere as a secured system.
- **Ease of Deployment and Management** – It leverages its facilities that make deployment and management easier and less risky.
- **Lowers Total Cost of Ownership (TCO)** – A rich set of functionality and cohesiveness that lowers the total cost of ownership.

Other details of benefits are -

- ➔ Improved community oriented policing through integrating programs and systems across regions and departments
- ➔ Consistent and enhanced services to citizens with automated work flows and task-based

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interface

- Better, more collaborative environment for multiple investigators, departments, or agencies to quickly and thoroughly explore each tip, lead, or citizen complaint
- Unparalleled security, scalability, and reliability with a world class, enterprise architecture based on industry standards
- Improved case clearance and sentencing through integrating disparate programs and information systems across regions and departments
- Consistent and enhanced services to citizens with automated work flows and task-based interfaces
- Better, more collaborative environment for multiple users, departments, or agencies to quickly and thoroughly explore each case, documents and associated evidence
- Ability to quickly analyze case loads, clearance rates, dispositions, and other management reports.
- Effectively turn information technologies from collection and storage to actionable intelligence through comprehensive analytics