



गृह मंत्रालय
MINISTRY OF
HOME AFFAIRS



Project Report

On

Automation of Weapons Licencing System

(Project No.05/MM:05)

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'Promoting Good Practices and Standards'



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1.0 Introduction/Background

Government of India had directed the state Governments to maintain a database of arms licenses. The Government had also notified several rules that require maintenance and usage of a live and dynamic database of arms licenses.

For example, if a licensee under the threat perception category had not used any ammunition in the previous year against the quota of 50 cartridges, no fresh quota for the current year would be admissible. The State Government is supposed to issue appropriate instructions to the licensees and all the arms dealers in the State in this regard. A report on the use of the ammunition by licensees is also supposed to be sent by each DM (District Magistrate) to the State Government concerned on a quarterly basis and consolidated report is to be sent by the State Government to MHA on an annual basis.

In the state of Telangana, the State Crime Records Bureau in CID collects this data from all the licensing authorities and compiles it. However, as the district Collectors and the Home Department issue licenses on a regular basis, this herculean effort by CID to collect data through the offices of District SsP, who in turn collect this data from the District Collectors, is necessarily non-live and not dynamic. Further, this data is to be updated only once every quarter and there is every chance of errors, duplication and omissions.

In this scenario, for instance, it would be very difficult to ensure strict compliance to the above Rule of no fresh quota of ammunition to those who did not utilize their previous quota.

This project explains the desirability of replacing the present book type arms licenses with RFID based smart cards.

2.0 Overview

2.1 Project Title: Automation of Weapons Licencing System

2.2 Vision: To have a system based mechanism to issue, record, monitor, manage arms/ammunition licences efficiently and effectively.

2.3 Project Objective: To prepare an S.O.P. for achieving the above vision with simplicity and robustness

3.0 The Project

3.1 Purpose of the project:

Arms licenses in the state are being issued presently in the book form and they are difficult to maintain and up keep in proper shape all through the life of the License validity period by the department as well as by the License holder.

The RFID system provides next-generation advantages over even bar code devices. The coil-on-chip RFID architecture enables specimen tracking without line-of-sight requirements. Rugged packaging makes the chips and the data stored impervious to harsh environments, including extreme cooling or heating. It also gives cost advantage to the users as the RFID tags are recyclable for 10 million times where as Barcodes are one time usage.

3.2 Sponsor: Government

3.3 Financial benefits:

With the issue of RFID based card licenses the following are the benefits.

- No more License Books.
- Hassle free maintenance since all the licenses will be card based.
- Customer Data is digitized and embedded in to smart cards and used as licenses.
- Data retrieval of a user at times is very easy and system driven.
- Police can verify licenses of the Arms user any time anywhere by using a Smart RFID PDA reader.
- No Computers or Internet Connection required for spot verification of licenses.
- Renewal Process becomes easy and user friendly.
- Proper filing and tracking system.
- Deployment of a RFID writer/reader at each armory store will record the data of the rounds purchased by the license holder and this transaction details can be managed and monitored by the Department and also can have a check on the users usage of rounds.
- Department will have centralized control on the licenses issuing offices and branches.

- This digitization and RFID card Licenses issue can be carried out individually at the respective branch and area offices yet seamless integration of all the offices data is possible.
- If all new licenses are issued in this manner and all old licenses replaced by these smart cards at the time of renewal, the entire arms licenses of a state will get converted to the new form within 3 years (as the license validity is 3 years).

The project can also be self financing by collection of appropriate user charges from the licensees.

4.0 Situational assessment and Problem statement:

RFID solution efficiently automates the information-gathering process that is currently dependent upon manual input and handling of Licenses in book form is tedious.

- Users can carry these license cards easily in their card holders or wallets etc.
- Provides a facility to record the complete data of the users.
- RFID eliminates manual data entry or bar-code scanning.
- It can also help solve issues with asset accounting, depreciation etc.
- Police can have quick checks of the users' activities.
- Same cards can be used for buying rounds from the licensed vendors. Number of rounds bought at these shops can be immediately recorded and the police will get alerts and their data base updates automatically whenever a license holder does a transaction at the stores.

The objective of this system is to have a hassle free, cost effective and fully secured world class system to facilitate the users with flexibility of carrying the Arms License – anytime and anywhere. Besides, improved customer handling, this will also improve documentation process streamlining.

5.0 Critical assumptions and constraints

Disadvantages in the Traditional book Licensing System.

- Needs careful upkeep and maintenance.
- Risk of forgery.
- Carrying the License in Book Form by the users is difficult and not user friendly.
- Authentication difficulties.

The RFID cards will be:

Memory Based Passive RFID smart cards with customized printing of the personal details of the License holders embedded in to the electronic chip of RFID card.

These RFID Smart cards will have unique 16 / 24 digits. The ID can be read through RFID readers.

After the ID is read by the reader the software application will call the details of the License holder captured in the backend database.

The details of the User are provided by the database after all validations as per the license issue norms.

Application software will hold the Data Base of all License holders in the state and the data can be managed as per requirement, by splitting in to area wise requirements and licenses issued in those areas.

The users Data can be written in the RFID License cards using RFID desk top card writers by taking a flat file from the database.

Linkage with Aadhaar:

If and when it becomes possible to seed this database with Aadhaar, when an applicant applies for the arms license he/she may be instructed to provide Aadhaar number in the application form of licensing system application software. Once Aadhaar is captured through application software, many processes as mentioned below will become faster:

- Verification of Name, address, Date of birth could be accomplished on the basis of records that are available with UIDAI.
- Age eligibility can be decided at the very first level of application.
- Family details like Father's name and address from Aadhaar can be verified in case of renewal of licenses under family Heirloom.

- No much documentation will be required once Aadhaar copy is enclosed with application.
- Follow up time will be reduced.
- Enquiry time will be reduced once one level of verification is done.
- Each arms' license number will be linked to Aadhaar number. This will enable the authorities to keep an eye on the number of licenses issued to a particular Aadhaar number. This will also check whether any other license has been issued in past for that particular person and will ensure whether the person has any weapon already.

Aadhaar Bridge will offer services to seamlessly integrate with UIDAI and will empower Arms Licensing Application with multi-factor authentication and e-KYC services.

As a part of authentication services roll-out strategy, UIDAI engages with Authentication User Agencies (AUAs - who would deliver services to their beneficiaries by using Aadhaar based model for verification) and Authentication Service Agencies (ASAs). This would be the first level of eligibility for the Arms Licensing Authority to sign an agreement with UIDAI where it can be authorized as AUA and ASA.

The eKYC service can be linked with the Arms Licensing Application System to enable the instantaneous paperless verifications and fraud deterring methods. Arms Licensing Authority after becoming an AUA/KUA (e-KYC User Agency) partner with UIDAI, agency can get integrated the Aadhaar's Authentication API and e-KYC API to access the services through UIDAI.

6.0 Implementation Strategy

6.1 Implementation:

Various steps involved in the implementation of this Project:

- i. Weapon & License holder data collection.
- ii. Master Mapping of the collected data in the database.
- iii. Issue of license cards to the Licenses.
- iv. Hardware fixing and configuration.
- v. Ongoing maintenance of the Software and hardware.

Following are the requirements of the project:

- RFID based License Cards for issue of Licenses to the valid users.
- Desktop writers for writing the data on the cards.
- Desk top readers for reading the data on the cards at various offices.
- Handheld Reader for spot verification.
- Biometric gadgets for data collection and authentication.
- Electrical components & cables etc.
- Software Application.
- Engineering, Hardware & software implementation and Training.

6.2 Deliverables: as per above

6.3 Stakeholders: Government, arms licencees, arms dealers

6.4 Related projects:

Not Applicable

6.5 Work Plan

The Home department of the state should call for an RFP from interested vendors who can deliver the above project in a time bound manner. Once completed, the project will place the Government and police department in full and firm control of the arms license holders' and arms dealers' activities in real time. The project can also be self financing by collection of appropriate user charges from the licensees. However, for this project to be really effective, the Government of India must prepare a standard SRS and require all states to model their implementation accordingly. Appropriate funding by the G.O.I. may also be considered. A suitable template for an all India implementation would be the RAPDRP program instituted by the ministry of power in the G.O.I. for certain IT based reforms in the power sector in all the states.

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