

Smart Card Based Projects in Government

Computer chip-embedded plastic cards that store and transact data, Smart cards, a new form of fast and effective transaction has been instrumental in providing better e-governance in India. Smart cards usually have multi-purpose lives, from being National ID cards to tools for driving licenses or calling on to a hospital. The moment you prefer to have a Contact-less Smart Card (CSC) or Smart Tag suddenly everyday life becomes easier and faster.



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INDUSTRY has long recognized its immense potential but its extensive use in government agencies has been a comparatively recent phenomenon. Keeping in view the immense potential of Smart Card, under the aegis of National Informatics Centre under Department of Information Technology (DIT), various development projects have been formulated and initiated to provide thrust to smooth governance. Some of the major projects currently underway include:

DRIVING LICENSE

The Government of India has issued guidelines for the introduction of Smart Card-based Driving Licenses (DL) and Vehicle Registration Certificate and e-governance facilities in various functions of the transport departments in all states of India.

Objectives of smart card driving license include providing security against illegal duplication and fake issuance, providing ease of handling to individual, and facilitating better law enforcement. Approximate Volumes are 200 to 300 millions with Provincials Governments as implementing agencies. So far Technology Standards are concerned, SCOSTA OS, Microprocessor based Card with contact interface and 64 K memory, and distributed personalization and issuance at regional offices are at work.

Security Systems Framework includes Symmetric Key based, Active Authentication, Symmetric

Key based Access Control to Card Data, and Symmetric Key based Role Verification.

E-PASSPORT

E-Passports, also known as bio-metric passports, has been prepared with the objectives that include security against illegal data tempering, providing a mechanism to prove identity of document holder, and above all facilitating better law enforcement.

Approximate Volumes are about 100 millions whereas Implementing Agency includes Ministry of External Affairs. SCOSTA-CL based OS, and Microprocessor based contact-less inlay with 64 K memory are the technical standards of this project. Booklet Manufacture includes Government owned Security Press, Distributed personalization and issuance at regional Passport offices, and DG1, DG2, DG11 and DG13.

Security Systems Framework includes Passive Authentication, Basic Access Control, and PKI Framework compliant to ICAO PKD standards.

NATIONAL ID

The Multipurpose National Identity Card (MNIC), an initiative of the Government of India for creating a National ID in the form of Smart Card focuses on increasing national security, managing citizen identity and facilitating e-governance. It is desired to allow multiple applications integrated onto a single smart card. It also focuses on providing a mechanism to prove identity of card holder at field and establish the proof of citizenship, facilitating better law enforcement with better border management.

Being a national project, the approximate volumes is estimated about 1.2 billion. Registrar General of India under Ministry of Home Affairs is the implementing agencies in partnership with National Informatics Centre and Central Public Sectors. Technology Standards ranges from SCOSTA OS to Microprocessor based Card with contact interface and 64 K memory to Centralized personalization.

PKI based Passive Authentication, Symmetric Key based Active Authentication, Symmetric Key based Access Control to Card Data, and Symmetric Key based Role Verification come under best Security Systems Framework.

SOCIAL SECURITY (HEALTH INSURANCE)

Providing social security to the citizens has always been the prime concern of the government of India. In this connection, to provide better coverage, smart card has been introduced with an objective to provide a secure instrument for delivering Health Services to Rural and under privileged. To help Insurance Service providers in authenticating the beneficiary and their entitlement and providing ease of handling to individual is another objective of this project.

India, being a large country, the Approximate Volumes seems to be around 100 millions. Stake Holders could be counted as Ministry of Labour, Insurance Companies, and Provincial Government bodies. SCOSTA OS, and Microprocessor based Card with contact interface and 32 K memory are the technical feature of this project.

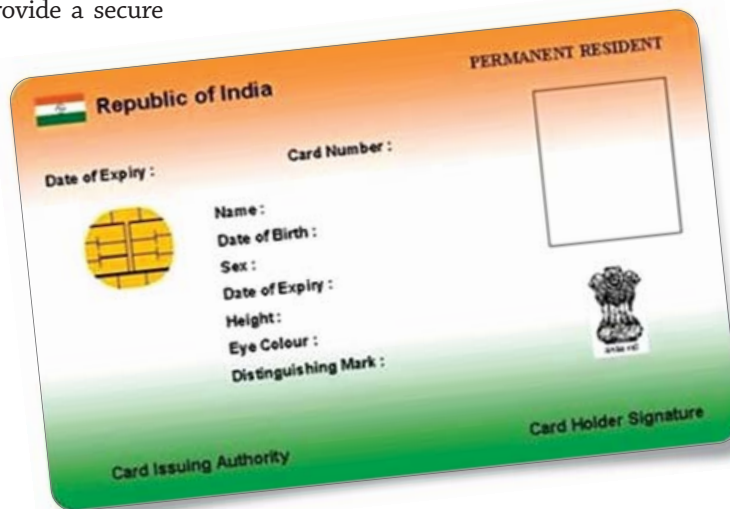
Distributed enrollment, personalization and issuance at grass root level

(roughly through 100 thousand village camps), Authentication and Transaction for service delivery at empanelled Hospitals with the help of a PC with Smart Card reader and finger print verification system are another features of this project. Security Systems Framework includes Symmetric Key based Active Authentication, Symmetric Key based Access Control, and Symmetric Key based Role Verification.

PUBLIC DISTRIBUTION

The introduction of Smart Card in Public Distribution System (PDS) has replaced the existing Paper based Ration Cards. The biometric Smart Cards carrying personal details and photograph of the card holder allow fare distribution of commodities, identification and verification of the right person through a secured mechanism.

The prime objectives of smart card based public distribution system range from providing a secure instru-



ment for delivering subsidized food and commodities to Rural and under privileged, to helping Government for effective monitoring the public distribution of subsidized food to entitled beneficiary and to establish an effective accountable mechanism to plug the distribution loop-holes and misuse of subsidy.

Approximate Volumes assumed are more than 100 millions. Federal and

Provincial Governments, Public Distribution Department are the pioneer implementing agencies. Technology Standards include SCOSTA OS, Microprocessor based Card with contact interface and 64 K memory, Distributed enrolment, Centralized Personalization and issuance, and Authentication and Transaction for service delivery distribution outlets with the help of a PoS device.

Security Systems Framework includes Symmetric Key based Active Authentication, Symmetric Key based Access Control for card data, and Symmetric Key based Role Verification.

MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT (MNREGS)

MNREGS, introduced by Rural Development Department, Government of India under the National Rural Employment Guaranteed Act-2005 focuses on the enhancement of livelihood security of the household in rural areas of country by providing at least one hundred days of guaranteed wage employment in every financial year.

Biometric Smart Cards have been provided for identification, attendance, verifications and wage disbursement. The nationalized banks have also initiated in the state government's project for Smart Card payment system (electronic benefit transfer) for National Rural Employment Guarantee Act (NREGA) and social security pension (SSP) beneficiaries. Under this project the beneficiaries operate their Saving Bank accounts using smart card at remote locations.

The standard Contactless Smart Cards used for NREGS are SCOSTA compliant with 32k/40k memory size.