Creation of a Single National ID: Challenges & Opportunities for India

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Abstract

A National ID for all citizens and residents of India has long being considered a critical necessity, albeit the related projects have been in pilot mode for the past several years and no distinct road ahead seems to be coming out. The government has been focusing on inclusive growth and has launched several schemes at different levels to facilitate the same. However, monitoring the execution of these schemes and understanding clearly if the targeted citizens actually have got benefited, would demand for substantial granularity of information and doing away with information bottlenecks. Interestingly, proper execution of the National ID project by the government can prove to be useful for execution of various schemes and projects as well as in accessing multiple government and private sector This paper focuses on the need for a single national identity system in India and its proposed execution which may actually be linked to citizen life cycle. The other aspects covered and analyzed include current Indian scenario, challenges, existing identification systems and loopholes in the existing systems. Major challenges seem to be coming from enrolments, technology platform choice and strategic design, corresponding policy and legal frameworks. The paper also discusses about international scenario of single national id projects undertaken in 27 countries across the globe to understand current status, adoption and usage. To reinforce the need for national ID, the existing IDs were analysed based on a scoring model considering various dimensions. Primary research was conducted, based on which it was found none of the existing IDs was able to satisfy as a National ID based on the scoring model. The proposed road map has been discussed in length i.e technology platform, smart card technology, legal and administrative framework, business model based on Private-Public Partnership (PPP) considering the mammoth and diverse population. A ranking matrix may be created to come up with a composite score for all districts based on various dimensions. The execution may be planned to be executed without asking Indians to stand in queue for one more ID and accelerating towards a more secured society and more importantly ensuring better delivery of Government services to citizens.

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1. Introduction

A national identification number is used by the governments of many countries as a means of tracking their citizens, permanent residents and temporary residents for the purposes of work, taxation, government benefits, health care and other functions. Although different countries have different views on the usage of the national identity, a large number of countries have been in favour of having a national identification system in place.

Many countries issued such numbers ostensibly for a singular purpose, but over time, they become a de facto national identification number. For example, the United States originally developed its Social Security Number system as a means of disbursing Social Security benefits. Due to functionality creep, the number has been utilized for other purposes to the point where it is almost essential to have one in order to, among other things, open a bank account, obtain a credit card, or drive a car.

In India, the current and previous governments have contemplated for a national identity system in place. Albeit the need of such a system and moreover the benefits which common citizens may accrue from one more identity has been a topic of debate. An average Indian now has to carry at least four to five different identities to prove his identity. The limitation of existing IDs, is that they serve different and limited purposes. As citizens are issued different identity proofs with different purposes, there is lack of a centralized information data system, thus causing redundancy and wastage of resources. Currently, government has been running at

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least two major national ID projects, which are in pilot phase for the past seven-eight years.

2. Need for a Single National ID in India

The need of a single national ID for a large country like India becomes more crucial than for a host of countries that have already adopted such a system or are in the process of such an exercise. Provision of multiple services to a large population by government and private organizations is a mammoth task and is accompanied by many hurdles. Unique National IDs would help in better delivery of government services like Public Distribution System, Grameen Yojana, Rozgar Yojana, Self-Employment, banking and investment services, health facilities and different schemes offered by the government. Other benefits which could be derived are: a single document with multiple information integrated to strengthen national security and social security for citizens, a useful means for citizens to access multiple government and private services and benefits, and an easier and safe means for entities to offer services, employment, etc.

The subsidy disbursement to the poor through smart cards and the accounting of disbursal can be done by using systems similar to those used by credit card companies. The critical task is to identify the beneficiaries at micro-level and that should be done using all possible sources of data and information so as to minimize both, Type I and Type II errors, that is, chance of exclusion of genuine beneficiary and chance of inclusion of spurious beneficiary in the list of target beneficiaries. Tactical ways could be created to verify the genuineness of a citizen and his identity proof. Disbursement of subsidy should be such that it is recorded at the point of transaction and is immediately captured in a large centralized database, thereby creating a permanent audit trail, akin to operation of credit cards (details outlined in the report). The activities associated with initial identification of beneficiaries, disbursement of subsidies and updating the list of beneficiaries is to be done by well-qualified private agencies.

A national ID with multiple usages would be beneficial both for citizens and government and other entities. Creation of a national ID system would enable to create a one point source of information hub and would include important information about each citizen. The creation of a centralized information hub enables effective

distribution and management of the database, access and exchange of information and upgradation. A centralized national ID system can help to clear off redundancies in the existing multiple ID proof system and save time, resources and energy of the citizens and country. Figure 1 indicates in brief core benefits, secondary benefits and other benefits, which could be gained from a national ID.

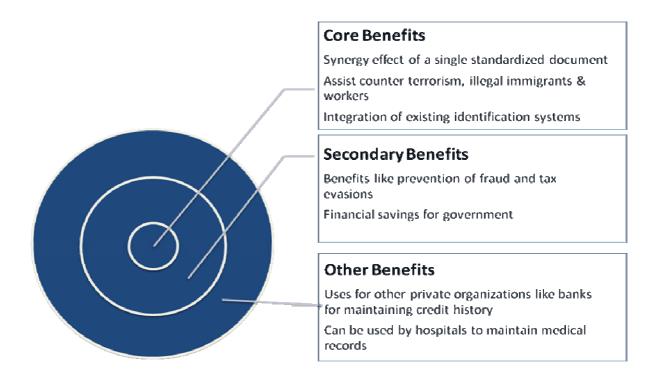


Figure 1 Advantages of National ID for India

A national ID is required at each stage of a citizen's life from the day of birth till death. A national ID card should be in a format where information of the citizen is updatable. Figure 2 tries to capture various stages during the lifetime of a citizen, where national ID would be required.

Birth: Once the child is born, the process for acquiring his/her national ID begins. Once a national ID is issued to the child it would help in acquiring birth certificate, getting the child's name registered and added in ration card, etc.

Medical Information & Facilities: If a centralized national ID system is created it could enable to send information or messages on medical facilities needed by the

child, create medical history of the child, etc. This could help as an easy reference for health service providers and the child's parents.

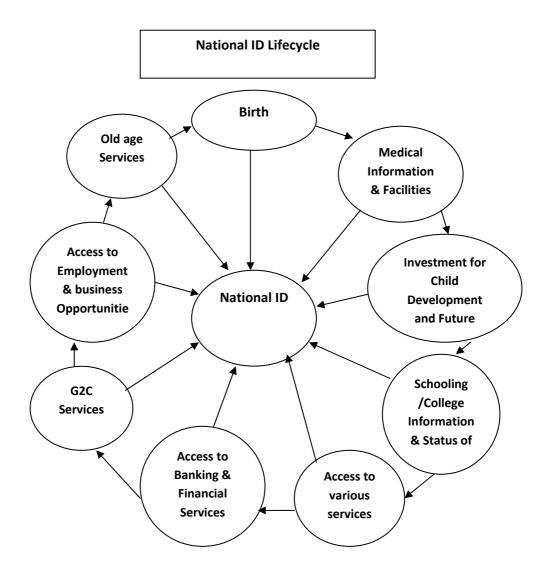


Figure 2 How National ID Can Be Linked with the Citizen Life Cycle

Investment for Child Development and Future: National ID system would enable parents to start investing for their child's studies and for fulfilling needs during the growing years by accessing investment provisions provided by banks and financial institutions.

Education Information and Status: The progress of a child's personal, medical and educational information could be updated in the national ID system. As per the

progress, the citizen and his guardian could be intimated about schools, colleges, courses available, alternative sources of education, etc.

Access to various services: There are innumerable services accessed and used by citizens each day. To access these services, it would be required to produce identification proof, residence proof and citizenship proof in order to overcome fraud or any discrepancies. A national ID could play a vital role being a single comprehensive ID proof, which could serve multiple purposes.

Access to Financial & Banking Services: As a child enters adult age, he would be interested to access financial & banking services either for investment or to take educational loans for higher studies or for an entrepreneurial venture.

G2C (Government to Citizen) Services: There are number of G2C services being provided for the betterment of citizens and the nation as a whole. E.g. Driving license, passport, voter's ID card, employment in government organization, Employees Provident Fund, etc.

Access to Employment & Business Opportunities: A national ID helps citizens to access employment opportunities in government and private entities. A national ID gives authenticity and acts as identification and proof of residence.

Old Age Service: A national ID could enable the country's senior citizens in easily accessing services required by them like pension fund, banking and postal services, health & medical services, concession in transportation charges, tax exemption facilities, etc.

3. Current Indian Scenario & Challenges

In India too, the need for a multi-purpose national level unique identity card has been recognized as the bedrock for e-governance initiatives and for improvement in internal law and order, security and border control measures.

On February 27, 2008 "In a communication sent to the Rajya Sabha, the Minister of State in the Ministry of Home Affairs, Manikrao H Gavit, said that the project

envisages providing unique national identity number (NIN) to each person in the National Population Register".

The Times of India (on 19 October 2007) reported a senior government official saying: "The main purpose of issuing integrated smart cards is to provide a credible individual identification system to help in identifying targeted beneficiaries, ensure egovernance by improving the citizen-government interface and improving the security conditions."

The news further elaborated: "The Planning Commission had suggested "introduction of Integrated Smart Card System (ISCS) for the major entitlement schemes.... ISCS will be based on the national level unique ID ... as the identifier to avoid duplication of benefits and check corruption and fraud. The proposal ... advocates establishing a national level regulatory authority, which will be the custodian of the integrated smart cards.... The authority will establish security infrastructure to make the card tamper-proof (and) ... ensure that smart cards are protected from unauthorized loading of applications and only those applications which are approved by the authority can be loaded on it. 'The smart cards will be designed in such a way that different applications will be hosted in different domain areas of the multi-application card,' said a senior official."

Studies and various reports have shown that a unique identifier for every citizen is the need of the hour for improving delivery of government benefits and services. In the absence of a unique national identity system "the PDS or the "ration card" system has become 'a double whammy'. It has been reconfirmed through a recent NACER study: "Not only do a huge number of fake cards point to diversion of the PDS subsidized food grains, but the leaking system is bypassing those who are in dire need of state support. While the government is importing food grains to maintain buffer stocks, the delivery system is falling wide off the mark". The study has put the number of "ghost" public distribution system cards at a staggering 2.3 crore and the dismal side is that as many as 1.21 crore "deserving" poor have been left out of the food security umbrella. This is just one example of challenges faced by the nation in providing effectively government benefits, health and other services to citizens by proper targeting.

On the other hand, crimes and criminals and forgery of existing ID proofs continue to flourish. Consider the news of unearthing a heinous racket in human organ trade in the NCR reported on the fifty-ninth republic day of the nation by most newspapers and TV channels. A disturbing feature of this racket is that any individual can assume several identities with ease. *The Times of India* carried the following story: "A Rs 100 crore kidney transplant racket ... a few kilometres from the national capital. The sheer scale of the racket — organized and brazen — that spanned six states and catered to the rich, including NRIs and foreigners, has left the authorities shaken.... But what's shocking is that this racket has already been busted four times earlier, with Dr Amit Kumar, the mastermind ... (already) figuring in police files ... a surgeon from Maharashtra (with) many aliases, Dr Santosh Raut being one. He also has several passports.... "

Another headline from *The Times of India* on 28 January 2008: "Kidney scam kingpin may be in Nepal. The news report further suggests that "the man behind the Rs 100 crore kidney racket - Dr Amit Kumar ... - might have sneaked into Kathmandu through the porous UP-Nepal border", perhaps using a fake passport.

In spite of an undisputed need for 'a multi-purpose national level unique identity, the current reality is that various government departments in India, both at centre and state levels, continue to allot their own identification numbers to the respective clients. As a result we have multiple, non-standard lists built at huge costs that encourage creation of fake and multiple identities and discourage data sharing in a meaningful manner. For instance, in addition to the MNIC of Ministry of Home Affairs, there are Social Security Number (SSN) cards and Employees State Insurance Corporation (ESIC) cards for organized workers and Smart Identity Cards for unorganized workers, Rashtriya Swasthya Bima Yojna Cards, Election Photo Identity Cards and Smart Cards for PDS kerosene besides several cards being issued by various state governments to its citizens. In the existing ID proofs scenario there is wastage of resources, redundancies and minimal use to citizens. Moreover the costs incurred to issue and maintain the data systems in different departments across each state and at central level are huge.

Among other maladies, this scenario adds to the travails of citizens, as detailed in the following extract taken from a blog: "Can you imagine how many times you may need to produce your personal profile during your life? How many times you get frustrated when your credentials are not correct? Just imagine, your personal and family information are important from the day you are born - Birth certificate, School admission application, Citizenship certificate, College admission form. Similar information is required for starting your business, getting driving license for riding your first motorbike, acquiring and transferring properties, registering your marriage, migrating from district to district, casting a vote for your favourite leader, getting a passport for travelling abroad, applying for a job and so many events and in so many situations you will have to disclose your personal identification. So your personal information is scattered everywhere. Besides that, the agencies which deal with you on such situations should process, store, retain your information separately, definitely causing a waste of resources, time and money. On top of that, you cannot expect consistency on the information of the same person in each agency." The major challenges of the current system can be summarized as follows:

	Enrolments	Smart Card	Legal Framework
Challenges	 ✓ Current trend Multiple enrolments Non-standard lists Data inconsistencies Circular frauds ✓ Queues Numbers – 1 billion plus Citizen harassment ✓ KYC Numbers – 1 billion plus 	 ✓ Current trend Multiple, single application cards Huge costs Redundancy Vendor lock in 	✓ Current trend • Fragmented efforts

Table 1 Challenges in the current initiatives towards National ID

a. Multiple Enrolments: The current national ID initiatives floated by different departments of Government of India differ from each other. Each one of the national ID initiatives has different purposes. Multiple national IDs if scaled out full-fledged would cause chaos and additional burden on the citizen to identify the appropriate ID needed by them. Moreover, it would create multiple centres of

national ID, creating additional burden on central and state government along with existing ID proofs system.

- **b. Inconsistencies:** If multiple national IDs are created, it would lead to multiple national ID systems. This could lead to redundancies, inconsistency in data, etc. as no standard has been set for a national ID.
- c. Long Queues: The current national ID initiatives compel citizens to stand in long queues. To make the large population stand in long queues is challenging and cumbersome. This would lead to wastage of resources, time and money.
- **d. High Cost:** If multiple national IDs are created it would lead to incurrence of huge cost on infrastructure, human resources, distribution & logistics management, etc.

4. Existing Identification Proofs System in India

In India, multiple identification proof cards are being issued to its citizens. Each of these existing ID proofs have limited use. Here we would highlight about widely used identification proofs by the citizens of India:

4.1 PAN Cards

PAN is an all India, unique number of 10 characters allotted by the Income Tax Department. It is permanent for the tax payers and does not change with change of address or station, or change of Assessing Officer, etc. A PAN number is currently being used for filing returns. Following are some key characteristics of the PAN system (based on interaction with officials in the Finance Ministry):

- The current PAN is a ten digit alphanumeric number system that uses soundex algorithm to prevent multiple allotments to same person.
- Close to 70 million cards have been issued till date.
- Use of PAN has grown beyond its original role as a taxpayer identification number. It is also necessary to quote PAN for obtaining a mobile connection and credit card. It is one of the numbers used by banks for KYC.

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 It has been adopted as a Common Business Number (CBN), based on Canadian Model for business numbers. PAN is used as CBN by Customs, Excise, Service Tax, DGFT and EPFO - as a number for the employers. (For employees, the EPFO is using SSN.).

- The ease with which PAN can be obtained has encouraged its use in equity and for mutual fund industries. In fact the Union Budget of 2007 had mandated the use of PAN in the entire financial sector.
- Bogus IDs do exist as there is a strong incentive to use duplicate IDs for different financial transactions. Currently the Income Tax dept doesn't have a full-fledged mechanism to deal with bogus IDs. This is in part due to the fact that verification doesn't entail physical verification. Presently verification is only done on the basis of documents submitted with the application and no effort is made to verify their veracity.
- The information on PAN card is restricted to Name, Father's name, photograph, date of birth, signature, and PAN number. Address changes are only reflected in the database if the cardholders personally notify the dept. No medical details are collected and mentioned eg. Blood group.
- No deletion of IDs takes place. Even in case of demise of cardholder or liquidation of a company, the IDs are appropriately flagged in the system only when such information is received. Regular checks for duplicate IDs are carried out.
- The ID is permanent and no renewal is required.
- The hardware is continually upgraded. Right now the system is capable of handling entire population of the country. Data is stored in regional centres across the country with backup at the central place. The data is stored on standalone systems.
- Data is not shared with any dept/external organization. Any verification of IDs is carried out on a request basis by the department.

Overview of Application Procedure

 The application procedure offers both physical and online modes. Application for new allotment of Permanent Account Number (PAN application form) can be submitted at various PAN service centres set up and managed by the two service providers across the country.

 The application form for PAN (Form 49A) can be downloaded from the official websites of Income Tax Department or the service providers or can be obtained from any other source.

- Submission of the following relevant documents is required along with the application form:
 - A] Proof of identity (POI)
 - B] Proof of address (POA)

The documents for POI and POA depend on citizenship and status of the applicant.

- There is a processing fee of Rs.60 (plus service tax, as applicable). If address for communication is a foreign address, the fee payable is Rs. 717 (including service tax).
- 'Individual' applicants are required to affix a recent colour photograph (size 3.5 cm x 2.5 cm) in the space provided in the form. The photograph should not be stapled or clipped to the form. The applicant should not sign across the photograph. The clarity of image on PAN card will depend on the quality and clarity of photograph affixed on the form.
- The department promises delivery of the PAN Card within 15 working days of submission of the complete application form. The processing time has been brought down significantly to 10 working days for issue of new cards. Around 10% of the cards have to be reissued due to various reasons like loss/theft and printing errors. The number of reissues resulting from misinformation/error is less than 0.1%. The dept has SLAs with the vendors for the timeliness and the quality of the cards.
- There is one call centre consisting of 25 executives to log complaints and provide support to the applicants/cardholders. The department promises to process any complaints within 30 days.

4.2 Passport

The Consular Passport and Visa (CPV) Division of the Ministry of External Affairs is responsible for issuance of Indian Passport to Indian Citizens. This document is issued from 28 locations across the country and 160 Indian missions abroad.

 Passport is one of the most acceptable and widely used proof for identification/address proof/ age proof both in India and outside

• Very few bogus passports exist as the verification process is extremely robust

Overview of Application Procedure

- A passport application can be submitted to Regional Passport Office covering jurisdiction of the applicant's residence. The applicant is required to fill a fresh passport application form available at Regional Passport Office at a cost of Rs.10/- or it can be downloaded online.
- While applying for a fresh passport two copies of the following documents are required:
 - (a) Proof of address (Any one of the following):

Applicant's ration card, certificate from employers of reputed companies on letterhead, water/telephone/electricity bill/statement of running bank account/Income Tax Assessment Order /Election Commission ID card, gas connection bill, spouse's passport copy, parent's passport copy in case of minors. (NOTE: If any applicant submits ration card as proof of address, it should be accompanied by one more proof of address out of the above categories).

(b) Proof of Date of Birth (Any one of the following):

Birth certificate issued by a Municipal Authority or district office of the Registrar of Births & Deaths;

Date of birth certificate from the school last attended by the applicant or any other recognized educational institution; or an Affidavit sworn before a Magistrate/Notary stating date/place of birth as per the specimen in ANNEXURE 'A' by illiterate or semi-illiterate applicants.

N.B.: In the case of applicants born on or after 26.01.89, only Birth Certificate issued by the Municipal Authority or the Office of the Registrar of Births & Deaths is acceptable.

(c) Citizenship Document if applicant is a citizen of India by Registration or Naturalization.

(d) Government/Public Sector/Statutory body employees should submit "Identity Certificate" in original (ANNEXURE B) along with Standard Affidavit (ANNEXURE I).

- (e) If the applicant is eligible for "ECNR", attach attested copy of supporting document (see COLUMN 15 of the INSTRUCTIONS AND GUIDELINES FOR FILLING UP THE APPLICATION FORM).
- (f) If the applicant was repatriated at Government cost, enclose documents to show that the expenditure, if any, incurred by the Government of India on his/her repatriation has been fully refunded to the Government of India, Ministry of External Affairs.
- (g) If the applicant was ever deported to India, details of Emergency Certificate/Passport need to be given.
- The duly filled-in application form, together with relevant documents can be submitted personally or through a representative (having authority letter duly signed by the applicant as per Annexure 'L') or by registered post.
- The business process for the issue of passports is being revamped to facilitate the issue within 3 days of submitting the application. The police verification which is a requirement of the Home Ministry is envisaged to be done after the issue of a passport. Biometric data will also be collected (fingerprints 4-4-2). The system is scheduled to be rolled out by April 2009.

4.3 Voter ID card / Electoral Rolls

This is one of the largest databases existing in India with the Election Commission of India, with over 700 million voters in the country. Of this, a total of about 500 million voter ID cards have been issued till date. The country is divided into about 4125 assembly constituencies, each handling around 5,000 – 1,000,000 voters.

Regular checks are carried out to ensure that the accuracy of the voter list is maintained. The electoral list has been observed to be currently about 90-95% accurate, though variations exist across different assembly constituencies. Regular data cleaning is carried out to remove silly mistakes, duplicate data (due to migration) using various software packages and analyses like demographic profiling, etc, on a case to case basis. The commission is planning to convert the whole

electoral roll to incorporate photographs of voters. It plans to achieve about 70-80% photo rolls by the next parliamentary elections in 2009.

Overview of Application Procedure

 The Election Commission prepares the electoral rolls through a process of intensive revision where house-to-house enumeration is done and electors residing in each house are registered by official enumerators who go physically from door-to-door to collect the information about electors.

- This process of full revision is done normally once in five years. Between two
 intensive revisions, summary revisions are done every year during a specified
 period for additions, deletions and modifications, when persons are given an
 opportunity to register themselves by applying.
- The system has been computerized since 1998 and all formats across assemblies have been standardized with the following data:

House Number

Serial Number

Name

Age

Relationship

Name of relationship

Voter ID Card (Yes/No)

Sex

- Following are the necessary documents which have to be submitted for the voter ID card:
 - 1. Proof of residence (Ration Card, Electricity Bill)
 - 2. Photo identification (Passport/Driver's license)
 - 3. Age proof (Passport/Birth Certificate/Driver's license/School Leaving Certificate)

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 The data is further segregated at the assembly constituency level to a cluster of houses in each assembly. This, together with the above information enables them to trace each individual's address for future correspondence/updating of the database.

4.4 Ration Card

Ration cards have been issued by the government allowing the holders to obtain access to the public distribution shops for essential items. Though many people could not get ration cards it is relatively widespread, with about 220 million Indians having ration cards. However, with the waning importance of public distribution of late, especially in the cities, its importance has diminished.

Overview of Application Procedure

- The application form (Form no 1) can be obtained for making a new consumer card from any Circle Office on payment of 50 paisa. Application form for Blue card is supplied free of cost. Same can be downloaded and presented in the form of duly filled hard copy at your Circle Office on any working day between 9.30 to 1:00 pm.
- The following documents are required along with the application form:
 - a. Three passport size photographs of head of family attested by a gazetted officer/MLA/MP/Municipal Councillor.
 - b. Proof of residence in case of owner, Registration Deed, Allotment Letter, Power of Attorney, House Tax Receipt, etc. - in case of tenant, NOC of landlord or any other relevant document.
 - In case the applicant is not able to provide any proof of residence, the Circle FSO conducts spot inquiries by recording statement of two independent witnesses in the neighbourhood.
 - c. Surrender/Deletion certificate of the previous card.
- Prescribed time schedule for preparation of ration card is 15 days.
- The party must produce a recommendation of any reputed personality like MLA or counsellor of the area to declare that he/she does not have any existing ration card in his/her name.

• In case of need for replacement of card due to damages or being lost, etc., the party has to fill a Form (F), after making a FIR in the local police station.

4.5 Driving Licence

A driving licence is an official document certifying that the holder is qualified to drive a motor vehicle or vehicles. Under the provisions of Motor Vehicles Act, 1988 in India, no person can drive a motor vehicle in any public place unless he/she holds a valid driving licence issued to him/her, authorizing him/her to drive a vehicle of that particular category.

Currently, two kinds of driving licences are issued: learner's licence and permanent licence. Learner's licence is valid only for six months. Permanent licence can be availed only after the expiry of one month from the date of issuance of the learner's licence.

Overview of Application Procedure

There are two types of driving licences:

- 1. Learner's Licence: This is a temporary licence valid up to 6 months only. It is issued to learn driving of motor vehicles.
- 2. Permanent Licence: One becomes eligible for permanent licence after expiry of one month from the date of issuing the learner's licence.

Eligibility for obtaining a learner's licence

Age eligibility: 18 years

For vehicles of up to 50CC engine capacity & without gear -- 16 years

(Provided parents'/guardian consent is obtained.)

For commercial vehicle -- 20 years

• Conversant with traffic rules & regulations.

For obtaining a learner's licence, one needs to apply in the prescribed format to the RTO in the region. The following documents are required for learner's licence along with the learner application form:

- 1. Residence proof attested copy of any of the following:
 - Ration card
 - Life Insurance Policy
 - Passport
 - Voter Identity card
 - Pay slip issued by any office in the Central/State or a local body
 - The consent from parents in blood relation can be treated as residence proof, if parents enclose their residence proof
 - Other authentic proof acceptable by M.L.O.
- 2. Age Proof attested copies of any of the following:
 - School certificate
 - Passport
 - Birth Certificate
 - Certificate from Central/State Govt. or a local body
 - Identity card/voter list
 - PAN of Income Tax card
 - Other authentic proof acceptable by M.L.O.
- 3. Form No.2: Application for learner's licence with passport size photograph.
- 4. Form No.1 A: Medical certificate It is required in case of commercial licences.
- 5. Form No.3: Learner's licence form with photographs.
- 6. Form No.1: Self declaration of medical fitness.

After verification of the documents the person will have to go through a learner test. Before learner test, colour blindness inspection is carried out. The learner test is conducted for a period of 20 minutes and it has 20 multiple objective type questions. The minimum marks to qualify are 12. The learning licence is issued to the applicant who has passed this test. If one fails the test, he/she will be given a chance to take the test again. A handbook is provided to go through and learn the contents of learner's test like road signs, traffic rules & regulations with the learner's licence application form.

To apply for permanent licence:

- 1. One should have a valid learner's licence.
- 2. One should apply after 30 days and within 180 days from the date of issuance of learner's licence.
- 3. One should be conversant with the vehicle systems, driving, traffic rules & regulations.

The following documents are also needed:

- One's valid original learner's licence, Application in Form No.4
- Rs.90/- for photograph and lamination of the licence
- Proof of age and residence (as attested photocopy as well)
- One recent passport size photograph
- Form No.5 in case of commercial licence
- The vehicles for which category the licence is being applied for
- One's original licence in case of endorsements of categories

After scrutiny of the documents, applicant will be put through the driving test. The person will be tested for driving skills, familiarization with the vehicle, traffic rules & regulations. Questions about the vehicle system and safety can be asked.

5 Discussion on Existing Identification Proofs

The existing ID proofs have their respective pros and cons. Each differs in robustness of usage, coverage, cross acceptance, accuracy and comprehensiveness of data, renewal and security of ID proofs and international acceptance. Across all the existing ID proofs being issued there are common concerns, which continue to prevail - redundancies of information especially when citizens migrate to another city or state, mismatch of data and lack of centralized database. There are problems of security issues, which continue to prevail due to which there are issues of fraud and forgery of ID proofs. Moreover, out of the existing IDs, PAN card, driving licence, and passport are issued to those who have considerable financial capacity. The profiles of PAN cardholders and passport holders are similar. Ration card is a major source of identification for those who are Below Poverty Line (BPL) and financially marginal citizens. Driving licences can be issued only to those who know to drive and are aware of traffic and driving rules.

PAN Card: The current PAN card issuance system is extremely efficient; however there is absence of a robust compliant resolution system. Income Tax Department needs to introduce a strong fraud detecting and prevention system to overcome forgeries of PAN cards and hacking of information. It does not cover people of BPL segment, which form a considerable chunk of India's population.

Passport: Profiles of passport and PAN card holders are similar. Till date only 4 crore passports have been issued out of more than 1 billion population.

Voters Id: It has been observed that on an average 20-30% of the voters migrate to different addresses/constituencies each year. In voters ID cards mismatch of information continues to exist, as database is upgraded only once in five years. Duplication of data occurs in different districts, when voters migrate from one district or state to another as they apply for another voter ID. Citizens are not aware, that a voters ID is issued on permanent basis and there is no need for renewal even in case of migration. There is lack of proper verification process.

Ration Card: Ration cards are least technologically advanced systems among all existing IDs being issued in the country. In ration cards there is absence of a centralized database to store information as the PDS is controlled by the state level.

Other key issues include availability of an electronic database, integration of databases across geographies, and presence of several bogus IDs. Moreover, as the PDS has primarily been targeting the below poverty line citizens, the demographics of the enrolled population is extremely skewed.

Driving Licence: The most critical drawback of driving licence that prevents it from being considered for conversion into a national ID is the functional prerequisite of being able to drive. In India people who own vehicles and know to drive are few compared to the whole population.

Thus it is essential to study in-depth the pros and cons of existing ID proofs and their system, as it would facilitate creating a comprehensive and exhaustive national ID.

Contents	Existing ID Proofs				
	PAN Cards	Passport	Voter ID Card	Ration Card	Driving Licence
No. of Proofs	•Form 49A	Passport Application	Proof of residence	• Form No. 1	Proof of Residence
Proofs	 Proof of Identity Proof of Address Passport size colour photo 	Application form Proof of Address Date of Birth Proof Additional Documents	residence • Proof of Identification • Age Proof	 Three passport size photographs Residence Proof Surrender/del etion of previous cards 	Proof of Age Form no. 2 application for learner's licence Medical Certificate Form No.1 A Medical Certificate Form No. 3 Learner's licence

Contents Extent of	•10 digit Alpha- Numeric Number •Name of the holder •Father's Name •Photo •Date of Birth •Signature of the Holder	 Name of the Passport Holder Passport Number Postal Address Age Father's name 	 Photo of the vote ID holder Name Father's Name Date of Birth Permanent Address 	 Name of the Ration Card Holder Name of Additional subscribers 	•Form No.1 Self Declaration of Medical Fitness • Name • Licence No. • Name of the Father • Permanent Address • Date of Birth • Date of Issue • Validity Date • Signature of licence holder
Usage	Identification Acts as Identity Proof Useful for Accessing Financial Services	 Acts as international identification proof Acts as Identity and Address Proof Proof of citizenship 	 Used during voting Proof for Identification Proof of Address 	government's PDS • Proof of Identification and Residency	Licence applicable across the country Proof of Identity and Residence

Table 2 Comparison of Existing ID Proofs

6 Current Initiatives towards National Identity

6.1 Multi-Purpose National Identity Card

Pilot programmes have already been launched in India under the purview of various departments like the Home Ministry and Department of Communication and Information Technology. One such programme is called the MNIC project. MNIC is an initiative of Government of India to issue a Multipurpose National Identity Card to every citizen of the country. It is being contemplated towards a well regulated approach of monitoring and tracking the various benefits being provided by government as well as restricting illicit use of multiple/false identities. Also, both detection and compliance in the tax area could be better managed. Some of the objectives of MNIC as identified are:

- 1) To strengthen national security by controlling illegal immigration.
- 2) To manage the identity of country's citizens.
- 3) To facilitate e-governance in India.

The objective is also to help government of India prepare a database on National Population Register (NPR), National Register of Residency (NRR) – for non-citizens, National Register of Indian Citizens (NRIC), National Identity Number (NIN) to each person, etc. The project was initiated under the Vajpayee, NDA government (circa 2002), which has since been continued by the present UPA government under Prime Minister Manmohan Singh. The project's importance was underscored by President Abdul Kalam in his 2006 Independence Day eve address to the nation.

The MNIC Project is currently in pilot mode in at least 12 states of India. While the exact status of the project is unknown, as of this writing on May 26, 2007, the project has kicked off a fresh round of card distribution to provide two million cards to people above 18 years in 13 districts across 12 states and the union territory of Pondicherry. Earlier plans and reports indicated that the project was in pilot, or was attempted in 20 selected sub-districts of 13 states and union territories. However, there are several implementation issues that the project is encountering in following terms:

 Non-availability of proofs for a considerable percentage of the population, especially in the rural areas.

- Issues related to distribution of the IDs to each individual.
- Issues related to maintenance of the database, once it is created. Considering the large time span that is required to prepare a comprehensive database, the system will face huge issues of obsolescence right from the beginning.

6.2 Unique ID Project

The UID project being piloted by Planning Commission and being executed by the Department of Communication and Information Technology, aims at studying the feasibility of expanding an existing ID system to generate a unique national ID for each citizen. This project, unlike the MNIC project is not trying to address the issue of citizenship, but is aiming at providing resident IDs to whoever is currently staying in India.

After considering the various existing systems, it has been decided to consolidate the electoral database primarily because of the extent of coverage (600 million) it provides. The project is currently in conception stage. The department is mulling over generation of the ID based on the available database. They are in the process of populating data by aggregating information from all districts across the country into a centralized database cleaning the information and up for any irregularities/inconsistencies. They are also defining a formal mechanism for enrolling new members into the database and setting up a formal central authority to maintain and run the system.

However, currently no plans have been formalized for distribution of any IDs, which is a serious issue, faced by the MNIC project too. The level of data that the department has been able to match is not more than 80%, which leaves a huge chunk of the population, with false data.

Following are the key issues and challenges:

The electoral database that has been chosen is currently available in vernacular language (separate for each state) which needs to be converted into English before further processing. Conversion of data involves lot of time and complications. The

conversion to English is being done using software; however there are specific cases where the conversion yields very weird connotations.

The UID team is still in the process of finalizing following issues:

- Which authority will be in-charge of maintaining and updating of the database once the national ID is implemented?
- How are new members going to be enrolled into this programme?
- How are the IDs going to be finally distributed to the citizens?
- What kinds of proofs will be required to be given by the citizens in order to receive the ID?
- What would be done in the case where no proofs are available?

6.3 Unorganized Workers Social Security

The Health Insurance Scheme has been formulated by Ministry of Labour and Employment (Labour) for BPL workers and will cover 6 crore families progressively in the next 5 years. In all, more than 30 crore workers will be benefited. A provision has been made for issuing a smart card, carrying a unique identification number, to each of these families. Both public and private health facilities will be utilized for providing medical services and there would be cashless transactions to ensure that there is no harassment of the beneficiaries.

6.4 Social Security Number (SSN)

With a view to provide better services to subscribers and employers, the organization has launched the Project RE-INVENTING EPF, INDIA since June, 2001. The prime objectives of this project are to provide the subscribers better and efficient services, to help the employers by reducing the cost of compliance, and to benefit the organization to register geometric growth in all fields. An important part of this project is the allotment of the UNIQUE IDENTIFICATION NUMBER - the SOCIAL SECURITY NUMBER to the EPF subscribers, issuing of BUSINESS NUMBERS to the employers and Business Process Re-engineering.

6.5 Rashtriya Swasthya Bima Yojna

The 'Rashtriya Swasthya Bima Yojana' (RSBY) was launched by Ministry of Labour and Employment (Labour) in October 2007 and its guidelines were released. Under this scheme, all Below Poverty Line (BPL) families would be covered in the next five years. The Central Government will contribute 75% of the premium amount. The scheme envisages issuance of a smart card to the beneficiary. This card will facilitate cashless transaction up to Rs.30,000 so that the worker does not have to pay anything for seeking medical treatment. The scheme will be implemented in a phased manner and will cover 1.2 crore BPL workers in first year and other 6 crore BPL workers by 2012-13. The unorganized sector worker and his family (unit of five) will be covered under the scheme. Total sum insured would be Rs.30,000 per family per annum. Salient features of the scheme include cashless attendance to all covered ailments, hospitalization expenses, taking care of most common illnesses, all pre-existing diseases to be covered and reimbursement of the transportation costs (actual with maximum limit of Rs.100 per visit) within an overall limit of Rs.1000. The scheme will become operational from April 2008.

6.6 ESIC Scheme

Employees State Insurance Corporation (ESIC), functioning under the aegis of Labour Ministry, increased wage ceiling eligibility from Rs. 6500 to Rs.7500 and also extended the ESI Scheme to new geographical areas. As a result, 6.57 lakh more workers were brought within the ambit of ESIC scheme. 35,000 factories/establishments were covered during year 2004 to 2006. The ceiling on medical expenditure was enhanced from Rs.750 to Rs.900 per Insured Person family unit per annum w.e.f. 01.04.2005. The Corporation has approved setting up of 4 Zonal Super-Specialty Hospitals at Hyderabad, Mumbai, Delhi and Kolkata.

Daily rate of cash allowance has been increased from Rs.45 to Rs.123 per day in respect of disabled insured persons undergoing training at vocational rehabilitation centres/institutes. The period for entire expenditure to be borne by the Corporation on implementation of the Scheme in North Eastern States has been enhanced from 3

years to 5 years. Revolving Fund has been set up in Regional Offices of ESIC for payment of drugs cost and dressings procured by the State Governments. Rate contract for Ayurvedic medicines has been formulated for the first time to facilitate procurement of Ayurvedic medicines by ESIC medical hospitals and dispensaries.

6.7 Kisan Credit Cards

Objectives:

As a pioneering credit delivery innovation, Kisan Credit Card Scheme aims at provision of adequate and timely support from the banking system to the farmers for their cultivation needs including purchase of inputs in a flexible and cost effective manner.

Contents of Credit Card

- Beneficiaries covered under the scheme are issued a credit card and a pass book or a credit card cum pass book incorporating the name, address, particulars of land holding, borrowing limit, validity period, a passport size photograph of holder, etc., which may serve both as an identity card and facilitate recording of transactions on an ongoing basis.
- Borrower is required to produce the card cum pass book whenever he/she operates the account.

Scheme Benefits to the Banks

- Reduction in workload for branch staff by avoidance of repeat appraisal and processing of loan papers under Kisan Credit Card Scheme.
- Minimum paperwork and simplification of documentation for drawl of funds from the bank.
- Improvement in recycling of funds and better recovery of loans.
- Reduction in transaction cost to the banks.

7 International Scenario

National IDs have been implemented in various forms and mechanisms and serve varied purposes. Many countries have a system of national identity cards, some of which require their citizens to carry them at all times. Most European countries have ID cards. Countries such as Canada, New Zealand, the United Kingdom and the United States currently do not have a national ID, however plans are underway. UK has introduced legislation to implement such a system and US has passed the Real ID Act, which critics argue would make driver's licences into de facto national IDs. Examples of few countries who have implemented/tried to implement a national ID system are discussed below. Notably, the European Union, which is examining the possibility of a pan European e-Identity so that European "citizens are freer to travel, find work, access health services, buy property, and register for schools (in any European nation) and it is easier for small and medium enterprises to set up and do business in any member state.... (proposes to) also test third-party "identity providers". These are trusted non-government agents that would do all or some of the initial registration, supply the credentials (such as an electronic ID card), and authenticate identities on request.... (And) the scheme is presently "only 50% funded" by national governments and industry is expected to chip in the rest." Table 3 gives a brief about countries with national ID, while Table 4 deals with nations without ID. Table 5 discusses about nations currently implementing national ID.

Nations with IDs

According to Privacy International, as of 1996, around 100 countries had compulsory identity cards. The term "compulsory" may have different meanings and implications in different countries. The compulsory character may apply only after a certain age. Often, a ticket can be given for being found without one's identification document, or in some cases a person may even be detained until the identity is ascertained. In practice, random controls are rare, except in certain

Country	Name or Form of Identification Systems	Characteristics
Argentina	Documento Nacional de Identidad	Booklet includes pages for a vote log, military service, wish to donate organs and legal address change log
Belgium	Identity card	Everyone above the age of 12 has to carry some means of identification at all times. For Belgians it is the identity card, for foreigners residing in Belgium it can also be a passport, a work permit or a (temporary) residence permit. Since the year 2000, all new identity cards have a chip.
Brazil	Registro Geral	The cards are needed to obtain a job, vote, make and use credit cards, but it doesn't guarantee anything for males over 18 without the Military Service card. Foreigners living in Brazil

		have a different kind of ID card.
Bulgaria	Uniform Civil No.	uniform Civil number (also printed on identity cards and passport)
Colombia	Cédula de Ciudadanía	ID cards are needed to obtain employment, open bank accounts, obtain a passport, driver's licence, military card, matriculate in educational institutions, vote or enter public buildings including subway stations, airports and courthouses. Failure to produce ID is a misdemeanor punishable with a fine.
Chile	Cédula de Identidad	It contains the full name, gender, nationality, date of birth, photograph of the data subject, right thumb print, ID number and personal signature. This is the only official form of identification for residents in Chile and is widely used and accepted as such. It is necessary for every contract, most bank transactions, voting, driving (along with the driver's licence) and other public and private situations.
Croatia	Unique Master Citizen No.	In Croatia every person over the age of 14 can have ID card, and all persons over the age of 16 must have ID cards and carry them at all times when they are in public places.
Estonia	Estonian ID card	An Estonian ID card is officially recognized by all member states of the European Union for intra EU travel. For travelling outside the EU, Estonian citizens may also request a passport.
Finland	identitetskort	In Finland, any citizen can get an identification card. This, along with the passport, is one of two official identity documents. It is available as an electronic ID card (sähköinen henkilökorttil elektroniskt identitetskort), which enables logging in to certain government services on the internet.
France	INSEE code	For financial transactions, ID cards and passports are almost always accepted as proof of identity. Due to common forgery, drivers' licences are sometimes refused. For transactions by cheque involving a larger sum, two different ID documents are frequently requested by merchants.
Greece	Greek ID card	ID cards are issued by the police on behalf of the Ministry of Public Order and display the holder's signature, standardized face photograph, name and surname, father's name and surname, mother's name and maiden surname, date and place of birth, height, electoral district (<i>Demotologion</i>), and the issuing police precinct. In Greece, an ID card is a citizen's most important state document, as it is used in most public and many private transactions.
Indonesia	Kartu Tanda Penduduk	Citizens over 18 are required to have the KTP (Kartu Tanda Penduduk) identity card.
Italy	Identity Card	Everybody in Italy over 15 can have a 4-page Identity Card issued by the town of residence. The first page includes the ID card number, the issuing town, and the name and surname.

		On the second page the card shows again the name and surname, together with the birth date and place, the gender, and the current address. The third page of the document includes a colour photograph and the signature. It also contains the issue date. The card has a validity of 5 years.
		The ID number is two letters followed by seven or more digits and is unique.
Israel	te'udat zehut	The card is designed in a bilingual form, printed in Hebrew and Arabic, but the personal data is presented only in Hebrew. Until the mid-nineties, the identification card was considered the only legally reliable document for many actions such as voting, opening a bank account, etc.
Malaysia	MyKad, or Government Multipurpose Card, (GMPC)	It is the official compulsory identity card. It is regarded as the world's first smart identity card. As of 2006, MyKad has eight current and several planned applications which are mostly related to proof of identity or electronic money. From March 2003, a variant issuable to newborn babies was introduced, known as MyKid.
Pakistan	Computerized National Identity Card (CNIC)	In Pakistan, all adult citizens must register for the Computerized National Identity Card (CNIC), with a unique number, at age 18. This card is regularly used because of the multiple uses of the card across Pakistan's organizations.
Portugal	Portuguese national ID card	All Portuguese citizens are required by law to obtain an Identity Card as they turn 16 years of age. They are not required to carry it with them always but are obligated to present them to the lawful autorithies if required.
Singapore	National Registration Identity Card	The National Registration Identity Card is given to all the Singapore Citizens and Permanent Residents. The NRIC contains a unique number that identifies the person holding it, and is used for almost all identification purposes in Singapore, including authentication when accessing the Singapore government's web portal.
Spain:	National Identity Card	In Spain, an ID card is the most important document of a citizen and is used in all public and private transactions. It is required to open a bank account, to sign a contract, to have state insurance, to register in a university or to be fined by a police officer. It is one of the official documents required to vote at any election, although any other form of official ID such as a driving licence or passport may be used.
South Africa	South African identity document	It is necessary to show the document or a certified copy as proof of identity when: Signing any contract, including opening or closing a bank account, taking up employment, and applying for a mobile phone contract; interacting with most government agencies, including applying for or renewing a drivers licence, applying for a passport and applying for any social grants.
Sweden	Personal Identity Number	Personal Identity Number is used in dealings with public agencies, from health care to the tax authorities. It is also commonly used as a customer number in banks and insurance

		companies.
Taiwan	Republic of China National Identification Card	The Identification Card contains the holder's photo, ID number, Chinese name, and (Minguo calendar) date of birth. The back of the card also contains the person's registered address where official correspondence is sent, parents' and even spouse's names.

Table 3 Nations with National IDs

	Nations without IDs A number of countries do not use country-wide identity cards to verify identity. These include Australia, Denmark, Ireland, Japan, New Zealand, Norway, the United Kingdom and the United States.				
Country	Characteristics				
Australia	There have been two proposals to introduce ID cards for tax and social security access in Australia: The Australia Card in 1985 by the Hawke Labor Government and the Health and Social Services Access Card in 2006 by the Howard Liberal Government. Although neither card would have been an official compulsory ID card, they were both criticized as leading to de facto ID cards. Ultimately, both proposals failed. Currently, driver's licences, issued by the states and territories, are the most widely used ID document.				
United Kingdom	Since the early 1950s there has been no national identity card in the United Kingdom, but the Identity Cards Act (effective 30 March 2006) makes one compulsory for anyone getting a new or renewed passport from 2008. Driving licences and passports are now the most widely used ID documents. There are also various PASS-accredited cards, used mainly for proof of age purposes.				
United States	The United States of America passed a bill entitled the Real ID Act on May 11, 2005. The bill compels states to begin redesigning their driver's licences to comply with federal antiterrorist standards by December 2009. Federal employees would reject licences or identity cards that don't comply, which would force Americans accessing everything from airplanes to national parks and some courthouses to have the federally mandated cards.				
	The bill takes place as governments are growing more interested in implanting technology in ID cards to make them smarter and more secure. The U.S. State Department soon will begin issuing passports with radio frequency identification, or RFID, chips embedded in them, and Virginia may become the first state to glue RFID tags into all its driver's licences.				

Table 4 Nations without National IDs

	Nations currently implementing			
Country	Characteristics			
Bangladesh	Bangladesh has also started a National Biometric ID Card system and is in the process of completing it by 2008.			
China	China is instituting biometric ID cards, beginning with the city of Shenzhen. The card will document data such as work history, educational background, religion, ethnicity, police record, medical insurance status, landlord's phone number and personal reproductive history.			
India	India is beginning to issue national ID cards.			

Table 5 Nations Currently Implementing

8 Looking Forward to India's National ID

8.1 Scoring Model (Comparison between Existing IDs on Different Dimensions)

In order to understand and appreciate the status of various current ID systems to be replicated as the national ID, we thought of having a scoring model in place to understand which of the existing IDs is nearest in all different dimensions to be used for the purpose of national ID. The scoring model was developed keeping in mind the following uses of the envisaged single national ID system:

- To manage the identity of country's citizens
- To facilitate e-governance in India
- To strengthen national security and for controlling illegal immigration
- Integration of all existing systems into one single identification system
- Centralized tracking of individuals' history (health, credit, etc.) for public and private institutions
- Collaboration of multiple ID systems with the databases of public and private enterprises and also Government to provide a single clearance window to the citizens.

In majority of the pilot projects currently being undertaken by various ministries/divisions of the Government(s), one of the existing IDs is being tried to be replicated, without being compared to the feature set that the national ID is suggested to have. To ensure that the national ID systems cater to the above needs,

the following dimensions were considered to be critical for the successful implementation of national ID.

1. Extent of Coverage

- Total Cards issued till date
- Geographical spread of coverage (as depth of presence in Tier I/II/III cities/villages)

2. Versatility/Acceptability of usage of the ID by institutions (public and private) other than the issuing authority, such as

- Age Proof
- Address Proof
- Other identity proofs (e.g., banks, domestic airlines)

3. Robustness of the card issue/delivery process

- Problems of bogus IDs
- Time taken for issue of card
- Card application process (self-application/agents, dependence on other IDs for proof, etc.)
- Effectiveness of the verification process (steps taken to verify)

4. Relevance of data

- Form of data (electronic version)
- Availability in English language
- Up-to-datedness of the ID (cleaning/deletion/update)

5. Comprehensiveness of Data

- Comprehensiveness of the data
 - o Personal information (DoB, Address, etc.)
 - o Medical details (blood group, etc.)

6. Validity period of ID/Frequency of renewal

7. Information Security Management System

- Level of IT Systems Integration (central database)
- Security/Privacy of Data
- Compatibility with other ID systems
- Ease of extension/upgrade of the system

8. Acceptability/Validity of the ID by foreign institutions/countries

To understand the relative importance of these factors, a primary research was done where more than 200 respondents from all different parts of the country were

contacted to understand the ranks that they would feel comfortable in giving to these eight factors mentioned above. The respondents were at least post graduates in different areas and broadly understood the context and implications of national ID. The rankings were asked to be done on a 5 point scale. Giving equal weights to the individual responses, we looked for the rank with the highest frequency and following was the rank-matrix that was arrived at.

Rank	Different Dimensions
4	Extent of Coverage
5	Cross Acceptance
4	Robustness of Issue
5	Cleanliness of Data
	Comprehensiveness of
3	Data
3	Renewal
5	Security of Data
	International Acceptability
1	of Data

Table 6 Ranks of Different Dimensions for National IDs

Now, for each of these factors, ranks were given to different existing ID systems. A composite score was arrived at as has been shown in the following table:

			Electoral/		Ration	Driving
Rank	Dimensions	PAN	Voter ID	Passport	Card	Licence
4	Extent of Coverage	3	5	3	4	2
5	Cross Acceptance	4	2	5	1	3
4	Robustness of Issue	2	3	5	1	4
5	Cleanliness of Data	5	3	4	1	2
	Comprehensiveness					
3	of Data	3	2	4	1	5
3	Renewal	3	1	4	5	2
5	Security of Data	5	3	4	1	3
	International					
1	Acceptability of Data	3	3	5	1	4
	Final Score	3.70	2.80	4.20	1.80	2.97

Table 7 Scoring Model for Existing ID Systems in India

From the above table, we come to understand that given the set of conditions that the national ID should possess; very few of the existing IDs actually have something close to what is required from the national ID. Though majority of the existing pilots are trying to scale up based on the electoral ID card system, it seems to have got a very low score compared to the passport issuing system in India (given that the passport system has got highest ranks in at least three of the dimensions and very high ranks in four more). This is followed by the PAN card, though the overall difference in score is but substantial.

Interestingly, it comes out clearly that none of the existing IDs (given their current processes) would be able to satisfy the need of the national ID and different processes of different IDs should be taken up for designing the process of the national ID. For example, we need to ensure that the extent of coverage is as high as that of the voter ID cards, while the cross acceptance should be high as passport/PAN card, the cleanliness of the data should be that of the PAN cards and the comprehensiveness of the data like that of the driving licence, etc.

8.2 Implementing National ID in India

Through the studies on existing ID proofs, it can be concluded that, standalone registrations by individual organizations result in redundancy both at state and central level, thus resulting in issuance of multiple cards to a single person. There is an urgent and emerging need for a single integrated registration, which will assign a unique national ID to each citizen of the country. A unique national ID, would give comprehensive, accurate and critical information of each individual citizen, whether permanent or temporary. The guiding principles for Indian national identity system were laid down by the former President, His Excellency APJ Kalam: "It should be a multipurpose, secured and authentic ID card. This card should be akin to the Xerox copy of the individual with the multifactor authentication such as photograph, biometrics-fingerprint, iris-based systems and digital signature. India with a population of one billion people should be concerned about providing this card to the citizens at a cost effective basis. Hence there is a need to select the right technology for the preparation of the card and online issue of the card also needs to be determined urgently. This challenge has to be taken up by the consortium of public and private industries, academic institutions with the Government." (Kalam, 2003).

It is important to understand the scale and complexity of the unique national identity programme for a population of more than one billion, which is very vast. However, this complex and mammoth task can be taken forward through multi-stakeholder, public-private partnership. This would be possible through joint sharing of the resource pool between the partners. Various databases can be shared and worked upon among the partners through information technology based systems. The public-private partnership model has also been suggested by Dr Kalam and some other countries have already explored use of public-private partnership models for their respective national identity programmes.

The proposed integrated registration system would consist of three subsystems:

- The enrolment system
- > The smart card
- The technology platform

At another level the proposed system would comprise two layers:

> The legal, administrative and regulatory framework

> The business model and technology platform

In light of above discussions, the contours of an integrated registration system to provide a unique, but multipurpose identity are as below:

8.2.1 Enrolment Process

The process of enrolment involves obtaining personal details (name, age, birth date, sex, education, profession, marital status, blood group, etc). Once the necessary information is obtained, they need to verify through standard and pre-defined protocol (KYC). Thereafter the data is digitized and a database is formed. Based on the database a unique number is assigned to each citizen. However, to get accurate and comprehensive data of more than 1 billion population is a challenging task. To make citizens stand in long queues is wastage of time, energy and resources of government and citizens. The business of managing the queues is time and resource intensive and an unsatisfactory service can deter and drive away the already reluctant citizens. Comprehensive and accurate data can be collected from existing databases available with government, organizations and private entities. Enrolment data can be collaborated through usage of information technology by collating existing data from multiple data sources of government departments, banks, telecom companies, Block Development Offices, etc. Critical requirements of the enrolment process, thus, are that it should be user friendly, should allow easy access (online enrolment is one answer), and should provide a robust verification before enrolment.

8.2.2 Trusted Partnership

The task of collecting, collaborating and recording critical, accurate and comprehensive data online would be possible through partnership with trusted partners. A trusted partner would be a government department or a private organization, which has huge and comprehensive data used in their business and agrees to participate in the national identity programme. As a part of their responsibility, at the time of enrolling their clients, the trusted partners will obtain, digitize and transmit information required for the national identity programme. Some examples of trusted partners are schools, colleges, motor licensing authorities, banks, telephone and mobile service providers, passport office; ration card department, electoral office, hospitals and income-tax department. The telecom and mobile service providers and payment card facility providers are two industries characterized by use of state-of-art IT systems and processes and high quality citizen

service. It should, thus, be possible to leverage on these two lists to reduce the 'time-to-market' and exploit the built-in, two-way communication with the clients enrolled in the list. The Network and Point of Sale machines, Wireless POS will offer unlimited reach. Using the trusted partners for enrolment will offer citizens an easy access to the enrolment process besides the advantage of a robust verification, reduced costs through elimination of redundancy in enrolment, and a 'future-proof' system.

8.2.3 Designing a Scoring Model to Select Partners:

A scoring model would enable to select efficient and coordinating partners. The scoring model would comprise list of selection criteria. The partners, who score the most in all dimensions, would be selected. Few of the dimensions of selection are coverage of database, accuracy of information, infrastructure and resources strength, coordination strength with government departments and private entities, etc.

8.2.4 Cost Saving

If the national ID programme is undertaken through collaborative or partnership effort, it would enable in saving huge cost, which otherwise would have been incurred on infrastructure, manpower, distribution & logistics, etc. E.g. Setting up separate national ID centres in each state would result in huge costs being incurred each year on salaries for manpower employed, setting up of IT infrastructure, training the manpower, time consuming data collection processes, etc.

8.2.5 Smart National IDs

Conventionally, identity cards, which were issued on plain paper, with photographs pasted and authenticated, have become obsolete. Today we find number of smart cards being issued for various purposes by both government and private organizations. These smart cards comprise of chips which consist of information about the concerned individual citizen. E.g. of smartcards are identity badges used to access buildings; credit cards, debit cards are forms of smart cards. Most of the existing smart cards have limited usage and are issued by different entities, thus citizens need to carry a set of cards daily. The earliest smart cards that had most useful information stored on the card itself (and not externally) were replaced with EMV type smart cards supported with a network of point of sale (POS) readers. EMV

type smart cards are cost effective and have benefits of data residing in back end machines. The credit card business in India too started with standalone smart cards but it has since migrated to EMV systems. Considering the benefits of EMV system, some banks have even migrated their Kisan Credit Card scheme (originally a card and pass book system) to such systems, wherein beneficiaries are provided with smart cards for conducting business through ATMs. While organizations with small populations and few applications may continue to find the standalone smart cards useful and cost effective, the future belongs to EMV type systems for large populations and multiple applications. The EMV systems are managed by international payment gateways and offer the facility of a globally unique number for every card. However, if a single national ID is issued which is multi-purpose, it would increase usage, enable optimum utilization of resources, and be easy for citizens. Creation of a common database enables in easy sharing of information among private and government entities, is easier to update, has information security, can cater to future unspecified application, etc. Multi-purpose national ID can serve as identification proof for accessing banking services, gas connections, health facilities, etc.

8.2.6 Technology should be handed over to private sector

The technology required to create a mammoth database for national ID should be handed over to a competent private organization. A private entity's cooperation would help in distribution of tasks, leading to optimum utilization of resources available within the organization. The Data Network Infrastructure for national ID should be accessible from across the country and transferable to another state/district/village. Moreover it should be able to detect any repetitions, errors and frauds. Whenever changes or upgrades are made at any of the centres, the changes should be reflected in all the connected sources. The data network should be distributive. Data Network Infrastructure could be distributed into following tiers through data centres:

- National Data Hub: This hub would form the core base for national ID. Creation of national data hub is essential to begin with the process of national ID. The hub would be interconnected with regional, state, district, taluka and village data hubs.
- Regional Data Hub: Regional data hub would be required for efficient management of data and would support the national data hub. Moreover, it

would be easily accessible for regional requirements. There would be around 5-6 regional clusters each comprising of 5-6 states.

- > State Data Hub: State data hub would interconnect districts and taluka level information of the citizens residing there. These data hubs are easily accessible to citizens, state government and organizations located within the state. The state data hubs are interconnected with regional and national data hub.
- District Data Hub: These hubs would be useful to maintain, update and make changes in primary data.
- > Taluka Data Hub: This hub would be the database of citizens residing within the taluka and a support to government and organizations in reaching their services effectively.
- Village Data Hub: Village data hubs would be supporting the above tiers.

8.2.7 To frame supportive government policies

The government should define the legal (challenge of framing laws in a federal polity), business and revenue framework, stipulate the scope of public private partnership, and manage the risks associated with large dynamic databases, using public oversight to an extent required. The government should also act as a custodian of national identity database. The interface with citizens, including complaint resolution through the lifetime of the citizen, the type of card and technology model and investment and up-gradation of technology should be left to private sector.

8.2.8 National ID Eco-System

The national ID eco-system would comprise of citizens, government, public-private partnership, information data hub, IT infrastructure and other entities as stakeholders in the overall process. This can only be achieved by taking an ecosystem approach by increasing the awareness of such an integrated system among the end-users like citizens, employees of public, private and government organizations, etc. It will be very critical to understand that each stakeholder in the ecosystem will have its own short term and long term objectives in being part of this ecosystem and substantially generating value in the said ecosystem. However, only an apex committee at the national level can track and ensure that the overall

objectives of such an ecosystem will be of use in the successful execution and sustenance of national ID catering to the basic needs that had been defined at the start of the project. Figure 3 gives an idea about the probable national ID's ecosystem. Given the fact that the national ID ecosystem will help delivery of G2C services (and ensuring delivery of all different government schemes to the target population), it will also provide a single window to all services that the government(s) and entrusted partners of the ecosystem would like to provide by creating touch points and putting up a single face to the citizen. Figure 5 provides the strategic touch point of the national ID system.

Enrolment Process (Through usage of ICT) > Fingerprint > Face ➤ Voice ➤ Iris **Public-Private ≻** Citizens **Partnership ➤** Organizations (Creation of National ID > Private Entities Database) > Name ➤ Birth ➤ Age **Unique National Identity Card** ➤ Sex > Bank Information **▶** Blood Group

National ID Ecosystem

Figure 3 National ID Ecosystem

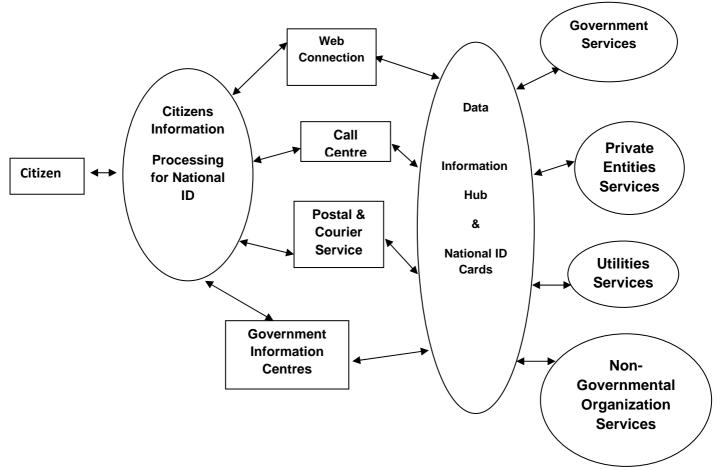


Figure 4 Strategic Touch Points of Coordination in National ID

9 Conclusion

All identity systems carry consequential dangers as well as potential benefits. Depending on the model used, identity systems may create a range of new and unforeseen problems. These include the failure of systems, unforeseen financial costs, increased security threats and unacceptable imposition on citizens. The success of a national identity system depends on a sensitive, cautious and cooperative approach involving all key stakeholder groups including an independent and rolling risk assessment and a regular review of management practices. Structural and/or policy changes become an inseparable part by the government to ensure that the plan is smoothly executed. In the long run, once a national identifier has been established, the next logical step would be to integrate it with the existing systems. The above exercise will involve a huge investment in terms of time and effort; however the benefits that will be reaped can be significant.

As the immediate next steps, the decision makers should consider creating alternative choices of execution of such an initiative with proper policy implications and taking into account constraints that needs to be considered. Existing infrastructure like that of the Common Service Centres may be considered to play a very crucial role for the same.

Given the current status quo of the national ID projects in India, it comes out that an integrated holistic approach is still missing for roll out exercises of the national ID. Considering the fact that the national ID roll out has been in a pilot state for the past several years, the policy makers at the top should start looking at it seriously, given that the broad mandate of going ahead with the plan of national ID in the country is still live. Saying that, it would mean that holistic planning needs to be taken up to understand the goals, objectives and the end state of such a nationwide exercise of criticality. Moreover, an ecosystem approach for successful roll out should be looked at based on PPP models ensuring that the national ID systems actually facilitate the transactions of citizens with various entities involved in the system, ultimately bringing in the much awaited transparency in delivery of Government schemes (like PDS, direct subsidy to citizens, etc.) and ease of delivery of G2C services, which has still been a major lacuna in the current scenario in India. The data about citizen life cycle that can be collated (with substantial precautionary measures to maintain privacy and secrecy of the data so that the Government is not perceived to be a big brother breathing downs the necks of the citizens) can be used for policy planning ultimately ensuring an inclusive growth for all. The decision makers should also consider framing the right kind of policies, legal structures and organizational setup for a successful rollout of National ID in India. A ranking matrix may be created to come up with a composite score for all districts based on various dimensions. The execution may be planned to be executed without asking Indians to stand in queue for one more ID and accelerating towards a more secured society and more importantly ensuring better delivery of Government services to citizens.

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Endnotes

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