



# Integrated Voter List, Civil Registration, and National ID Concept for Nepal

Kathmandu, Nepal

September, 2009

UNDP Electoral Support Project (ESP)
Election Commission of Nepal
Kantipath, Kathmandu

## Integrated Voter List, Civil Registration, and National ID Concept for Nepal

#### 1. Overview

Within 2010 the Election Commission of Nepal (ECN) will complete a new digital Voter List with biometric data capture including photograph and fingerprint. The Voter List will be compiled through a combination of door-to-door enumeration covering every household in Nepal, and the establishment of Registration Centers in all localities for the photograph, fingerprint, and digital data capture of all eligible citizens. Efforts have been made by the ECN to include additional information in the registration forms and system designs to facilitate the development of a multipurpose National ID (NID) card for Nepal.

The development of an integrated concept for Voter List, Civil Registration, and NID ensures the best utilization of available resources and that all organizations providing services and benefits to the citizens of Nepal work from a single definition of each citizen's identity.

This concept paper has been developed to respect the mandates of each organization involved in the process. The ECN has a constitutional responsibility for the production and management of the Voter List, and the nominated Government body (in this document referred to NID authority) will have the responsibility for the management and administration of the NID including data sharing, card production, and identity validation.

The establishment of the NID and Civil Register will raise some additional issues for the Government of Nepal including the development of appropriate supporting legislation. Legal provisions must ensure that the identity of each citizen as recorded on the NID database is the sole legal identity of each citizen, including the spelling of name, date of birth, and other details. Further legal provisions must also be put into place for the protection of citizen's privacy and data including the establishment of parameters under which this data can be accessed and shared.

This concept has been designed to provide the ability for a phased implementation under which each component can come into place as organizations are ready, capacities are developed, and systems are developed. To ensure the successful implementation of the full Civil Register common Government wide technical and process standards must be developed at the outset, and mechanisms established for the ongoing cooperation of all stakeholders.

#### 2. Civil Registration

To develop an integrated approach to the development of a Civil Register it is first important to understand the definition of civil registration and the outputs and responsibilities that this entails. An internationally accepted definition of civil registration is:

"Civil Registration is the system with which a government records the vital events of its citizens."

Traditionally this has been the recording of events such as births, deaths, and marriages. In modern society the vital events of citizens has expanded to include

events such as employment, tax, education, health, and other areas in which the Government provides services to the community.

The common purposes of civil registration can be summarized as follows:

- The primary purpose of civil registration is to create legal documents that are used to establish and protect the civil rights of individuals.
- A secondary purpose is to create a data source for the compilation of vital statistics.

The Civil Register therefore must facilitate the creation and issuance of documents such as birth certificate, NID, passport, driving license, education & health certificates, and others as required.

The Civil Register may also provide the basis for demographic analysis to assist the Government's planning process including the development and roll-out of public service programmes.

#### 3. Organizational Responsibilities & Mandates

Implementation of an integrated Civil Register will require the cooperation of several national organizations and in doing so must respect and protect the mandates of each organization. The following parameters were considered in the development of this concept and the allocation of roles and responsibilities.

#### 3.1. NID Authority

The NID authority will establish and manage the unique identity of all eligible citizens of Nepal, and will therefore provide the center piece of all systems and processes for the provision of citizen services. The mandate of the NID authority should include:

- To establish and maintain a unique identity for each eligible citizen from the date of birth registration.
- To be the only legal point of identity validation for Nepal citizens.
- Responsible for the production, distribution, and management of NID cards.
- In coordination and collaboration with other Ministries and stakeholders, provide a complete record of citizen's life events, entitlements, and access to services.
- To be responsible for ensuring the privacy and protection of citizen's personal data.
- To provide identity validation services and data sharing to selected authorities under the parameters of established MOU and other supporting legal guidelines.

#### 3.2. ECN

The ECN has the constitutional mandate for the establishment, management, and printing of the Voter List containing all eligible citizens of voting age. The functions and responsibilities of the ECN therefore includes:

- Direct and independent control over all Election Management activities and processes.
- Direct control over Voter List activities.
- Maintenance of secure communication connections between field offices for election management activities including results processing.
- No data sharing outside of legal provisions to be established between ECN and NID authority.
- The ECN should not be distracted by the provision of services or requirements outside of the ECN direct constitutional mandate.

#### 4. Implementation

The implementation of the integrated Civil Register must proceed in a logical, modular, and phased approach to accommodate the varied schedules and capacities of all stakeholders including central and field level staffing, infrastructure, and technology development.

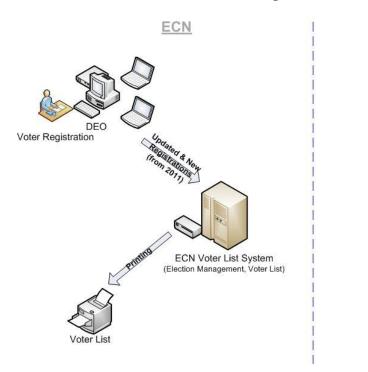
To be successful the overall implementation must be conducted under a common set of technical and process standard to be developed and agreed at the outset of the project.

It is understood that the Government of Nepal has established a High Level Commission for IT and this commission may be considering a set of technical standards. It is crucial that the ECN be part of this dialogue and has the opportunity to provide inputs into the development of these standards.

The following sections outline a five phase implementation process. The phases are specifically presented to represent logical and modular steps that can be implemented as organizations are ready and technical structures are put into place.

The phases as proposed should not be seen as rigid, as some phases may either be merged or conducted in parallel if technical and organizational structures are in place at the appropriate time.

#### 4.1. Phase 1 – Continuous Voter Registration



Within 2010 the Election Commission of Nepal (ECN) will complete a new digital Voter List with biometric data including photograph and fingerprint. Efforts have been made by the ECN to include additional information in the registration forms and system designs to facilitate the development of a multipurpose National ID (NID) card for Nepal.

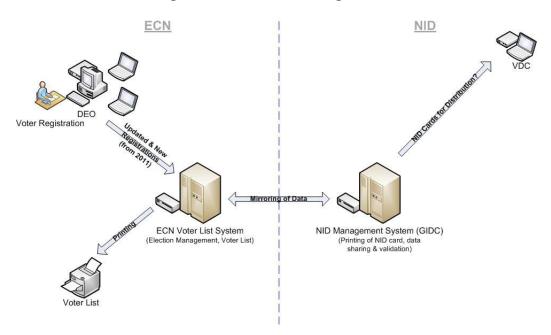
NID

The voter registration project will not only complete the process of data collection for the voter list, but will also establish sufficient infrastructure at each of 75 District Election Offices (DEO) for the continuous updating of the Voter List. Each DEO will be provided with a computer workstation, camera, fingerprint scanner, and a secure network connection linked to the central office for the processing of new and updates registrations.

The work process will therefore be as follows:

- 1. Eligible voters attend the DEO at any time of their convenience to add their name to the voter list, or to update their registration details.
- 2. The voter must present their Citizenship Certificate, and if required Migration Certificate. These documents will be the basis for the voter registration.
- 3. DEO staff will enter the details from the registration form into the computer and digitally capture the photograph and fingerprint of the voter.
- 4. The details will be electronically transferred through the secure ECN network and updated on the ECN central database.
- 5. Biometric (fingerprint) information will be used to ensure no duplicate registrations exist on the ECN database.
- 6. The Voter List can be printed at any time from the central database.

#### 4.2. Phase 2 – Linkage to NID for Card Printing



The Government Integrated Data Center (GIDC) is currently in the final phase of establishment and is proposed to be the central facility for the management of data for the NID project. The GIDC will therefore have responsibility for the printing and distribution of NID cards.

Following the finalization of the full digital Voter List including the qualitative assessment, cleaning, and rationalization of data, consideration may be given to the mirroring of this data onto the facilities of GIDC for NID purposes. The NID/GIDC authority may then print and distribute NID cards on the basis of the ECN prepared data.

Continuous voter registration will initially continue through the DEO as these offices will be suitably equipped, systems will be in place, and staff trained in the update process. As new registration details are updated on the ECN database they will automatically be reflected on the NID/GIDC database through database mirroring processes.

The work process will therefore be as follows:

- 1. Eligible voters attend the DEO at any time of their convenience to add their name to the voter list, or to update their registration details.
- 2. The voter must present their Citizenship Certificate, and if required Migration Certificate. These documents will be the basis for the voter registration.
- 3. DEO staff will enter the details from the registration form into the computer and digitally capture the photograph and fingerprint of the voter.
- 4. The details will be electronically transferred through the secure ECN network and updated on the ECN central database.
- 5. Biometric (fingerprint) information will be used to ensure no duplicate registrations exist on the ECN database.
- 6. All registration updates on the ECN database will be automatically mirrored onto the NID/GIDC database.

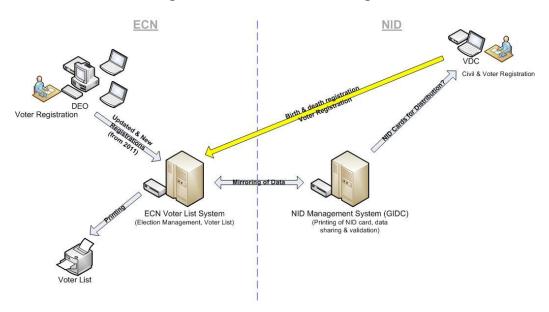
- NID cards may be centrally printed by GIDC and distributed though CDO and/or VDC offices.
- 8. The Voter List can be printed at any time from the ECN central database.

Not only will the mirroring of data to the NID/GIDC facilitate NID card printing and distribution but will also provide full data redundancy between the two organizations for data recovery purposes in the event of the major failure of either site.

It should be noted that the legal mandate of ECN only requires the registration of eligible voters, therefore citizens of the age of 18 years and above at the time of registration. The current eligible age for Citizenship Certificates is 16 years of age.

To fully replace all current Citizenship Certificates with new NID cards the NID, authority will have to take additional measures for the manual capture of data for 16-18 year olds. Alternatively, special arrangements may be discussed with ECN for the capture of data for all citizens of the age of 16 and above during the 2010 voter registration project.

#### 4.3. Phase 3 – Linkage to VDC for Civil & Voter Registration



The ECN 2010 voter registration project will be conducted using a combination of door-to-door enumeration processes and the establishment of Registration Centers in all localities for the photograph, fingerprint, and digital data capture of all eligible citizens. To conduct nationwide Registration Centers approximately 4,000 registration units will be utilized including laptop computers, cameras, and fingerprint scanners.

The registration units may be re-utilised to progressively equip VDC offices for the purpose of assisting with voter registration, and potentially to commence digital birth and death registration. With digital birth and death registration the ECN database (and therefore NID/GIDC database) will have the potential to commence transition to being full "population databases".

It is recognized that not all VDC offices have suitable facilities, infrastructure, or available personnel to commence registration activities. The equipping of VDC offices would happen gradually as offices are deemed to be suitable to meet this purpose.

Voters living in areas where registration is available through the VDC offices will have the option to attend the VDC office for ongoing voter registration requirements. In all other areas, continuous voter registration will continue through the DEO office. As new registration details are updated on the ECN database, they will continue to be reflected on the NID/GIDC database through database mirroring processes.

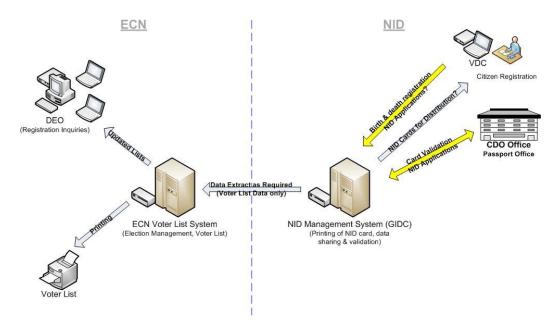
Birth and death registration is a vital component in the ambition to establish a comprehensive Civil Register including the assignment of a unique identity to each citizen from the date of birth registration.

It is hoped that through the allocation of registration equipment to VDC offices that the integration of birth and death registration can be facilitated and a full population database can be established. To meet this objective national level cooperation will be required.

The work process will therefore be as follows:

- 1. Eligible voters attend the DEO or VDC at any time of their convenience to add their name to the voter list, or to update their registration details.
- 2. The voter must present their Citizenship Certificate, and if required Migration Certificate. These documents will be the basis for the voter registration.
- 3. DEO/VDC staff will enter the details from the registration form into the computer and digitally capture the photograph and fingerprint of the voter.
- 4. The details will be electronically transferred through the secure ECN network and updated on the ECN central database. An additional step may be required for the respective DEO to authorize VDC entered voter registrations to protect the mandate of ECN.
- 5. Biometric (fingerprint) information will be used to ensure no duplicate registrations exist on the database.
- 6. All registration updates on the ECN database will be automatically mirrored onto the NID/GIDC database.
- 7. NID cards may be centrally printed by GIDC and distributed though CDO and/or VDC offices.
- 8. The Voter List can be printed at any time from the ECN central database.

#### 4.4. Phase 4 – All Civil Registry updates through CDO & VDC Offices



In many developed countries it is customary for the Voter List to be extracted as required from the Civil Register. This should ultimately be the ambition of Nepal, but this can only be achieved with sufficient technical preparations and procedural safeguards to ensure the integrity of the shared data to meet both civil and electoral purposes.

Fundamental change must be made in the update process to implement this modality. No longer will the DEO be directly involved in the processing of voter registrations, as all registration will be performed on the basis or Civil/NID registrations and be conducted through CDO and VDC offices.

Prior to implementation, agreement must be reached between the ECN and NID authority regarding the finalization of mechanisms to protect both the NID process, and the ECN constitutional requirement of ensuring the integrity of the Voter List.

Some of the mechanisms and processes that should be in place prior to the implementation of all registration through the CDO and VDC offices are:

- All CDO offices and sufficient VDC offices must be prepared including ICT equipment, network connection, registration software, and trained personnel.
- Mechanisms must be available for the validation of citizens identity and residency at point of initial registration. This may be through appropriate documentation or endorsement from local officials, political party representatives, and/or other locally respected citizens.
- The DEO must have the opportunity for periodic review of local registrations.
- Electronic audit trails must be maintained of updates applied to the database including operator, date, and time of registration processing.
- Ongoing analysis of registration trends must be performed including time based analysis.

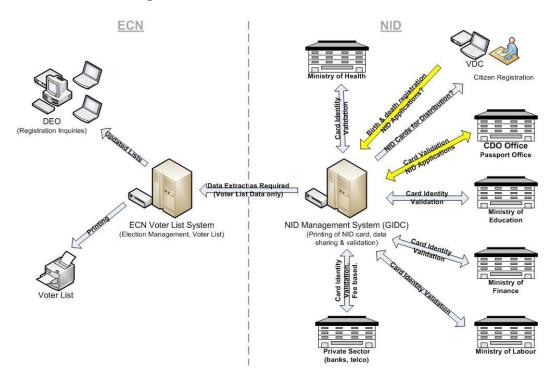
- Ongoing biometric matching and follow-up must be processed by NID/GIDC to ensure a continuous de-duplication process.
- Citizen/voter awareness and education campaigns must be conducted prior to registration cut-over to ensure that voters understand the new NID registration and Voter List processes.
- It must be ensured that all appropriate legal amendments are in place to ensure that sufficient political, process, and constitutional safeguards are in place.

The work process will therefore be as follows:

- 1. Eligible citizens will attend the CDO or VDC at any time of their convenience to apply for an NID card or to update their NID registration details.
- New registration must present appropriate identification documents.
   Migration Certificate must be supplied for update registrations. For citizens
   with insufficient documentation other forms of local identification and
   endorsement may be considered.
- 3. CDO/VDC staff will enter the details from the registration form into the computer and digitally capture the photograph and fingerprint of the voter.
- 4. The details will be electronically transferred through a secure NID/GIDC network and updated on the GIDC central database. An additional step may be required for the respective CDO to authorize VDC entered NID registrations.
- 5. Biometric (fingerprint) information will be used to ensure no duplicate registrations exist on the database.
- 6. NID cards may be centrally printed by GIDC and distributed though CDO and/or VDC offices.
- 7. The ECN may extract data relating to eligible voters (18 years and above) from the NID/GIDC database periodically and/or as required to meet election management requirements including printing of the Voter List.

Citizens living in areas where registration is available through the VDC offices may attend the VDC office for ongoing NID registration requirements. In all other areas NID registration will be performed through the CDO office.

### 4.5. Full Civil Registration



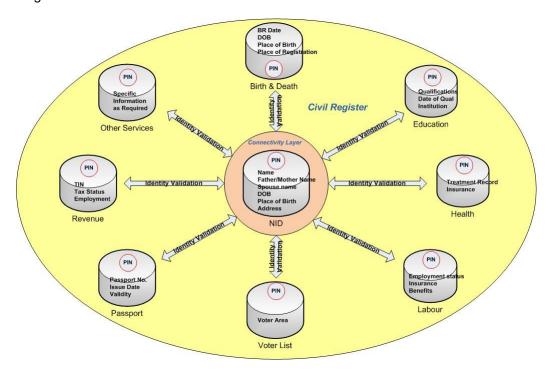
As other Government Ministries enhance their service capacity through the development of ICT systems they will have the opportunity to connect to the NID authority database for the validation of citizen identity. Each Government Ministry will manage their own specific information (example: health, education, revenue) but the NID authority will maintain the only legal record of citizen identity.

Selected private sector organizations such as banks and telephone companies may be provided with a mechanism to validate NID card details to assist with processes such as the allocation of mobile SIM cards and the opening bank accounts. This service may be provided under specific MOU signed with these organizations and should be implemented as a fee based service to provide income to the NID authority to partially cover operating costs.

No data should be shared, or access granted to the NID database without the signing of appropriate MOU to cover the mechanism and data items to be shared.

#### 5. National Database Linkages

A Civil Register is not just the responsibility of a single organization, but is the result of the linking of information held and managed by many organizations in the Government of Nepal. As per the definition "Civil Registration is the system with which a government records the vital events of its citizens", these events are under the management of various organizations in the government structure, and only through the collective linkage of this information is it possible to establish a Civil Register.



The illustration above is simply an example of a citizen's life cycle, the linkages between recorded events, and therefore the structure of a Civil Register. In the above illustration (starting from 12 o'clock and working clockwise) a citizen is born, goes to school, goes to a clinic for treatment, becomes employed, votes, travels, pays taxes, gets a driving license, and at some later stage dies. All of these events are linked by a unique identity number (PIN) to a single identity (NID) which is held by the NID authority. The unique identity and PIN must be established at the time of birth registration and maintained through all of the events in the citizen's life.

Each organization holds only their specific data, for example the Ministry of Health only requires information regarding a citizen's health and treatment records, the Ministry of Education only requires information regarding a citizen's academic qualifications, and the ECN only requires sufficient information to manage the Voter List.

A number of prerequisites must be met to provide the platform for the establishment of a successful NID and Civil Registration system. These prerequisites and conditions include:

• Establishment and publishing of common Government technical standards for systems development and interconnectivity.

- Government coordination mechanisms for systems and process development.
- Development of legal mechanisms including:
  - o A definition of what constitutes a citizen's identity
  - o Citizen's data protection and privacy provisions
  - Civil Registration and NID laws
  - Specific MOU and agreements for NID verification and data sharing

### 6. Immediate Requirements

The ECN will launch pre-pilot and pilot projects for voter registration within 2009 and this will form the basis for full national voter registration to be completed within 2010. To conduct the pre-pilot and pilot project exercises project designs and operational plans are being finalized including the design of registration forms and data elements to be collected.

To implement the concept as described in this document, and therefore the facilitation of a multipurpose NID card and civil registration it is essential that the following immediate measures be undertaken:

- The ECN be included at both technical and management levels in discussions regarding the development of the NID project.
- The ECN be kept informed regarding progress of the High Level Commission for IT including the development of technical standards.
- The ECN should have the opportunity to provide inputs and recommendations to the High Level Commission.
- Working level coordination and cooperation should commence between ECN and GIDC including regular scheduled information sharing meetings.