



MINISTRY OF HEALTH

# National eHealth Guidelines and Standards [ NeGS ]

1.0





# MINISTRY OF HEALTH

## National eHealth Guidelines and Standards

---

[NeGS]

**Version 1.0**

**March 2016**

Prepared by  
Health Information Unit  
Management Development and Planning Unit  
Ministry of Health

Rs. 200.00

## Preface

Sri Lanka is embarking on a new wave of development in the health sector through adaptation of information and communication technology (ICT). The success of this endeavour depends on all health care institutions working according to a set of uniform guidelines and standards. The Ministry, through a process of consultation over several years, developed this set of uniform guidelines and standards. These “National eHealth Guidelines and Standards” are aimed at ensuring that future ICT adaptation in the health care sector conforms to a set of uniform guidelines and standards.

These guidelines and standards are comprehensive. It covers areas such as the Architectural Model of the National eHealth Information System; Management of Computer Hardware and Software for eHealth Services; Network and Connectivity; Communication Interface; Privacy, Confidentiality, Security and Medical Ethics; and eHealth Systems Interoperability Standards. This document therefore is expected to be an essential handbook for all health care institutions. I am sure that the Medical Administrators would find this useful for all their administrative activities in relation to implementation of ICT systems in their hospitals. The Ministry has a set of Medical Officers and Dental Surgeons in Health Informatics who can work with the Medical Administrators and help them look into the finer points of these guidelines and standards when it comes to planning and implementation of ICT systems in their institutions.

In conclusion I wish to thank all those involved in developing these guidelines and standards. I must mention the Health Information Unit of the Ministry in particular for their untiring efforts. It is my hope that this document would be a living document and that it would undergo necessary modifications and updates as and when required as technology advances and that it would remain a constant companion for the Medical Administrators.

Dr. P.G. Mahipala,  
Director General of Health Services,  
Ministry of Health, Nutrition and Indigenous Medicine

## Executive Summery

The National eHealth Guidelines and Standards (NeGS) of Sri Lanka is aimed at streamlining the implementation of eHealth solutions in the health sector of Sri Lanka. This document lays down a set of Guidelines and Standards to be adopted when implementing eHealth solutions in the State and Private healthcare institutions in Sri Lanka. The document is drafted within the framework of the “eHealth Policy of Sri Lanka” as this is the overall policy document governing the adoption of ICT in whole state sector of Sri Lanka.

The document lays down standards and guidelines in the following six main areas which are important in the adoption of ICT.

1. E health Architecture – This gives a holistic view of the eHealth architecture in accordance with the National ICT Architecture and Infrastructure.
2. ICT Governance – This section handles the procurement, deployment, development, maintenance and decommissioning of ICT systems including Hardware and Software.
3. Network and Connectivity – This emphasize the importance in having a proper network plan for the individual healthcare institutions and maintaining them.
4. Communication Interface – The emphasis on having proper websites standards, Domain name structure and official email nomenclature is mentioned in this section. This also emphasisin the proper use of emails as this could be used as an office mode of communication.
5. Security, Confidentiality and Privacy – Unlike in many other sectors the practice of proper ethical standards and patient privacy bears the highest importance in the field of healthcare. The importance of this being ensured even during the adoption of ICT in the health sector is mentioned under this section.
6. Data Communication Standards – This is a set of technical standards (Semantic and Syntactic) to be adopted in the eHealth solutions to ensure seamless data exchange between eHealth solutions.

Some of these guidelines are already in use in the form of informal practice or as internal circulars (Which are attached), but this document also brings all of them together in one place and in a proper sequential manner.

Since, Information Communication Technology is ever evolving, the NeGS too will be reviewed periodically and necessary amendments made if necessary.

# Table of Contents

Preface .....	ii
Executive Summary.....	iii
Table of Contents.....	iv
List of Abbreviations .....	v
List of Figures .....	vi
List of Tables .....	vi
Introduction .....	1
1. Architectural Model of the National eHealth Information System .....	2
1.1 The Architectural Model .....	2
2. Management of Computer Hardware and Software for eHealth Services .....	3
2.1 Computer Hardware .....	3
2.2. Software.....	4
3. Networking and Connectivity .....	7
3.1. Network Architecture .....	7
3.2. Network Management.....	7
4. Communication Interface .....	8
4.1. Websites of the state healthcare sector.....	8
4.2. Domains names for State Healthcare Sector Institutions.....	8
4.3. Email.....	8
5. Privacy, Confidentiality, Security and Medical Ethics .....	10
5.1. Medical Ethics .....	10
5.2. Privacy and Confidentiality .....	10
5.3. Security .....	11
6. eHealth Systems Interoperability Standards .....	14
6.1. Personal Health Number.....	14
6.2. Healthcare Facility Registry.....	15
6.3. Healthcare Provider Registry .....	15
6.4. Data Interchange Standards .....	15
6.5 Standardized Clinical Vocabulary.....	16
Glossary.....	17
List of Related Official Documents.....	18

## List of Abbreviations

- ADX - Aggregated Data Exchange
- DICOM - Digital Imaging and Communications in Medicine
- EIA - Electronic Industries Association
- FERCSL - Forum of Ethical Review Committee of Sri Lanka
- HIU - Health Information Unit
- HL7 - Health Level 7
- HL7-CDA - Health Level 7 – Clinical Document Architecture
- ICT - Information Communication Technology
- ICTA - Information Communication Technology Agency of Sri Lanka
- ICD - International Classification of Disease
- ICPC-2 - International Classification of Primary Care – Release 2
- IEEE - Institute of Electrical and Electronics Engineers
- IPR - Intellectual Property Rights
- ISO - International Organisation of Standardization
- IHTSDO - International Health Terminology Standards Development Organization
- LOINC - Logical Observation Identifiers Names and Codes
- NPG - National Procurement Guidelines
- P-LAN - Private Local Area Network
- PHN - Personal Health Number
- SNOMED-CT - Systematized Nomenclature of Medicine--Clinical Terms
- SLCERT - Sri Lanka Computer Emergency Readiness Team
- TEC - Technical Evaluation Committee
- TIA - Telecommunications Industries Association
- VPN - Virtual Private Network
- WHO - World Health Organization

## List of Figures

Figure 1	National eHealth Architectural Model	02
----------	--------------------------------------	----

## List of Tables

Table 1	Components of PHN	12
---------	-------------------	----

## Introduction

Sri Lanka has achieved high standards in healthcare when compared to countries with the same level of economic development. This is evident when one compares the traditional health indicators with the Gross National Product (GNP). This can be attributed to the free healthcare policy in the state health sector and the importance successive governments have given to the development of the healthcare in the country. But the challenges that the health system is facing are changing. We must adopt the healthcare system in order to face these new challenges.

The National Health Development Plan (NHDP) 2013-2017 is one such initiative undertaken by the Ministry of Health. Healthcare is an information intense field, *relevant, accurate* and *timely* information is the key for evidence-based management in healthcare. Even though many aspects of healthcare in Sri Lanka have changed, the information flow has largely remained manual and paper based in both the curative and preventive sectors. The paper based record system is inadequate to meet the needs of rapidly evolving present day health care system especially for the preventive aspect of health. The need to adopt an efficient information management system has been stressed in the National Health Development Plan.

Even though there are no large scale eHealth projects implemented in Sri Lanka so far, some healthcare institutions have piloted or adopted eHealth solutions on their own initiative. It is highly commendable that these institutions have done so on their own initiative. At the same time it must also be pointed out that these systems have been developed in an ad hoc manner without central co-ordination.

The *National eHealth Guidelines and Standards for Sri Lanka* aims to achieve uniformity in the eHealth solutions implemented in Sri Lanka while ensuring quality care and rights of the care recipients.



# 1. Architectural Model of the National eHealth Information System

## 1.1 The Architectural Model

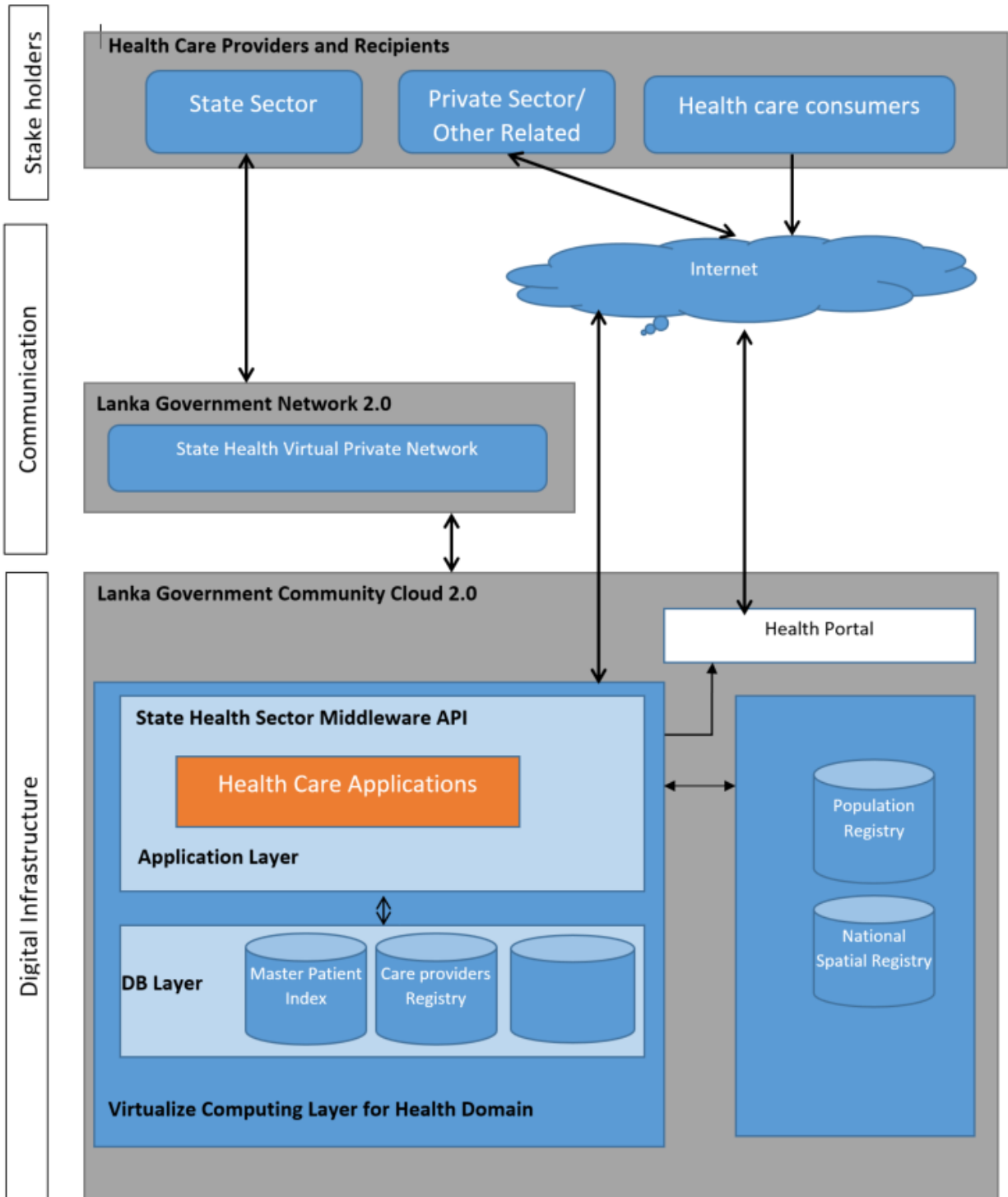


Figure 01 – Architectural Model of the National eHealth Information System

## 2. Management of Computer Hardware and Software for eHealth Services

### 2.1 Computer Hardware

- 2.1.1. The current applicable National Procurement Guidelines (NPG) and the eGovernment Policy should be followed when purchasing computer hardware [“Procurement Guidelines of 2006 for Goods and Work by National Procurement Agency”].
- 2.1.2. Any such procurement procedure should be accompanied with appropriate maintenance and service agreements.
- 2.1.3. A representative of the Information and Communication Technology Agency (ICTA) and/or an expert on Health Informatics shall be included in Technical Evaluation Committees (TEC) in addition to the minimum requirements on the composition of a TEC specified in NPGs.
- 2.1.4. When procuring electronic medical equipment, where applicable, it is recommended that the necessary workstation and/or software compatible with the equipment is also procured.
- 2.1.5. When procuring Information and Communication Technology (ICT) hardware, it is recommended that the cost of consumables and maintenance is considered.
- 2.1.6. A hardware inventory containing detailed specifications of all hardware according to the treasury guidelines must be maintained at institutional level. [Treasury Circular IAI/2002/02]
- 2.1.7. It is recommended that service agreement/s should be reached for maintenance of all equipment that are not covered under warranty

conditions.

- 2.1.8. Service agreement/s for maintenance of equipment should be reached as per the relevant guidelines [Procurement Guidelines of 2006 for Goods and Work by National Procurement Agency].
- 2.1.9. Except in an extraordinary situations, that are mutually agreed by the Ministry of Health and the ICTA, the Lanka Government Community Cloud shall be used for the purpose of hosting any central database, application or middleware.

## 2.2. Software

- 2.2.1 **State Healthcare Sector eHealth Software list:** All eHealth systems that are developed, tested, piloted or implemented in all State Sector Healthcare Institutions should be listed in the eHealth Software List maintained at the Health Information Unit (HIU) of the Ministry of Health as per **Internal Circular No: 02-136/2015** (Annexure I).
- 2.2.2 State Healthcare Sector Software shall be aligned with the Sri Lanka government National Interoperability Standards.
- 2.2.3 Government healthcare organizations should only use appropriately licensed software. Such licensing is applicable for proprietary as well as free and open source software.
- 2.2.4 Acquisition of software including software donated free of charge should always be accompanied by contractual agreements with relevant parties for development, customisation and maintenance.
- 2.2.5 When the Ministry of Health, Provincial Ministries of Health, or Health Care Institutions award a contract to build software from scratch, the ownership of Intellectual Property Rights (IPR) including the source code of such software lies with the awarding party.

- 2.2.6 When acquiring software solutions built in-house or as donations the IPR must be co-owned by the developer and the relevant institution.
- 2.2.7 When acquiring software containing third party components, it is necessary to ensure that appropriate licenses are provided for such components.
- 2.2.8 **Piloting of Software Systems:** The decision to implement a software system or component(s) of software shall be made after piloting, and shall be done at selected institutions/units followed by proper evaluation of the pilot project. If the pilot involves a third party, the evaluation should be done independent of the third party.
- 2.2.9 Prior to the piloting or implementation of a software solution, security audit must be performed by Sri Lanka Computer Emergency Readiness Team Coordination Center (SLCERT).
- 2.2.10 Agreements/contracts should cover important issues including the following:
- a. Software Requirement Specifications.
  - b. Source code availability.
  - c. If the software is a unique solution meant for the healthcare institution
    - i. Milestones of the development process and percentage of payments (partial payments) to be made at reaching each milestone.
    - ii. Provisions for flexibility in the specifications during the development process.
  - d. Software documentation including installation and user manuals.
  - e. Provision for modifications and updates to the software.
  - f. Declaration of the developer/s stating that the software complies with existing legislations (of the country).
  - g. Handling of critical and non-critical failures.
  - h. Clauses handling dispute situations. This should include preventing remotely disabling features.
  - i. Third party licences.

- 2.2.11 Clauses which are detrimental to the acquiring entity similar to but not limited to the following should not be included in agreements/contracts:
- a. Clauses preventing smooth transition of the healthcare institution to different software from another vendor in the future (i.e. Vender Lock).
  - b. Broad exculpatory clauses which limits or exclude vendor's liability.
  - c. Clauses that prevent or limit the inheritance of the software in an event of a change of ownership of the healthcare institution (e.g.taking over a hospital from a Provincial Department of Health by the Ministry of Health).

## **3. Networking and Connectivity**

### **3.1. Network Architecture**

- 3.1.1. It is recommended to follow the latest and/or widely accepted versions on networking (including mobile devices) and cabling standards of the Institute of Electrical and Electronics Engineers (IEEE), International Organization for Standardization (ISO), Electronic Industries Alliance (EIA) and Telecommunications Industry Association (TIA).
- 3.1.2. Except in the extraordinary situation, mutually agreed by Ministry of Health and ICTA, the Sri Lanka Government Network shall be used for networking all institutions in the health domain with VPN.
- 3.1.3. All institutions under the Ministry of Health and the provincial departments of health should be able to exchange health related data through the health VPN of the Sri Lanka Government Network.
- 3.1.4. Health Institutions are recommended to maintain their own Private Local Area Network (P-LAN) interconnecting all the devices within the institution.
- 3.1.5. Open network protocols are recommended to ensure freedom of hardware selection.

### **3.2. Network Management**

- 3.2.1. Whenever planning new buildings for healthcare institutions, they should be designed to support network infrastructure.
- 3.2.2. Physical topology, physical cable layout and upgrades, access methods, protocols, communication devices, operating systems, applications, and configurations should be adequately documented.

## 4. Communication Interface

### 4.1. Websites of the state healthcare sector

- 4.1.1. Contents should be available in Sinhala, Tamil and English for documents relevant to the public.
- 4.1.2. Any complaints or concerns on healthcare related content in a website should be submitted to the Health Information Unit of the Ministry of Health.
- 4.1.3. Websites created must comply with the Guidelines for Development and Maintenance of Websites of Government Organizations set by the ICTA.

### 4.2. Domain names for State Healthcare Sector Institutions

- 4.2.1 The HIU will issue the official domain names to line Ministry Institutions and Institutions coming under the Provincial Ministries. They should contact the HIU to obtain the official domain names.
- 4.2.2 The domain names under “health.gov.lk” and “healthdept.<prov\_code>.gov.lk” will be allocated according to “**General Circular Letter No. 02-l87/2012**” (Annexure II) and they will be owned by the Ministry of Health and the relevant Provincial Ministry of Health.
- 4.2.3 Those wishing to obtain domain names that include health related generic words from the .lk domain registry should obtain clearance from the HIU. This includes English generic words and Sinhala or Tamil Generic words in native script or transliterated to Latin script.

### 4.3. Email

- 4.3.1 Email addresses should be assigned in accordance with the “**General Circular Letter No. 02-l87/2012**” (Annexure II)

- 4.3.2 Email accounts on an organization's domain shall be used for official purposes only.
- 4.3.3 All official electronic communications should only be carried out using the official email address under the organization's domain.
- 4.3.4 All email should follow proper channel of communication as per existing guidelines and norms for paper based document communication.
- 4.3.5 Paper based archiving regulations should also be applied to all email communications.
- 4.3.6 The relevant officer shall ensure that his/her email account is checked for and responded according to the guidelines applicable to postal mail.



## 5. Privacy, Confidentiality, Security and Medical Ethics

### 5.1. Medical Ethics

- 5.1.1 Ensuring privacy and confidentiality of care recipient is a fundamental ethical concept in Medical Practice and should be paramount in all eHealth solutions.
- 5.1.2 eHealth systems that handle personally identifiable data of patients, clients or general public for research purposes should have received ethical approval from an ethics review committee coming under the *Forum for Ethics Review Committees in Sri Lanka (FERCSL)*.

### 5.2. Privacy and Confidentiality

- 5.2.1 Ensure confidentiality of personally identifiable data and information at all stages of the Health Information Systems (HIS) cycle.
- 5.2.2 Personally identifiable data and information shall be used only for the purpose for which the data was collected. If such data is to be used for any other purpose, a proper de-identification procedure shall be followed.
- 5.2.3 Unless disclosure is enforced by law, personally identifiable information should not be disclosed without written informed consent of the individual concerned for any other purpose than the purpose for which it was collected for.
- 5.2.4 Health care workers access to healthcare related information should be strictly on a need to know basis and such access should be revoked immediately when the job role is changed or is terminated.
- 5.2.5 Role based access control profiles should be clearly defined and documented.

- 5.2.6 It is the duty of Healthcare Institutions to ensure that information of an individual is accessible only to employee/s who have signed an information confidentiality agreement (Non-Disclosure Agreement).
- 5.2.7 Healthcare institutions shall ensure that employees who leave the organization are bound to maintain confidentiality of information that they have come to know during the period of employment with the institution.
- 5.2.8 Healthcare institutions shall ensure that third party personnel involved with health information systems including maintenance should sign non-disclosure agreements.
- 5.2.9 An individual has the right to appeal for amendments to personal information held in an information system in the event of any discrepancy.

### **5.3. Security**

- 5.3.1 Electronic documents should be maintained following existing guidelines governing paper based documents and the prevailing legislation in the Country.
- 5.3.2 The security standards and guideline defined by the SLCERT should be strictly followed.
- 5.3.3 eHealth systems must ensure that every Creation, Reading and Update actions on data should be recorded in an event log with the original data being preserved and visible.
- 5.3.4 A no-deletion approach should be adopted in relation to clinical data.
- 5.3.5 During decommissioning of a system or a data storage device, permanent removal of data should be ensured using a media sanitation tool

or the storage devices should be removed and physically destroyed.

- 5.3.6 Institutions should ensure security of all ICT hardware and relevant Documentations.
- 5.3.7 Institutions shall maintain access restricted rooms to keep critical computer equipment such as servers and networking equipment. Such access should be revoked when the job role is changed or the employee is terminated..
- 5.3.8 Institutions shall ensure employee/s who are leaving the institution/unit have surrendered identification cards, access cards, keys, and other means of access and dispose (destroy or deactivate) them appropriately.
- 5.3.9 Maintenance of internal or external data storage devices should be performed on-site whenever possible and should only be done by authorized personnel.
- 5.3.10 eHealth systems shall be designed with an events (security) log that allows tracing of successful and failed log-in attempts. Personally Identifiable and Login Authentication Credentials must be encrypted using the appropriate algorithm.
- 5.3.11 Institutions shall ensure that appropriate procedure is followed for secure backup of data.
- 5.3.12 Institutions should make sure that the retrievability of backed up data/information is regularly checked to ensure reliability of the backup process.
- 5.3.13 Information systems security audits must be performed annually.
- 5.3.14 Systems should be promoted to enforce the use of strong passwords [A strong password should contain at least 8 characters, consisting of at least one uppercase character, one numeric character and one special character]

or implement two-step verification.

5.3.15 High level Authentication as System Administration must remain with at least two individuals.

## 6. eHealth Systems Interoperability Standards

### 6.1. Personal Health Number

- 6.1.1. Computerized systems in the Sri Lankan healthcare sector shall use the Personal Health Number (PHN) to connect the healthcare recipients to their appropriate health record.
- 6.1.2. PHN is a unique number assigned to a particular individual.
- 6.1.3. The PHN will be issued to the patient upon his first contact with the healthcare sector and it is strongly advised to continue it for his/her life.
- 6.1.4. It is recommended that all Healthcare Institution issuing the PHN should not Issue a new PHN for individuals already having a PHN, unless in instances where ensuring the anonymity of the individual is requested.
- 6.1.5. There are three components to the number which are;

Point of Issue number	Serial Number	Check Digit
XXXX (4 digit alpha numeric number)	XXX XXX (6 digit numeric )	C

Table 01 – Components of the Personal Health Number

- 6.1.6. Any segregated unit (functionally or physically) of or within a healthcare institution where PHN is issued shall be referred to as a Point of Issue.
- 6.1.7. Point of Issue (POI) number: The Health Information Unit (HIU) of the Ministry of Health will be the issuing authority to assign a number for the point of issue, which is the “*Point of Issue*” number. State and private healthcare institutions can obtain the POI number from the HIU.

- 6.1.8. Serial Number – will be a 6 digit serially generated number.
- 6.1.9. Check Digit – shall be generated using the modified Luhn Algorithm used by Regenstrief Institute Inc.

## **6.2. Healthcare Facility Registry**

- 6.2.1 A registry of Healthcare Institutions is maintained at the HIU and should be referred when necessary.
- 6.2.2 The registry holds a unique identification number for the Institution and other relevant information.

## **6.3. Healthcare Provider Registry**

- 6.3.1 The Ministry of Health will maintain a Healthcare Provider registry based on the Sri Lanka Medical Council's registry of medical practitioners.

## **6.4. Data Interchange Standards**

- 6.4.1 It is recommended to adopt the Lanka Interoperability Framework where necessary.
- 6.4.2 For the purpose of Data Exchange HL7 (Health Level 7) standard should be used.
- 6.4.3 It is recommended to adopt HL7-CDA (Health Level 7 – Clinical Document Architecture), Release 2, as the data standard for clinical documentation.
- 6.4.4 For aggregated data exchange - ADX (Aggregated Data Exchange) Standards should be used.

- 6.4.5 For interchange of Laboratory data it is recommended to use Logical Observation Identifiers Names and codes (LOINC) developed by Regenstrief Institute Inc.
- 6.4.6 For transfer and storage of images between software programs in the medical domain Digital Imaging and Communication in Medicine (DICOM) standard of the National Electrical Manufacturers Association, USA and Vendor Neutral Archiving (VNA) should be used.

## **6.5 Standardized Clinical Vocabulary**

- 6.5.1 For the purpose of coding clinical data, it is recommended to use the Systematized Nomenclature of Medicine – Clinical Terms (SNOMED CT) of the International Health Terminology Standards Development Organization (IHTSDO).
- 6.5.2 For the purpose of statistical reporting of health related data it is recommended to use ICD 10 (International Classification Disease) of the World Health Organisation (WHO).
- 6.5.3 Applications that record data in SNOMED CT should be able to cross map their data into ICD 10 for the purpose of reporting.
- 6.5.4 For the purpose of collecting data at the Primary Healthcare Level, it is recommended to use the International Classification of Primary Care Second Edition (ICPC-2).



## Glossary

- Health Information Unit : Unit under the Director – Health Information of the Ministry of Health.
- Ministry of Health : Ministry of Health, Department of Health Services of Sri Lanka which is currently amalgamated merged with each other and the Provincial Ministries of Health.
- Middleware : Computer software that connects software components or people and their applications.
- State healthcare sector : Any institute, division or unit in Sri Lanka providing or supporting healthcare and belong to a Ministry, a state department, a provincial department or a local authority. (This does not include healthcare institutes of state owned companies).
- Software : Is a collection of computer programs and related data that provide the instructions for telling a computer what to do and how to do it.



## List of Related Official Documents

This is a list of legislations, regulations, policy documents and guideline documents of Sri Lanka relevant to use of ICT for Health Information.

### **Health Sector related**

- Medical Ordinance
- Health Services Act, No 12 of 1952
- Declaration on Health, SLMA 1995
- National Health Policy
- Health Master plan 2007-2016
- Declaration on Health, Sri Lanka Medical Association 1995-96

### **IT related**

- Information And Communication Technology Act, No. 27 of 2003
- Information And Communication Technology (Amendment) Act, No. 33 of 2008
- Electronic Transactions Act, No. 19 of 2006
- Policy and Procedures for ICT Usage in Government (e-Government Policy)
- Lanka Interoperability Framework (LIFe)
- Treasury Circular IAI/2002/02

### **General (relevant to Health Information)**

- National Archives Act, No 48 of 1973
- Intellectual Property Act, No. 36 of 2003
- Companies Act, No. 07 of 2007
- Financial Regulations of the Government of the Democratic Socialist Republic of Sri Lanka 1992
- Provincial Financial regulations
- Guidelines for procurement of pharmaceuticals & medical devices 2006 (National Procurement Agency)

දුරකථන ) 011 2669192 , 011 2675011  
 தொலைபேசி ) 011 2698507 , 011 2694033  
 Telephone ) 011 2675449 , 011 2675280

තැනැස් ) 011 2693866  
 பெக்ஸ் ) 011 2693869  
 Fax ) 011 2692913

විද්‍යුත් තැපෑල ) postmaster@health.gov.lk  
 மின்னஞ்சல் முகவரி )  
 e-mail )

වෙබ් අඩවිය ) www.health.gov.lk  
 இணையத்தளம் )  
 website )



සුවසිරිපාය  
 சுவசிரிபாய  
 SUWASIRIPAYA

මගේ අංකය )  
 எனது இல )  
 My No. ) HP/HI/DIR/19/2015

ඔබේ අංකය )  
 உமது இல )  
 Your No. : )

දිනය )  
 திகதி ) 05  
 Date ) 10 / Sept / 2015

සෞඛ්‍ය, පෝෂණ සහ දේශීය වෛද්‍ය අමාත්‍යාංශය  
 சுகாதார, போசணை மற்றும் சுதேச வைத்திய அமைச்சு  
 Ministry of Health, Nutrition & Indigenous Medicine

Internal Circular No: 02-136/2015

All Heads of Institutions including Heads of Specialized Campaigns

**Obtaining approval for implementation of eHealth solutions**

Several eHealth solutions are being implemented in the Ministry of Health and Indigenous Medicine and the Line Ministry Institutions without obtaining prior approval. Even though these initiations are commendable, implementing them in an ad hoc manner could cause many complications in the future.

As a step towards preventing this and streamlining this process please follow the following instructions.

1. At the designing stage of an eHealth project a detailed project proposal is to be submitted to the Deputy Director General Planning.. Health information unit will go through the proposal and make necessary recommendations. If the proposal is suitable for implementation, it will be forwarded for approval of Director General of Health Services. You may proceed with development of the solution after obtaining approval.
2. All projects to be piloted/implemented are also advised to obtain permission before being piloted/ implemented.

3. The following are the mandatory information to be included in the project proposal to be submitted to the Director Health Information.

1. Name of the solution
2. Proposed Place of implementation
3. Scope of implementation
4. Technical details
5. proposed Developer of the solution
6. Technology used in the development of the solution



~~Mr.~~ Anura Jayawickrama  
Secretary,

Ministry of Health, Nutrition and Indigenous Medicine

**Anura Jayawickrama**

Secretary

Ministry of Health, Nutrition & Indigenous Medicine  
"Suwasiripaya"

385, Rev. Baddegama Wimalawansa Thero Mawatha,  
Colombo 10, Sri Lanka.

දුරකථන ) 2698475  
 தொலைபேசி ) 2698490  
 Telephone ) 2698507  
 ෆැක්ස් ) 2692913  
 பெக்ஸ் ) 2694860  
 Fax )  
 විද්‍යුත් තැපෑල )  
 மின்னஞ்சல் முகவரி ) postmaster@health.gov.lk  
 e-mail )  
 වෙබ් අඩවිය )  
 இணையத்தளம் ) www.health.gov.lk  
 website )



සුවසිරිපාය  
 சுவசிரிபாய  
 SUWASIRIPAYA

සෞඛ්‍ය අමාත්‍යාංශය  
 சுகாதார அமைச்சு  
 Ministry of Health

මගේ අංකය )  
 எனது இல ) HP/III/DIR/24/2012  
 My No. )  
 ඔබේ අංකය )  
 உமது இல )  
 Your No. )  
 දිනය )  
 திகதி ) 23.11.2012  
 Date )

### General Circular Letter No: 02-181/2012

Director / NHSL,  
 All Provincial Directors of Health Services,  
 Heads of Specialized Campaigns,  
 Regional Directors of Health Services,  
 Directors of Teaching Hospitals, Provincial General Hospitals,  
 Medical Superintendents of DGH and BH  
 Heads of all Health Institutions,

### Domain Name and email Structure to be used in the State Healthcare Institutions

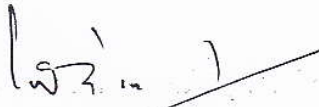
Ministry of health is in the process of introducing and streamlining the incorporation of Information and Communication technologies in to the State Health sector with the view of improving the efficiency of the healthcare provision. In this regard the National eHealth Steering Committee headed by the Secretary Health has initiated the formulation of the National eHealth Policy and the National eHealth Standards and Guidelines.

It has been observed that the domain name and email structure followed by the healthcare institutions were not in accordance with the Policy and Procedures for ICT usage in Government (eGovernment Policy of 2009). Hence, the stipulated structure developed in accordance with the above policy and is part of the National eHealth Standards and Guidelines (Draft), is to be followed by all healthcare institutions in the event of allocating Domain Names (Annexure 1) and emails (Annexure 2). The recommendations stated are the result of and consensus reached through extensive discussions held with the

Information and Communication Technology Agency (ICTA) of Sri Lanka, representatives of professional colleges and relevant officials of the Ministry of Health.

Abbreviations to be used for names of districts in domain name and email are given in Annexure 3.

The procedure to be adapted in obtaining domain names is given in Annexure 4.

  
**Secretary Health**

Actg. Secretary  
Ministry of Health  
"Suwasiripaya"  
385, Rev. Baddegama Wimalawansa Thero Mawatha,  
Colombo 10, Sri Lanka.

- Cc : 1. All Additional Secretaries  
2. Director General of Health Services  
3. All Deputy Director Generals of Health Services

## Annexure 01

**Domain names to be used by the State Healthcare Institutions**

- i Any state healthcare sector institution shall have their web site or web pages under the domain of the organisation which the institution is administrated by.

e.g:		
Line ministry hospital or vertical programme	:	Under line ministry / DoHS domain
Hospitals or MOH divisions under the Provincial DoH	:	Domain of PDoHS
Hospital under a municipal council	:	Domain of the municipal council
Healthcare facility by a Medical Faculty	:	Domain of the University

- ii Health Information Unit of the Department of Health Services (DoHS) or Provincial Department of Health Services (PDoHS) shall be responsible for assigning URL for institutions & units of the respective organisation.

- iii URL of the main healthcare organisations shall be as follows

e.g:	Amalgamated MoH & DoHS	: health.gov.lk
	Provincial DoHS	: healthdept.<province-code>.gov.lk

Note: In an event of de-amalgamation of Ministry of Health (MoH) and the Department of Health services, the URL shall be assigned as follows.

Ministry of Health	:	www.healthmin.gov.lk
Department of Health Services	:	www.health.gov.lk

- iv All healthcare institutions / units shall have URL under the URL of the relevant organisation.

- v URL for institutions/units under the MoH/DoHS

▪ **XXX.health.gov.lk**

Note: The XXX can be the name of the institute or an abbreviation. Category of the hospital shall not be included for any hospital other than for national level institutions.

e.g:		
NIHS	:	www.nihs.health.gov.lk
Epidemiology Unit	:	www.epid.health.gov.lk
National Eye Hospital	:	www.national-eye-hospital.health.gov.lk
PGH Kurunegala	:	www.kurunegala-hospital.health.gov.lk

## vi URL for Institutions / units directly under PDoHS

- <PDoHS-URL>/XXX

Note: The XXX can be the full name of the institute/unit or an abbreviation.

Category of the hospital shall not be included for any hospital.

e.g.

Planning unit of PDHS office : [www.healthdept.nw.gov.lk/planning](http://www.healthdept.nw.gov.lk/planning)

Provincial health training centre : [www.healthdept.nw.gov.lk/training-center](http://www.healthdept.nw.gov.lk/training-center)

RDHS office : [www.healthdept.nw.gov.lk/rdhs-kg](http://www.healthdept.nw.gov.lk/rdhs-kg)

Hospital : [www.healthdept.nw.gov.lk/polgahawela-hospital](http://www.healthdept.nw.gov.lk/polgahawela-hospital)

MOH division : [www.healthdept.nw.gov.lk/polgahawela-moh](http://www.healthdept.nw.gov.lk/polgahawela-moh)

## vii Subunits of an institutions

- <institute-URL>/unit

e.g.

Accident Service of the National Hospital : [www.nhsl.health.gov.lk/accident](http://www.nhsl.health.gov.lk/accident)

Paediatrics ward of the DBH Kuliyaipitiya : [www.healthdept.nw.gov.lk/kuliyaipitiya-hospital-paed](http://www.healthdept.nw.gov.lk/kuliyaipitiya-hospital-paed)

## viii Projects, programmes, events organised as a common effort of more than one organisation or institute of State healthcare sector shall be as follows.

- <preferred-name>.<org-URL>

or

- <URL of the main organiser>/preferred-name

e.g.

1. Nutrition week event organized at national level by FHB :

[nutrition-week.health.gov.lk](http://nutrition-week.health.gov.lk) or

[fhb.health.gov.lk/nutrition-week](http://fhb.health.gov.lk/nutrition-week)

2. Mental health promotion project named *Sahanaya* at central province planned by Mental Health Unit of the line ministry and the PDoHS-Central Province.

[sahanaya.health.gov.lk](http://sahanaya.health.gov.lk) or

[sahanaya.healthdept.cp.gov.lk](http://sahanaya.healthdept.cp.gov.lk)

or

[mhu.health.gov.lk/sahanaya/cp](http://mhu.health.gov.lk/sahanaya/cp) or

[healthdept.cp.gov.lk/sahanaya](http://healthdept.cp.gov.lk/sahanaya)

## Annexure 02

**Email Structure to be used in the State Healthcare Sector**

(Applicable for emails to be created under domain names created as per Annexure 01 only.)

**General eMail Account for Organisations and Institution**

- i General email address for each organisation shall be as follows.
- a) For Line Ministry Institutions, Special Campaigns and Office of the PDHS  
**info@<org-URL>**
- b) For Institutions under the preview of the PDHS  
**info.<institution type code>.<location/rdhs code>@<org-URL>**

e.g:

- a)
- |                           |   |                           |
|---------------------------|---|---------------------------|
| MoH/DoHS                  | : | info@health.gov.lk        |
| PDoHS                     | : | info@healthdept.up.gov.lk |
| Line ministry institution | : | info@nihs.health.gov.lk   |
- b)
- |                        |   |  |
|------------------------|---|--|
| RDHS office Kurunegala | : | info.rdhs.kg@healthdept.nw.gov.lk          |
| Polgahawela Hospital   | : | info.hosp.polgahawela@healthdept.nw.gov.lk |
| MOH office Polgahawela | : | info.moh.polgahawela@healthdept.nw.gov.lk  |

**Official eMail Accounts of the employees**

- ii Organization should adopt the following nomenclature in providing email addresses to officers; i.e. the user name should be standardized and the domain should be the organization URL.

- a) Employees working in the Line Ministry institutions and Special Campaigns  
**<designation>@<org-URL>**

e.g.

- |                    |   |                         |
|--------------------|---|-------------------------|
| DDG/Planning       | : | ddgp@health.gov.lk      |
| DDG/MSII           | : | ddgms2@health.gov.lk    |
| Director, NHSL     | : | dir@nhsl.health.gov.lk  |
| Director, FHB      | : | dir@fhb.health.gov.lk   |
| Accountant 1- NHSL | : | acc1@nhsl.health.gov.lk |



b) Employees working in the Office of the PDHS and institutions coming under the preview of the Provincial Health Services  
 <designation>.<institution type code>.<location/rdhs code>@<org- URL>

e.g.

PDHS Office (North Western Province)

PD : pd@healthdept.nw.gov.lk  
 MO Planning : moplanning.pdhs@healthdept.nw.gov.lk  
 Accountant 1 : acc1.pdhs@healthdept.nw.gov.lk  
 Accountant 2 : acc2.pdhs@healthdept.nw.gov.lk

RDHS Office (Kurunegala)

RD : rdhs.kg@ healthdept.nw.gov.lk  
 MO Planning : moplanning.rdhs.kg@ healthdept.nw.gov.lk  
 MO MCH : momch.rdhs.kg@ healthdept.nw.gov.lk  
 DTCO : dtco.rdhs.kg@healthdept.nw.gov.lk  
 Accountant 1 : acc1.rhs.kg@healthdept.nw.gov.lk

MOH Division (Galgamuwa)

MOH : moh.galgamuwa@healthdept.nw.gov.lk  
 PHM (Molewa) : phm.molewa@healthdept.nw.gov.lk

Hospital (Kuliyapitiya)

MS : ms.hosp.kuliyapitiya@healthdept.nw.gov.lk  
 PPA 1 : ppa1.hosp.kuliyapitiya@healthdept.nw.gov.lk  
 PPA 2 : ppa2.hosp.kuliyapitiya@healthdept.nw.gov.lk

Hospital (Dompe)

DMO : dmo.hosp.dompe@healthdept.wp.gov.lk

## Annexure 03

## Codes to be used for type of Institutions

Hospital	- hosp
Provincial Director of Health's Office	- pdhs
Medical Officer of Health	- moh
Regional Director of Health's Office	- rdhs

## Standard code to be used for Provinces

Northern Province	- np
Eastern Province	- ep
North Central Province	- nc
Western Province	- wpc
Sabaragamuwa Province	- sg
Uva Province	- up
Southern Province	- spc
North Western Province	- nw
Central Province	- cp

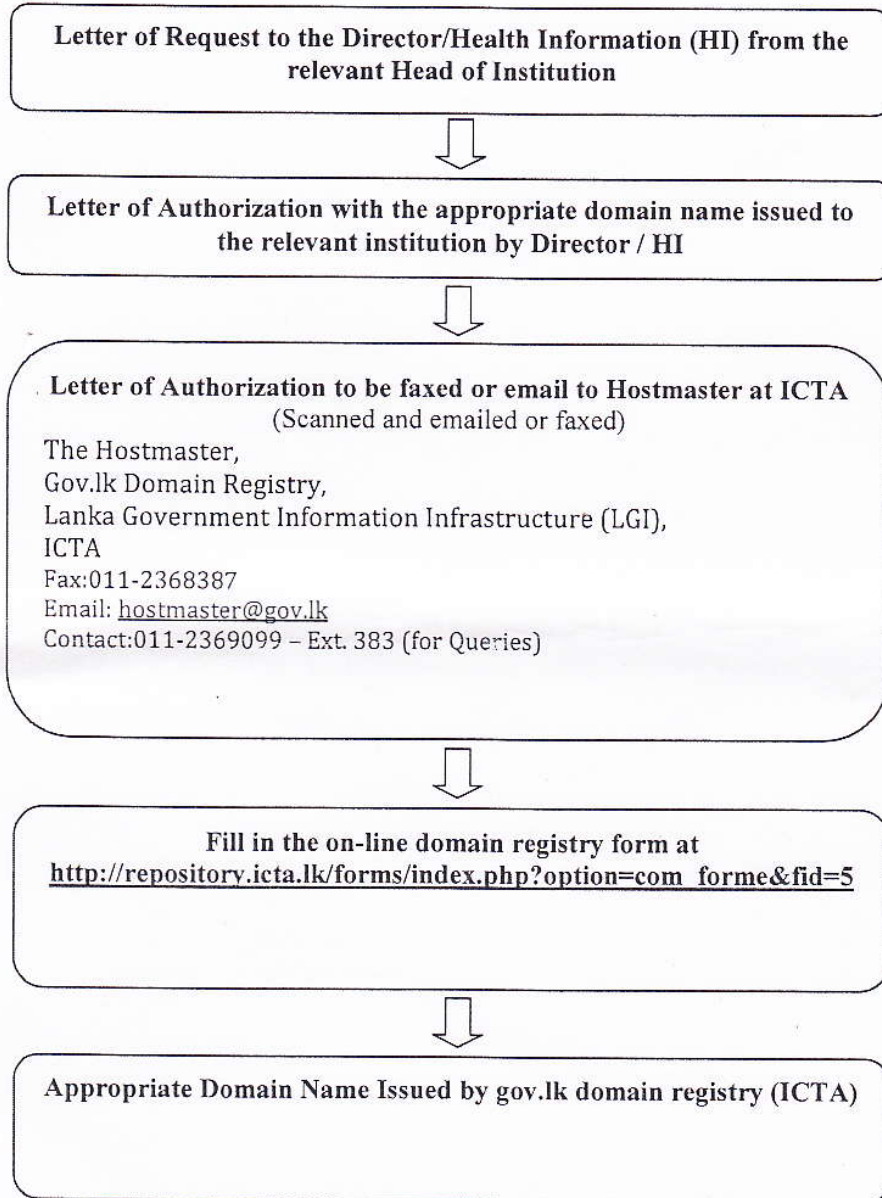
## Standard code to be used for RDHS areas

Colombo	: cb
Gampaha	: gp
Kaluthra	: kt
Kandy	: ky
Matale	: mt
Nuwara-Eliya	: ne
Galle	: gl
Mathara	: mr
Hambanthota	: ht
Jaffna	: jf
Mannar	: mn
Vavuniya	: vn
Mullaitivu	: ml
Kilinochchi	: kn
Batticalo	: bc
Kalmunai	: kl
Ampara	: ap
Trincomalee	: tm
Kurunegala	: kg
Puththalama	: pt
Anuradhapura	: an
Polonnaruwa	: pn
Badulla	: bd
Monaragala	: mg
Rathnapura	: rp
Kegalla	: kl

## Annexure 04

## Procedure to obtain Domain Names

## 1. Line Ministry Institutions and for Office of the PDHS



2. Institutions under the PDHS should seek the assistance of the MO/DS Health Informatics of the relevant office of the PDHS. (Where there is no such officer in place, assistance of the HIU of the DoHS is to be sought.)